#### FiBL and IFOAM

# The World of Organic Agriculture Statistics and Emerging Trends 2013

For supplementary material see http://www.organic-world.net/yearbook-2013.html

Username: "organic2013"; password "organicworld"

All of the statements and results contained in this book have been compiled by the authors and are to the best of their knowledge correct and have also been checked by the Research Institute of Organic Agriculture (FiBL) and the International Federation of Organic Agriculture Movements (IFOAM). However, the possibility of mistakes cannot be ruled out entirely. Therefore, the editors, authors and publishers are not subject to any obligation and make no guarantees whatsoever regarding any of the statements or results in this work; neither do they accept responsibility or liability for any possible mistakes, nor for any consequences of actions taken by readers based on statements or advice contained therein.

Authors are responsible for the content of their own articles. Their opinions do not necessarily express the views FiBL or IFOAM.

This document has been produced with the support of the Swiss State Secretariat for Economic Affairs (SECO), and NürnbergMesse. The views expressed herein can in no way be taken to reflect the official opinions of SECO or NürnbergMesse.

Should corrections and updates become necessary, they will be published at www.organic-world.net. Figures as well as selected chapters from this book are available for download at www.organic-world.net. Some of these are publicly accessible; others are password protected and have the username: "organic2013" and the password "organicworld". The PDF is available at the password area.

Any enquiries regarding this book and its contents should be sent to Helga Willer, FiBL, Ackerstrasse, CH-5070 Frick, e-mail helga.willer@fibl.org.

Please quote articles from this book individually with name(s) of author(s) and title of article. The same applies to the tables: Please quote source, title of table and then the overall report. The whole report should be cited as:

Willer, Helga, Julia Lernoud and Lukas Kilcher (Eds.) (2013)
The World of Organic Agriculture. Statistics and Emerging Trends 2013. FiBL-IFOAM Report.
Research Institute of Organic Agriculture (FiBL), Frick, and International Federation of Organic Agriculture Movements (IFOAM), Bonn

Die Deutsche Bibliothek – CIP Cataloguing-in-Publication-Data A catalogue record for this publication is available from Die Deutsche Bibliothek

© February 2013 Research Institute of Organic Agriculture (FiBL) and International Federation of Organic Agriculture Movements (IFOAM). Revised version August 2013 with some minor corrections

Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Switzerland, Tel. +41 62 865 72 72; Fax +41 62 865 72 73, e-mail info.suisse@fibl.org, Internet www.fibl.org

International Federation of Organic Agriculture Movements (IFOAM) e.V., Charles-de-Gaulle-Str. 5, 53113 Bonn, Germany, Tel. +49 228 926 50-10, Fax +49 228 926 50-99, e-mail headoffice@ifoam.org, Internet www.ifoam.org, Trial Court Bonn, Association Register no. 8726

Language editing: Robert Home, FiBL, Frick, Switzerland

Layout: Julia Lernoud and Helga Willer, FiBL, Frick, Switzerland

Cover & maps: Claudia Kirchgraber, FiBL, Frick, Switzerland

Cover picture: Date palm in Saudi Arabia. Picture: Marco Hartmann, GIZ

Graphs (if not otherwise stated): Julia Lernoud and Helga Willer, FiBL, Frick, Switzerland

Printed by Medienhaus Plump, Rolandsecker Weg 33, 53619 Rheinbreitbach, Germany

Price: 50 Euros, IFOAM members: 25 Euros

 $Printed\ copies\ of\ this\ volume\ may\ be\ ordered\ directly\ from\ IFOAM\ and\ FiBL\ (see\ addresses\ above)\ or\ via\ the\ IFOAM\ website\ at\ www.ifoam.org,\ the\ FiBL\ shop\ at\ shop.fibl.org$ 

ISBN FiBL 978-3-03736-233-4, ISBN IFOAM 978-3-944372-00-6

# **Table of Contents**

Forewo	rd from SECO	15
Forewo	rd from FiBL and IFOAM	17
Acknow	rledgements	19
ORGANIC	AGRICULTURE 2013: Key Indicators and Leading Countries	25
	rld of Organic Agriculture 2013: Summary Viller, Julia Lernoud and Robert Home	26
>	Key data on organic agriculture	26
>	Global market	27
>	Africa	27
>	Asia	28
>	Europe	29
>	Latin America	29
>	North America	30
>	Oceania	30
>	Standards and regulations	32
>	IFOAM and the road to sustainable development	32
ORGANIC	AGRICULTURE WORLDWIDE: CURRENT STATISTICS	35
	Statistics on Organic Agriculture Worldwide: Organic Area, Producers and Market Viller and Julia Lernoud	36
>	Scope	36
>	Indicators	37
>	General notes on the data	38
>	Organic agricultural land	40
>	Shares of organic agricultural land by region and country	44
>	Development of the organic agricultural land	48
>	All organic areas, including non-agricultural areas	56
>	Organic producers and other operator types 2011	62
>	Market and international trade data	68
>	Organic farming in developing countries and in emerging markets	73
>	Land use and crop data	75
>	Arable land	80
>	Permanent crops	82
>	Wild collection and beekeeping	84
>	Beehives	89
>	Statistics on selected crops	93
>	> Cereals	94
>	> Citrus fruit	98
>	> Cocoa beans	100
>	> Coffee	102
>	> Fruit: Temperate Fruit	104
,	> Fruit: Tropical and subtropical fruit	108

Table o	of Contents	
>	> Grapes	112
>	> Olives	114
>	> Oilseeds	116
>	> Protein crops	120
>	> Vegetables	122
>	Data collection on organic agriculture worldwide: Background	126
	rld of Organic Agriculture - Density equalising map ull and Benjamin Henning	130
THE GLO	BAL MARKET FOR ORGANIC FOOD & DRINK	131
The Glo	obal Market for Organic Food & Drink Sahota	132
>	Introduction	132
>	Europe	133
>	North America	134
>	Asia	135
>	Oceania	136
>	Other regions	136
>	Conclusions & challenges	136
STANDA	RDS AND REGULATIONS	139
	rds and Regulations	140
Beate H	uber, Otto Schmid, and Gbati Napo-Bitantem	
>	Organic legislations worldwide: current situation	141
>	The Codex Alimentarius Guidelines: Recent Developments	144
>	EU regulation on organic production	145
>	Import requirements of major economies	145
World o	of Organic Certification 2013	149
Kolbjöri	n Örjavik	
>	Number of certification bodies	149
>	Number of operators and farmers	151
>	Turnover	151
>	Starting date	151
>	Approvals	152
>	The Organic Certification Directory 2013	153
The Or	ganic Guarantee System - Keeping up with the Times ould	154
>	Instilling confidence - A consistent objective	154
>	Systematizing a concept	154
>	The latest evolution	156
>	Moving forward	158
Overvie	ew of Participatory Guarantee Systems in 2012	159
Flávia C		100
>	PGS in the international agenda	160

4 FiBL & IFOAM (2013): The World of Organic Agriculture 2013. Frick and Bonn

		Table of Contents
>	PGS worldwide in figures	161
>	Online references	162
<b>A</b> FRICA		163
	evelopments in Organic Farming in Africa uagnimbeck	164
>	GSF recognizes the role of organic agriculture in increasing agriculture	al
	productivity and production in a sustainable manner	165
>	Ugocert and Certysis recognized as third country certification bodies	165
>	Second African Organic Conference: Key step towards bringing	
	organic agriculture into the mainstream in Africa	166
>	More support for the implementation of the Action Plan of the	167
>	African Ecological Organic Agriculture (EOA) Initiative	167 167
, ,	Non-certified organic agriculture Outlook	167
<i>,</i>	References	168
	urrent Statistics	169
	urrent statistics uagnimbeck, Julia Lernoud and Helga Willer	109
	Agriculture in Africa: Graphs	170
_	Agriculture in Africa: Tables	173
	ngriculture in Africa. Tables	
<b>A</b> SIA		177
Developi Ong Kun	ments in Asia 2012 g <i>Wa</i> i	178
>	China's new rules	178
>	GOMA's initiative in Asia and ASEAN Economic Community (AEC)	180
>	Country updates	181
>	> Bhutan	181
>	> Cambodia	182
>	> Lao PDR	182
>	> India	183
>	> Indonesia	184
>	> Malaysia	184
<b>&gt;</b>	> Nepal > Philippines	185
<b>&gt;</b>	> Sri Lanka	186 187
, ,	> Thailand	187 188
<i>,</i>	> Vietnam	189
		191
_	Agriculture in Saudi Arabia: Country Report 2012 artmann, Saad Khalil, Thomas Bernet, Felix Ruhland, Ayman Al Ghamdi	191
>	Recent developments	191
>	History	191
>	Production data and operators	192
>	Key institutions/organizations	194
>	Domestic market	194

Table of Contents	
* *1	100
> Legislation	196
> Government support for organic farming	196
> Outlook	197
Asia: Current statistics	199
Julia Lernoud and Helga Willer	200
Organic Agriculture in Asia: Graphs	200
Organic Agriculture in Asia: Tables	202
EUROPE	207
Organic Farming in Europe 2012 Helga Willer	208
> Current statistics	208
> EU regulation on organic farming and related issues	208
Government support	209
> Research	210
> Successful policy work of IFOAM EU	212
Current statistics Helga Willer and Julia Lernoud	215
Organic Agriculture in Europe: Graphs	217
Organic Agriculture in Europe: Tables	219
The Organic Market in Europe 2011 –Nine Percent Increase Compared with 2010 Diana Schaack, Julia Lernoud, Susanne Padel and Helga Willer	224
> Graphs: The European market for organic food	226
> Table: The European market for organic food	228
Improving European Organic Market Information - The OrganicDataNetwork Project Raffaele Zanoli	230
Survey of the Demands of End Users in Europe for Organic Market Data Robert Home, Matthias Stolze, Michal Losták	232
Organic Agriculture in Albania: Country Report 2012 Thomas Bernet and Iris S. Kazazi	234
> Recent important developments	234
> History	234
> Production data and operators	234
Key institutions/organizations	237
> Market and trade	237
> Legislation and sector support	237
Research, advice and training	238
> Outlook	238
	239
Organic Agriculture in Hungary –Past, Present and Future Zoltán Dezsény and Dóra Drexler	233
> Introduction	239
> Production volume and structure	240

241

The organic market – wholesale and retail structure

		Table of Content
>	Factors that motivate consumption of organic produce	242
, ,	Future trends	243
, ,	The role of ÖMKi for organic farming research in Hungary	243
	Farming in Kosovo	244
Sylë Syla	<u> </u>	244
		244
<b>&gt;</b>	Production Certification	244 244
, ,		244
, ,	Legislation Further government support	244
Monten Natasa I	egro -Country Report Miracki	246 246
Ivatasa 1		
>	Introduction	246
>	Historical development of the organic sector	246
>	Key institutions	247
>	Training and education	247
>	Legislation	248
>	Production and marketing of organic products	248
>	Action plan	249
>	Outlook and challenges	250
>	References	250
	Farming in Serbia: The Challenge to Officially Register all Operators atrol Bodies  aas:	251
>	Organic agricultural land	251
>	Cropland dominated by fruit orchards	251
>	Wild collection area - Definition missing	252
>	Low share of livestock and legumes	252
>	Operator and control bodies (CBs)	252
>	Import of processed food - Export of fruits	253
>	Exports to the European Union - Not organic until after the border	253
>	EU list of non-authorized control bodies	253
>	Unleash exporters and control bodies	253
>	Legislation, labeling and administration not settled yet	254
>	Subsidy payments unsure: as is agricultural policy in general	254
>	Connect organic with rural area challenges	255
>	References	255
LATIN AM	MERICA AND THE CARIBBEAN	257
Organic	Agriculture in Latin America and the Caribbean	258
Patricia .	=	
>	Introduction	258
>	Organic markets and exports	258
>	Mexico	259
>	Central America	260

#### Table of Contents

>	South America	262
>	> Peru	262
>	> Bolivia	264
>	> Ecuador	265
>	> Colombia	266
>	> Brazil	268
>	> Argentina	269
>	> Chile	270
>	> Paraguay	272
>	> Uruguay	272
>	References	272
>	Links	272
	nerica and the Caribbean: Current statistics noud and Helga Willer	273
Organic .	Agriculture in Latin America and Caribbean: Graphs	274
Organic .	Agriculture in Latin America and Caribbean: Tables	276
North A	MERICA	281
United S	tates of America	282
Barbara 1	Fitch Haumann	
>	Organic production	282
>	Enforcement	283
>	Organic's role in market	283
>	Good for the economy	284
>	Challenges	285
>	Check-off discussions	286
>	Research and consumer education	287
>	Further readings	287
Canada		288
	Holmes and Anne Macey	200
>	Organic market	288
>	Organic farming statistics	288
>	Highlight	290
>	Research	290
>	Challenges	291
>	Expanding production and supply	291
>	Outlook	292
	nerica: Current statistics noud and Helga Willer	293
	Agriculture in North America: Graphs	294
_	Agriculture in North America: Tables	296

	Table of Contents	
Oceania	297	
Organic Farming in Australia Els Wynen and Alexandra Mitchell	298	
·		
> Size of the industry	298	
> Standards and certification	299	
> Market	300	
> Policy and stakeholder structures	301	
> Research and extension	301	
> References	302	
Organic Agriculture in the Pacific Islands	303	
Karen Mapusua		
> Recent developments	303	
> History	304	
› Key actors	305	
> International trade	305	
> Domestic markets	306	
> Legislation	306	
<ul> <li>Government and international support</li> </ul>	307	
> Outlook	307	
> Links/Further reading	307	
Oceania: Current statistics		
Julia Lernoud and Helga Willer		
Organic Agriculture in Oceania: Graphs	309	
Organic Agriculture in Oceania: Tables	311	
OUTLOOK: THE ROAD TO SUSTAINABLE DEVELOPMENT IS ORGANIC	313	
The Road to Sustainable Development is Organic Markus Arbenz	314	
> "Functional Integrity" means sustaining and following ethical	values. 314	
> Commitments and conclusions from the past	315	
translate into actions of the future	315	
Annex	317	
The FiBL-IFOAM Survey: Overview Table	318	
Data Providers and Data Sources 3		
Compiled by Julia Lernoud and Helga Willer		

#### Tables

Table 1: Countries and territories covered by the global survey on organic agriculture 2011.  Table 2: World: Organic agricultural land (including in-conversion areas) and regional shares of the glob	
organic agricultural land 2011	
Table 3: World: Organic agricultural land (including in-conversion areas) by country 2011 (sorted)	
Table 4: World: Organic agricultural land (including in-conversion areas) and shares	42
of total agricultural land 2011	44
Table 5: World: Shares of organic agricultural land by country 2011, sorted	46
Table 6: World: Organic agricultural land (including in-conversion areas) by region: growth 2010/2011	
Table 7: World: Development of organic agricultural land by country 2007-2011	
Table 8: World: Organic areas: Agricultural land (including conversion areas) and further organic areas	
	57
Table 9: World: All organic areas by country 2011	
Table 10: World: Development of the numbers of producers by region 2010 to 2011	
Table 11: World: Organic producers and other operator types by country 2011	
Table 12: Global market data: Domestic sales, per capita consumption, and exports by country 2011	
Table 13: Countries on the DAC list: Development of organic agricultural land 2005-2011	
Table 14: World: Land use in organic agriculture by region (including in-conversion areas) 2011	
Table 15: World: Land use and crop categories in organic agriculture worldwide 2011	
Table 16: Use of organic arable land (including in-conversion areas), 2009 and 2010 compared	
Table 17: Use of organic permanent cropland (including in-conversion areas), 2010 and	
2011 compared	82
Table 18: Wild collection and beekeeping areas by region 2011	84
Table 19: Wild collection and beekeeping areas by crop group 2011	84
Table 20: Wild collection and beekeeping areas by country 2011	86
Table 21: Number of Beehives by country 2011	91
Table 22: Selected key crops in organic agriculture 2011 (overview): Land under organic management	
(including conversion areas)	
Table 23: Organic cereal area 2011	96
Table 24: Organic citrus fruit 2011	99
Table 25: Organic cocoa bean area 2011	
Table 26: Organic coffee area 2011	103
Table 27: Organic temperate fruit by crop 2011	104
Table 28: Organic temperate fruit 2011	106
	108
Table 30: Organic tropical and subtropical fruit	
Table 31: Organic grape area 2011	
	115
Table 33: Organic oilseeds 2011	
Table 34: Organic oilseeds area 2011	118
Table 35: Organic protein crop area 2011	
Table 36: Organic vegetable area 2011	
Table 37: Countries with regulations on organic agriculture	
Table 38: Countries in the process of drafting regulations	143
Table 39: Countries with the most certification bodies	
Table 40: Certification bodies: Start of operation of organic certifiers	
Table 41: PGS initiatives officially recognized by IFOAM	161
Table 42:Africa:Organic agricultural land, share of total agricultural land and	4.50
number of producers 2011.	173
Table 43: Africa: All organic areas 2011	
Table 44: Africa: Land use in organic agriculture (fully converted and in conversion) 2010	
Table 45: Africa: Use of wild collection areas 2011	T./6
Table 46: Asia: Organic agricultural land, share of total agricultural land and	000
number of producers 2011	_202
Table 47: Asia: All organic areas 2011	203
Table 48: Asia: Land use in organic agriculture (fully converted and in-conversion) 2011	
Table 49: Asia: Use of wild collection areas 2011	∠∪5
rabie 50. Europe: Organic agricultural land, snare of total agricultural land and	

number of producers 2011	219
Table 51: Europe: All organic areas 2011	220
Table 52: Europe: Land use in organic agriculture 2010 and 2011	222
Table 53: Europe: Use of wild collection areas 2011	223
Table 54: Europe: The European market for organic food 2011	
Table 55: Albania: Development of organically certified actors, by category	235
	235
	237
	242
	244
	248
	252
Table 62: Latin America: Organic agricultural land, share of total agricultural land and	0.74
	276
	277
0 0	278
Table 65: Latin America: Use of wild collection areas 2011	279
Table 66: North America: Organic agricultural land, share of total agricultural land and	200
number of producers	296 296
Table 68: North America: Land use in organic agriculture	
	290
Table 70: Australia: Values of organic production 2001-2011  Table 71: Pacific region: Main crops currently organically certified	
Table 72: Oceania: Organic agricultural land, share of total agricultural land and	500
number of producers 2011	311
	311
Table 74: Oceania: Land use in organic agriculture 2011	
Table 75: Organic agricultural land, share of total agricultural land and number of producers and dome	estic
sales 2011	STO
sales 2011	318
	510
Figures	
Figures Figure 1: World: Distribution of organic agricultural land by region 2011	41
<b>Figures</b> Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011	41 41
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011	41 41 45
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011	41 41 45 45
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011	41 41 45 45 45
Figures Figure 1: World: Distribution of organic agricultural land by region 2011_ Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011_ Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011_ Figure 4: World: Distribution of the shares of organic agricultural land 2011_ Figure 5: World: Growth of the organic agricultural land 1999-2011_ Figure 6: Growth of the organic agricultural land by region 2005 to 2011_	41 41 45 45 49
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011	41 45 45 45 49 49
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011	41 45 45 45 49 49
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011	41 45 45 49 49 50
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares	41 45 45 49 49 50 56
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011 Figure 11: Global market of organic food: Distribution by country 2011	41 45 45 49 49 50 56 63 63
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011	41 45 45 49 49 50 56 63 63
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011 Figure 11: Global market of organic food: Distribution by country 2011	41 45 45 49 50 56 63 63 69
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011 Figure 11: Global market of organic food: Distribution by country 2011 Figure 12: Global market: The countries with the largest markets for organic food 2011 Figure 14: Global market: The countries with the highest per capita consumption 2011	41 45 45 49 50 56 63 63 69 70
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011 Figure 11: Global market of organic food: Distribution by country 2011 Figure 12: Global market of organic food: Distribution by single market 2011 Figure 13: Global market: The countries with the largest markets for organic food 2011 Figure 14: Global market: The countries with the highest per capita consumption 2011 Figure 15: Countries on the DAC list: the countries with the largest organic agricultural land in 2011	41 45 45 49 50 56 63 63 69 70
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011 Figure 12: Global market of organic food: Distribution by country 2011 Figure 13: Global market: The countries with the largest markets for organic food 2011 Figure 14: Global market: The countries with the highest per capita consumption 2011 Figure 15: Countries on the DAC list: the countries with the highest shares of organic	411 414 45 45 49 49 50 56 63 63 69 69 70 74
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011 Figure 11: Global market of organic food: Distribution by country 2011 Figure 12: Global market: The countries with the largest markets for organic food 2011 Figure 13: Global market: The countries with the highest per capita consumption 2011 Figure 15: Countries on the DAC list: the countries with the largest organic agricultural land in 2011 Figure 16: Countries on the DAC list: the countries with the highest shares of organic agricultural land in 2011	41 41 45 45 49 49 50 56 63 69 69 70 70 74
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011 Figure 11: Global market of organic food: Distribution by country 2011 Figure 12: Global market: The countries with the largest markets for organic food 2011 Figure 14: Global market: The countries with the highest per capita consumption 2011 Figure 15: Countries on the DAC list: the countries with the largest organic agricultural land in 2011 Figure 16: Countries on the DAC list: the countries with the highest shares of organic agricultural land in 2011 Figure 17: World: Distribution of main land use types by region 2011	41 41 45 49 49 50 56 63 63 69 70 70 74
Figures Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011 Figure 11: Global market of organic food: Distribution by country 2011 Figure 12: Global market of organic food: Distribution by single market 2011 Figure 13: Global market: The countries with the largest markets for organic food 2011 Figure 14: Global market: The countries with the highest per capita consumption 2011 Figure 15: Countries on the DAC list: the countries with the largest organic agricultural land in 2011 Figure 16: Countries on the DAC list: the countries with the highest shares of organic agricultural land in 2011 Figure 17: World: Distribution of main land use types by region 2011 Figure 18: World: Distribution of main land use types and crop categories 2011	41 41 45 49 49 50 56 63 63 69 70 70 74
Figures  Figure 1: World: Distribution of organic agricultural land by region 2011  Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011.  Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011.  Figure 4: World: Distribution of the shares of organic agricultural land 2011.  Figure 5: World: Growth of the organic agricultural land 1999-2011.  Figure 6: Growth of the organic agricultural land by region 2005 to 2011.  Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011.  Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares.  Figure 9: World: Distribution of organic producers by geographical region 2011.  (Total: 1.8 million producers).  Figure 10: World: The countries with the highest numbers of organic producers 2011.  Figure 11: Global market of organic food: Distribution by country 2011.  Figure 12: Global market: The countries with the largest markets for organic food 2011.  Figure 13: Global market: The countries with the highest per capita consumption 2011.  Figure 15: Countries on the DAC list: the countries with the largest organic agricultural land in 2011.  Figure 16: Countries on the DAC list: the countries with the highest shares of organic agricultural land in 2011.  Figure 17: World: Distribution of main land use types by region 2011.  Figure 18: World: Distribution of main land use types and crop categories 2011.  Figure 19: World: Development of organic arable land, permanent cropland and	41 41 45 49 49 50 56 63 63 69 70 74 74 77
Figure 5: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011 Figure 11: Global market of organic food: Distribution by country 2011 Figure 12: Global market of organic food: Distribution by single market 2011 Figure 13: Global market: The countries with the largest markets for organic food 2011 Figure 14: Global market: The countries with the highest per capita consumption 2011 Figure 15: Countries on the DAC list: the countries with the largest organic agricultural land in 2011 Figure 16: Countries on the DAC list: the countries with the highest shares of organic agricultural land in 2011 Figure 17: World: Distribution of main land use types by region 2011 Figure 18: World: Distribution of main land use types and crop categories 2011. Figure 19: World: Distribution of main land use types and crop categories 2011. Figure 19: World: Development of organic arable land, permanent cropland and permanent grassland/grazing areas 2004-2011	41 41 45 49 49 50 56 63 63 69 70 74 74 77 77
Figure 5: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011 Figure 11: Global market of organic food: Distribution by country 2011 Figure 12: Global market of organic food: Distribution by single market 2011 Figure 13: Global market: The countries with the largest markets for organic food 2011 Figure 14: Global market: The countries with the highest per capita consumption 2011 Figure 15: Countries on the DAC list: the countries with the largest organic agricultural land in 2011 Figure 16: Countries on the DAC list: the countries with the highest shares of organic agricultural land in 2011 Figure 17: World: Distribution of main land use types by region 2011 Figure 18: World: Distribution of main land use types and crop categories 2011. Figure 19: World: Development of organic arable land, permanent cropland and permanent grassland/grazing areas 2004-2011 Figure 20: World: Distribution of arable cropland by region 2011	41 41 45 49 49 50 56 63 63 69 70 74 77 77 77
Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 3: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011 Figure 12: Global market of organic food: Distribution by country 2011 Figure 13: Global market of organic food: Distribution by single market 2011 Figure 14: Global market: The countries with the largest markets for organic food 2011 Figure 15: Countries on the DAC list: the countries with the largest organic agricultural land in 2011 Figure 16: Countries on the DAC list: the countries with the highest per capita consumption 2011 Figure 17: World: Distribution of main land use types by region 2011 Figure 18: World: Distribution of main land use types and crop categories 2011 Figure 19: World: Distribution of main land, permanent cropland and permanent grassland/grazing areas 2004-2011 Figure 20: World: Distribution of arable cropland by crop group 2011	41 41 45 49 49 50 56 63 63 69 70 74 74 77 77 78 81 81
Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 4: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011 Figure 12: Global market of organic food: Distribution by country 2011 Figure 13: Global market of organic food: Distribution by single market 2011 Figure 14: Global market: The countries with the largest markets for organic food 2011 Figure 14: Global market: The countries with the highest per capita consumption 2011 Figure 15: Countries on the DAC list: the countries with the largest organic agricultural land in 2011 Figure 16: Countries on the DAC list: the countries with the highest shares of organic agricultural land in 2011 Figure 17: World: Distribution of main land use types by region 2011 Figure 18: World: Distribution of main land use types and crop categories 2011 Figure 19: World: Distribution of arable cropland by region 2011 Figure 20: World: Distribution of arable cropland by region 2011 Figure 21: World: Distribution of permanent cropland by region 2011 Figure 22: World: Distribution of permanent cropland by region 2011 Figure 22: World: Distribution of permanent cropland by region 2011	411 411 451 459 499 500 566 633 639 699 7074 777 778 811 818 83
Figure 1: World: Distribution of organic agricultural land by region 2011 Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011 Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011 Figure 3: World: Distribution of the shares of organic agricultural land 2011 Figure 5: World: Growth of the organic agricultural land 1999-2011 Figure 6: Growth of the organic agricultural land by region 2005 to 2011 Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011 Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers) Figure 10: World: The countries with the highest numbers of organic producers 2011 Figure 12: Global market of organic food: Distribution by country 2011 Figure 13: Global market of organic food: Distribution by single market 2011 Figure 14: Global market: The countries with the largest markets for organic food 2011 Figure 15: Countries on the DAC list: the countries with the largest organic agricultural land in 2011 Figure 16: Countries on the DAC list: the countries with the highest per capita consumption 2011 Figure 17: World: Distribution of main land use types by region 2011 Figure 18: World: Distribution of main land use types and crop categories 2011 Figure 19: World: Distribution of main land, permanent cropland and permanent grassland/grazing areas 2004-2011 Figure 20: World: Distribution of arable cropland by crop group 2011	411 411 451 459 499 500 566 633 639 699 700 747 777 78 811 818 83 83 83 83

#### Table of Contents

Figure 25: World: The ten countries with the largest organic wild collection	
and beekeeping areas in 2011	85
Figure 26: World: Distribution of organic beehives by region in 2011	89
Figure 27: Development of the global organic beehives 2007-2011	90
Figure 28: The ten countries with the largest number of organic beehives in 2011	90
Figure 29: Cereals: Development of the global organic area 2004-2011	95
Figure 30: Cereals: Distribution of cereal types 2011	
Figure 31: Citrus fruit: Use of organic citrus fruit area 2011	
Figure 32: Cocoa beans: Development of the organic area 2004-2011	
Figure 33: Coffee: Development of organic area 2004-2011	
Figure 34: Temperate fruit: Distribution by crop 2011	
Figure 35: Temperate fruit: Development 2004-2011	
Figure 36: Tropical and subtropical fruit: Distribution by crop 2011	
Figure 37: Tropical and subtropical fruit: Development 2004-2011	
Figure 38: Organic grape area: Development 2004-2011	
Figure 39: Organic olive area: Development 2004-2011	11/
Figure 40: Organic oilseed area: Growth 2004-2011	
Figure 41: Organic oilseed area: Distribution of oilseed area by crop 2011	117
Figure 42: Organic protein crop area: Growth 2004-2011	
Figure 43: Organic vegetable area: Growth 2004-2011	122
Figure 44: The Global Market for Organic Food & Drink: Market growth 2002-2011	
Figure 45: Global market for organic food and drink: Distribution by region 2011	133
Figure 46: Development of the number of certification bodies by region 2004-2012	
Figure 47:Development of the number of certification bodies by type of approval	
Figure 48: Logo IFOAM Family of Standards	
Figure 49: Logo IFOAM accredited	
Figure 50: Logo IGOSA - IFOAM Global Organic System Accreditation	
Figure 51: Global Organic Mark	158
Figure 52: The IFOAM PGS logo	160
Figure 53: Africa: The ten countries with the largest organic area 2011	170
Figure 54: Africa: The countries with the highest share of organic agricultural land 2011	170
Figure 55: Africa: Development of organic agricultural land 2000 to 2011	171
Figure 56: Africa: Use of agricultural land 2011	171
Figure 57: Africa: The ten countries with the largest number of organic producers 2011	172
Figure 58: Cambodia: Organic land use 2011	182
Figure 59: Cambodia: Development of organic agricultural land 2005-2011	182
Figure 60: Lao PDR: Oganic land use2011	
Figure 61: Lao PDR: Development of organic agricultural land 2008-2011	183
Figure 62: India: Development of organic agricultural land 2004-2011	
Figure 63: Indonesia: Oganic land use2011	
Figure 64: Indonesia: Development of organic agricultural land 2003-2011	
Figure 65: Malaysia: Development of organic agricultural land 2003-2011	
Figure 66: Nepal: Development of organic agricultural land 2005-2011	
Figure 67: Philippines: Development of organic agricultural land 2003-2011	
Figure 68: Sri Lanka: Development of organic agricultural land 2003-2011	
Figure 69: Thailand: Organic land use 2011	190
Figure 71: Vietnam: Development of organic agricultural land 2005-2011	189
Figure 72: Saudi Arabia: Organic production by region	
Figure 73: Saudi Arabia: Organic logo	197
Figure 74: Asia: The ten countries with the most organic agricultural land 2011	
Figure 75: Asia: The ten countries with the highest percentage of organic agricultural land 2011	
Figure 76: Asia: Development of organic agricultural land 2000 to 2011	
Figure 77: Asia: Use of organic agricultural land 2011	201
Figure 78: European Union: Logo for organic products.	
Figure 79: Europe: The ten countries with the most organic agricultural land 2011	
Figure 80: Europe: The ten countries with the highest shares of organic agricultural land 2011	
Figure 81: Europe: Development of organic agricultural land 1999-2011	
Figure 82: Europe: Use of agricultural land 2011	
Figure 83: Europe: The ten countries with the largest markets for organic food and beverages $2011_{}$	226

Figure 84: Europe: Distribution of organic food sales 2011	226
Figure 85: Europe: The ten countries with the highest per-capita consumption 2011	
Figure 86: Europe and European Union: Market development 2004-2011	
Figure 87: Number of users of each data type and	
number of respondents who reported that the respective data type does not exist	233
Figure 88: Albania: Geographical location of organic operators	
Figure 89: Development of organic agricultural land in Hungary 1988-2011	239
Figure 90: Land use types of certified organic area in Hungary in 2011	
Figure 91: Serbia: Organic logo	
Figure 92: Mexico:Development of organic agricultural land 2005-2011	
Figure 93: Central America: Organic agricultural land use 2011. (Belize, Costa Rica, Guatemala,	200
Honduras, El Salvador, Nicaragua and Panama)	262
Figure 94: Central America: Development of organic agricultural land 2005-2011. (Belize, Costa Rica,	202
Guatemala, Honduras, El Salvador, Nicaragua and Panama)	262
Figure 95: Peru: Distribution of key agricultural crop groups 2011 (total area 185'964 ha)	
Figure 96: Bolivia: Distribution of key agricultural crop groups 2011 (total area 32'710 ha)	
Figure 97: Ecuador: Distribution of key agricultural crop groups 2011 (total area 52'196 ha)	
Figure 98: Colombia: Distribution of key agricultural crop groups 2011 (total area 34'060 ha)	
Figure 99: Brazil: Certified wild collection and agricultural land (total: 1.8 million hectares).	
Figure 100: Argentina: Land use in organic agriculture 2011	
Figure 101: Argentina: Development of the organic cereal area 2007 – 2011.	
Figure 102: Chile: Distribution of key crops/crop group area 2011	271
Figure 104: Latin America and Caribbean: The ten countries with the largest areas	
of organic agricultural land 2011	274
Figure 105: Latin America and Caribbean: The ten countries with the highest shares	
of organic agricultural land 2011	
Figure 106: Latin America and Caribbean: Development of organic agricultural land 2000-2011	
Figure 107: Latin America and Caribbean: Land use in organic agriculture 2011	275
Figure 108: Canada: Development of the number of organic farms 1992-2011	289
Figure 109: North America: Organic agricultural land in Canada and the United States (2008)	294
Figure 110: North America: Organic share of total organic agricultural land in Canada and	
the United States	294
Figure 111: North America: Development of organic agricultural land 2000-2011 (for the US the latest	
available data are from 2008)	295
Figure 112: North America: Land use in organic agriculture 2011 (for the US the latest	
	_295
Figure 112: Organic Pasifika PGS logo	_303
Figure 114: Pacific Islands: Development of organic agricultural land 2008-2011	_304
Figure 115: Oceania: Organic agricultural land by country 2011	309
Figure 116: Oceania: Share of organic agricultural land 2011	309
Figure 117: Oceania: Development of organic agricultural land 2000-2011	
Figure 118: Oceania: Top 5 countries with the largest growth of organic agricultural land in 2011	
MAPS	
Man 1. Ourseit a minute multimultand and other surreit areas in 2011	25
Map 1: Organic agricultural land and other organic areas in 2011	
Map 2: The world map of organic agriculture	
Map 3: Organic agricultural land in the countries of Africa 2011	
Map 4: Organic agricultural land in the countries of Asia 2011	
Map 5: Organic agricultural land in the countries of Europe 2011	
Map 6: Organic agricultural land in the countries of Latin America and the Caribbean 2011	
Map 7: Organic agricultural land in Canada and the US 2011	
Map 8: Organic agricultural land in the countries of Oceania 2011	297

Table of Contents

#### **Foreword from SECO**

Once more, the number of consumers voting with their trolley has grown rapidly! Organic products with a total value of almost 63 billion US dollars were sold globally in 2011 – an increase by four billion US dollars compared with 2010. A growth rate of nearly 10 percent was even recorded in the most advanced markets for organic products. In the United States the market grew by 9.4 percent and in Germany by 9 percent – a remarkable result.

The other good news is that the production side is keeping pace: The latest data for 2011 show that organic farmland has grown, so overall organic production has increased. Second, considerable efforts have been made to achieve technical improvements and increase productivity. Beside the lower production costs and the price premium for organic, higher yields are a key factor to improve income and create wealth in developing countries. This remains the major challenge of organic compared to conventional production. Third, the number of countries – 86 by now – that have defined binding rules for organic agriculture also has grown. Four new countries, Dominica, Guinea Bissau, Kosovo and Tonga, have joined the community of organic producers (162 in total).

These figures on the organic market in terms of quantity are intrinsically linked to the findings in terms of quality, i.e. the challenges, achievements and benefits of organic production: workers' health, workload, gender equality, biodiversity conservation, carbon sequestration, and so forth. A favorable policy environment, reliable regulations and standards as well as transparency remain key factors for future success.

To continue attracting the various stakeholders to join the organic movement and in order to maintain sustainable growth of the sector, gathering the relevant information on market trends – to which this book makes a major contribution – is essential, as are assessments of value added and of the costs and benefits of organic production. These information tools enable credibility and informed decisions on both the producing and buying side.

Hans-Peter Egler Head of the Division for Trade Promotion Swiss State Secretariat for Economic Affairs SECO Bern, Switzerland

#### Foreword from FiBL and IFOAM

Data collection is a major and constant 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 crucial for monitoring the impact of these activities. The data collection of FiBL and IFOAM has become one of the most frequently quoted literature in scientific, technical and descriptive papers and reports on organic agriculture.

With this edition, FiBL and IFOAM are presenting "The World of Organic Agriculture" for the fourteenth time. The data and information compiled in this volume document the current statistics, recent developments, and trends in global organic farming. The statistical information and all chapters have been updated. As in previous editions, selected country reports were also compiled.

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

We are grateful to the Swiss State Secretariat for Economic Affairs (SECO)/Economic Development and Cooperation for their support.

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

Frick and Bonn, February 2013

Prof. Dr. Urs Niggli Director Research Institute of Organic Agriculture (FiBL) Frick, Switzerland Markus Arbenz
Executive Director
International Federation of Organic
Agriculture Movements (IFOAM)
Bonn, Germany

### **Acknowledgements**

The Research Institute of Organic Agriculture (FiBL) and the International Federation of Organic Agriculture Movements (IFOAM) are very grateful to their sponsors for granting financial support for the global data collection and for the 2013 edition of "The World of Organic Agriculture": the Swiss State Secretariat for Economic Affairs (SECO), Economic Development and Cooperation (within the framework of its support activities for organic production in developing countries), Bern, Switzerland, and NürnbergMesse, the organizers of the BioFach World Organic Trade Fair, Nürnberg, Germany.

Numerous individuals have contributed to the making of this work. The editors are very grateful to all those listed below, without whom it would not have been possible to produce this global statistical yearbook.

Gyorgyi Acs Feketene, Control Union Certifications, AD Zwolle, The Netherlands, www.controlunion.com; Olugbenga O. AdeOluwa, Faculty of Agriculture and Forestry//Department of Agronomy, University of Ibadan, Ibadan, Nigeria, www.unaab.edu.ng; Samuel Adimado, Ghana Organic Agriculture Network, Kumasi, Ghana, www.goan-network.net; Raymond Aendekerk, Oikopolis, Biolabel - Verenegung fir Biologesche Landbau Letzebuerg, Munsbach, Luxembourg, www.biolabel.lu; Lina Al Bitar, Istituto Agronomico Mediterraneo IAMB, Valenzano), Italy, www.iamb.it; Ayman Al Ghamdi, Ministry of Agriculture of the Kingdom of Saudi Arabia, Department of Organic Agriculture (DOA), Riyadh, Saudi Arabia, KSA, www.moa.gov.sa; Mohammad Al Oun, Water and Food Research Food Programme, Jordan National Centre for Research and Development, Jordan, Saif Mohamed Alshara, Ministry of Environment and Water, united Arab Emirates; Stoilko Apostolov, Bioselena: Foundation for organic agriculture, Karlovo, Bulgaria, www.bioselena.com; Markus Arbenz, International Federation of Organic Agriculture Movements (IFOAM), Bonn, Germany, www.ifoam.org; Lidya Ariesusanty, Organic Indonesia Alliance IOA, Bogor, Indonesia, www.organicindonesia.org; Raymond Auerbach, School of Natural Resource Management, Nelson Mandela Metropolitan University, George, South Africa, www.nmmu.ac.za; Elhag Meki Ali Awouda, Quality Control Unit & Export development, Federal Ministry of Agriculture & Irrigation, Sudan; Vugar Babayev, Ganja Agribusiness Association (GABA), Ganja City, Azerbaijan, www.gaba.az; Verena Batlog, GIZ Bolivia, La Paz, Bolivia; Lea Bauer, Biokontroll Hungária Közhasznú Társaság, Budapest, Hungary, www.biokontroll.hu; Andrew Bayliss, Soil Association Certification Limited, Bristol, UK, www.sacert.org; Florence Bassono, Ecocert, www.ecocert.com; Milena Belli, ICEA Foreign Office, Istituto per la Certificazione Etica ed Ambientale (ICEA), Bologna, Italy, www.icea.info; Gwandal Belloqc, Instituto Biodinâmico, Botucatu, Brazil, www.ibd.com.br; Mohamed Ben Kheder, Centre Technique de l'Agriculture Biologique, Sousse, Tunesia, www.ctab.nat.tn; Thomas Bernet, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org; Marian Blom, Bionext, LC Utrecht, The Netherlands, www.bionext.nl; Hervé Bouagnimbeck, International Federation of Organic Agriculture Movements, IFOAM Africa Office, Bonn, Germany, www.ifoam.org; Thavisith Bounyasouk, Department of Agriculture (DOA), Vientiane, Lao PDR; Trevor Brown, Jamaica Organic Agriculture Movement JOAM, Kingston 6, Jamaica, West Indies, www.joamltd.org; Marie Reine Bteich, Organic Agriculture Unit, Istituto Agronomico Mediterraneo di Bari, Bari, Italy; Klaus Büchel, Ingenieurbüro für Agrarund Umweltberatung, Klaus Büchel Anstalt, Mauren, Liechtenstein, www.kba.li; Andreas Bürkert, Organic Plant Production and Agroeceosystems Research in the Tropics and Subtropics, University of Kassel, Faculty of Organic Agricultural Sciences, Witzenhausen, Germany, www.agrar.uni-kassel.de; Diana Callear, Afrisco, Pretoria, South Africa, www.afrisco.net; Flávia Castro, International Federation of Organic Agriculture Movements (IFOAM), Bonn, Germany, www.ifoam.org; Jennifer Chang, Senior Manager, International Relations, Korean Federation of Sustainable Agriculture Organizations (KFSA), Seocho-gu, Seoul, Republic of Korea, www.kfsao.org; Thomas Cierpka, International Federation of Organic Agriculture Movements (IFOAM), Bonn, Germany, www.ifoam.org; Marian Cioceanu, Bio Romania, Bucuresti, Romania, www.bio-romania.org; Martin Cottingham, Soil Association, UK; Marcus Coomer, BioGro, New Zealand, www.biogro.co.nz; Catarina Crisostomo, University of Milan, Italy; Philip Cullen, Department of Agriculture, Food and Rural Development, The Organic Farming Unit, Johnstown, Co. Wexford, Ireland, www.irlgov.ie/daff; Nune Darbinyan, ECOGLOBE - Organic control and certification body, Yerevan, Republic of Armenia, www.ecoglobe.am; Enrico de Ruvo, ISMEA, Research institute for agriculture and market studies, Roma, Italy; Koen den Braber, Hanoi, Vietnam, Zoltán Dezsény, Hungarian Research Institute of Organic Agriculture (ÖMKi), Budapest, Hungary, www.biokutatas.hu; Famara Diédhiou, National Federation for Organic Agriculture, AGRECOL, Dakar, Senegal; Dóra Drexler, Hungarian Research Institute of Organic Agriculture (ÖMKi), Budapest, Hungary, www.biokutatas.hu; Karolína Dyrtová, Bioinstitut, o.p.s., Institute for Ecological Agriculture and Sustainable Landscape Development, Olomouc, Czech Republic, www.bioinstitut.cz; Loli Edeso, Ruta, San José, Costa Rica, www.ruta.org; Pilar M. Eguillor Recabarren, Ministry of Agriculture, Oficina de Estudios y Politicas Agrarias ODEPA, Santiago Centro, Chile, www.odepa.gob.cl; Afaf Abdelrahim Elgzouly, Federal Ministry of Agriculture & Irrigation, Export Development& Quality Control Unit, Republic of the Sudan, Lucy Ellis, Department of Agriculture, Stanley FIQQ 1ZZ, Falkland Islands/Malvinas, www.agriculture.gov.fk; Sandra Elvir Sanchez, Agricultura Orgánica Honduras, SENASA HONDURAS, Secretaria de Agricultura y Ganadería, Tegucigalpa, Honduras, Carlos Escobar, ECONEXOS, Conexion Ecologica, Cali, Colombia, Cali, Colombia, www.econexos.com; Angela Pernas Escosteguy, Instituto do Bem-Estar, Porto Alegre, Brasil, www.ibembrasil.org; Monique Faber, Service de la protection des végétaux, Administration des services techniques de l'agriculture (ASTA), Luxembourg, www.asta.etat.lu; Addisu Alemayehu Ferede, Tepi National Spice Research Centre, Ethiopian Association of Organic Agriculture EAOA, Addis Ababa, Ethiopia; Tobias Fischer, BCS Öko-Garantie GmbH, Nürnberg, Germany, www.bcs-oeko.de; Barbara Fitch Haumann, Organic Trade Association (OTA), Brattleboro VT 05301, USA, www.ota.com; Patricia Flores Escudero, Representative of the Latin American and Caribbean Group of the International Federation of Organic Agriculture Movements (GALCI), Lima, Peru; Emmeline Foubert, Certisys, Walhain, Belgium, www.certisys.eu; Ferenc Frühwald, BioHolMi, Budapest, Hungary; Carolin Funck, University of Hiroshima, Japan; Udo Funke, Nürnberg Messe, BioFach - World Organic Trade Fair, Nürnberg, Germany, www.biofach.de; Salvador Garibay, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org; Lisa Gauvrit, ECOZEPT, Montpellier, France, www.ecozept.com; Catherine Gerrard, Organic Research Centre, Hamstead Marshall, Newbury, UK, www.organicresearchcentre.com;

Maheswar Ghimire, Kathmandu, Nepal, Laurent C. Glin, Wageningen University and FiBL West Africa, Benin; Camille Godard, Ecocert, France, www.ecocert.com; Denise Godinho, International Federation of Organic Agriculture Movements (IFOAM), Bonn, Germany, www.ifoam.org; Ana Goloborodco, Ecocert, Romania, www.ecocert.com; Miguel Gomez, RUTA, San José, Costa Rica, Alberto Gómez, CEUTA, Uruguay, Victor Gonzálvez Pérez, Sociedad Española de Agricultura Ecologica (SEAE) / Spanish Society for Organic Agriculture, Catarroja (Valencia), Spain, www.agroecologia.net; Daniel Gorba, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org: David Gould. International Federation of Organic Agriculture Movements (IFOAM), Bonn, Germany, www.ifoam.org; P.V.S.M. Gouri, Ministry of Commerce and Industry, Govt. of India, Agricultural and Processed Food Products. Export Development Authority, August Kranti Marg. New Delhi, India, www.apeda.com/organic; Catherine Greene, Economic Research Service USDA, 20036-5831, Washington DC, USA, www.ers.usda.gov/Data/Organic; Simone Groh, CERES - CERtification Environmental Standards GmbH, Happurg, Germany, www.ceres-cert.com; Iulia Grosulescu, Organic Farming Office, Ministry of Agriculture and Rural Development, Bucharest, Romania, www.mapam.ro; Gunnar Á. Gunnarsson, Organic Inspection and certification, Vottunarstofan Tún ehf., Reykjavik, Iceland, www.tun.is; Guido Haas, agrar Expertise, Bad Honnef, Germany, www.agrarhaas.de: Marco Hartmann, Organic Farming Project, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, GIZ International Services, Riyadh, Saudi Arabia, Kingdom of Saudi Arabia, www.saudi-organic.org.sa; Benjamin Henning, University of Sheffield, UK; Sampsa Heinonen, Evira, Helsinki, Finland, www.evira.fi; Ines Hensler, Institute of Market Ecology (IMO), Weinfelden, Switzerland, www.imo.ch; Otto Hofer, Lebensministerium/ BMLFUW, Wien, Austria; Matthew Holmes, Organic Trade Association, Canadian Office, Sackville, Canada, www.ota.com/otacanada.html; Robert Home, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland; Andrea Hrabalová, Agrienvironmental policy, Institute of Agricultural Economics and Information, Brno, Czech Republic; Beate Huber, International Cooperation, Research Institute of Organic Agriculture Frick, Switzerland, www.fibl.org; Jansen. EkoConnect - International Centre for Organic Agriculture of Central and Eastern Europe e.V., Dresden, Germany, www.ekoconnect.org; Jorge Leonardo Jave Nakayo, Producción Orgánica, Ministerio de Agricultura, SENASA- Perú, Lima, Peru; Aikuali Joseph, DOAM, Dominica; Jack Juma, Secretariat, Kenya Organic Agricultural Network (KOAN), Nairobi, Kenya, www.koan.co.ke; Marija Kalentic, Economic Development and Employment Promotion Program (WBF), German International Cooperation GIZ, Novi Sad, Serbia, www.gtzwbf.org/?nahrungsmittel&jez=de; Lani Katimbang-Limpin, Organic Certification Center of the Philippines OCCP, Barangay Laging Handa, Quezon City, Philippines, www.occpphils.org; Joelle Katto-Andrighetto, International Federation of Organic Agriculture Movements (IFOAM), Bonn, Germany, www.ifoam.org; Iris Kazazi, Albanian Association of Marketing, Tirana, Albania, Saad Khalil, Secretary General, Ministry of Agriculture & Saudi Organic Farming Association (SOFA), Riyadh, Saudi Arabia, Mohamed Ben Khedher, Technical Center of Organic Agriculture, Tunisia, www.ctab.nat.tn; Andrey Khodus, Eco-control Solnechnogorsk, Russian Federation, www.eco-control.ru; Eustace Kiarii, Secretariat, Kenya Organic Agricultural Network (KOAN), Nairobi, Kenya, www.koan.co.ke; Claudia Kirchgraber, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland;

Organic Centre of Kazakhstan, Almaty, Kazakhstan, Klimov, www.organiccenter.kz; Masaya Koriyama, Japan, Marja-Riitta Kottila, Pro Luomu, Kauniainen, Finland, www.luomu.fi; Dóra Kovács, Hungária Öko Garancia Kft., Budapest, Hungary, www.okogarancia.hu; Manoj Kumar Menon, International Competence Centre for Organic Agriculture ICCOA, Rajarajeshwarinagar, Bangalore, India, www.iccoa.org; Shaknoza Kurbanalieva, "Organic Cotton Production & Trade Promotion" Project (BioCotton), HELVETAS, Jalal-Abad, the Kyrgyz Republic, www.helvetas.kg; Noel Kwai, Tanzania Organic Agriculture Movement TOAM, Dar es Salaam, Tanzania, www.kilimohai.org; Meirelles Laércio, Brazil; Carla Larsson, Economic Statistics Department, Statistics Sweden, Örebro, Sweden, www.scb.se; Sonia Lehmann, Deutsche Gesellschaft für Internationale Zusammenarbeit GIZ Ecuador, Quito, Ecuador, www.giz.de; Ralph Liebing, Market Development & Services, ORA ~ Organic Retailers Association, Wien, Austria, www.o-r-a.org; Ming Chao Liu, Organics Brazil, Brazil, www.organicsbrasil.org; Alexander Lysenkov, ABCERT GmbH Kontrollstelle für ökologisch erzeugte Lebensmittel, ABCert GmbH, Esslingen, Germany, www.abcert.de; Samia Maamer Belkhiria, National Burea of Organic Agriculture, Ministry of Agriculture and Hydraulic Resources APIA, Tunis, Tunisia, www.tunisie.com/APIA/min\_agriculturea.htm; Anne Macey, Canadian Organic Growers COG, Canada; Marcela Machuca, Ecocert, Colombia, www.ecocert.com; Hossein Mahmoudi, Department of Ecological Agriculture, Environmental Sciences Research Institute, Evin Shahid Beheshti University SBU, Velenjak, Evin, Tehran, Iran, http://en.sbu.ac.ir/Default.aspx?tabid=189; Souhel Makhoul, Institutional Development of Organic Agriculture in Syria, General Commission for Scientific Agricultural Research, Damascus, Syria, www.organicsyria.com; Jon Manhire, The AgriBusiness Group Ltd., New Zealand, www.agribusinessgroup.com; Pablo Malabanan Villegas; Karen Mapusua, Secretariat of the Pacific Community (SPC), Suva, Fiji, www.spc.int; Cliflyn McKenzie, Ecocert Southern Africa, Gardens, Cape Town, South Africa, www.ecocert.com; Merit Mikk, Centre of Ecological Engineering, Tartu, Estonia, www.ceet.ee; Eugene Milovanov, Organic Federation of Ukraine, http://organic.com.ua; Heinz Minder, Bio Test Agro, Münsingen, Switzerland, www.biotest-agro.ch; Natasa Mirecki, University of Montenegro, Biotechnical Faculty, Podgorica, Montenegro, www.btf.ac.me/en; Alexandra Mitchell, School of Rural Science and Agriculture, University of New England, Australia; Walaa Mohamad, Sekem, Egypt; Keerthi Mohotti, Sri Lanka; Camille Moreau, Agence BIO, Montreuil-sous-Bois, France, www.agencebio.fr; Vincent Morel, Ecocert, L'Isle Jourdain, France; Mersida Musabegovic, Organska Kontrola (OK), Sarajevo, Bosnia & Herzegovina, Charity Namuwoza, National Organic Agricultural Movement of Uganda NOGAMU, Kampala, Uganda, www.nogamu.org.ug; Jean Napo-Bitantem, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org; Urs Niggli, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org; Aleksandra Nikolic, University of Sarajevo, Sarajevo, Bosnia and Herzegovina; Agung Nugroho, Promotion of Organic Farming and Marketing in Lao PDR PROFIL Project, Helvetas Laos, Vientiane Capital, Lao PDR; Kung Wai Ong, Humus Consultancy, Penang, Malaysia; Pnina Oren Shnidor, Plant Protection and Inspection Services, PPIS, Ministry of Agriculture and Rural Development, Israel, www.ppiseng.moag.gov.il; Kolbjörn Örjavik, Grolink AB, Höje, Sweden, www.grolink.se; Maximiliano Ortega, Belize Organic Producers Association, Belmopan, Belize; Rosaleen O'Shaughnessy, Corporate Communications,

Irish Food Board Bord Bia, Dublin 2, Ireland, www.bordbia.ie; Pablito Villegas, Philippines; Susanne Padel, Socio-economics Programme, Organic Research Centre, Newbury, UK, www.organicresearchcentre.com; Elio Palmero, BioFruta, Cuba; Vitoon Panyakul, Green Net, Bangkok, Thailand, www.greennet.or.th; John Paull, Journal of Organic Systems; Gordana Pecelj, PROBIO consulting agency for organic farming, Skopje, Macedonia (FYROM), www.probio.com.mk; Ejvind Pedersen, Landbrug & Fødevarer, Copenhagen, Denmark, www.lf.dk/Oekologi.aspx; Elias Pfäffli, bio.inspecta, Frick, Switzerland, www.bioinspecta,ch; Joan Picazos, Biocop Productos Biológicos, S.A. (BIOCOP), Lliçà de vall (Barcelona), Spain, www.biocop.es; Diego Pinasco, Dirección de Calidad Agroalimentaria, Servicio Nacional de Sanidad y Calidad Agroalimentaria SENASA, Buenos Aires, Argentina; Roberto Pinton, Pinton Organic Consulting, Padova, Italy; Zaripa Pratova, "Organic Cotton Production & Trade Promotion" Project (BioCotton), HELVETAS, Jalal-Abad, the Kyrgyz Republic, Kyrgystan, www.helvetas.kg; Patrizia Pugliese, Mediterranean Agronomic Institute of Bari CIHEAM-IAMB, Valenzano, Italy, www.iamb.it; Yuhui Qiao, College of Resources and Environmental Sciences, China Agricultural University, Beijing, China, www.cau.edu.cn/zihuan; Juan Carlos Ramirez, Dirección de Calidad Agroalimentaria, Servicio Nacional de Sanidad y Calidad Agroalimentaria SENASA, Buenos Aires, Argentina; Basanta Rana Bhat, Ecological Service Centre, Chitwan, Nepal; Sandra Randrianarisoa, Ecocert East Africa, Antananarivo, Madagascar; Michel Reynaud, Ecocert International, Office, Toulouse, France, www.ecocert.com; Nathalie Rison Alabert, Agence BIO, Montreuil-sous-Bois, France, www.agencebio.fr; Marta Romeo, Ministero delle Politiche Agricole e Forestali, Sistema d'Informazione nazionale sull'agricoltura biologica SINAB, Roma, Italy, www.sinab.it; Elin Røsnes, Organic farming, Norwegian Agricultural Authority SLF, Oslo, Norway, https://www.slf.dep.no; Felix Ruhland, Organic Farming Project, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, GIZ International Services, Riyadh, Saudi Arabia, www.saudi-organic.org.sa; Gulnur Ryskulova, HELVETAS, Kyrgyzstan; Mitul Saha, Horticulture Export Development Foundation, Bangladesh, www.hortex.org; Amarjit Sahota, Organic Monitor Ltd., London W5 2PJ, UK, www.organicmonitor.com; Thatsaka Saphangthong, Vientiane, PDR; Adrienn Sárközy, Biokontroll Hungária, Budapest, Hungary, www.biokontroll.hu; Diana Schaack, Ökologischer Landbau, Agrarmarkt Informations-Gesellschaft (AMI), Bonn, Germany; Burkhard Schaer, ECOZEPT, Montpellier, France, www.ecozept.com; Aender Schanck, BIOGROS Logistique, Munsbach, Luxembourg, www.biogros.lu/de/home; Peter Schaumberger, Institut für Marktökologie IMO / Institute of Market Ecology, Weinfelden, Switzerland, www.imo.ch; Winfried Scheewe, Partner Organization: Cambodian Organic Agricultural Association (COrAA), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Sangkat Boeung Keng Kang III, Khan Chamkar Mon, Phnom Penh, Cambodia, http://kambodscha.ded.de; Bernhard Schlatter, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org; Otto Schmid, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org; Rita Schwentesius, Centro de Investigaciones Interdisciplinarias para el Desarrollo Rural Integral (CIIDRI), Universidad Autónoma Chapingo // Chapingo University, Chapingo, México, www.chapingo.mx; Dennis Sciberras, Agriculture Directorate, Organic Section, Agriculture Research Development Centre, Department for Rural Affairs and Aquaculture, Ghammieri, Malta; Ibrahima Seck, Association Sénégalaise pour la Promotion de l'Agriculture Biologique, Thiès, Sénégal, www.aspab.interconnection.org; Elene Shatberashvili, Elkana Biological Farming Association, Akhaltsikhe, Georgia, www.elkana.org.ge; Nina Shestakova, ABCERT GmbH Kontrollstelle für ökologisch erzeugte Lebensmittel, ABCert GmbH, Esslingen, Germany, www.abcert.de; Anamarija Slabe, Institute for Sustainable Development, Institut za trajnostni razvoj, Lubljana, Slovenia, www.itr.si; Nicolette van der Smissen, Feres, Greece; Manjo Smith, Namibian Organic Association NOA, Okahandja, Namibia, www.noa.org.na; Francesco Solfanelli, DIIGA, Università Politecnica Marche, Ancona, Italy, www.univpm.it; Carlos Soto, PROAMO, Costa Rica; Sokol Stafa, Albinspekt, Tiranë, Shqipëri, Albania; Emilija Stefanovic, Economic Developmenta and Employment Promotion Program (WBF), GIZ, Novi Sad, Serbia, http://www.giz.de; Erdal Süngü, General Directorate for Agricultural Production, Ministry of Food Agriculture and Animal Husbandry, Ankara, www.tarim.gov.tr/e-is,E\_.s.html; Sylye Sylanaj, Mirësevini në Fakultetin e Bujqësisë dhe Veterinarisë, University of Prishtina, Prishtinë, Kosovo; Andrzej Szeremeta, IFOAM EU Group, Brussels, Belgium, www.ifoam-eu.org; Emma Tsessue, ECOCERT SAS, L'Isle Jourdain, France, www.ecocert.com; Kesang Tshomo, National Organic Programme DOA, Ministry of Agriculture MOA, Thimphu Bhutan, www.moa.gov.bt; Nhung Tu Tuyet, Vietnam; Jiri Urban, Institut pro ekologické zemedelství a udržitelný rozvoj krajiny, Bioinstitut, o.p.s, Institute for Ecological Agriculture and Sustainable Landscape Development, Olomouc, Czech Republic, www.bioinstitut.cz; Tom Václavík, Green marketing, Moravské Knínice, www.greenmarketing.cz; Paul Verbeke, BioForum Vlaanderen vzw, Antwerpen, Belgium, www.bioforum.be; Fabienne Verzeletti, LACON GmbH, Offenburg, Germany, www.lacon-institut.com; Hellmut von Koerber, fleXible Informations-Systeme, Daten-Integration, fleXinfo, Frick, Switzerland, www.fleXinfo.ch; Maohua Wang, Department for Registration, Certification and Accreditation Administration of the People's Republic of China CNCA, Haidian district, Beijing, China, www.cnca.gov.cn/cnca; Yu Watanabe, c/o AFAS Certification Center, IFOAM JAPAN, Tokyo, Japan, www.ifoam-japan.net; Katerina Wolf, KRAV Ekonomisk förening, Uppsala, Sweden, www.krav.se; Els Wynen, Eco Landuse Systems, Flynn, ACT, 2615, Australia, www.elspl.com.au; Abdoul Aziz Yanogo, Ecocert Burkina Faso, Ecocert SA West Africa Office, Ougadougou 11, Burkina Faso, www.ecocert.com; Raffaele Zanoli, DIIGA, Università Politecnica Marche, Ancona, Italy, www.univpm.it; José Zapata, Oficina de Control Agricultura Organica, Secretaria de Estado de Agricultura OCO, Santo Domingo, Republica Dominicana, www.agricultura.gob.do; Zejiang Zhou, IFOAM China, Bonn, Germany, Germany, www.ifoam.org; Darko Znaor, Independent Consultant, Zagreb, Croatia.

## Organic Agriculture 2013: Key Indicators and Leading Countries

Indicator	World	Leading countries
Countries with data on certified organic agriculture <sup>1</sup>	2011: 162 countries	
Organic agricultural land	2011: 37.2 million hectares (1999: 11 million hectares)	Australia (12 mio. hectares, 2009) Argentina (3.8 mio. hectares) US (1.9 mio. hectares, 2008)
Share of total agricultural land	2011: 0.86 % <sup>2</sup>	Falkland Islands (Malvinas) (35.9 %) Liechtenstein (29.3 %) Austria (19.7 %)
Further, non- agricultural organic areas (mainly wild collection)	2011: 32.5 million hectares (2010: 43 million hectares; 2009: 41 million hectares)	Finland (7 million hectares) Zambia (5.9 million hectares; 2009) India (4.5 million hectares)
Producers	1.8 million producers (2010: 1.6 million producers; 2009: 1.8 million producers)	India (547'591), Uganda (188'625, 2010), Mexico (169'570)
Organic market size	62.9 billion US dollars (2010: 59.1 billion US dollars 1999: 15.2 billion US dollars) Source: Organic Monitor	US (21 billion euros or 29 billion US dollars), Germany (6.6 billion euros or 9.2 billion US dollars) France (3.7 billion euros or 5.2 billion US dollars)
Per capita consumption	2011: 9.02 US dollars <sup>3</sup>	Switzerland (177.4 euros or 250.4 USD), Denmark (161.9 euros or 225.7 USD) Luxemburg (134.3 euros or 187.3 USD)
Number of countries with organic regulations 2011	86 countries (2010: 84 countries)	
Organic certifiers 2010	2012: 576 certifiers (2011: 549; 2010 532)	South Korea, Japan, USA
Number of IFOAM affiliates	1.1.2013: 766 affiliates from 117 countries	Germany: 96 affiliates; India: 46 affiliates; China: 40 affiliates; United States: 33 affiliates: The Netherlands: 31 affiliates

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

 $^{2}$  Share of the countries included in the FiBL-IFOAM survey 2013.  $^{\rm 3}$  Total world population 6.97 billion in 2011 acording to FAO stats. FAO, Rome;

 $<sup>^{\</sup>rm 1}$  Where the designation "country" appears in this book, it covers countries or territories.

http://faostat.fao.org/site/550/DesktopDefault.aspx?PageID=550#ancor Last updated June 23, 2011.

## The World of Organic Agriculture 2013: Summary

#### HELGA WILLER<sup>1</sup>, JULIA LERNOUD<sup>2</sup> AND ROBERT HOME<sup>3</sup>

#### Key data on organic agriculture

According to the latest FiBL-IFOAM survey on certified organic agriculture worldwide,<sup>4</sup> (data as of end of 2011), data on organic agriculture are available from 162 countries (up from 160 in 2010).

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, 33 percent of the world's organic agricultural land) and Europe (10.6 million hectares, 29 percent). Latin America has 6.9 million hectares (18.4 percent) followed by Asia (3.7 million hectares, 10 percent), North America (2.8 million hectares, 7.5 percent) and Africa (1.1 million hectares, 3 percent). For the detailed results of the FiBL-IFOAM survey, see page 36.

The countries with the most organic agricultural land are Australia (12 million hectares), Argentina (3.8 million hectares), and the United States (1.9 million hectares).

Currently 0.9 percent of the agricultural land of the countries covered by the survey is organic. By region, the highest shares of the total agricultural land are in Oceania (2.9 percent) and in Europe (2.2 percent). In the European Union, 5.4 percent of the farmland is organic. However, some countries reach far higher shares: Falkland Islands: 35.9 percent; Liechtenstein: 27.3 percent; Austria 19.7 percent. In ten countries, more than ten percent of the agricultural land is organic.

There has been an increase of the organic agricultural land in Asia, Europe, North America and Oceania. For Asia, after a major drop of organic land in 2010, 0.9 million more hectares were reported. There was also strong growth in Europe, where the area increased by 0.6 million hectares (6 percent). In Latin America the organic land decreased, mainly due to a decrease of organic grazing areas in Argentina.

Apart from agricultural land, there are further organic areas, most of these being areas for wild collection. Other areas include aquaculture, forests, and grazing areas on non-agricultural land. They constitute 32.5 million hectares. In total, 69.7 million hectares (agricultural and non-agricultural areas) are organic.

There were 1.8 million producers in 2011. Thirty-four percent of the world's organic producers are in Asia, followed by Africa (30 percent), and Europe (16 percent). The countries with the most producers are India (547'591), Uganda (188'625, 2010), and Mexico (169'570).

<sup>&</sup>lt;sup>1</sup> Dr. Helga Willer, Communication, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org

 $<sup>^2</sup>$  Julia Lernoud, Communication, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org

 $<sup>^3</sup>$  Robert Home, Socio-Economics, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org

<sup>&</sup>lt;sup>4</sup> The survey included both fully converted and in-conversion organic areas.

About one third of the world's agricultural land (12 million hectares) and more than 80 percent (1.5 million) of the producers are in developing countries and emerging markets.

Land use details were available for almost 90 percent of the organic agricultural land. Unfortunately, some countries with very large organic areas, such as Australia, Brazil, China, and India had no or only little information on their land use. Almost two-thirds of the agricultural land was grassland/grazing areas (23.2 million hectares). With a total of at least 6.3 million hectares, arable land constitutes 17 percent of the organic agricultural land. An increase of seven percent over 2010 was reported. Most of this category of land is used for cereals including rice (2.6 million hectares), followed by green fodder from arable land (2.2 million hectares), oilseeds (0.5 million hectares), protein crops (0.3 million hectares), and vegetables (0.2 million hectares).

Permanent crops account for approximately seven percent of the organic agricultural land, amounting to 2.6 million hectares. Compared with the revised data of the previous survey, the permanent cropland has remained steady. The most important permanent crops are coffee (with 0.6 million hectares), constituting almost one-fifth of the organic permanent cropland), followed by olives (0.5 million hectares), nuts and grapes (0.3 million hectares each), and cocoa (0.2 million hectares).

Most of the wild collection area (including areas for beekeeping) is in Europe (36 percent of the global total) and Africa (35 percent). Not much detail on the crops harvested is available. Berries, medicinal and aromatic plants, and fruit are among the most important crops.

#### **Global market**

In spite of the slowdown in the global economy, international sales of organic products continue to rise. Organic Monitor estimates organic food & drink sales reached almost 63 billion US dollars in 2011. The market has expanded by 170 percent since 2002. Demand for organic products is mainly in North America and Europe; these two regions comprise more than 90 percent of sales. Although organic farming is now practiced in every continent, demand is concentrated in these regions. Production of organic foods in other regions, especially Asia, Latin America and Africa is mainly export-geared. The organic food sector in some countries is almost entirely dependent on exports. (See chapter by Amarjit Sahota, page 132).

In 2011, the countries with the largest organic markets were the United States, Germany, and France. The largest single market was the United States. The highest percapita consumption was in Switzerland, Denmark, and Luxemburg. The highest market shares were reached in Denmark, Switzerland and Austria. (See chapter on the global survey on organic agriculture, page 208).

#### **Africa**

There are slightly more than one million hectares of certified organic agricultural land in Africa. This constitutes about three percent of the world's organic agricultural land. There were 541'000 producers. Uganda is the country with the largest organic area (with more than 220'000 hectares) and with the largest number of organic producers. The country with the highest share of organic agricultural land is the island state Sao Tome

and Principe with 8 percent of its agricultural area being organic. The majority of certified organic produce in Africa is destined for export markets. Key crops are coffee, olives, cocoa, oilseeds, and cotton. The European Union is Africa's largest market for agricultural produce. There is a growing recognition among policy makers that organic agriculture has a significant role to play in addressing the pressing problems of food insecurity, poverty, and climate change in Africa. Significant breakthroughs were achieved in 2012: Currently, the Action Plan of the Ecological Organic Agriculture (EOA) Initiative has been implemented on a pilot basis in six countries: Kenya, Tanzania, Uganda, and Ethiopia in eastern Africa; Nigeria in western Africa; and Zambia in southern Africa. At the Second African Organic Conference held in Lusaka, Zambia, in May 2012, "The Lusaka Declaration on Mainstreaming Organic Agriculture into the African Development Agenda" was adopted. It will be used to continue lobbying a comprehensive range of stakeholders capable of unlocking the potential that organic/ecological agriculture offers for Africa. The next African Organic Conference will be held in Nigeria in 2015. (See article by Hervé Bouagnimbeck, page 164).

#### Asia

The total organic agricultural area in Asia is nearly 3.7 million hectares. This constitutes ten percent of the world's organic agricultural land. There were almost 0.6 million producers; 0.55 million are in India. The leading countries by area are China (1.9 million hectares) and India (1.1 million hectares); Timor-Leste has the highest proportion of organic agricultural land (almost seven percent). Compared with 2010, organic agricultural land increased by almost one million hectares, mainly due to major increases in China and India. Market and trade data remain scarce. (For details see chapter on FiBL-IFOAM survey, page 199).

The Asian market for organic products is growing at a steady rate. Rising awareness of organic production methods is fuelling demand for organic food & drink. The continent is, however, divided in terms of consumption and production. Most organic product sales are from the affluent countries, such as Japan, South Korea, Taiwan, Hong Kong, Malaysia and Singapore. However, a small share of the organic products sold is grown in these countries. Large quantities of organic food & drink products (especially processed foods) are imported from Australasia, Europe and the US into these countries. (See chapter by Amarjit Sahota, page 132).

Other Asian countries mainly have export-geared organic food sectors whereby organic crops are grown for other regions. The Chinese revised organic rules, implemented in March 2012, were the big topic in the region in 2012. Reports from country contacts noted that 2012 has been a fair to good year for sector development. Domestic markets based on participatory guarantee systems are growing. A resurgence in regional collaboration, which was boosted by the IFOAM Organic World Congress held in November 2011 in Korea, precipitated the reconstitution of Organic Asia as an Internal Body of IFOAM. For details see chapters on organic farming in Asia by Ong Kung Wai, page 178. A country report on organic farming in Saudi Arabia by Hartmann et al. informs about the development of the sector in a country of the Middle East (page 191).

#### Europe

As of the end of 2011, 10.6 million hectares of agricultural land in Europe were managed organically on almost 290'000 farms. In Europe, 2.2 percent of the agricultural area, and in the European Union, 5.4 percent of the agricultural area is organic. Twenty-nine percent of the world's organic land is in Europe. Compared to 2010, organic farmland increased by 0.6 million hectares. The countries with the largest organic agricultural area are Spain (1.6 million hectares), Italy (1.1 million hectares), and Germany (1 million hectares). There are seven countries in Europe with more than ten percent organic agricultural land: Liechtenstein (29.3 percent), Austria (19.7 percent), Sweden (15.2 percent), Estonia (14.8 percent), Switzerland (11.7 percent), Czech Republic (10.7 percent) and Latvia (10.4 percent). Sales of organic products were approximately 21.5 billion euros in 2011, an increase of 9 percent over 2010. The largest market for organic products in 2011 was Germany with a turnover of 6.6 billion euros, followed by France (3.8 billion euros) and the UK (1.9 billion euros) (see article by Diana Schaack et al., page 224). The new research project OrganicDataNetwork that was launched in early 2012 is expected to be a major step towards improving European market data (see articles by project coordinator Raffaele Zanoli, page 230, and by Home et al., page 232). Currently a revision process of the EU regulation is underway, which was started with three hearings at the Commission in 2012. In January 2013, a consultation for the review of the European policy on organic agriculture was launched by the European Commission. Regarding organic farming research, it is expected that the successful work of the Technology Platform TP Organics will result in more funding for organic farming research under the European Union's next framework programme. A number of country reports about organic farming in south eastern European countries are included in this book; they all show the increasing importance of organic farming in these countries: Albania by Iris Kazazi and Thomas Bernet (page 234), Hungary by Zoltán Dezsény and Dóra Drexler (page 239), Kosovo by Sylë Sylanaj (page 244), Monenegro by Natasa Mirecki (page 246) and Serbia by Guido Haas (page 251).

#### **Latin America**

In Latin America, more than 315'000 producers managed 6.9 million hectares of agricultural land organically in 2011. This constitutes 18 percent of the world's organic land and 1.1 percent of the region's agricultural land. The leading countries are Argentina (4.2 million hectares), Uruguay (0.9 million hectares, 2006) and Brazil (0.7 million hectares). The highest shares of organic agricultural land are in the Falkland Islands/Malvinas (35.9 percent), French Guyana (17.5 percent), and the Dominican Republic (9.5 percent).

While exports remain the main activity, the domestic market for organic products is becoming more diverse and is steadily growing; especially in Mexico, Costa Rica and South America. The most developed domestic market is in Brazil, in which farmers' street markets and cooperatives have been organized for 30 years, and where a balance has been kept between domestic and international organic markets. Following Brazil, other countries in the region, including Ecuador, Colombia, Mexico and Peru, have started to develop alternative certification schemes and marketing strategies aiming at directly reaching responsible consumers. The main destination markets for organic exports, which constitute approximately 85 percent of the region's production, are the

#### The World of Organic Agriculture: Summary

European Union, the United States, and Japan. For countries with tropical and mountain ecosystems, the main organic export products are coffee, cacao, banana, and quinoa. For countries with extensive land areas with pastures for animal grazing, the main products are meat and wool. Argentina and Costa Rica are the only countries in the region with third country status for the European Union although most Latin American countries are applying for this status: a process that started ten years ago when governmental organic regulations began to be developed in the region. For details see article by Patricia Flores on page 258.

#### **North America**

In North America, almost 2.8 million hectares of farmland are managed organically, of these nearly two million in the United States (2008 data) and 0.8 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.

Driven by consumer choice, the U.S. organic industry grew by 9.5 percent overall in 2011 to reach 31.5 billion US dollars in sales. Of this, the organic food and beverage sector was valued at 29.22 billion US dollars, according to findings from the Organic Trade Association's (OTA's) 2012 Organic Industry Survey. In the U.S., overall organic product sales growth of 9.5 percent continued to outpace total sales of comparable conventionally produced food and non-food items, which experienced 4.7 percent growth. Organic food sales experienced 9.4 percent growth in 2011. The easing of the recession, consumer price inflation due to input price increases, and consumers' increasing desire for convenience products were all factors that elevated growth for the year. The organic food sector grew by 2.5 billion US dollars during 2011, with the fruit and vegetable category contributing close to 50 percent of the growth. The fastest-growing sector was the meat, fish & poultry category, posting 13 percent growth over 2010 sales.

Canada's organic market continues to grow and broaden at the consumer level, with evidence of many new product offerings, a continued "mainstreaming" of organic products into conventional retail locations, and obvious growth in non-food sectors such as personal care. In the absence of more current data, the Canada Organic Trade Association (COTA) has maintained its estimated market value of 2.6 billion Canadian dollars (2010), though it is likely this significantly underrepresents the true market place.

For the U.S. organic sector, the biggest milestone for 2012 was the signing and implementation of an historic equivalency arrangement between the United States and European Union (EU). In late 2012, Swiss and Canadian authorities announced an equivalency arrangement between the two countries.

For more details on recent developments, see articles by Barbara Haumann on the United States (page 282) and by Matthew Holmes and Anne Macey on Canada (page 288) in the North American section of this book.

#### Oceania

This region includes Australia, New Zealand, and Pacific Island states including Fiji, Papua New Guinea, Tonga, and Vanuatu, among others. Altogether, there were almost

14'000 producers, managing 12.2 million hectares. This constitutes 2.9 percent of the agricultural land in the region and 33 percent of the world's organic land. More than 98 percent of the organic land in the region is in Australia (12 million hectares in 2009, 97 percent of which is extensive grazing land), followed by New Zealand (133'000 hectares), and Samoa (34'000 hectares). The highest shares of all agricultural land are in Samoa (11.8 percent), followed by Australia (2.9 percent, 2009) and the Solomon Islands (1.6 percent). Growth in the organic industry in Australia, New Zealand, and the Pacific Islands has been strongly influenced by rapidly growing overseas demand; domestic sales are, however, also growing. In Australia, the domestic market was valued at 1.15 billion Australian dollars in 2011-12¹ and in New Zealand at 360 million New Zealand dollars (2011).²

There has been little change in the last few years of the Australian regulatory instruments overseeing sales of domestic and export products. The Australian Standard for Organic and Biodynamic Products (AS6000) was published by Standards Australia in 2009 to establish a domestic standard for certification of organic products, but to date has not been broadly adopted by the industry for certification. As the growth of the Australian market continues, the structures of the industry informing policy development are also undergoing some change. The peak body of the Australian industry, the Organic Federation of Australia (OFA), has delivered considerable outputs and continues to respond to Australian and international policy reviews in agriculture and food policy. As to research, the Rural Industries Research and Development Corporation (RIRDC) has practically ceased its activities related to organic farming and there seems to be very little going on in the area of public funding of research and education that is specific to organic agriculture in Australia (See article by Els Wynen and Alexandra Mitchell, page 298).

Most of the organically certified products from the Pacific Islands are produced for export. Key products are vanilla, coconut, and tropical fruit. The main international markets are Australia and New Zealand, due to their proximity, although Japan is a growing market and other markets include North America and the European Union. Domestic markets for organic certified products are not very developed, and in some cases are non-existent. National governments continue to support certification costs for small holders in Samoa and Tonga. In September 2012, the Ministers of Agriculture and Forestry Conference in Fiji endorsed the recommendation to include mainstream organic agriculture into the agriculture strategies of the Secretariat of the Pacific Community and that of the individual countries. This is an encouraging step and should facilitate increased support for organic growers across the region. 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. A key challenge is building production to meet projected demands (see chapter by Karen Mapusua, page 303).

\_

 $<sup>^1</sup>$ 1 Australian dollar = 0,7410 euros (average exchange rate 2011); Source: http://www.oanda.com/lang/de/currency/average

 $<sup>^21</sup>$  New Zealand dollar = 0,6047 euros in 2011 (average exchange rate 2011); Source: http://www.oanda.com/lang/de/currency/average

#### Standards and regulations

According to the *FiBL survey on organic rules and regulations*, the number of countries with organic standards has increased to 86. There are 26 countries that are in the process of drafting legislation. A major development in 2012 was that the European Union and the United States achieved a breakthrough in their negotiations concerning the mutual recognition of their organic standards and control systems. The agreement makes it possible for organic products (with a few exceptions) certified in the EU or the USA to be sold in the other country/region without any further inspection or certification. The EU-US agreement came into force by July 1, 2012 together with the revised European import scheme for organic products. With the new EU scheme, imports in the EU are possible for products certified by a control body recognized for operations in the respective export country. The EU recognizes certification bodies either via the so-called Third Country list or directly. In the Asian region, the dominating topic in 2012 was the implementation of revised production rules in China – further tightening the already strict rules (see contribution by Huber et al. on page 140).

In 2010, IFOAM led the way forward by creating the *COROS – Common Objectives and Requirements of Organic Standards*. Standards deemed to be equivalent to the COROS can be included in the *IFOAM Family of Standards*; to draw a line between what is organic and what is not. The Family is a key part of the Organic Guarantee System, which qualifies as a valid standard because it is deemed equivalent to the COROS. Aiming to further lead and unite the organic world, IFOAM offers a branding mark for products from operators in good standing in the OGS - the Global Organic Mark. In 2012, IFOAM began forming partnerships in Thailand and Malaysia with the first organizations to act as agents for spreading the Global Organic Mark in their respective countries. IFOAM anticipates further promotion of the Mark in other countries, by other agents and through direct efforts from the IFOAM Head Office itself. For more information see the article by David Gould on page 154.

The total *number of certification bodies* is 576; up from 549 in 2011. Most certification bodies are located in the European Union, South Korea, Japan, the United States, China, India and Canada. For the first time, Asia now has more organic certification bodies than Europe. There has been a slight decrease in the number of certification bodies in most regions of the world, although the number has increased rapidly in South Korea (see article by Kolbjörn Örjavik, page 149).

Participatory Guarantee Systems (PGS) are locally focused quality assurance systems. They certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks, and knowledge exchange. It is estimated that at least 41 PGS initiatives exist now on all continents, and a similar number of initiatives are currently under development. Asia and Latin America remain the leaders in terms of both the number of farmers certified through PGS and the level of recognition achieved by the national governments (see article by Flávia Castro, page 159).

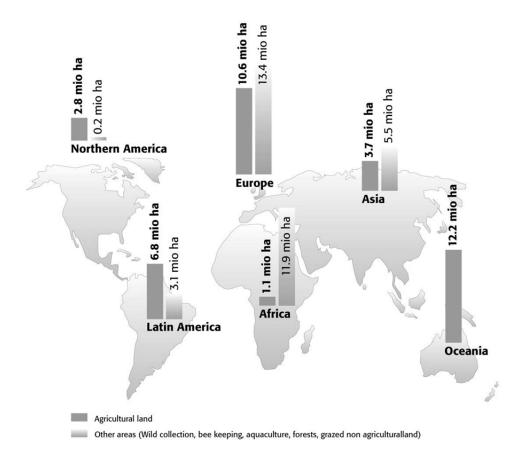
#### IFOAM and the road to sustainable development

The General Assembly of the Global Organic Movement in 2011 in Korea approved a mandate to IFOAM to lead development of organic agriculture towards sustainability. As a consequence, in 2012, the IFOAM World Board initiated the Sustainable Organic

Agriculture Action Network (SOAAN). The purpose of SOAAN is to support the organic movement in identifying the areas where organic agriculture is sustainable and the areas where it needs to do more. SOAAN's goal is to contribute to improved sustainability and to increase the overall impact of organic farming and of other social and environmental standards. At the "Bonn Sustainability Days", from November 23rd to 26th 2012, experts discussed sustainable development in agriculture and the way forward for the organic sector. The year 2013 will see broad consultations of the draft of the Best Practice Reference document that describes the vision for sustainable agriculture practice in detail, describes detailed practices that lead to the manifested objectives embodied by the principles of organic agriculture, and aims to provide guidance to further develop the organic sector. For more information see article by Markus Arbenz, page 314.

0	rgan	ic Ag	ricult	ture \	Worl	dwi	de: (	Curren	t Sta	tistics

# Organic Agriculture Worldwide: Current Statistics



Map 1: Organic agricultural land and other organic areas in 2011

Source: FiBL-IFOAM Survey 2013

# Current Statistics on Organic Agriculture Worldwide: Organic Area, Producers and Market

#### HELGA WILLER<sup>1</sup> AND JULIA LERNOUD<sup>2</sup>

The 14th survey of certified organic agriculture worldwide was carried out by the Research Institute of Organic Agriculture (FiBL) together with the International Federation of Organic Agriculture Movements (IFOAM). Furthermore, data in the Mediterranean countries was collected in cooperation with the Mediterranean Organic Agriculture Network (MOAN, c/o Mediterranean Agronomic Institute of Bari) and in the Central American countries with the Regional Unit for Technical Assistance for Sustainable Rural Development (RUTA).

These activities are currently funded by the Swiss State Secretariat for Economic Affairs (SECO) and  $N\ddot{u}rnbergMesse$ .<sup>3</sup>

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

We are pleased to announce that the FAO has now integrated some of the data collected in the framework of the FiBL-IFOAM survey into its FAOSTAT land use database.<sup>4</sup>

#### Scope

In total, data were available from 162 countries (most data are per end of 2011). Data were received for Kosovo, Tonga, Dominica and Guinea Bissau (only production volume), for the first time, but for Sierra Leone and Suriname, for which data had previously been available, data were no longer available.

Updated data on the organic area were available for 135 countries; however, for some countries, updates were only available for the total organic area, and not necessarily for the number of farms, land use or other variables. In such cases, data from the previous survey were used.

 $<sup>^1</sup>$  Dr. Helga Willer, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Switzerland, www.fibl.org

 $<sup>^2</sup>$  Julia Lernoud, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Switzerland, www.fibl.org

<sup>&</sup>lt;sup>3</sup> From 2008 to 2011 the data collection activities were supported under a project of the International Trade Centre ITC and the Swiss State Secretariat of Economic Affairs SECO. Under this project the following activities were funded: Build a data collection tool; redesign of the www.organic-world.net website, provide the statistical material and graphs as well as backgound information; data collection and processing; overview of data availability world-wide; dissemination activities.

<sup>&</sup>lt;sup>4</sup> This database is available at the FAO database at http://faostat.fao.org/site/377/default.aspx#ancor.

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

	Countries* with data on organic agriculture	Countries per region <sup>1</sup>	Share of countries that provided data (%)
Africa	37	57	65
Asia	37	49	76
Europe	46	46	100
Latin America and Caribbean	29	45	64
North America	2	5	40
Oceania	11	23	49
World	162	224	72

Source: FiBL-IFOAM Survey 2013

#### **Indicators**

Data on the following indicators were collected:

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

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

## More information at www.organic-world.net

Tables with more details on crops, country details, and conversion status can be downloaded as excel files from the Organic-World website (www.organic-world.net). The password is available on the imprint page.

# Contact

Enquiries related to the data should be directed to Helga Willer, FiBL, Frick, e-mail helga.willer@fibl.org.

\_

<sup>\*</sup>Where the designation "country" appears in this book, it covers countries or territories.

<sup>&</sup>lt;sup>1</sup> Number of countries mostly based on countries as listed in the FAO database at http://faostat.fao.org/site/377/default.aspx#ancor as well as some additional countries like Kosovo.

#### General notes on the data

Organic areas: Data represent certified organic 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. For a definition of organic agriculture see IFOAM website.1

PGS: For the first time for some countries, such as Namibia, areas certified by Participatory Guarantee Systems (PGS) were included. (For more information about PGS see article by Flávia Castro on page 159).

Countries: For countries and areas, the Standard Country and Area Codes Classifications as defined by the United Nations Statistics division are used.<sup>2</sup> 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 were not complete. For some countries, no data were available at all. Therefore, it can be assumed that the extent of organic agriculture is larger than documented in this volume.

**Crop data:** For some crops, the area values provided might refer to main crops grown on a certain area or farm, but the actual area for that particular crop may be smaller. 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. This may explain the high proportions of some organic crops in some countries in the crop chapter; in particular tropical crops.

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

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

http://unstats.un.org/unsd/methods/m49/m49regin.htm

<sup>&</sup>lt;sup>1</sup> The following pages at the IFOAM website are informing about definitions and princples of organic agriculture.

Definition of organic agriculture: http://www.ifoam.org/growing\_organic/definitions/doa/index.html Principles of organic agriculture: http://www.ifoam.org/about\_ifoam/principles/index.html The IFOAM Organic Guarantee System: http://www.ifoam.org/about\_ifoam/standards/ogs.html IFOAM Family of Standards:

 $http://www.ifoam.org/about\_ifoam/standards/family\_of\_standards/familiy\_of\_standards.html$ 

<sup>&</sup>lt;sup>2</sup> For the composition of macro geographical (continental) regions, geographical sub-regions, and selected economic and other groupings see the UNSTAT homepage at

**Data revisions:** Data revisions and corrections, compared with the data published in the 2012 edition of *The World of Organic Agriculture* are communicated at http://www.organic-world.net/statistics-data-revisions.html as well as www.organic-world.net/statistics-data-tables.html.

# Contact

Helga Willer, FiBL, Frick, Switzerland, e-mail helga.willer@fibl.org

# Organic agricultural land

Currently 37.2 million hectares are under organic agricultural management worldwide (end of 2011 for most data).1

The region with the most organic agricultural land is Oceania, with 12.2 million hectares, followed by Europe with 10.6 million hectares, Latin America (6.8 million hectares), Asia (3.7 million hectares), North America (2.8 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 29 percent of the world's organic agricultural land, followed by Latin America with 18 percent (see Table 2, 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 (Table 3, Figure 2). The ten countries with the largest organic agricultural areas have a combined total of 26.3 million hectares and constitute seventy percent of the world's organic agricultural land.

Apart from the organic agricultural land, there are further organic areas, such as wild collection areas. These areas constitute 32.5 million hectares.

Table 2: World: Organic agricultural land (including in-conversion areas) and regional shares of the global organic agricultural land 2011

Region	Organic agricultural land (hectares)	Regions' share of the global organic agricultural land
Africa	1'073'657	2.88%
Asia	3'706'280	9.95%
Europe	10'637'128	28.56%
Latin America	6'857'611	18.41%
Northern America	2'790'162	7.49%
Oceania	12'185'843	32.71%
Total*	37'245'686	100.00%

Source: FiBL-IFOAM 2013. Note: Agricultural land includes in-conversion areas and excludes wild collection, aquaculture, forest, and non-agricultural grazing areas. \* Includes correction value for French overseas departments.

40

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

# Distribution of organic agricultural land by region 2011

Source: FiBL-IFOAM Survey 2013

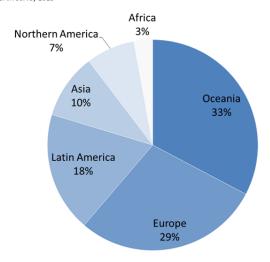


Figure 1: World: Distribution of organic agricultural land by region 2011

Source: FiBL and IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

# The ten countries with the most organic agricultural land 2011

Source: FiBL-IFOAM survey 2013

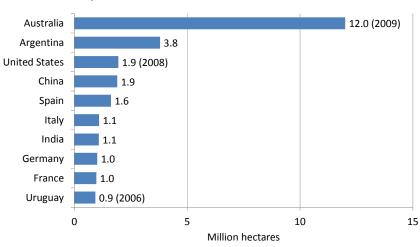


Figure 2: World: The ten countries with the largest areas of organic agricultural land 2011

Source: FiBL and IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

Table 3: World: Organic agricultural land (including in-conversion areas) by country 2011 (sorted)

For an alphabetical country list, see page 318.

Country	Hecares
Australia (2009)	12'001'724
Argentina	3'796'136
United States of America (2008)	1'948'946
China	1'900'000
Spain	1'621'898
Italy	1'096'889
India	1'084'266
Germany	1'015'626
France	975'141
Uruguay (2006)	930'965
Canada	841'216
Brazil	687'040
United Kingdom	638'528
Poland	609'412
Austria	542'553
Sweden	480'185
Czech Republic	460'498
Turkey	442'582
Falkland Islands (Malvinas)	398'806
Mexico	366'904
Greece (2010)	309'823
Ukraine	270'320
Romania	229'946
Uganda (2010)	228'419
Portugal (2010)	201'054
Kazakhstan	196'215
Finland	188'189
Dominican Republic	186'931
Peru	185'964
Latvia	184'096
Tunisia	178'521
Slovakia	166'700
Denmark	162'173
Lithuania	152'305
Ethiopia	140'475
Estonia	133'779
New Zealand	133'321
Russian Federation	126'848
Hungary	124'402
Switzerland	123'000
United Republic of Tanzania	115'022
Philippines	96'317

Country	Hecares
Egypt (2010)	82'167
Indonesia	74'034
Belgium	59'220
Norway	55'500
Ireland	54'122
Sudan	53'017
Ecuador	52'196
Paraguay (2007)	51'190
Netherlands	47'205
Iran (Islamic Republic of)	43'332
South Africa	41'947
Democratic Republic of the Congo	41'032
Thailand	34'829
Colombia	34'060
Nicaragua (2009)	33'621
Samoa	33'515
Bolivia (Plurinational State of)	32'710
Slovenia	32'149
Croatia	32'036
Madagascar	30'243
Chile	29'068
Macedonia (FYROM)	26'431
Bulgaria	25'022
Pakistan	24'924
Timor-Leste	24'754
Honduras	23'827
Viet Nam	23'400
Moldova	22'102
Azerbaijan	21'959
Bhutan	20'995
Côte d'Ivoire	20'658
Syrian Arab Republic (2010)	19'987
Ghana	19'893
Burkina Faso	19'684
Sri Lanka	19'469
Republic of Korea	19'312
Saudi Arabia	18'563
Morocco (2010)	17'030
Kyrgyzstan	15'097
Mali	14'790
Namibia	14'112
Guatemala	13'380

Country	Hecares
Senegal	13'000
Papua New Guinea	11'337
Nepal	9'892
Costa Rica	9'570
Nigeria	9'473
Japan	9'401
Cambodia	8'285
Iceland	8'246
Zambia	7'310
Israel	7'095
Bangladesh	6'810
El Salvador (2008)	6'736
Occupied Palestinian Territory (2010)	6'354
Serbia	6'238
Taiwan	5'016
Kenya	4'969
Panama	4'570
Mozambique	4'468
Sao Tome and Principe	4'467
Guyana (2009)	4'249
French Guiana (France)	3'974
Lao (PDR) (2009)	3'843
Luxembourg (2010)	3'720
Rwanda	3'705
Cyprus (2009)	3'575
Lebanon	3'303
Montenegro	3'068
Comoros	2'642
Jordan	2'567
Cuba	2'209
Vanuatu	2'197
Fiji	2'006
Georgia	1'999
Benin	1'696
Malaysia (2009)	1'582
Togo	1'336
Solomon Islands	1'307
Belize	1'204
Liechtenstein	1'095
United Arab Emirates	958
Haiti	912

Country	Hecares
Cameroon	849
Armenia	750
Algeria	692
Réunion (France)	556
Burundi	550
Jamaica (2009)	542
Zimbabwe	466
Tajikistan	460
Albania	448
Channel Islands (2009)	370
Bosnia and Herzegovina	343
Martinique (France)	298
Faroe Islands	253
Tonga	248
Dominica	240
Uzbekistan	209
Myanmar	202
Lesotho	183
Malawi	166
Guadeloupe (France)	166
French Polynesia	105
Grenada	85
Niger	76
Afghanistan	61
Niue	61
Venezuela (Bolivarian Republic of) (2009)	59
Oman	38
Mauritius	30
Malta	23
Cook Islands	22
Swaziland	14
Kosovo	11
Andorra	4
Belarus (Wild collection only)	
Chad (Wild collection only)	
Total*	37'245'686

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

\* Total includes correction value for French overseas departments.

# Shares of organic agricultural land by region and country

The proportion of the world's agricultural land that is organic agricultural land is 0.86 percent (for the countries included in the survey).

By region, the proportion is highest in Oceania (2.7 percent), followed by Europe with 2.2 percent and Latin America with 1.1 percent. In the 27 countries of the European Union, the proportion of organic agricultural land is 5.4 percent. In the other regions, the share is less than two percent (see Table 4).

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

However, 64 percent of the countries, for which data were available, have less than one percent organic agricultural land (Figure 4).

Table 4: World: Organic agricultural land (including in-conversion areas) and shares of total agricultural land 2011

Continent	Organic agr. land [ha] Share of total agr.	
Africa	1'073'657	0.1%
Asia	3'706'280	0.3%
Europe	10'637'128	2.2%
Latin America	6'857'611	1.1%
Northern America	2'790'162	0.7%
Oceania	12'185'843	2.9%
Total**	37'245'686	0.9%

Source: FiBL-IFOAM Survey 2013.

To calculate the percentages, the data for most countries were taken from the FAO Statistical database FAOSTAT (as of 2009). For the European Union, most data were taken from Eurostat. Where available, data from ministries was used for total agricultural land (for instance U.S., Switzerland, and Austria), which sometimes differ from those published by Eurostat or FAOSTAT.

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

44

 $http://ec.europa.eu/agriculture/agrista/2007/table\_en/2012.pdf, The Eurostat Homepage, Eurostat, Luxembourg$ 

<sup>\*</sup>For the calculation of the shares of total agricultural land, only the countries that are included in the survey were used.

<sup>\*\*</sup> Total includes correction value for French overseas departments.

 $<sup>^1</sup>$  FAOSTAT, Data Archives, the FAO Homepage, FAO, Rome at faostat.fao.org > Resources > Resourcestat at http://faostat.fao.org/site/377/default.aspx#ancor

<sup>&</sup>lt;sup>2</sup> Eurostat: Basic data – key agricultural statistics at

# The ten countries with the highest shares of organic agricultural land 2011

Source: FiBL-IFOAM survey 2013

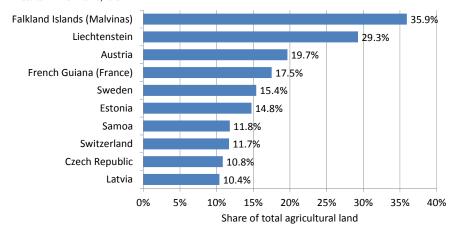


Figure 3: World: The ten countries with the highest shares of organic agricultural land 2011

Source: FiBL and IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

### Distribution of the shares of organic agricultural land 2011

Source: FiBL-IFOAM Survey 2013

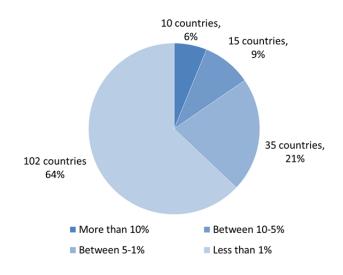


Figure 4: World: Distribution of the shares of organic agricultural land 2011

Source: FiBL and IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

# Statistics: Organic Agricultural land

Table 5: World: Shares of organic agricultural land by country 2011, sorted

For an alphabetical country list, see page 318

Country	Share
Falkland Islands (Malvinas)	35.94%
Liechtenstein	29.28%
Austria	19.66%
French Guiana (France)	17.51%
Sweden	15.40%
Estonia	14.75%
Samoa	11.80%
Switzerland	11.69%
Czech Republic	10.84%
Latvia	10.38%
Dominican Republic	9.61%
Slovakia	8.61%
Italy	8.61%
Faroe Islands	8.43%
Finland	8.21%
Sao Tome and Principe	7.98%
Timor-Leste	6.60%
Slovenia	6.58%
Spain	6.52%
Uruguay (2006)	6.29%
Denmark	6.09%
Germany	6.08%
Portugal (2010)	5.79%
Lithuania	5.75%
Norway	5.36%
Belgium	4.31%
Channel Islands (2009)	4.20%
Bhutan	4.14%
United Kingdom	3.96%
Poland	3.94%
Greece (2010)	3.74%
France	3.55%
Hungary	2.94%
Australia (2009)	2.93%
Luxembourg (2010)	2.84%
Argentina	2.70%
Macedonia (FYROM)	2.47%
Croatia	2.46%
Cyprus (2009)	2.45%
Netherlands	2.45%
Egypt (2010)	2.23%
Tunisia	1.82%
Turkey	1.82%
Occupied Palestinian Territory (2010)	1.73%

Country	Share
Mexico	1.71%
Comoros	1.70%
Romania	1.67%
Uganda (2010)	1.64%
Solomon Islands	1.56%
Réunion (France)	1.39%
Israel	1.36%
Ireland	1.31%
Canada	1.24%
Niue	1.22%
Vanuatu	1.17%
New Zealand	1.16%
Martinique (France)	1.06%
Republic of Korea	1.04%
Papua New Guinea	0.99%
Dominica	0.98%
Moldova	0.89%
Peru	0.87%
Bulgaria	0.82%
Philippines	0.81%
Tonga	0.80%
Belize	0.79%
Honduras	0.75%
Sri Lanka	0.75%
Cook Islands	0.73%
Ecuador	0.69%
Grenada (2010)	0.68%
Ukraine	0.65%
Nicaragua (2009)	0.65%
United States of America (2008)	0.60%
India	0.60%
Montenegro	0.60%
Taiwan	0.59%
Costa Rica	0.53%
Lebanon	0.48%
Fiji	0.48%
Azerbaijan	0.46%
El Salvador (2008)	0.44%
Guadeloupe (France)	0.42%
Ethiopia	0.40%
China	0.36%
Iceland	0.36%
United Republic of Tanzania	0.32%
Guatemala	0.30%

Country	Share
Brazil	0.27%
Guyana (2009)	0.25%
Jordan	0.25%
Paraguay (2007)	0.24%
Japan	0.24%
French Polynesia	0.24%
Nepal	0.23%
Viet Nam	0.23%
Malta	0.22%
Panama	0.20%
Rwanda	0.19%
Chile	0.18%
Democratic Republic of the Congo	0.18%
Thailand	0.18%
United Arab Emirates	0.17%
Burkina Faso	0.16%
Lao (PDR) (2009)	0.16%
Cambodia	0.15%
Syrian Arab Republic (2010)	0.14%
Kyrgyzstan	0.14%
Indonesia	0.14%
Senegal	0.14%
Ghana	0.13%
Serbia	0.12%
Jamaica (2009)	0.12%
Côte d'Ivoire	0.10%
Pakistan	0.09%
Kazakhstan	0.09%
Iran (Islamic Republic of)	0.09%
Bolivia (Plurinational State of)	0.09%
Colombia	0.08%
Georgia	0.08%
Bangladesh	0.07%
Madagascar	0.07%
Russian Federation	0.06%
Morocco (2010)	0.06%
Benin	0.05%
Haiti	0.05%
Armenia	0.04%

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

Country	Share
South Africa	0.04%
Togo	0.04%
Sudan	0.04%
Albania	0.04%
Namibia	0.04%
Mali	0.04%
Cuba	0.03%
Zambia (2009)	0.03%
Mauritius	0.03%
Burundi	0.03%
Andorra	0.02%
Malaysia (2009)	0.02%
Kenya	0.02%
Bosnia and Herzegovina	0.02%
Nigeria	0.01%
Saudi Arabia	0.01%
Tajikistan	0.01%
Cameroon	0.01%
Mozambique	0.01%
Lesotho	0.01%
Kosovo	0.003%
Malawi	0.003%
Zimbabwe	0.003%
Venezuela (Bolivarian Republic of)	0.003%
Oman	0.002%
Myanmar	0.002%
Algeria	0.002%
Swaziland	0.001%
Uzbekistan	0.0008%
Niger	0.0002%
Afghanistan	0.0002%
Belarus (Wild collection only)	
Chad (Wild collection only)	

#### Development of the organic agricultural land

Compared with 1999, the area of organic agricultural land has more than trebled (Willer/Yussefi 2000).

In 2011, the area of organic agricultural land increased mainly in Asia, Europe and Northern America. The highest absolute growth was in Asia (+34.4 percent, +0.9 million hectares). A major decrease occurred in Latin America, with the biggest decrease in Argentina, where almost 400'000 hectares less were reported.

Ninety-three countries experienced an increase in the area of their organic agricultural land, while a decrease was reported from 41 countries. In 25 countries, the organic agricultural area either did not change or no new data were received. The largest increases of organic agricultural land were in Asian countries: China and India, followed by some European countries including France, Poland, and Spain.

The figures communicated in the following tables and graphs with historical figures may differ from previously communicated data, as data revisions were received and included in the FiBL database. The largest revision was for Brazil, where the government has now set up a data collection system. This revision also affects the historical data back to 2007, and the global organic area for the past year is now lower than communicated previously. More information is available in the annex.<sup>1</sup>

Table 6: World: Organic agricultural land (including in-conversion areas) by region: growth 2010/2011

Region	Organic agr. land (hectares) 2010	Organic agr. land (hectares) 2011	+/- in hectares	+/- percent %
Africa	1'075'830	1'073'657	-2'174	-0.2%
Asia	2'756'887	3'706'280	+949'392	+34.4%
Europe	10'002'087	10'637'128	+635'041	+6.3%
Latin America	7'543'578	6'857'611	-685'968	-9.1%
Northern America*	2'652'624	2'790'162	+137'538	+5.2%
Oceania	12'145'030	12'185'843	+40'812	+0.3%
Total**	36'173'766	37'245'686	+1'071'919	+3.0%

Source: FiBL-IFOAM Survey 2013, based on data from government bodies, the private sector, and certifiers. For detailed data sources see annex, page 322.

48

<sup>\*</sup> For the United States the latest available data are from 2008.

<sup>\*\*</sup> Total includes correction value for French Overseas Departments.

 $<sup>^{1}</sup>$  For details on the Brazilian data see the chapter with information on data sources, see page 322.

## Growth of the organic agricultural land 1999-2011

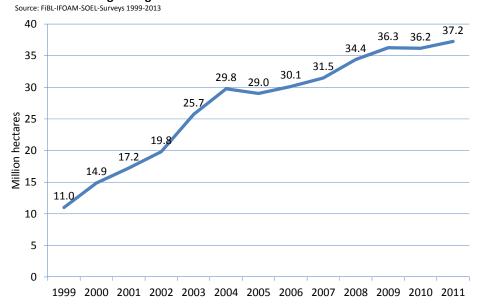


Figure 5: World: Growth of the organic agricultural land 1999-2011

Source: FiBL, IFOAM, and SOEL 2000-2013

# Growth of the organic agricultural land by continent 2005-2011

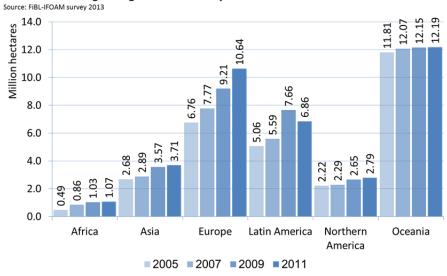


Figure 6: Growth of the organic agricultural land by continent 2005 to 2011

Source: FiBL, IFOAM, and SOEL 2007-2013

# The ten countries with highest growth of organic land 2011

Source: FiBL-IFOAM survey 2013 +510'000 China India +304'266 +165'226 Spain +137'538 Canada +129'699 France **Poland** +87'442 **Russian Federation** +82'831 Kazakhstan +62'654 Turkey +58'799 Romania +47'240 0 100'000 200'000 300'000 400'000 500'000 600'000 Hectares

Figure 7: World: The ten countries with the largest increase of organic agricultural land 2011

Source: FiBL-IFOAM Survey 2013, based on data from government bodies, the private sector, and certifiers. For detailed data sources see annex, page 322.

# Table 7: World: Development of organic agricultural land by country 2008-2011

Important note: A direct year-to-year comparison is not always possible for many countries, because the data sources may have changed over the years or data access improves. The figures published here may differ from previously published data due to data revisions. Data are not available for all countries for every year and, in these cases, the figure for the previous year is used (see also page 322).

Country	2008 [ha]	2009 [ha]	2010 [ha]	2011 [ha]	Change in hectares 10/11	Change 10/11 %
Afghanistan	42	63	61	61	0.0	0.0
Albania	331	271	284	448	163.9	57.7
Algeria	1'042	622	623	692	68.6	11.0
Andorra		2	2	4	2.0	100.0
Argentina	4'007'026	4'327'372	4'177'653	3'796'136	-381'516.7	-9.1
Armenia	600	600	750	750	0.0	0.0
Australia (2009)	11'988'044	12'001'724	12'001'724	12'001'724	0.0	0.0
Austria	492'632	518'757	543'605	542'553	-1'052.0	-0.2
Azerbaijan	21'240	20'339	21'347	21'959	612.8	2.9
Bangladesh	526	1'162	799	6'810	6'011.8	752.8
Belarus			Wild colle	ction only		
Belgium	35'721	41'459	49'005	59'220	10'215.0	20.8
Belize	852	1'177	1'177	1'204	27.1	2.3
Benin	1'030	872	1'167	1'696	528.5	45.3
Bhutan	59			20'995	20'994.6	35'605.2
Bolivia (Plurinational State of)	41'004	41'004	112'109	32'710	-79'399.5	-70.8
Bosnia and Herzegovina	691	580	580	343	-237.2	-40.9
Brazil	932'120	932'120	932'120	687'040	-245'080.4	-26.3
Bulgaria	16'663	12'320	25'648	25'022	-625.9	-2.4
Burkina Faso	16'424	14'693	13'802	19'684	5'882.8	42.6
Burundi	350	350	350	550	200.0	57.1
Cambodia	8'810	10'725	8'084	8'285	200.2	2.5
Cameroon	370	292	496	849	352.8	71.1
Canada	628'556	703'678	703'678	841'216	137'538.0	19.5
Chad			Wild colle	ction only		
Channel Islands (2009)	430	370	370	370	0.0	0.0
Chile	13'774	82'327	31'696	29'068	-2'627.6	-8.3
China	1'853'000	1'853'000	1'390'000	1'900'000	510'000.0	36.7
Colombia	47'107	47'776	33'334	34'060	725.3	2.2
Comoros	1'059	1'330	1'045	2'642	1'596.9	152.8
Cook Islands			18	22	4.1	22.9
Costa Rica	8'004	8'052	11'114	9'570	-1'544.1	-13.9
Côte d'Ivoire	2'938	17'443	18'133	20'658	2'525.1	13.9
Croatia	10'010	14'194	23'352	32'036	8'683.4	37.2
Cuba	14'314	14'314	2'106	2'209	102.9	4.9
Cyprus (2009)	2'322	3'575	3'575	3'575	0.0	0.0
Czech Republic	341'632	398'407	448'202	460'498	12296.3	2.7

# Statistics: Development of Organic Agricultural Land

Country	2008 [ha]	2009 [ha]	2010 [ha]	2011 [ha]	Change in hectares 10/11	Change 10/11 %
Democratic Republic of the Congo	7'852	6'667	32'523	41'032	8509.1	26.2
Denmark	150'104	156'433	162'903	162'173	-730.0	-0.4
Dominica				240	2408	
Dominican Republic	123'089	161'098	165'109	186'931	21821.6	13.2
Ecuador	71'066	69'358	64'751	52'196	-12554.7	-19.4
Egypt (2010)	40'000	56'000	82'167	82'167	0.0	0.0
El Salvador (2008)	6'736	6'736	6'736	6'736	0.0	0.0
Estonia	87'346	95'167	112'972	133'779	20806.6	18.4
Ethiopia	99'944	122'727	137'196	140'475	3279.1	2.4
Falkland Islands (Malvinas)	414'474	395'935	398'806	398'806	0.0	0.0
Faroe Islands	12	12	253	253	0.0	0.0
Fiji	100	100	100	2'006	1906.0	1906.0
Finland	150'374	166'171	169'168	188'189	19021.0	11.2
France	583'799	677'513	845'442	975'141	129699.0	15.3
French Guiana (France)	2'385	2'651	1'776	3'974	2198.0	123.8
French Polynesia			1'727	105	-1621.6	-93.9
Georgia	251	1'208	1'401	1'999	597.8	42.7
Germany	907'786	947'115	990'702	1'015'626	24924.0	2.5
Ghana	26'657	29'140	12'635	19'893	7258.7	57.5
Greece (2010)	317'824	326'252	309'823	309'823	0.0	0.0
Grenada (2010)		40	85	85	0.0	0.0
Guadeloupe (France)	67	84	27	166	139.0	514.8
Guatemala	7'285	13'300	13'375	13'380	5.0	0.0
Guinea-Bissau	5'600			Production volu	ıme only	
Guyana (2009)	75	4'249	4'249	4'249	0.0	0.0
Haiti		54	188	912	723.7	384.0
Honduras	8'448	11'801	17'825	23'827	6001.7	33.7
Hungary	122'816	140'292	127'605	124'402	-3203.0	-2.5
Iceland	6'970	6'661	5'806	8'246	2440.0	42.0
India	1'018'470	1'180'000	780'000	1'084'266	304266.0	39.0
Indonesia	42'087	46'720	71'208	74'034	2826.0	4.0
Iran	11'745	8'853	7'256	43'332	36076.2	497.2
Ireland	44'751	47'864	47'864	54'122	6258.0	13.1
Israel	6'400	6'969	8'794	7'095	-1699.3	-19.3
Italy	1'002'414	1'106'684	1'113'742	1'096'889	-16852.9	-1.5
Jamaica (2009)	483	542	542	542	0.0	0.0
Japan	9'092	9'067	9'067	9'401	334.0	3.7
Jordan Kazakhetan	1'053	1'053	1'469	2'567	1098.6	74.8
Kazakhstan	157'176	134'862	133'562	196'215	62653.6	46.9

Country	2008 [ha]	2009 [ha]	2010 [ha]	2011 [ha]	Change in hectares 10/11	Change 10/11 %
Kenya	5'159	4'227	4'842	4'969	126.6	2.6
Kosovo				11	11.1	-
Kyrgyzstan	9'868	11'415	15'040	15'097	57.3	0.4
Lao (PDR)	1'537	4'878	4'885	3'843	-1041.8	-21.3
Latvia	161'625	160'175	166'320	184'096	17776.0	10.7
Lebanon	2'180	3'332	1'227	3'303	2076.2	169.2
Lesotho	355	330	330	183	-147.3	-44.6
Lithuania	122'200	129'055	143'644	152'305	8661.0	6.0
Luxembourg (2010)	3'535	3'614	3'720	3'720	0.0	0.0
Macedonia (FYROM)	3'380	6'213	35'164	26'431	-8733.1	-24.8
Madagascar	19'914	14'069	20'288	30'243	9955.1	49.1
Malawi	819	994	824	166	-657.6	-79.8
Malaysia (2009)	1'582	1'582	1'582	1'582	0.0	0.0
Mali	9'107	21'681	15'199	14'790	-409.2	-2.7
Malta	12	26	24	23	-1.2	-4.9
Martinique (France)	188	140	193	298	105.0	54.4
Mauritius		6	35	30	-5.2	-14.8
Mexico	332'485	332'485	332'485	366'904	34418.9	10.4
Moldova	11'695	32'105	32'105	22'102	-10003.0	-31.2
Montenegro	1'876	4'603	3'561	3'068	-493.1	-13.8
Morocco (2010)	3'450	3'800	17'030	17'030	0.0	0.0
Mozambique	2'810	1'556	5'519	4'468	-1051.0	-19.0
Myanmar		555	60	202	142.0	237.1
Namibia	410	124	124	14'112	13987.8	11280.4
Nepal	8'498	8'059	9'789	9'892	102.6	1.0
Netherlands	50'434	51'911	46'233	47'205	972.0	2.1
New Zealand	100'000	124'464	124'463	133'321	8858.0	7.1
Nicaragua (2010)	70'972	33'621	33'621	33'621	0.0	0.0
Niger	355	355	48	76	27.9	58.1
Nigeria	3'073	8'202	11'979	9'473	-2505.6	-20.9
Niue	159	159	159	61	-98.0	-61.6
Norway	52'248	56'737	57'219	55'500	-1719.0	-3.0
Occupied Palestinian Territory (2010)	1'001	1'000	6'354	6'354	0.0	0.0
Oman	34	39	39	38	-0.9	-2.3
Pakistan	24'466	20'321	22'103	24'924	2821.3	12.8
Panama	5'244	5'244	3'242	4'570	1328.3	41.0
Papua New Guinea	2'497	3'321	3'156	11'337	8181.0	259.2
Paraguay (2007)	51'190	51'190	51'190	51'190	0.0	0.0
Peru	146'438	186'314	216'756	185'964	-30792.0	-14.2

Country	2008 [ha]	2009 [ha]	2010 [ha]	2011 [ha]	Change in hectares 10/11	Change 10/11 %
Philippines	15'795	51'806	79'992	96'317	16324.7	20.4
Poland	313'944	367'062	521'970	609'412	87442.0	16.8
Portugal (2010)	211'071	151'460	201'054	201'054	0.0	0.0
Republic of Korea	12'033	13'343	15'518	19'312	3794.0	24.4
Réunion (France)	203	188	276	556	280.0	101.4
Romania	140'132	168'288	182'706	229'946	47240.0	25.9
Russian Federation	46'962	78'449	44'017	126'848	82831.0	188.2
Rwanda	3'508	3'697	3'600	3'705	104.5	2.9
Samoa	7'243	9'714	9'714	33'515	23801.1	245.0
Sao Tome and Principe	2'859	3'591	4'411	4'467	56.2	1.3
Saudi Arabia	30'000	46'635	42'376	18'563	-23813.2	-56.2
Senegal	25'992	25'351	28'175	13'000	-15175.0	-53.9
Serbia	4'494	8'661	8'635	6'238	-2396.7	-27.8
Sierra Leone	960	72'472	65'252		-65'252	-100.0
Slovakia	140'755	145'490	174'471	166'700	-7771.0	-4.5
Slovenia	29'838	29'388	30'696	32'149	1453.0	4.7
Solomon Islands	3'628	3'628	1'306	1'307	1.0	0.1
Somalia	274	0	0	0	0.0	-
South Africa	43'882	59'562	55'621	41'947	-13674.0	-24.6
Spain	1'129'844	1'330'774	1'456'672	1'621'898	165226.3	11.3
Sri Lanka	22'347	21'156	22'260	19'469	-2790.4	-12.5
Sudan	65'188	77'798	53'602	53'017	-585.4	-1.1
Swaziland	18	46	6	14	8.6	148.3
Sweden	336'439	391'524	438'693	480'185	41492.0	9.5
Switzerland	116'266	114'050	119'613	123'000	3386.8	2.8
Syrian Arab Republic (2010)	25'660	35'439	19'987	19'987	0.0	0.0
Taiwan	2'356	2'962	2'962	5'016	2054.2	69.4
Tajikistan	70	70	391	460	69.7	17.8
Thailand	16'955	30'755	34'079	34'829	750.0	2.2
Timor-Leste	26'101	24'997	24'750	24'754	3.8	0.0
Togo	2'977	1'789	3'409	1'336	-2073.0	-60.8
Tonga				248	248.0	-
Tunisia	174'725	167'302	175'066	178'521	3454.9	2.0
Turkey	109'387	325'831	383'782	442'582	58799.4	15.3
Uganda (2010)	212'304	226'954	228'419	228'419	0.0	0.0
Ukraine	269'984	270'193	270'226	270'320	94.0	0.0
United Arab Emirates	310	373	360	958	598.3	166.3
United Kingdom	737'631	721'726	699'638	638'528	-61110.0	-8.7
United Republic of	72'188	72'188	72'665	115'022	42356.6	58.3

54

## Statistics: Development of Organic Agricultural Land

Country	2008 [ha]	2009 [ha]	2010 [ha]	2011 [ha]	Change in hectares 10/11	Change 10/11 %
Tanzania						
United States of America (2008)	1'948'946	1'948'946	1'948'946	1'948'946	0.0	0.0
Uruguay (2006)	930'965	930'965	930'965	930'965	0.0	0.0
Uzbekistan	2'530	324	65	209	144.0	221.5
Vanuatu	8'996	8'996	2'664	2'197	-467.3	-17.5
Venezuela (Bolivarian Republic of)	2'441	337	337	59	-278.0	-82.6
Viet Nam	12'622	14'012	19'272	23'400	4128.4	21.4
Zambia (2009)	3'602	7'310	7'310	7'310	0.0	0.0
Zimbabwe	266	421	1'995	466	-1528.5	-76.6
Total*	34'397'189	36'264'704	36'173'766	37'245'686	1'071'919.3	3.0

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see previous editions of "The World of Organic Agriculture" and annex, page 322.
\*Total includes correction value for French overseas departments.

## All organic areas, including non-agricultural areas

Apart from the organic agricultural land, there are additional organic areas. The largest part of these are wild collection areas and areas for beekeeping. Further areas are for aquaculture, forest areas, and grazing areas on non-agricultural land. According to the FiBL-IFOAM survey, the total of these areas was 32.5 million hectares, and all organic areas together constituted 69.7 million hectares.

It should be noted, that many countries do not report the non-agricultural organic areas; they only communicate the organic agricultural land area.

Almost all of the non-agricultural areas are for wild collection and beekeeping. More information on the use of the wild collection areas is available in the corresponding chapter (page 84).

# Distribution of all organic areas in 2011

Source: FiBL-IFOAM Survey 2013

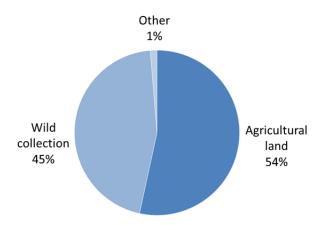


Figure 8: World: Distribution of all organic areas 2011. Total: 69.7 million hectares

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

Table 8: World: Organic areas: Agricultural land (including conversion areas) and further organic areas by region in 2011

Region	Agricultu ral land and crops [ha]	Aqua- cultur e [ha]	Forest [ha]	Grazed non agricultur al land [ha]	Wild collection* [ha]	Other non agricultur al land [ha]	Total [ha]
Africa	1'073'657			-	11'088'694	840'000	13'002'350
Asia	3'706'280	15'105	24'531		5'607'964	74	9'353'954
Europe	10'637'128		17'984	6'382	11'569'083	6'385	22'236'962
Latin America	6'857'611	4	0		3'079'479		9'937'094
Oceania	12'185'843				1'564		12'187'407
North America	2'790'162				225'435		3'015'597
Total**	37'245'686	15'109	42'516	6'382	31'572'219	846'459	69'728'370

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.
Blank cells: No data available.

\* Wild collection and beekeeping areas

\*\* Total includes correction value for French overseas departments.

Table 9: World: All organic areas by country 2011

Country	Agricul- tural land [ha]	Aqua- Culture [ha]	Forest [ha]	Grazed non agr. land [ha]	Wild collec tion <sup>1</sup> [ha]	Other non agricul- tural land (ha)	Total
Afghanistan	61						61
Albania	448				273'552		274'000
Algeria	692				477		1'169
Andorra	4						4
Argentina	3'796'136				614'776		4'410'912
Armenia	750				800		1'550
Australia (2009)	12'001'724						12'001'724
Austria	542'553						542'553
Azerbaijan	21'959		109		802		22'871
Bangladesh	6'810	7'717					14'527
Belarus					103		103
Belgium	59'220						59'220
Belize	1'204						1'204
Benin	1'696						1'696
Bhutan	20'995				15'605		36'599
Bolivia	32'710				785'453		818'163
Bosnia and Herzegovina	343				78'550		78'893
Brazil	687'040				1'209'773		1'896'812
Bulgaria	25'022				543'655		568'677

 $<sup>^{\</sup>scriptsize 1}$  Includes areas for beekeeping.

Country	Agricul- tural land [ha]	Aqua- Culture [ha]	Forest [ha]	Grazed non agr. land [ha]	Wild collec tion¹ [ha]	Other non agricul- tural land [ha]	Total
Burkina Faso	19'684				54'966		74'650
Burundi	550						550
Cambodia	8'285						8'285
Cameroon	849				1'412'000		1'412'849
Canada	841'216				225'435		1'066'651
Chad					110'000		110'000
Channel Islands (2009)	370						370
Chile	29'068				80'870		109'938
China	1'900'000				900'000		2'800'000
Colombia	34'060				6'850		40'910
Comoros	2'642				70		2'712
Cook Islands	22						22
Costa Rica	9'570						9'570
Côte d'Ivoire	20'658						20'658
Croatia	32'036		7		331		32'375
Cuba	2'209						2'209
Cyprus (2009)	3'575			261			3'836
Czech Republic	460'498						460'498
Democratic Republic of the Congo	41'032						41'032
Denmark	162'173						162'173
Dominica	240						240
Dominican Republic	186'931						186'931
Ecuador	52'196				3'000		55'196
Egypt (2010)	82'167						82'167
El Salvador (2008)	6'736						6'736
Estonia	133'779						133'779
Ethiopia	140'475				458		140'933
Falkland Islands (Malvinas)	398'806						398'806
Faroe Islands	253						253
Fiji	2'006						2'006
Finland	188'189				7'007'363		7'195'552
France	975'141						975'141
French Guiana (France)	3'974						3'974
French Polynesia	105						105
Georgia	1'999				1'405		3'404

Germany

Ghana

1'015'626

19'893

1'015'626

59'893

40'000

Country	Agricul- tural land [ha]	Aqua- Culture [ha]	Forest [ha]	Grazed non agr. land [ha]	Wild collec tion¹ [ha]	Other non agricul- tural land [ha]	Total
Greece (2010)	309'823	-		-			309'823
Grenada (2010)	85						85
Guadeloupe (France)	166						166
Guatemala	13'380				5		13'385
Guinea-Bissau¹							
Guyana (2009)	4'249				59'930		64'179
Haiti	912						912
Honduras	23'827						23'827
Hungary	124'402						124'402
Iceland	8'246				212'436		220'682
India	1'084'266				4'477'526		5'561'792
Indonesia	74'034	94			16'007		90'135
Iran (Islamic Republic of)	43'332				38'510		81'842
Ireland	54'122						54'122
Israel	7'095						7'095
Italy	1'096'889				14'747		1'111'636
Jamaica (2009)	542				0		542
Japan	9'401						9'401
Jordan	2'567						2'567
Kazakhstan	196'215						196'215
Kenya	4'969				99'905		104'874
Kosovo	11				180		191
Kyrgyzstan	15'097						15'097
Lao (PDR) (2009)	3'843						3'843
Latvia	184'096						184'096
Lebanon	3'303				1'686	74	5'063
Lesotho	183						183
Liechtenstein	1'095						1'095
Lithuania	152'305						152'305
Luxembourg (2010)	3'720						3'720
Macedonia (FYROM)	26'431				120'000		146'431
Madagascar	30'243				23'711		53'953
Malawi	166				5'346		5'512
Malaysia (2009)	1'582						1'582
Mali	14'790				7'515		22'304
Malta	23						23
Martinique (France)	298						298

\_

 $<sup>^{\</sup>rm 1}$  For Guinea-Bissau only the production volume in tones was available, but not area data.

Country	Agricul- tural land [ha]	Aqua- Culture [ha]	Forest [ha]	Grazed non agr. land [ha]	Wild collec tion¹ [ha]	Other non agricul- tural land [ha]	Total
Mauritius	30						30
Mexico	366'904				145'342		512'246
Moldova	22'102						22'102
Montenegro	3'068				139'809		142'877
Morocco (2010)	17'030				618'200		635'230
Mozambique <sup>1</sup>	4'468						4'468
Myanmar	202						202
Namibia	14'112				2'453'200		2'467'312
Nepal	9'892		24'422				34'314
Netherlands	47'205						47'205
New Zealand	133'321				1'452		134'773
Nicaragua (2010)	33'621				11'463		45'084
Niger	76						76
Nigeria	9'473						9'473
Niue	61				112		173
Norway	55'500						55'500
Occupied Palestinian Territory (2010)	6'354						6'354
Oman	38						38
Pakistan	24'924						24'924
Panama	4'570						4'570
Papua New Guinea	11'337						11'337
Paraguay (2007)	51'190						51'190
Peru	185'964	4	0		159'717		345'685
Philippines	96'317						96'317
Poland	609'412						609'412
Portugal (2010)	201'054		9'977				211'031
Republic of Korea	19'312						19'312
Réunion (France)	556						556
Romania	229'946				338'051		567'997
Russian Federation	126'848				2'186'507		2'313'355
Rwanda	3'705				80		3'784
Samoa	33'515						33'515
Sao Tome and Principe	4'467						4'467
Saudi Arabia	18'563						18'563
Senegal	13'000				200		13'200
Serbia	6'238						6'238

 $<sup>^{1}\</sup>mathrm{Data}$  partly based on FiBL estimate.

166'700

Statistics: All Organic Areas

Slovakia

166'700

Country	Agricul- tural land [ha]	Aqua- Culture [ha]	Forest [ha]	Grazed non agr. land [ha]	Wild collec tion¹ [ha]	Other non agricul- tural land [ha]	Total
Slovenia	32'149						32'149
Solomon Islands	1'307						1'307
South Africa	41'947				127'106		169'052
Spain	1'621'898				181'763		1'803'661
Sri Lanka	19'469						19'469
Sudan	53'017					840'000	893'017
Swaziland	14						14
Sweden	480'185						480'185
Switzerland	123'000			6'121		6'385	135'506
Syrian Arab Republic (2010)	19'987				8'000		27'987
Taiwan	5'016						5'016
Tajikistan	460						460
Thailand	34'829	294			701		35'824
Timor-Leste	24'754						24'754
Togo	1'336				249		1'585
Tonga	248						248
Tunisia	178'521				66'885		245'406
Turkey	442'582				172'037		614'619
Uganda (2010)	228'419				158'328		386'747
Ukraine	270'320				300'000		570'320
United Arab Emirates	958						958
United Kingdom	638'528		8'000				646'528
United Republic of Tanzania	115'022						115'022
United States of America	1'948'946						1'948'946
Uruguay (2006)	930'965				2'300		933'265
Uzbekistan	209				145'621		145'830
Vanuatu	2'197						2'197
Venezuela (Bolivarian Republic of)	59						59
Viet Nam	23'400	7'000			1'300		31'700
Zambia (2009)	7'310				5'910'000		5'917'310
Zimbabwe	466						466
Total*	37'245'686	15'109	42'516	6'382	31'572'219	846'459	69'728'370

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.
Blank cells: No data available.
\* Total includes correction value for French overseas departments.

# Organic producers and other operator types 2011

#### **Producers**

Almost 1.8 million organic producers were reported in the current survey. According to the data obtained, more than three quarters of the producers are in Asia, Africa, and Latin America (see Figure 9). The country with the most producers is India, followed by Uganda and Mexico (see Figure 10).

There has been an increase of 225'000 producers or 14.3 percent over 2010. This is mainly due to an increase in the number of organic farms in India, where the number had fallen sharply in 2010. In 2011, India almost reached the number of organic producers that it had in 2009.

To find precise figures on the number organic farms remains difficult, as:

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

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

Table 10: World: Development of the numbers of producers by region 2010 to 2011

Continent	2010	2011	Change in numbers	Change in %
Africa	539'403	540'988	+1'585	+0.3 %
Asia	460'762	619'439	+158'677	+34.4 %
Europe	277'461	291'451	+13'990	+5.0 %
Latin America	270'568	315'889	+45'321	+16.8 %
Northern America	16'673	16'659	-14	-0.1 %
Oceania	8'483	14'138	+5'655	+66.7 %
Total	1'573'209	1'798'359	+225'150	+14.3 %

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

# Organic producers by region 2011

Source: FiBL-IFOAM Survey 2013

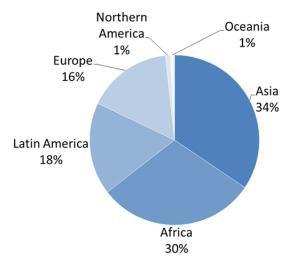


Figure 9: World: Distribution of organic producers by geographical region 2011 (Total: 1.8 million producers)

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

# The ten countries with the largest numbers of organic producers 2011

Source: FiBL-IFOAM survey 2013

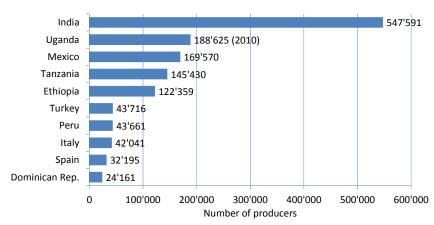


Figure 10: World: The countries with the highest numbers of organic producers 2011

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

### Further operator types

Regarding data on further operator types, there are at least 50'000 processors and at least 2'000 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 can be assumed that the number of processors, importers and exporters is far higher.

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

#### Table 11: World: Organic producers and other operator types by country 2011

We are doing our best to ensure that this overview table, which was published for the first time in the 2011 edition of "The World of Organic Agriculture", 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 or the total number of all operators is available.

Country	Producers	Processors	Exporters	Importers
Afghanistan	264	-	1	
Albania	146	25	28	4
Andorra (2010)	1	1	1	
Argentina	1'699	316	161	
Armenia	34	7		
Australia (2009)	2'129			
Austria	21'575			
Azerbaijan	322	31		
Bangladesh	9'335		2	
Belarus		3		
Belgium	1'274	673		42
Belize	1'291			
Benin	2'424			
Bolivia (Plurinational State of)	9'837	273		
Bosnia and Herzegovina	25	12	6	
Brazil	14'437			
Bulgaria	978	43	7	3
Burkina Faso	4'102	23	1'364	
Burundi	36	1	1	
Cambodia	5'182	2	3	
Cameroon	34	6	6	
Canada	3'718	993		
Chad		1	1	
Chile	600	50	100	30
Colombia	4'775	5	15	5
Comoros	1'416	4	4	
Cook Islands	75			
Costa Rica (2009)	3,000	57		
Côte d'Ivoire	597	7	8	
Croatia	890	303	6	18

Country	Producers	Processors	Exporters	Importers
Cuba	14	5	2	-
Cyprus (2009)	732	53		
Czech Republic	3'904	422	53	9
Democratic Republic of the Congo	1'122	2	2	
Denmark	2'677	517		
Dominican Republic	24'161	18	21	8
Ecuador	9'485	38		
Egypt (2010)	790			
El Salvador (2008)	2'000			
Estonia	1'431	58		3
Ethiopia	122'359	1	11	1
Falkland Islands (Malvinas)	8			
Faroe Islands	1	1		
Fiji	170			
Finland	4'114	352		27
France	23'135	8'785		179
French Guiana (France)	31	4		
French Polynesia	21			
Georgia	150			
Germany	22'506	12'062		297
Ghana	3'464	16	16	
Greece (2010)	21'274	1'557		5
Grenada (2010)	3			
Guadeloupe (France)	28	5		
Guatemala	3'008	23	92	
Guyana (2009)	74	1		
Haiti	1'005	1	1	
Honduras	4'989	26	25	1
Hungary	1'433	320		3
Iceland	39	22		
India	547'591	71		
Indonesia	8'612	71		
Iran (Islamic Republic of)	6'120	10	35	2
Ireland	1'400	204	1	31
Israel	500	59	45	22
Italy	42'041	10'301		293
Jamaica (2009)	80	_		
Japan	2'137	1'788		151
Jordan	98	7	3	
Kenya	12'647	•	5	1
Kosovo	6		3	
Kyrgyzstan	988	2	1	
Lao (PDR) (2009)	2'178	1	1	
Latvia	3'484	69	_	2
Lebanon	181	63	4	5
Lesotho	1	2	-	
Liechtenstein	34	5		
Lithuania	2'623	70		

# Statistics: Producers and Other Operator Types

Country	Producers	Processors	Exporters	Importers
Luxembourg (2010)	96	43	-	3
Macedonia (FYROM)	419	23	2	3
Madagascar	14'550	137	136	
Malawi	9'004	4		1
Malaysia (2009)	24	11		
Mali	2'951	654	377	
Malta	9	1		1
Martinique (France)	31	4		
Mauritius	4	2	1	
Mexico	169'570			
Moldova	172			
Montenegro (2010)	62	1		
Morocco (2010)	120			
Mozambique	6	2		
Myanmar	13			
Namibia	6	4	1	
Nepal	247	4	4	
Netherlands	1'672	1'713		28
New Zealand	1'365	231	235	3:
Nicaragua (2010)	10'060	30		
Niger (2010)	1	1	1	
Nigeria	597	81	81	
Niue	122			
Norway	2'725	537		57
Occupied Palestinian Territory (2010)	832			
Oman (2010)	4			
Pakistan	1'045	18	1	
Panama	10	2		
Papua New Guinea	8'912			
Paraguay (2007)	11'401			
Peru	43'661		153	
Philippines	3'010	20	21	
Poland	23'430	260		17
Portugal (2010)	2'434			
Republic of Korea	13'376			
Réunion (France)	115	9		
Romania	9'471	106		2
Russian Federation	49	8	2	
Rwanda	876			
Samoa	743	4		
Sao Tome and Principe	2'056	2	2	
Saudi Arabia	78			
Senegal	12'754		2	
Serbia	177	25	15	18
Singapore		4	1	
Slovakia	365	41		
Slovenia	2'363	150		

Country	Producers	Processors	Exporters	Importers
Solomon Islands	384			
South Africa	167	49		1
Spain	32'195	2'729	65	101
Sri Lanka	403	72	6	
Sudan	221	1	1	
Swaziland	2	2		
Sweden	5'508	633		203
Switzerland	6'060			
Syrian Arab Republic (2010)	2'458			
Taiwan	2'300			
Tajikistan	75	1	1	
Thailand	7'405			
Timor-Leste	71	1		
Togo	2'057	8	8	
Tonga	122			
Tunisia	2'396	122	60	
Turkey	43'716	169	39	37
Uganda (2010)	188'625			
Ukraine	155	45	32	28
United Arab Emirates	15			
United Kingdom	4'650	2'479		95
United Republic of Tanzania	145'430		28	
United States of America (2008)	12'941			
Uruguay (2006)	630			
Uzbekistan	6	5	4	
Vanuatu	95			
Venezuela (Bolivarian Republic of) (2009)	1			
Viet Nam	4'385	33	4	
Zambia (2009)	10'055			
Zimbabwe	3			
Total	1'798'359	50'311	3'318	2'030

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322. Blank cells: No data available.

#### Market and international trade data

#### Domestic sales

Whereas global trends and a global figure for the organic market are presented, along with much background information, by Amarjit Sahota in this volume (page 132), here we show the country-related data compiled under the framework of the global survey on organic agriculture. For Europe, data collection was carried out in cooperation with the German Agrarmarkt Informations-Gesellschaft (AMI) (see also article on the European Market (page 224). Data on total domestic sales value was available for more than 50 countries.

The countries with the largest market for organic food are the United States, followed by Germany and France. The largest single market is the United States followed by the European Union. The highest per capita consumption in 2011 was in Switzerland (177 euros per capita), followed by Denmark (162 euros per capita) and Luxembourg (134 euros per capita).

Some countries also provide a breakdown by product, be it in value (euros) or volume (tons), and it is expected that the work of the European OrganicDataNetwork project will enable these data to be made accessible for Europe during 2013. In addition to the total sales values, Table 12 also provides figures on the average per capita consumption in 2011. More details of European domestic sales are available; please see European chapter for corresponding tables, page 219.

#### Export data

International trade data are available for some countries. These can be expressed as total export/import volumes in tons or as values in the local currency. Some countries also provide a breakdown by crop and product. Table 12 shows the values of total exports where available.

# Global market: Distribution of total retail sales value by country 2011

Source: FiBL-AMI-IFOAM Survey 2013

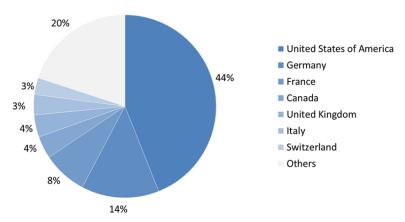


Figure 11: Global market of organic food: Distribution by country 2011

Source: FiBL-AMI-IFOAM Survey 2013, based on data from government bodies, the private sector, and market research companies. For data sources see annex, page 322.

# Global market: Distribution of total retail sales value by single market 2011

Source: FiBL-AMI-IFOAM Survey 2013

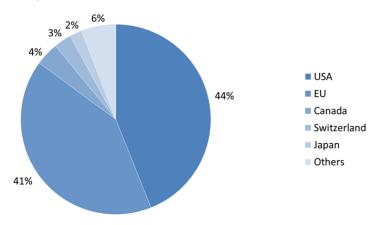


Figure 12: Global market of organic food: Distribution by single market 2011

Source: FiBL-AMI-IFOAM Survey 2013, based on data from government bodies, the private sector, and market research companies. For data sources see annex, page 322.

#### The ten countries with the largest markets for organic food 2011

**United States** 21'038 Germany 6'590 France 3'756 Canada (2010) 1'904 **United Kingdom** 1'882 Italy 1'720 Switzerland 1'411 Austria 1'065 Japan (2010) 1'000 Spain 965 0 5'000 10'000 15'000 20'000 25'000 Retail sales in million Euros

Figure 13: Global market: The countries with the largest markets for organic food 2011

Source: FiBL-AMI-IFOAM Survey 2013, based on data from government bodies, the private sector, and market research companies. For data sources see annex, page 322.

# The ten countries with the largest per capita consumption for 2011

Source: FiBL-AMI-IFOAM survey 2013 Switzerland 177 Denmark 162 Luxembourg 134 Austria 127 Liechtenstein (2009) 100 Sweden 94 Germany 81 **United States** 67 France 58 Canada (2010) 57 0 50 150 200

Figure 14: Global market: The countries with the highest per capita consumption 2011

Source: FiBL-AMI-IFOAM Survey 2013, based on data from government bodies, the private sector, and market research companies. For data sources see annex, page 322.

Per capita consumption in Euros

# Table 12: Global market data: Domestic sales, per capita consumption, and exports by country 2011

It should be noted that for market and trade data, comparing country statistics remains very problematic, due to differing methods of data collection. Comments on this table should be sent to helga.willer@fibl.org. Revisions will be posted at http://www.organic-world.net/statistics-data-revisions.html and included into the database.

Country	Data year	Sales [Mio €]	€/person	Export [Mio €]
Argentina	2009			122.3
Australia	2007			123.0
	2011	941.9	41.7	
Austria	2011	1'064.7	127.0	79.7
Azerbaijan	2011	2.64		
Belgium	2011	435.0	40	
Belize	2009	0.0		0.02
Bolivia (Plurinational State of)	2011			178.7
Bosnia and Herzegovina	2010	1.0	0.1	
	2011			2.3
Brazil	2010			187.5
Bulgaria	2010	7.0	1	
Cambodia	2009			1.0
Canada	2010	1'903.7	57.1	285.6
Chile	2009	1.8	0.1	37.7
China	2008			300.0
	2009	790.8	0.6	
Colombia	2007			13.0
Costa Rica	2008	1.4	0.3	
	2009			19.0
Croatia	2011	83.3	18.9	2.9
Cyprus	2006	1.5	2	
Czech Republic	2010	59.0	7.4	19.0
Denmark	2011	901.0	161.9	139.3
Dominican Republic	2011			155.2
Estonia	2009	11.8	9	
Ethiopia	2010			25.6
Falkland Islands (Malvinas)	2009			2.1
Finland	2011	120.0	22.0	
France	2011	3'756.0	58	
Germany	2011	6'590.0	81	
Greece	2006	58.0	5	
Hungary	2009	25.0	2.5	20.0
India	2011	45.9	0.04	128.4
Ireland	2011	98.7	22	
Italy	2011	1'720.0	28.0	1135.0
Japan	2009	999.7	8	33.4
Kenya	2008	0.3	0	
Latvia	2011	4.0	2.0	
Liechtenstein	2009	3.4	100.0	
Lithuania	2011	6.0	2.0	

## Statistics: Market and International Trade Data

Country	Data year	Sales [Mio €]	€/person	Export [Mio €]
Luxembourg	2011	68.3	134.3	
Mexico	2008	20.5	0.2	
	2011			383.0
Moldova	2011			15.0
Montenegro	2010	0.1	0.2	
Netherlands	2007			525.0
	2011	760.5	46.0	
New Zealand	2011	204.5	46.3	123.8
Norway	2011	159.9	32.9	
Paraguay	2011			71.4
Peru	2010	13.7	0.5	166.7
Poland	2011	120.0	3.1	
Portugal	2011	21.0	2.0	
Republic of Korea	2010	343.4	7.1	
Romania	2011	80.0	3.7	200.0
Russian Federation	2009	65.0	0.5	4.0
Samoa	2010	0.0	0.1	0.1
Serbia	2010	40.0	5.5	
Slovakia	2010	4.0	0.7	
Slovenia	2009			0.1
	2010	38.0	18.7	
Spain	2011	965.0	20.5	506.0
Sweden	2011	885.0	94.0	
Switzerland	2011	1'410.8	177.4	
Thailand	2009	50.8	0.7	50.8
Tunisia	2011			44.0
Turkey	2009	3.6	0.1	19.8
Uganda	2010			32.0
Ukraine	2011	5.1	0.1	
United Kingdom	2011	1'882.0	30.0	
United States of America	2011	21'038.4	67.2	

Source: FiBL-AMI-IFOAM Survey 2013, based on data from government bodies, the private sector, and market research companies. For data sources see annex, page 322 Blank cells: No data available.

### Organic farming in developing countries and in emerging markets

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) are analyzed in this section. More than 1.5 million producers from de DAC countries were counted, constituting more than 80 percent of all producers. Slightly more than one-third of the world's organic agricultural land - 12 million hectares - is located in countries listed on the DAC list. If wild collection and beekeeping areas are included, the total area is 32.9 million hectares. Most of the agricultural land is in Latin American countries (6.4 million hectares), with Asia (3.6 million) and Africa (almost 1.1 million) in second and third place. The countries with the largest areas of organic agricultural land are Argentina, China, India, Uruguay and Brazil (in that order). Not surprisingly, most of them are all large countries.

However, when it comes to organic agricultural land as a percentage of total area under agriculture, the order is different. The highest percentages of organic agricultural land are in the Dominican Republic, several Pacific Island countries, and Timor Leste. Argentina, with by far the largest area under organic management (with 3.8 million hectares), is ranked seventh when organic agricultural area is expressed as a proportion of the total agricultural area. In the top ten countries on the DAC list, the shares of organic land are comparable to those in many European countries. 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. However, out of all countries on the DAC list that were covered in the survey, only a few have a proportion of organic agricultural land that is higher than one percent of the total agricultural area.

Land use details were available for only 65 percent of the agricultural land; crop data are missing for some of the world's largest producing countries (China, India, and Brazil). However, the available statistics show that the shares of grassland/grazing areas and of permanent crops are relatively high when compared with Europe and North America. Arable land, by contrast, is of minor importance. This is because exports play 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.

Table 13: Countries on the DAC list: Development of organic agricultural land 2005-2011

Continent	2005	2006	2007	2008	2009	2010	2011
Africa	489'949	684'803	862'351	857'459	1'026'445	1'089'950	1'073'101
Asia	2'646'084	2'964'020	2'842'949	3'285'252	3'553'235	2'676'342	3'643'368
Europe	351'739	387'027	421'479	411'847	668'340	765'292	816'024
Latin America	5'056'158	5'521'091	6'157'276	7'392'239	7'338'930	7'209'712	6'456'637
Oceania	100	22'623	22'623	22'623	25'918	17'117	50'693
Total	8'544'029	9'579'564	10'306'678	11'969'420	12'612'867	11'758'413	12'039'823

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

1

 $http://www.oecd.org/document/45/0,3746,en\_2649\_34447\_2093101\_1\_1\_1\_1,00.html$ 

<sup>&</sup>lt;sup>1</sup> The list is available at

Source: FiBL-IFOAM survey 2013

# The ten countries on the DAC list with the largest areas of organic agricultural land 2011

3.80 Argentina China 1.90 India 1.08 Uruguay 0.93 (2006) Brazil 0.69 Turkey 0.44 Mexico 0.37 Ukraine Uganda 0.23 (2010) Kazakhstan 0.20 0.50 1.00 1.50 2.00 2.50 3.00 3.50 4.00 Million hectares

Figure 15: Countries on the DAC list: the countries with the largest organic agricultural land in 2011

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

# The ten countries on the DAC list with the highest shares of organic agricultural land 2011

rce: FiBL-IFOAM survey 2013 Samoa 11.8% Dominican Rep. 9.6% Sao Tome and Principe 8.0% Timor-Leste 6.6% Uruguay 6.3% Bhutan 4.1% Argentina 2.7% Macedonia 2.5% Croatia 2.5% Egypt 2.2% (2010) 0% 10% 15% Share of agricultural land

Figure 16: Countries on the DAC list: the countries with the highest shares of organic agricultural land in 2011

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

ŭ

### Land use and crop data

Almost two-thirds of the 37.2 million hectares of organic agricultural land in 2011 was grassland/grazing areas (23.2 million hectares). The cropland area (arable land with 6.3 million hectares and permanent crops with 2.6 million hectares) constitute 8.9 million hectares and thus more than a quarter of the organic agricultural land. The cropland area is probably much higher because details on land use are not available as for some countries with large organic agricultural areas, for example China and India. 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 as not all countries provided detailed crop data.<sup>1</sup>

The FAO classification<sup>2</sup> of land use, although with slight modifications, was utilized for this survey. A system similar to that of Eurostat was used for the classification of crops.<sup>3</sup> The following main levels were used to classify the land use data: arable land; permanent crops; cropland for which no further details were available (cropland=arable land + permanent cropland with no details available); permanent grassland/grazing areas; other agricultural areas (like for instance hedges); and agricultural land for which no details were 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.

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

- Africa: Land use information was available for about two thirds of the organic agricultural land in Africa. More than a third of the agricultural land is used for permanent crops. The main permanent crops are cash crops such as coffee and olives. For land use details in Africa see page 169.
- Asia: Some land use details are known for one third of the organic agricultural 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. For land use details in Asia see page 199.
- Europe: In Europe, the agricultural land use is 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 (1.8 million hectares), followed by the cultivation of green fodder (1.8 million hectares). Permanent crops account for ten percent of organic agricultural land. More than one third of this land is used for olives, followed by grapes, nuts, and fruits. For land use details in Europe see page 215.
- Latin America and the Caribbean: Most of the organic agricultural 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

\_

 $<sup>^1</sup>$  For some countries, only information on the main uses (arable crops, permanent crops, and permanent grassland) was available. For other countries, very detailed statistical land use information can be found. The Eurostat statistics, for instance, list each vegetable type for many countries.

 $<sup>^2</sup>$  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

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

- permanent cropland is used for coffee, followed by cocoa and tropical fruits. For land use details in Latin America and the Caribbean see page 273.
- North America: As in Europe, arable land and permanent grassland have almost equal shares. A major proportion of the arable land is used for cereal production and cultivation of green fodder. For land use details in North America see page 293.
- Oceania: Most of the land in Australia is used for extensive grassland/grazing areas only little information is available about the remaining land. For land use details in Oceania see page 308.

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

Land use	Africa	Asia	Europe	Latin America	Northern America	Oceania	Total
Agr. land, no details	415'509	2'430'555	34'813	1'027'758	159'931	293'012	4'356'584
Arable crops	153'108	259'664	4'395'339	182'106	1'311'143	37'205	6'338'566
Cropland, no details	17'680	128'125	18'149	27'857	97'561	40'188	329'559
Other agr. land	16'554	30'207	295'279	30'974	23'338		396'352
Permanent crops	408'424	256'425	1'055'023	754'832	64'572	59'113	2'598'390
Permanent grazing	62'381	601'303	4'838'525	4'834'083	1'133'617	11'756'325	23'226'234
Total	1'073'657	3'706'280	10'637'128	6'857'611	2'790'162	12'185'843	37'245'686

Source: FiBL-IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

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

### Land use in organic agriculture by region 2011

Source: FiBL-IFOAM survey 2013 100% Agricultural land and Share of total agriculturalland crops, no details 80% Other agricultural land 60% Permanent grassland Permanent crops 40% Arable crops 20% 0% Africa Asia Europe Latin Northern Oceania

America America

Figure 17: World: Distribution of main land use types by region 2011

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

# Distribution of main land use types and crop categories 2011

Source:  $\overline{\text{FiBL-IFOAM}}$  Survey 2013; based on information from the private sector, certifiers, and governments.

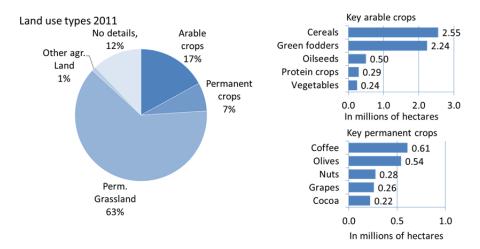


Figure 18: World: Distribution of main land use types and crop categories 2011

## Growth of the organic land by land use type 2004-2011

Source: FiBL-IFOAM-SOEL-Surveys 1999-2013

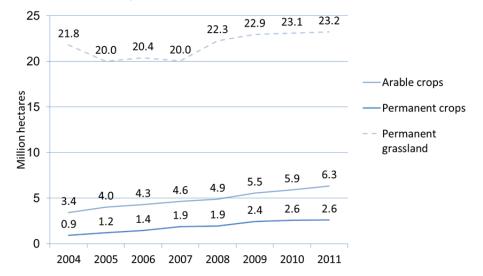


Figure 19: World: Development of organic arable land, permanent cropland and permanent grassland/grazing areas 2004-2011

Table 15: World: Land use and crop categories in organic agriculture worldwide 2011

Land use	Main crop category	Area [ha]
Agricultural land and cr	ops, no details	4'356'584
Arable crops	Arable crops, no details	145'062
	Arable crops, other	48'624
	Cereals	2'550'064
	Flowers and ornamental plants	400
	Green fodder from arable land	2'236'356
	Hops	263
	Industrial crops	21'856
	Medicinal and aromatic plants	101'445
	Mushrooms and truffles	1'945
	Protein crops	290'917
	Oilseeds	499'911
	Root crops	56'223
	Seeds and seedlings	8'685
	Strawberries	3'137
	Sugarcane	44'467

Land use	Main crop category	Area [ha]
	Textile crops	86'600
	Tobacco	161
	Vegetables	242'451
Arable crops total		6'338'566
Cropland, no details, total		329'559
Other agricultural land	Fallow land, crop rotation	221'702
	Home gardens	115
	Other agricultural land, no details	93'992
	Unutilised land	80'543
Other agricultural land total		396'352
Permanent crops	Berries	39'424
	Citrus fruit	52'776
	Cocoa	221'323
	Coconut	37'271
	Coffee	608'385
	Flowers and ornamental plants, permanent	4'844
	Fruit	16'323
	Fruit, temperate	135'811
	Fruit, tropical and subtropical	190'577
	Fruit/nuts/berries	12'218
	Grapes	259'947
	Medicinal and aromatic plants, permanent	44'970
	Nurseries	1'095
	Nuts	275'058
	Olives	542'489
	Other permanent crops	107'022
	Tea/mate, etc.	48'856
Permanent crops total		2'598'390
Permanent grassland total		23'226'234
Total		37'245'686

### Arable land

With a total of at least 6.3 million hectares, organic arable land constitutes 17 percent of the world's organic agricultural land and 0.44 percent of the world's total arable land. An increase of 7.3 percent over 2010 was reported and there was an increase in almost all crop categories. Almost three quarters of the arable land is located in Europe, followed by North America (21 percent), Asia (4 percent) and Latin America (3 percent) (see Figure 20).

Most of this category of land is used for cereals including rice (2.5 million hectares), followed by green fodder (2.2 million hectares) and oilseeds (0.5 million hectares).

Table 16: Use of organic arable land (including in-conversion areas), 2010 and 2011 compared

Main crop category	2010	2011	Change in ha	Change in %
Arable crops, no details	99'543	145'062	45'519	45.7
Arable crops, other	57'083	48'624	-8'459	-14.8
Cereals	2'450'334	2'550'064	99'730	4.1
Flowers and ornamental plants	291	400	109	37.6
Green fodder from arable land	2'032'078	2'236'356	204'278	10.1
Hops	228	263	36	15.7
Industrial crops	28'641	21'856	-6'786	-23.7
Medicinal and aromatic plants	87'602	101'445	13'843	15.8
Mushrooms and truffles	59	1'945	1'886	3212.0
Protein crops	272'176	290'917	18'741	6.9
Oilseeds	461'221	499'911	38'690	8.4
Root crops	59'721	56'223	-3'498	-5.9
Seeds and seedlings	5'503	8'685	3'182	57.8
Strawberries	3'347	3'137	-210	-6.3
Sugarcane	47'508	44'467	-3'042	-6.4
Textile crops	62'408	86'600	24'192	38.8
Tobacco	106	161	55	51.9
Vegetables	240'650	242'451	1'801	0.7
Total	5'908'500	6'338'566	430'066	7.3

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

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

80

 $<sup>^1</sup>$  1'381'204'040 hectares in 2009 according to FAOSTAT, FAO, Rome. See the FAO Homepage: faostat.fao.org

<sup>&</sup>gt; Resources > Resourcestat > http://faostat.fao.org/site/377/default.aspx#ancor

## Distribution of organic arable land by region 2011

Source: FiBL-IFOAM Survey 2013

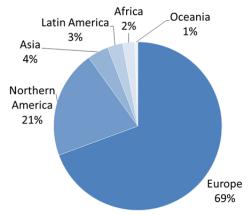


Figure 20: World: Distribution of arable cropland by region 2011

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

### Distribution of organic arable land by crop group 2011

Source: FiBL-IFOAM Survey 2013

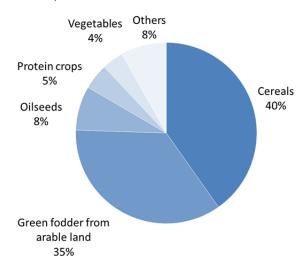


Figure 21: World: Use of arable cropland by crop group 2011

### Permanent crops

Permanent crops account for approximately 2.6 million hectares, which is 1.75 percent of the world's permanent cropland.¹ Compared with the previous survey, almost 14'000 hectares more were reported. With seven percent, permanent cropland has a higher share in organic agriculture than in total agriculture, where permanent crops account for approximately three percent of the total. Most of the permanent cropland is in Europe (1 million hectares), followed by Latin America (0.7 million hectares), and Africa (0.4 million hectares) (see Table 14). The most important crops are coffee with 0.6 million hectares reported and constitute one-fifth of the organic permanent cropland, followed by olives (0.5 million hectares), nuts (0.27 million hectares), grapes (0.26 million hectares) and cocoa (0.22 million hectares).

Table 17: Use of organic permanent cropland (including in-conversion areas), 2010 and 2011 compared

Main crop category	2010	2011	Change in ha	Change in %
Berries	36'629	39'424	2'795	7.6
Citrus fruit	53'945	52'776	-1'169	-2.2
Cocoa	229'472	221'323	-8'149	-3.6
Coconut	99'436	37'271	-62'165	-62.5
Coffee	607'763	608'385	622	0.1
Flowers and ornamental plants	118	4'844	4'726	4001.5
Fruit	7'065	16'323	9'257	131.0
Fruit, temperate	118'707	135'811	17'105	14.4
Fruit, tropical and subtropical	177'268	190'577	13'309	7.5
Fruit/nuts/berries	9'549	12'218	2'670	28.0
Grapes	217'634	259'947	42'313	19.4
Medicinal and aromatic plants	27'167	44'970	17'803	65.5
Nurseries	1'103	1'095	-8	-0.7
Nuts	247'220	275'058	27'838	11.3
Olives	495'480	542'489	47'009	9.5
Other permanent crops	215'038	107'022	-108'017	-50.2
Tea/mate, etc.	41'017	48'856	7'839	19.1
Total	2'584'611	2'598'390	13'779	0.5

Source: FiBL-IFOAM-Survey 2013, based on data from governments, the private sector, and certifiers. For detailed data sources see annex, page 322.

Blank cells: No data available. Not all countries included in the survey provided data on land use or crop areas.

82

 $<sup>^1</sup>$  There were 152'149'880 hectares of permanent cropland in 2009 according to FAOSTAT, FAO, Rome. See the FAO Homepage: faostat.fao.org > Resources > Resourcestat > Land at http://faostat.fao.org/site/377/default.aspx#ancor

## Distribution of organic permanent cropland by region 2011

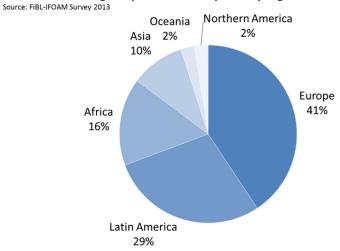


Figure 22: World: Distribution of permanent cropland by region 2011

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

### Use of permanent cropland by crop group 2011

Source: FiBL-IFOAM Survey 2013

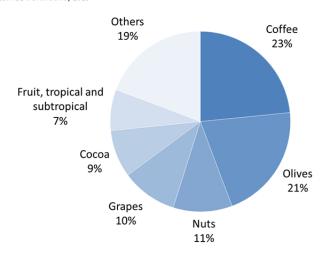


Figure 23: World: Use of permanent cropland by crop group 2011

### Wild collection and beekeeping areas

The collection of wild harvested crops is defined in the IFOAM Basic Standards, and wild collection activities are regulated in organic laws. A collection area (including beekeeping) of 31.5 million hectares was reported in 2011. The organic wild collection areas are concentrated in Europe, Africa, Asia, and Latin America (Figure 24); the distribution is thus quite different from that of the organic agricultural land. 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 Zambia (beekeeping) and India (Figure 25).

Wild berries, medicinal and aromatic plants, as well as shea nuts in Africa and Brazil nuts in Latin America play the most important role. Unfortunately, details on the harvested crops were only available for about one third of the wild collection area (see Table 20).

Table 18: Wild collection and beekeeping areas by region 2011

Continent	2010	2011	Change in hectares	Change in %
Africa	16'364'414	11'088'694	-5'275'720	-32.2
Asia	4'821'377	5'607'964	+786'587	16.3
Europe	13'360'526	11'568'769	-1'791'757	-13.4
Latin America	1'994'269	3'079'479	+1'085'210	54.4
Northern America	210'231	225'435	+15'204	7.2
Oceania	550	1'564	+1'014	184.4
Total	36'751'368	31'571'905	-10358929	-14.1

Source: FiBL-IFOAM Survey 2013, based on data from governments, the private sector, and certifiers. For detailed data sources see annex, page 322.

Table 19: Wild collection and beekeeping areas by crop group 2011

Main use	Hectares
Beekeeping areas	6'620'352
Berries, wild	7'074'312
Forest honey	1'467'792
Fruit, wild	2'124'095
Medicinal and aromatic plants, wild	3'077'958
Mushrooms, wild	413'182
Nuts, wild	1'053'412
Oil plants, wild	400'000
Palmito, wild	66'780
Seaweed	200'000
Wild collection, no details	8'906'337
Wild collection, other	167'685
Total	31'571'905

### Distribution of organic wild collection areas by region 2011

Source: FiBL-IFOAM Survey 2013

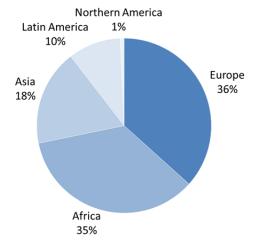


Figure 24: World: Distribution of organic wild collection and beekeeping areas in 2011

Source: FiBL-IFOAM Survey 2013, based on data from government bodies, the private sector, and certifiers. For detailed data sources see annex, page 322.



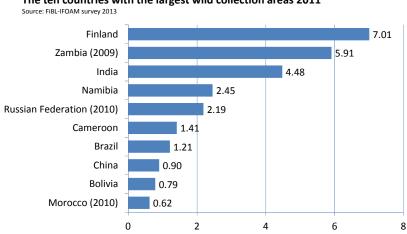


Figure 25: World: The ten countries with the largest organic wild collection and beekeeping areas in 2011

Source: FiBL-IFOAM Survey 2013, based on data from government bodies, the private sector, and certifiers. For detailed data sources see annex, page 322.

Million hectares

## Statistics: Wild Collection

# Table 20: Wild collection and beekeeping areas by country 2011

Country	Crop group	2011
Albania	Wild collection, no details	273'552
Algeria	Fruit, wild	477
Argentina	Beekeeping	607'619
	Wild collection, no details	7'157
Armenia	Wild collection, no details	800
Azerbaijan	Berries, wild	154
	Fruit, wild	350
	Medicinal and aromatic plants, wild	150
	Nuts, wild	148
Belarus	Wild collection, no details	103
Bhutan	Medicinal and aromatic plants, wild	15'605
Bolivia (Plurinational State of)	Nuts, wild	785'453
Bosnia and Herzegovina	Wild collection, no details	78'550
Brazil	Wild collection, no details	1'209'773
Bulgaria	Wild collection, no details	543'655
Burkina Faso	Medicinal and aromatic plants, wild	10
	Nuts, wild	40'613
	Wild collection, no details	14'008
	Wild collection, other	335
Cameroon	Forest honey	1'400'000
	Nuts, wild	12'000
Canada	Wild collection, no details	225'435
Chad	Wild collection, other	110'000
Chile	Wild collection, no details	80'870
China	Wild collection, no details	900'000
Colombia	Palmito, wild	6'850
Comoros	Medicinal and aromatic plants, wild	29
	Wild collection, no details	41
Croatia	Bee pastures	314
	Berries, wild	0
	Fruit, wild	4
	Medicinal and aromatic plants, wild	13
Ecuador	Wild collection, other	3'000
Ethiopia	Beekeeping	458
Finland	Berries, wild	7'007'363
Georgia	Beekeeping	12
	Wild collection, no details	1'393
Ghana	Nuts, wild	40'000
Guatemala	Beekeeping	5

Country	Crop group	2011
Guyana	Palmito, wild	59'930
Iceland	Seaweed	200'000
	Wild collection, no details	12'436
India	Wild collection, no details	4'477'526
Indonesia	Forest honey	9'007
	Medicinal and aromatic plants, wild	7'000
Iran (Islamic Republic of)	Wild collection, no details	38'510
Italy	Wild collection, no details	14'747
Jamaica	Beekeeping	0
Kenya	Forest honey	58'417
	Medicinal and aromatic plants, wild	41'488
Kosovo	Fruit, wild	180
Lebanon	Medicinal and aromatic plants, wild	18
	Nuts, wild	7
	Wild collection, no details	1'661
Macedonia (FYROM)	Wild collection, no details	120'000
Madagascar	Fruit, wild	141
	Medicinal and aromatic plants, wild	20'152
	Nuts, wild	3'364
	Wild collection, no details	13
	Wild collection, other	41
Malawi	Wild collection, no details	4'473
	Wild collection, other	872
Mali	Nuts, wild	7'515
Mexico	Beekeeping	89'342
	Fruit, wild	12'032
	Medicinal and aromatic plants, wild	60
	Wild collection, no details	43'678
	Wild collection, other	230
Montenegro	Medicinal and aromatic plants, wild	139'809
Morocco	Fruit, wild	17'000
	Medicinal and aromatic plants, wild	200'200
	Oil plants, wild	400'000
	Wild collection, no details	1'000
Namibia	Medicinal and aromatic plants, wild	2'453'200
New Zealand	Beekeeping	1'452
Nicaragua	Beekeeping	11'463
Niue	Fruit, wild	112
Peru	Forest honey	168
	Medicinal and aromatic plants, wild	179

Statistics: Wild Collection		
Country	Crop group	2011
	Nuts, wild	159'722
Romania	Wild collection, no details	338'051
Russian Federation	Berries, wild	12'000
	Fruit, wild	1'755'707
	Medicinal and aromatic plants, wild	6'800
	Mushrooms, wild	412'000
Rwanda	Medicinal and aromatic plants, wild	68
	Wild collection, no details	12
Senegal	Forest honey	200
South Africa	Medicinal and aromatic plants, wild	27'106
	Wild collection, no details	50'000
	Wild collection, other	50'000
Spain	Wild collection, no details	181'763
Syrian Arab Republic	Wild collection, no details	8'000
Thailand	Wild collection, no details	701
Togo	Wild collection, other	249
Tunisia	Wild collection, no details	66'885
Turkey	Berries, wild	54'794
	Fruit, wild	338'092
	Medicinal and aromatic plants, wild	165'452
	Mushrooms, wild	1'182
	Nuts, wild	4'592
	Wild collection, other	2'958
Uganda	Wild collection, no details	158'328
Ukraine	Wild collection, no details	300,000
Uruguay	Wild collection, no details	2'300
Uzbekistan	Medicinal & aromatic plants, wild	422
	Medicinal and aromatic plants, wild	199
	Wild collection, no details	145'000
Viet Nam	Wild collection, no details	1'300
Zambia	Bee keeping	5'910'000
Total		31'572'219

### **Beehives**

More than 700'000 beehives were reported in 2011, which represent almost one percent of the world's total beehives, according to FAO data from 2010. The organic beehives are concentrated mainly in Europe (65.7 percent) and Latin America (almost 28 percent) (see Figure 26). The countries with the largest numbers of beehives are Italy (99'260), followed by Romania (77'994) and France (69'115) (Figure 28). Since 2007 when there were 525'000 beehives, their number has increased by more than 200'000 (42 percent) (Figure 27).

The Third World Organic Beekeeping Conference<sup>1</sup> will take place in 2014, in Italy. It will be organized by the Consorzio Nazionale Apicoltori (CONAPI) and co-coordinated by FiBL, Naturland, Apimondia, Ecusur and IFOAM. The most recent conference<sup>2</sup> was held in Mexico, in 2012, and was organized by an international interdisciplinary team, which included two local organic beekeeping organizations (Maya Vinic and Mieles del Sur), two research institutions (FiBL and El Colegio de la Frontera Sur), an international association for organic agriculture (Naturland), two organic inspection and certification agencies (IMOLA and Certimex) and a beekeeping consultancy (DECA).

### Distribution of organic beehives by region 2011

Source: FiBL-IFOAM Survey 2013

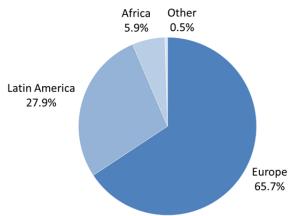


Figure 26: World: Distribution of organic beehives by region in 2011

Source: FiBL-IFOAM Survey 2013, based on data from government bodies, the private sector, and certifiers. For detailed data sources see annex, page 322.

\_

 $<sup>^{\</sup>rm 1}$  For more information on the Third World Organic Beekeping Conference please visit: www.organicbeekeping.info

 $<sup>^2</sup>$  For more information about the Second World Organic Beekeeping Conference please visit the organizers' web site www.abejas.hypernet.com.mx

## Development of the global organic beehives 2007-2011

Source: FiBL-IFOAM-SOEL 2006-2013

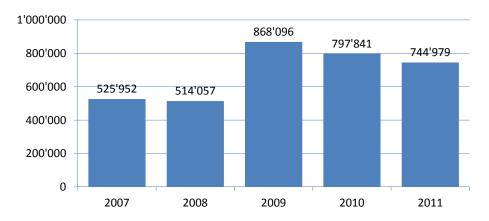


Figure 27: Development of the global organic beehives 2007-2011

Source: FiBL-IFOAM-SOEL Surveys 2006-2013. For detailed data sources see annex, page 322.

# The ten countries with the largest number of organic beehives 2011

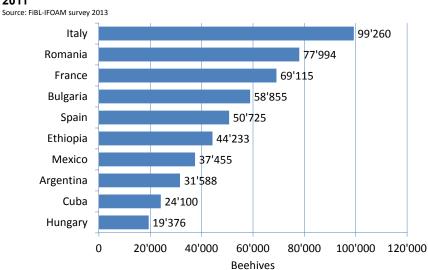


Figure 28: The ten countries with the largest number of organic beehives in 2011

Source: FiBL-IFOAM- Survey-2013. For detailed data sources see annex, page 322.

Table 21: Number of beehives by country 2011

Country	Beehives
Italy	99'260
Brazil	96'367
Romania	77'994
France	69'115
Bulgaria	58'855
Spain	50'725
Ethiopia	44'233
Mexico	37'455
Argentina	31'588
Cuba	24'100
Hungary	19'376
Turkey	19'105
Austria	17'982
Portugal	15'927
Latvia	14'553
Greece	13'695
Macedonia (FYROM)	13'581
Nicaragua	13'367
Chile	4'731
Switzerland	3'365
Finland	3'030
Sweden	2'182
Croatia	1'804
Slovenia	1'646
Norway	1'452
Serbia	1'053
Lithuania	910
Saudi Arabia	854
Poland	811
Azerbaijan	745
Canada	736
Georgia	570
Czech Republic	551
Estonia	530
Luxembourg	512
Slovakia	448
Bosnia and Herzegovina	373
Lebanon	345
Armenia	318

Country	Beehives
Ukraine	300
Belgium	200
Montenegro	159
Kosovo	40
Senegal	32
South Africa	4
Total	744'979

### Statistics on selected crops

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

It should be noted that the organic areas are compared with the *area harvested in 2010* as provided by FAO. The data may not necessarily be directly comparable to the areas sown or planted as registered by the certification bodies, and may differ from which crops were harvested, due to natural catastrophes for instance.

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

Data on conversion status: For some countries, data were collated from several certifiers, some of which provided information on the conversion status while others did not. Therefore, the sum of land under conversion and the fully converted land is not necessarily the total land under organic agricultural management in all cases (=conversion land, fully converted land and land for which no such details were available).

The tables presented here are an example of the information available, including other crops, in the FiBL database.

Table 22: Selected key crops in organic agriculture 2011 (overview): Land under organic management (including conversion areas)

Main crop group	Africa [ha]	Asia [ha]	Europe [ha]	Latin America [ha]	Northern America [ha]	Oceania [ha]
Cereals	4'676	142'039	1'787'562	38'452	574'611	2'724
Citrus fruit	7'325	545	30'644	8'451	5'692	119
Cocoa	23'581	1'321		196'421		
Coffee	150'394	70'363		376'808		10'819
Fruit, temperate	747	7'696	113'607	4'945	8'023	793
Fruit, tropical and subtropical	21'731	31'656	18'859	113'830	3'595	907
Grapes	499	8'232	231'556	7'800	11'577	282
Oilseeds	62'248	43'257	185'501	39'303	169'385	217
Olives	114'068	1'873	421'903	4'174		470
Protein crops	1'578	14'108	234'543	1'261	39'409	18
Vegetables	8'388	10'277	116'888	40'247	65'264	1'388

### > Cereals

Table 23 shows that at least 2.5 million hectares of cereals are under organic management. Comparing the organic figure with FAO's figure for the world's harvested cereal area of almost 700 million hectares in 2010 (FAOSTAT), 0.4 percent of the total cereal area is under organic management.

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

The key cereal producers worldwide are India (97.7 million hectares), China (90 million hectares), the United States (57 million hectares), and the Russian Federation (32 million hectares).

Of these four countries, information on the organic cereal area was available only for the United States, which is the largest organic producer. Here, almost 370'000 hectares or 0.6 percent of the cereal area was organic (2008). The United States is followed by Turkey with more than 210'000 hectares, Canada (2009 data) and Germany (both with more than 200'000 hectares).

Some countries reach proportions that are far higher than the global cereal proportion of 0.4 percent. For example, Austria (9.6 percent), Sweden (9.1 percent), Estonia (7.5 percent), and Lithuania (5.4 percent) greatly exceed 0.4 percent.

As some of the world's large cereal producers (such as India, China, and the Russian Federation) did not provide land use and crop details, it can be assumed that the cereal area is larger than that shown here.

Even though the organic cereal area has increased by more than 50 percent since 2004 (1.6 million hectares), the cereal area did no show a great increase in 2011.

The available data on the conversion status indicate that 17 percent of the organic cereal area was in-conversion in 2011 (less than half a million hectares). If this is indicative, there could be a considerable increase in supply of organic cereals in the near future.

\_

<sup>&</sup>lt;sup>1</sup> FAOSTAT > PRODUCTION > PRODSTAT > CROPS. The FAOSTAT homepage at http://faostat.fao.org/site/567/DesktopDefault.aspx?PageID=567#ancor. Download of December, 2012.

### Cereals: Development of the global organic area 2004-2011

Source: FiBL-IFOAM-SOEL 2006-2013

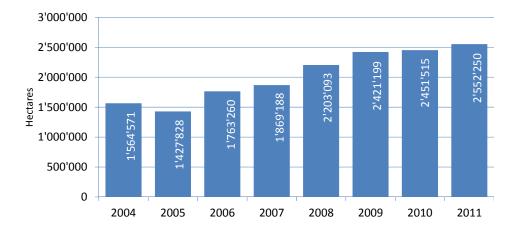


Figure 29: Cereals: Development of the global organic area 2004-2011

Source: FiBL-IFOAM-SOEL 2006-2013

## Cereals: Distribution of cereal types 2011

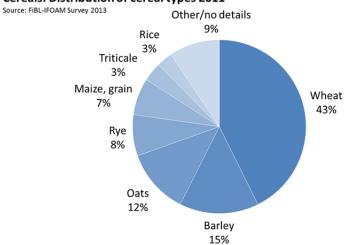


Figure 30: Cereals: Distribution of cereal types 2011

Source: FiBL-IFOAM 2013

# Statistics: Crops - Cereals

Table 23: Organic cereal area 2011

Country	Organic area [ha]	Organic Share [%]	Area fully converted [ha]	Area under conversion [ha]
Australia	2'724	0.0%		
Austria	93'114	9.6%		
Azerbaijan	1'932	0.2%	405	1'527
Bangladesh	103	0.0%	13	
Belgium	4'320	1.3%	2'721	1'599
Benin	0	0.0%	0	
Bolivia (Plurinational State of)	904	0.1%	435	469
Bosnia and Herzegovina	45	0.0%	45	
Bulgaria	6'521	0.3%	1'541	4'980
Burkina Faso	23	0.0%		
Cambodia	1'227	0.0%	1'153	74
Canada	207'191	1.6%	207'191	
Chile	117	0.0%		117
Colombia	2	0.0%	2	
Costa Rica	56	0.1%		
Croatia	8'288	1.5%	1'404	6'884
Cyprus	476	1.3%	319	157
Czech Republic	24'382	1.7%	17'616	6'765
Denmark	44'650	3.0%	43'139	1'511
Dominican Republic	45	0.0%		45
Ecuador	1'097	0.1%	1'005	92
Estonia	20'493	7.5%	15'117	5'376
Finland	39'143	4.2%	39'143	
France	119'747	1.2%	80'801	38'946
Georgia	35	0.0%	4	31
Germany	204'000	3.1%		
Greece	35'190	3.5%	32'809	2'381
Hungary	23'112	0.9%	19'866	3'246
Indonesia	1'548	0.0%	1'548	
Iran (Islamic Republic of)	1'178	0.0%	1'054	124
Italy	184'111	5.3%	148'456	35'654
Japan	3'214	0.2%	3'214	
Jordan	69	0.2%	69	
Kazakhstan	91'782	0.6%	91'782	
Kenya	1	0.0%	1	
Kosovo	1	-		1
Kyrgyzstan	774	0.1%	378	396
Latvia	26'257	5.2%	20'180	6'077
Lebanon	27	0.0%	27	
Liechtenstein	71	-	56	15
Lithuania	54'320	5.4%	36'757	17'564
Luxembourg	633	2.1%		
Macedonia (FYROM)	3'670	2.3%	378	3'292
Madagascar	89	0.0%		
Mali	50	0.0%		
Malta	0	0.0%	0	

Country	Organic area [ha]	Organic Share [%]	Area fully converted [ha]	Area under conversion [ha]
Mexico	5'214	0.1%	5'214	
Moldova	8'399	1.0%		
Myanmar	60	0.0%	60	
Namibia	400	0.1%		
Netherlands	4'367	2.1%		
Norway	7'518	2.5%	7'518	
Pakistan	6'067	0.0%		
Peru	1'052	0.1%		
Philippines	554	0.0%	508	
Poland	109'511	1.5%	60'465	49'046
Republic of Korea	9'177	0.9%		
Romania	79'167	1.6%	40'285	38'882
Russian Federation	4'772	0.0%	2'287	1'720
Saudi Arabia	105	0.0%	21	84
Senegal	3'562	0.2%	208	874
Serbia	737	0.0%		
Slovakia	15'406	2.2%	10'768	4'638
Slovenia	1'198	1.3%	1'007	191
South Africa	549	0.0%	243	306
Spain	175'880	2.9%	102'355	73'525
Sweden	84'851	9.1%	71'907	12'944
Switzerland	6'321	4.2%		
Taiwan	1'654	-	1'654	
Thailand	22'514	0.2%		
Turkey	217'941	1.8%	97'899	120'043
Ukraine	126'088	0.9%		
United Kingdom	52'862	1.8%	51'661	1'201
United States of America	367'420	0.6%	367'420	
Uruguay	2'800	0.4%	2'800	
Viet Nam	19	0.0%	19	
Total	2'522'899	0.4%	1'592'931	440'776

### > Citrus fruit

In Table 24, the area of organic citrus fruits is shown, which includes oranges, lemons, limes, grapefruit, pomelos, and "other citrus". According to these data, almost 53'000 hectares of citrus fruit are grown organically worldwide. This constitutes 0.6 percent of the world's citrus area of 8.7 million hectares in 2010 (FAOSTAT).<sup>1</sup>

As no crop details for the organic area were available for some of the world's leading citrus producers - China (2.1 million hectares), India (1 million hectares), Brazil (0.9 million hectares), and Nigeria (0.75 million hectares) - it can be assumed that the world figures for the area under organic citrus is higher.

In organic agriculture, the largest producer is Italy with almost 22'000 hectares constituting 12.7 percent of Italy's harvested citrus fruit area, followed by Mexico (6'000 hectares, 1.1 percent), and Spain (5'800 hectares, 2.2 percent).

France has the highest proportion of organic citrus fruit with 14.6 percent of the harvested citrus fruit area. It is followed by Italy and Ghana (7.3 percent).

Since 2004, when 28'500 hectares of organic citrus were grown, the area has more than doubled.

Crop details were available for about one third of the organic citrus fruit area: Oranges were grown in 55 percent of the citrus area, followed by lemons and limes with 13 percent (see Figure 31). The available data on the conversion status indicate that 17 percent of the organic citrus area was in-conversion in 2011 (almost 10'000 hectares). If this is indicative, there could be a considerable increase in supply of organic citrus fruit in the near future.

#### Citrus fruit: Use of organic citrus fruit area 2011 Source: FIBL-IFOAM Survey 2013

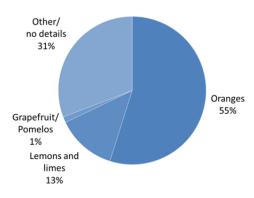


Figure 31: Citrus fruit: Use of organic citrus fruit area 2011 Source: FiBL-IFOAM 2013

<sup>&</sup>lt;sup>1</sup> FAOSTAT > PRODUCTION > PRODSTAT > CROPS. The FAOSTAT webpage at http://faostat.fao.org/site/567/DesktopDefault.aspx?PageID=567#ancor. Download of December, 2012.

Table 24: Organic citrus fruit 2011

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Argentina	888	0.7%		
Australia	119	0.4%		
Azerbaijan	5	0.2%	2	3
Costa Rica	542	1.9%		
Croatia	5	0.3%	0	5
Cuba	227	0.5%		227
Cyprus	57	1.3%	21	36
Dominican Republic	263	2.1%	251	12
El Salvador	9	0.2%	9	
France	361	14.6%	196	166
Georgia	7	0.1%		7
Ghana	5'216	7.3%	272	
Greece	1'909	3.7%	1'642	267
Indonesia	33	0.1%	33	
Iran (Islamic Republic of)	4	0.0%		4
Israel	213	1.3%	213	
Italy	21'940	12.7%	15'843	6'097
Jordan	63	0.9%	63	
Lebanon	201	1.2%	201	
Madagascar	12	0.1%		
Malta	1	0.5%	0	1
Mexico	6'024	1.1%	6'024	
Morocco	400	0.5%		
Mozambique	17	0.2%		
Myanmar	20	-	20	
Paraguay	60	0.6%	60	
Peru	28	0.0%		
South Africa	1'680	2.4%		
Spain	5'856	2.2%	3'716	2'141
Turkey	515	0.4%	326	189
United States of America	5'692	1.7%	5'692	
Uruguay	410	2.4%	410	
Total	52'776	0.6%	36'567	9'154

### > Cocoa beans

More than 220'000 hectares of cocoa were grown organically in 2011. This constitutes 2.3 percent of the world's harvested cocoa bean area of 9.5 million hectares 2010 (FAOSTAT).

The world's leading producers are Côte d'Ivoire (2.1 million hectares), Indonesia (1.6 million hectares), Ghana (1.6 million hectares), and Nigeria (1.3 million hectares).

The largest organic cocoa areas are in the Dominican Republic (132'000 hectares), Ecuador (23'000 hectares), and Peru (13'000 hectares).

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

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

The available data on the conversion status indicate that 13.7 percent of the organic cocoa area was in conversion in 2011 (30'000 hectares). If this is indicative, a slight increase in supply of organic cocoa in the near future may be expected.

## Cocoa beans: Development of the global organic area 2004-2011

Source: FiBL-IFOAM-SOEL 2006-2013

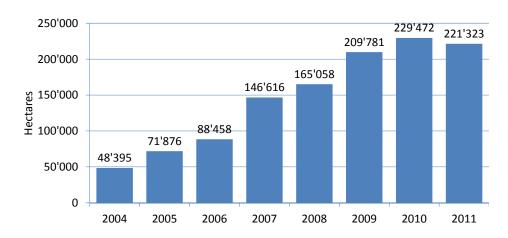


Figure 32: Cocoa beans: Development of the organic area 2004-2011

Source: FiBL, IFOAM, SOEL 2006-2013

Table 25: Organic cocoa bean area 2011

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Bolivia (Plurinational State of)	8'266	95.8%	4'919	3'347
Colombia	164	0.2%	164	
Costa Rica	271	6.0%		
Côte d'Ivoire	148	0.0%	50	
Dominican Republic	132'204	82.1%	116'473	15'731
Ecuador	23'010	6.4%	21'964	1'046
Ghana	7'390	0.5%		
Grenada	65	9.2%		
Haiti	77	0.3%		
Honduras	558	20.7%		
Indonesia	1'321	0.1%	1'321	
Madagascar	2'133	17.1%		
Mexico	14'796	24.2%	14'796	
Nicaragua	3'666		1'521	2'146
Nigeria	4'754	0.4%	4'754	
Peru	13'343	17.3%		
Sao Tome and Principe	4'178	27.9%		
Togo	1'059	0.8%		
United Republic of Tanzania	3'919	42.1%	3'919	
Total	221'323	2.3%	169'881	22'270

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.
Blank cells: No data available.

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

### > Coffee

Over 600'000 hectares of coffee were grown organically in 2011. This constitutes 6 percent of the world's harvested coffee area of 10.2 million hectares in 2010 according to FAOSTAT.

The world's leading producers are Brazil (2.1 million hectares), Indonesia (1.2 million hectares), Mexico and Colombia (each with almost 0.8 million hectares), and Vietnam (0.5 million hectares). Data on the organic production were available for all of these countries with the exception of Brazil.

In organic farming, the largest areas are in Mexico (185'000 hectares), Ethiopia (122'000 hectares) and Peru (96'000 hectares). Bolivia has the highest share with 51 percent of organic coffee, followed by Peru: (27 percent), Tanzania (26 percent), and Mexico (25 percent). Some of these high percentages must be attributed to the fact the coffee is grown more extensively in organic agriculture and often in association with other crops.

The organic coffee area has more than trebled since 2004.

The available data on the conversion status indicate that eleven percent of the organic coffee area was in conversion in 2011 (68'000 hectares). If this is indicative, a slight increase in supply of organic coffee could be expected in the near future.

### Coffee: Development of the global organic area 2004-2011

Source: FiBL-IFOAM-SOEL 2006-2013

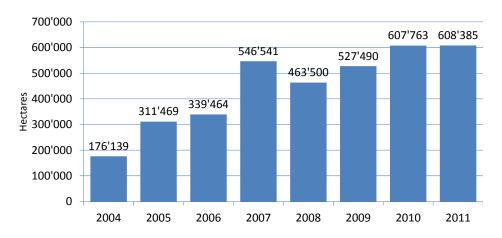


Figure 33: Coffee: Development of organic area 2004-2011

Table 26: Organic coffee area 2011

Country	Organic Area [ha]	Organic share [%]	Area fully converted [ha]	Area under Conversion [ha]
Bolivia (Plurinational State of)	13'715	51.4%	11'820	1'895
Colombia	9'580	1.3%	9'580	
Costa Rica	842	0.9%		
Côte d'Ivoire	814	0.2%		
Cuba	1	0.0%	1	
Dominican Republic	20'156	15.1%	14'956	5'200
Ecuador	3'996	2.8%	3'441	555
El Salvador	3'639	2.4%	3'617	22
Ethiopia	122'053	30.9%	122'053	
Guatemala	8'425	3.4%	6'925	1'500
Haiti	102	0.1%	102	
Honduras	22'572	8.4%		
Indonesia	41'652	3.3%	41'652	
Jamaica	7	0.1%		
Kenya	240	0.2%	120	120
Lao People's Democratic Republic	3'253	6.2%	682	485
Madagascar	1'102	0.8%		
Mexico	185'193	25.0%	185'193	
Nepal	705	42.7%	705	
Nicaragua	12'257	10.8%	10'433	1'824
Panama	234	0.8%		
Papua New Guinea	10'819	19.3%	10'819	
Peru	96'090	27.5%		
Rwanda	82	0.2%		
Timor-Leste	24'754	46.0%		
United Republic of Tanzania	26'104	26.1%	6'333	19'771
Total	608'385	5.9%	428'431	31'373

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322. Blank cells: No data available.

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

.

### > Fruit: Temperate fruit

The total area under organic temperate fruit production recorded here (almost 136'000 hectares), is 1.2 percent of the total area of temperate fruit grown in the world (11.5 million hectares in 2010 according to FAOSTAT).

Of the six most important temperate fruit growing countries in the world (China, Russia, Iran, India, Turkey, the United States and Serbia) only three (Iran, Turkey, and Serbia), provided data on area of organic temperate grown in 2011. It can therefore be assumed that the organic temperate fruit area is higher.

The countries with the largest organic temperate fruit areas are Poland (36'000 hectares), Italy (18'000 hectares), Turkey (11'000 hectares), and France (9'000 hectares). The highest proportions are in the Czech Republic (35.6 percent), Austria (17.4 percent), Latvia (14.7 percent), and Denmark (13.5 percent) (see Table 28).

Since 2004, when data on land use and crops were collected for the first time (almost 60'000 hectares), the temperate fruit area has more than doubled. However, some of the increase must be attributed to continually improving availability of crop data.

The key temperate fruits are apples, with almost half of the temperate fruit area, and almost 40 percent of the apple area in Poland, followed by pears, apricots, and plums (Table 27).

The available data on the conversion status indicate that a relatively large part of the total temperate fruit area (36 percent) is in-conversion. If this is indicative, there could be a considerable increase in supply of organic temperate fruit in the near future.

Table 27: Organic temperate fruit by crop 2011

Crop	Hectares
Apples	65'302
Apricots	9'490
Cherries	8'893
Fruit, temperate, no details	14'488
Fruit, temperate, other	8'260
Peaches and nectarines, no details	6'838
Pears	11'959
Plums	9'428
Pome fruit, no details	593
Quinces	18
Stone fruit, no details	542
Total	135'811

Source: FiBL-IFOAM 2013

## Temperate fruit: Use of organic temperate fruit area 2011

Source: FiBL-IFOAM Survey 2013

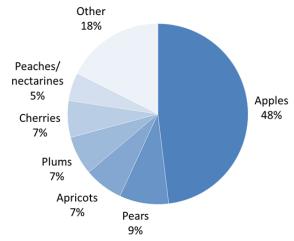


Figure 34: Temperate fruit: Distribution by crop 2011

Source: FiBL-IFOAM 2013

# Temperate Fruit: Development of the global organic area 2004-2011

Source: FiBL-IFOAM-SOEL 2006-2013

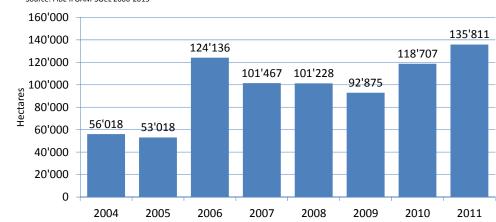


Figure 35: Temperate fruit: Development 2004-2011

Source: FiBL, IFOAM and SOEL 2006-2013

## Statistics: Crops - Temperate Fruit

Table 28: Organic temperate fruit 2011

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Albania	25	0.1%	15	10
Argentina	3'835	3.1%		
Australia	793	1.3%		
Austria	1'867	17.4%		
Azerbaijan	423	0.9%	131	167
Belgium	547	3.0%	383	164
Bolivia (Plurinational State of)	11	0.1%	11	
Bosnia and Herzegovina	2	0.0%	2	
Bulgaria	1'440	2.7%	409	1'031
Canada	890	4.0%	890	
Chile	1'033	1.1%		
China	4'000	0.1%		
Croatia	875	3.8%	174	701
Cyprus	75	3.0%	34	41
Czech Republic	5'684	35.6%	2'741	2'943
Denmark	436	13.5%	301	49
Estonia	371	9.2%	255	116
Finland	88	12.4%	88	
France	9'198	8.9%	4'862	4'336
Georgia	942	6.7%	931	11
Germany	5'800	12.2%		
Greece	1'318	1.7%	857	461
Hungary	1'793	2.5%	998	795
Iran (Islamic Republic of)	187	0.1%	123	64
Italy	18'121	7.1%	13'459	4'662
Jordan	310	4.7%	310	
Kyrgyzstan	6	0.0%		6
Latvia	533	14.7%	382	152
Lebanon	148	0.4%	148	
Lesotho	183	-	183	
Liechtenstein	. 1			1
Lithuania	1'294	8.1%	990	305
Macedonia (FYROM)	50	0.2%	8	42
Madagascar	5	0.1%		
Malta	0.3	0.2%	0.1	0.2
Mexico	65	0.1%	65	
Moldova	1'326	1.5%		
Netherlands	340	1.9%		

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Norway	156	7.1%	156	
Oman	4	-	4	
Peru	768	0.0%		
Poland	36'792	13.2%	11'785	25'007
Portugal	1'778	4.7%		
Republic of Korea	1'676	2.5%		
Romania	2'725	1.9%	608	2'118
Russian Federation	1	0.0%	1	
Sao Tome and Principe	240	-		
Serbia	663	0.3%		
Slovakia	758	8.4%	710	48
Slovenia	77	1.2%	57	20
South Africa	319	0.6%	124	196
Spain	5'009	2.6%	3'727	1'283
Sweden	53	2.6%	44	9
Switzerland	509	7.7%		
Turkey	11'764	3.2%	7'511	4'254
Ukraine	385	0.2%		
United Kingdom	1'752	9.3%	1'616	136
United States of America	7'133	2.3%	7'133	
Total	135'811	1.2%	62'223	49'126

### > Fruit: Tropical and subtropical fruit

The total area under organic tropical and subtropical fruit recorded here (190'000 hectares) is 0.8 percent of the total area of tropical and subtropical fruit grown in the world (22.8 million hectares in 2010 according to FAOSTAT data).

Of the five most important tropical and subtropical fruit growing countries in the world (India, China, Uganda, Brazil, and the Philippines, all with more than one million hectares), only the Philippines provided data on the area under organic tropical and subtropical fruit grown in 2011.

The largest growers for which data on the organic area were available (Mexico, Dominican Republic, Philippines, Ecuador, and Turkey) all have more than 10'000 hectares. Mexico, the Dominican Republic, and Turkey have also very high proportions, with more than ten percent of their country's total. In the case of the Dominican Republic, this is mainly due to a high share of bananas; and in the case of Mexico for mangoes and avocados. The largest proportions of organic tropical and subtropical fruit area are in Fiji (55 percent), Burkina Faso (26.6 percent; mainly mangos), and the Dominican Republic (25.8 percent; mainly bananas). By area, the key tropical and subtropical fruits are bananas, avocados, and mangos (Figure 36).

Since 2004, when data on land use and crops were collected for the first time, the tropical fruit area has almost quintupled (Figure 37). However, some of the increase must be attributed to the continually improving data availability.

The available data on the conversion status indicate that more than eleven percent of the total tropical and subtropical fruit area is in-conversion. This suggests that an increase in supply in the near future may be expected.

Table 29: Organic tropical and subtropical fruit 2011

Crop	Hectares
Avocados	34'890
Bananas	61'887
Carobs	67
Cashew apples	907
Dates	5'772
Figs	16'835
Fruit, tropical and subtropical, no details	28'818
Fruit, tropical and subtropical, other	5'075
Guava	112
Kiwis	4'715
Litchi	646
Mangos	24'987
Noni	808
Papayas	1'013
Passion fruit	85
Persimmons	144
Pineapples	2'622
Pomegranate	1'194
Total	190'577

Source: FiBL-IFOAM 2013

### Tropical and subtropical fruit: Use of organic tropical and subtropical fruit area 2011

Source: FiBL-IFOAM Survey 2013

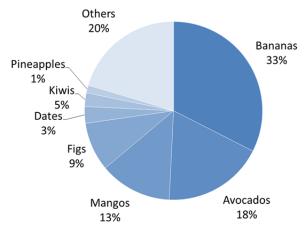


Figure 36: Tropical and subtropical fruit: Distribution by crop 2011

Source: FiBL-IFOAM 2013

### Tropical and subtropical fruit: Development of the global organic area 2004-2011

Source: FiBL-IFOAM-SOEL 2006-2013

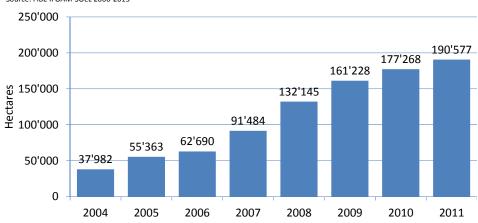


Figure 37: Tropical and subtropical fruit: Development 2004-2011

Source: FiBL, IFOAM, and SOEL 2006-2013

### Statistics: Crops - Tropical and Subtropical Fruit

Table 30: Organic tropical and subtropical fruit

Argentina			converted [ha]	conversion [ha]
	23	0.2%		-
Australia	228	0.6%		
Azerbaijan	316	3.4%	180	136
Bangladesh	10	0.0%	0	
Bolivia (Plurinational State of)	394	0.6%	271	123
Bosnia and Herzegovina	0	0.0%	0	
Bulgaria	2	8.8%	0	2
Burkina Faso	4'046	26.6%	2'183	
Burundi	550	0.1%		
Cambodia	126	0.4%	98	28
Cameroon	427	0.1%		
Chile	1'283	2.8%	1'283	
Colombia	8'322	1.5%	8'322	
Cook Islands	22	18.0%		
Costa Rica	7'220	6.4%		
Côte d'Ivoire	192	0.0%	31	
Croatia	15	1.5%	4	11
Cuba	937	0.6%	471	462
Cyprus	90	4.1%	41	49
Dominican Republic	24'336	25.8%	19'583	4'753
Ecuador	13'608	3.8%	12'170	326
El Salvador	1'164	4.5%	1'164	
Ethiopia	380	0.6%		380
Fiji	657	55.2%		
France	837	18.8%	530	307
French Guiana (France)	30	2.3%	30	
Georgia	29	-	1	28
Ghana	1'276	0.4%	357	239
Grenada	19	1.5%		
Guatemala 	35	0.0%	35	
Haiti	333	0.2%	_	33
Indonesia	164	0.0%	164	<b>51</b>
Iran (Islamic Republic of)	8'619	4.7%	2'546	6'074
Israel 	1'963	8.6%		
Italy 	4'807	11.8%	3'544	1'263
Jamaica Landan	2	0.0%		
Jordan Kenya	335 1'425	8.4% 0.9%	335 1'425	

Country	Organic area [ha]	Organic share [ha]	Area fully converted [ha]	Area under conversion [ha]
Macedonia	2	5.7%	1	1
Madagascar	1'250	0.6%		
Mali	86	0.2%		
Malta	1	2.4%	1	1
Mauritius	2	0.2%		
Mexico	46'670	10.5%	46'670	
Mozambique	2'171	7.0%		
Myanmar	39	0.1%	39	
Pakistan	878	0.2%		
Panama	4'308	19.9%		
Peru	5'146	2.1%		
Philippines	16'634	1.5%	5'857	
Rwanda	2'000	0.6%		
Saudi Arabia	2'476	1.4%	2'033	443
Senegal	3'152	17.7%	2'902	250
South Africa	2'882	8.0%		
Spain	1'775	2.2%	1'033	743
Sri Lanka	66	0.1%		
Togo	256	12.8%	48	
Tunisia	1'094	1.6%	1'094	
Turkey	11'329	10.6%	6'262	5'067
United Republic of Tanzania	545	0.1%	545	
United States of America	3'595	9.1%	3'595	
Total	190'577	0.8%	124'846	20'719

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.
Blank cells: No data available.

### > Grapes

Almost 260'000 hectares of organic grapes are grown, constituting 3.7 percent of the world's grape area (7.2 million hectares in 2010 according to FAOSTAT). In Europe (230'000 hectares), 5.3 percent of the harvested grape area is organic.

Not all of the grape area listed in the table is used for wine making. The production of table grapes and of raisins is important in many countries, for example, Turkey.

Of the five most important grape growing countries in the world (Spain, Italy, France, China, and Turkey), only China did not provide data on the area under organic grapes in 2011, although an older figure is available for that country.

The countries with the largest organic grape areas are, as for the total grape area, Spain, France, and Italy. Each of these countries has more than 50'000 hectares of organic grapes. The highest shares are also in these countries and in Austria with 9.5 percent of the total grape area of the country (Table 31).

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

The available data indicate a large part of the total grape area (42 percent) to be inconversion. If this is indicative, a considerable increase in supply of organic grapes may be expected, particularly from France, Italy, and Spain.

### Grapes: Development of the global organic area 2004-2011

Source: FiBL-IFOAM-SOEL 2006-2013

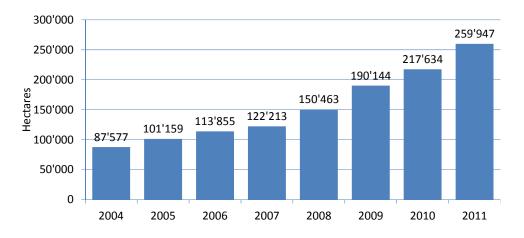


Figure 38: Organic grape area: Development 2004-2011

Source: FiBL, IFOAM, and SOEL 2006-2013

Table 31: Organic grape area 2011

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under Conversion [ha]
Albania	35	0.4%	10	25
Algeria	204	0.3%	204	_
Andorra	4	-	4	
Argentina	3'193	1.4%	•	
Australia	282	0.2%		
Austria	4'178	9.6%		
Azerbaijan	34	0.3%	1	33
Bosnia and Herzegovina	8	0.1%	8	
Bulgaria	1'455	1.8%	303	1'152
Canada	129	1.2%	129	-
Chile	4'567	2.4%		4'567
China	2'000	0.4%		43-7
Croatia	625	1.9%	186	439
Cyprus	204	3.0%	107	96
Czech Republic	978	6.1%	442	536
Denmark	12	0.6%	9	3
Finland	1	0.0%	1	,
France	61'055	7.8%	28'662	32'394
Georgia	119	0.3%	39	80
Germany	6'900	6.9%	33	JU
Greece	5'001	5.0%	3'874	1'127
Hungary	1'207	1.6%		754
Indonesia		1.0 /0	453	/54
Iran (Islamic Republic of)	5 5	2.6%	5	160
Italy	5'732 52'812	6.8%	5'572 34'077	18'735
Iordan				10 /35
Kazakhstan	238	7.4% 0.2%	238	
Kosovo	20 1	0.2%	20	
Lebanon	83	0.6%	83	1
	_	0.0%	_	
Liechtenstein	2 22	1.8%	2	
Luxembourg		0.2%		
Macedonia (FYROM)	41		30	11
Malta	5	0.3%	2	3
Moldova	4'641	3.5%		
Netherlands	29	14.5%		
Peru	0.3	0.0%	0.3	
Poland	22	0.1%	10	12
Portugal	2'667	1.5%		
Romania	842	0.5%	553	290
Serbia	7	0.0%		
Slovakia	68	0.8%	53	15
Slovenia	287	1.8%	132	155
South Africa	295	0.3%	. 54	43
Spain	79'016	7.9%	33'014	46'002
Switzerland	368	2.5%		
Turkey	8'871	1.9%	6'271	2'600
Ukraine	84	0.1%		
United Kingdom	107	16.7%	92	15
United States of America	11'448	3.0%	11'448	
Uruguay	40	0.5%	40	
Total	259'947	3.7%	126'128	109'248

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.
Blank cells: Not data

### > Olives

More than 540'000 hectares were reported to be under organic olive production in 2011. This is approximately 5.7 percent of the world's total harvested olive area (9.5 million hectares).

The main countries in which olives are grown are the countries around the Mediterranean. Spain is by far the largest grower with 2 million hectares, and Tunisia (1.6 million hectares), Italy (1.2 million hectares), and Turkey and Greece (each with 0.8 million hectares) are also important producers. For all these countries, data for the organic area are available. Spain has the largest area under organic olives (almost 170'000 hectares), followed by Italy (more than 140'000 hectares), and Tunisia (111'000 hectares).

In Italy, the percentage of area under organic production is relatively high (12 percent). In Spain, 8 percent of the olive area is organic and in Tunisia 7 percent. France has the highest share of organic olives area, with 20 percent of all olives in France being organic.

Since 2004, when data on land use and crops were collected for the first time, the olive area increased by 70 percent. However, some of the increase must be attributed to continually improving availability of crop data.

The data available for a breakdown of the fully converted and in-conversion area shows that approximately two-thirds of the total organic area is fully organic. If the relative figures are indicative of the proportions of the total area, almost one third is inconversion, and will be fully converted in the next few years. This has implications for the availability of organic olives in the near future.

### Olives: Development of the global organic area 2004-2011

Source: FiBL-IFOAM-SOEL 2006-2013

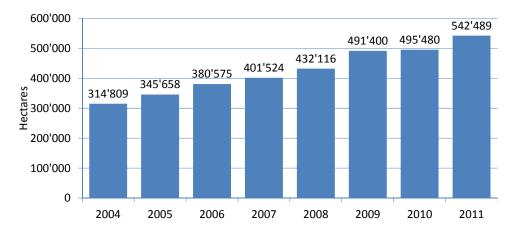


Figure 39: Organic olive area: Development 2004-2011

Source: FiBL-IFOAM-Survey 2013 based on national data sources and certifier data. For detailed data sources see annex, page 322.

Table 32: Organic olive area 2011

Country	Organic Area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Albania	166	0.4%	101	65
Algeria	488	0.2%	488	
Argentina	2'514	4.5%		
Australia	470	1.6%		
Azerbaijan	10	0.5%	5	5
Bosnia and Herzegovina	0.1	0.1%	0.1	
Bulgaria	0.01	-	0.01	
Chile	1'235	9.6%	1'235	
Croatia	612	3.6%	101	511
Cyprus	946	9.3%	641	304
France	3'945	20.3%	1'445	2'499
Greece	56'970	6.8%	50'025	6'945
Iran (Islamic Republic of)	110	0.4%	110	
Italy	141'568	11.9%	99'588	41'980
Jordan	1'417	2.3%	1'417	
Lebanon	337	0.5%	337	
Macedonia (FYROM)	0.2	0.0%		0.2
Malta	5	85.0%	5	1
Morocco	1'800	0.2%		
Portugal	17'209	5.0%		
Slovenia	92	9.0%	43	49
South Africa	25	-	19	7
Spain	168'619	8.1%	90'450	78'169
Tunisia	111'755	6.8%	111'755	
Turkey	31'771	3.8%	9'503	22'268
Uruguay	425	14.7%	425	
Total	542'489	5.7%	367'692	152'803

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322. Blank cells: No data.

### > Oilseeds

An area of almost 500'000 hectares was reported to be used for growing organic oilseeds in 2011. This is approximately 0.3 percent of the world's total harvested oilseed area (more than 196 million hectares).

The main countries in which oilseeds are grown are the United States, India, China, and Brazil (each with more than 20 million hectares). The United States (33 million hectares) is by far the largest grower. However, of these countries, data on the organic area were only available for the United States.

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

The highest shares are in Peru (soybeans and peanuts), El Salvador (sesame), Austria (soya and sunflower seed), Nicaragua (sesame), and Greece (sunflower seed).

Since 2004, when data on land use and crops were collected for the first time, the oilseed area (2004: 140'000 hectares) has more than trebled. However, some of the increase must be attributed to continually improving availability of crop data.

One quarter of the organic oilseed area is for sunflower seeds, and another quarter is for soybeans (Figure 41).

The data available for a breakdown of the total fully converted and in-conversion area shows that approximately two-thirds of the organic oilseed area is fully organic. If the relative figures are indicative of the proportions of the total area, 12 percent is inconversion, and will be fully converted in the next few years. This has implications for the availability of organic oilseeds in the near future.

Table 33: Organic oilseeds 2011

Main crop	Hectares
Jojoba	329
Linseed	51'671
Oilseeds, no details	7'489
Oilseeds, other	38'230
Peanuts	11'173
Pumpkin seeds	116
Rape and turnip rape	76'856
Safflower	5'596
Sesame	67'504
Soya	117'807
Sunflower seed	123'141
Total	499'911

Source: FiBL-IFOAM 2013

### Oilseeds: Development of the global organic area 2004-2011

Source: FiBL-IFOAM-SOEL 2006-2013

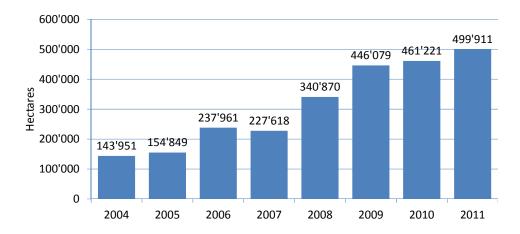


Figure 40: Organic oilseed area: Growth 2004-2011

Source: FiBL, IFOAM and SOEL 2006-2013

### Oilseeds: Use of organic oilseeds area 2011

Source: FiBL-IFOAM Survey 2013

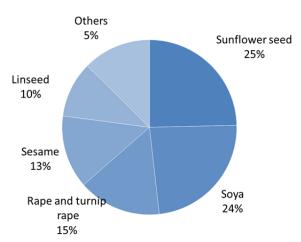


Figure 41: Organic oilseed area: Distribution of oilseed area by crop 2011

Source: FiBL-IFOAM 2013

### Statistics: Crops - Oilseeds

Table 34: Organic oilseeds area 2011

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Argentina	19'553	0.1%		
Australia	217	0.0%		
Austria	11'646	8.0%		
Azerbaijan	79	0.5%	33	46
Bangladesh	2	0.0%	2	
Belgium	65	0.3%	43	22
Bolivia (Plurinational State of)	8'821	0.8%	8'047	774
Bosnia and Herzegovina	2	0.0%		2
Bulgaria	2'587	0.3%	690	1'897
Burkina Faso	3'420	0.6%	2'322	
Canada	42'269	0.5%	42'269	
Chile	36	0.2%		36
Croatia	3'093	3.0%	313	2'780
Czech Republic	2'319	0.5%	858	1'462
Denmark	585	0.4%	532	53
Ecuador	400	0.6%	400	
El Salvador	839	15.8%	839	
Estonia	2'091	2.1%	1'086	1'005
Ethiopia	17'563	2.2%	14'444	3'119
Finland	2'921	1.9%	2'921	
France	26'705	1.2%	17'398	9'307
Germany	5'800	0.4%		
Greece	1'910	5.7%	1'891	19
Guatemala	342	0.7%		342
Haiti	347	0.9%		
Hungary	7'438	0.9%	6'927	512
Iran (Islamic Republic of)	2	0.0%		2
Israel	99	1.1%	99	
Italy	11'198	3.9%	9'969	1'228
Kazakhstan	42'917	2.8%	42'917	
Kyrgyzstan	36	0.1%	27	9
Latvia	1'316	1.2%	1'127	189
Lithuania	2'321	0.9%	1'202	1'119
Luxembourg	4	0.1%		
Macedonia (FYROM)	119	1.8%	9	110
Madagascar	2'500	4.1%		
Mali	14'654	3.9%	3'288	
Mexico	2'265	0.6%	2'265	

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Mozambique	768	0.1%		
Nepal	122	0.0%		122
Netherlands	9	0.2%		
Nicaragua	2'500	6.0%	2'500	
Nigeria	202	0.0%		
Norway	124	2.1%	124	
Paraguay	4'000	0.1%	4'000	
Peru	1'443	20.7%		
Poland	1'315	0.2%	438	877
Romania	46'046	3.3%	25'926	20'120
Russian Federation	724	0.0%	28	696
Senegal	5'690	0.5%	1'245	1'200
Serbia	170	0.0%		
Slovakia	2'533	0.9%	2'029	504
Slovenia	92	1.6%	63	29
South Africa	90	0.0%	90	
Spain	9'198	1.3%	4'182	5'016
Sudan	12'300	-	2'300	10'000
Sweden	2'747	2.1%	2'521	226
Switzerland	411	1.5%		
Turkey	1'884	0.2%	1'324	560
Ukraine	37'850	0.6%		
United Kingdom	279	0.0%	255	24
United Republic of Tanzania	5'057	0.6%	3'557	1'500
United States of America	127'116	0.4%	127'116	
Uruguay	200	0.0%	200	
Zimbabwe	4	0.0%	4	
Total	499'911	0.3%	339'819	64'915

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322. Blank cells: no data.

### > Protein crops

The total area under organic protein crops recorded here (290'000 hectares), is 0.4 percent of the total area of protein crops grown in the world (71 million hectares in 2010 according to FAOSTAT).

Not current data on the organic area were available from the three most important protein crop growing countries in the world (India, Niger, and Myanmar); with India (24 million hectares) by far the largest grower.

The countries with the largest organic protein crop areas are France, Spain, Lithuania, and Germany. Austria has the highest share of protein crop organic area with almost 70 percent.

Since 2004, when data on land use and crops were collected for the first time, the protein crop area almost quadrupled from 78'000 to 290'000 hectares. However, some of the increase must be attributed to continually improving availability of crop data.

Unfortunately, for protein crops a breakdown for individual crops is not available for many countries. For instance, Eurostat - the statistical office of the European Union - communicates only one figure for "dried pulses".

The data available for a breakdown of the total fully converted and in-conversion area shows that approximately two-thirds of the total organic area for protein crops is fully organic. If the relative figures are indicative of the proportions of the total area, 25 percent is in-conversion, and will be fully converted in the next few years. This has implications for the availability of organic protein crops in the near future.

### Protein crops: Development of the global organic area 2004-2011

Source: FiBL-IFOAM-SOEL 2006-2013

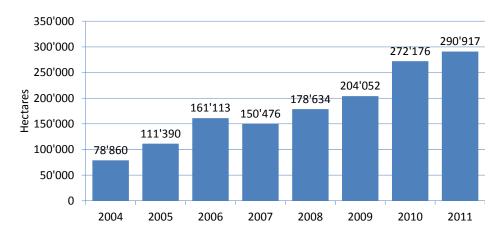


Figure 42: Organic protein crop area: Growth 2004-2011

Source: FiBL, IFOAM and SOEL 2006-2013

Table 35: Organic protein crop area 2011

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Argentina	3	0.0%	-	
Australia	18	0.0%		
Austria	12'474	69.5%		
Azerbaijan	6	0.1%	3	3
Bangladesh	2	0.0%	2	
Belgium	512	26.9%	306	206
Bulgaria	106	1.3%	52	54
Burkina Faso	81	0.0%	11	
Canada	23'801	0.8%	23'801	
Chile	27	0.1%		27
Croatia	11	0.7%	5	7
Czech Republic	1'845	7.0%	1'321	524
Denmark	5'579	64.1%	5'486	93
Estonia	739	10.2%	585	154
Finland	8'145		8'145	
France	45'624	10.9%	30'965	14'659
Germany	25'500	25.6%		
Greece	5'723	35.0%	5'550	173
Hungary	1'813	9.6%	1'562	251
Italy	21'445	25.8%	17'577	3'867
Kazakhstan	14'099	15.2%	14'099	
Kenya	3	0.0%	3	
Latvia	3'301		2'725	576
Lithuania	24'387	61.4%	18'721	5'666
Luxembourg	74	21.2%		,
Macedonia (FYROM)	53	0.3%		53
Madagascar	59	0.1%		,,,
Mexico	1'231	0.1%	1'231	
Moldova	4'641	13.4%		
Netherlands	78	2.2%		
Poland	4'194	8.2%	2'780	1'414
Romania	3'147	6.6%	1'150	1'997
Russian Federation	218	0.0%	218	- 557
Rwanda	1'400	0.4%		
Senegal	35	0.0%		35
Serbia	17	0.0%		- 33
Slovakia	246	2.1%	174	72
Spain	36'090	11.7%	20'921	15'168
Sweden	10'173	43.7%	8'202	1'971
Switzerland	360	9.4%	0 202	- 3/1
Turkey	6'552	0.8%	3'950	2'603
Ukraine	9'900	2.8%	3 330	2 003
United Kingdom	1'597	2.2%	1'551	46
United States of America	15'608	1.1%	15'608	40
Total	290'917	0.4%	186'704	49'619

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322. Blank cells: No data.

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

### > Vegetables

The total area under organic vegetables recorded here (242'000 hectares), is 0.4 percent of the total area of vegetables grown in the world (60 million hectares in 2010 according to FAOSTAT).

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

The countries with the largest organic vegetable areas are the United States, Mexico, and Italy (each with more than 20'000 hectares).

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

Since 2004, when data on organic land use and crops were collected for the first time, the vegetable area has more than double from 100'000 to the current 242'000 hectares. However, some of the increase must be attributed to continually improving availability of crop data.

Unfortunately, for vegetables, a breakdown for individual vegetable groups is available for only half of the organic vegetable area. A large part (34'000 hectares) is for pulses (fresh beans and peas), followed by root tubers and leafy and stalked vegetables (salads).

The data available for a breakdown of the fully converted and in-conversion area shows that three-quarters of the total organic vegetable area is fully converted. If the relative figures are indicative of the proportions of the total area, 25 percent is in-conversion, and will be fully converted in the next few years, implying that there will probably not be a major increase of the organic vegetable area.

### Vegetables: Development of the global organic area 2004-2011 Source: FIBL-IFOAM-SOEL 2006-2013

300'000 240'650 242'451 250'000 223'327 208'201 211'901 200'000 181'374 Hectares 152'175 150'000 105'735 100'000 50'000 ი 2007 2004 2005 2006 2008 2009 2010 2011

Figure 43: Organic vegetable area: Growth 2004-2011

Source: FiBL, IFOAM and SOEL 2013

Table 36: Organic vegetable area 2011

Country	Organic area [ha]	Organic share [ha]	Area fully converted [ha]	Area under Conversion [ha]
Albania	6	0.0%	3	3
Argentina	983	0.6%		
Australia	1'388	2.4%		
Austria	2'248	13.0%		
Azerbaijan	356	0.3%	145	211
Bangladesh	158	0.0%	1	
Belgium	580	0.9%	478	102
Benin	1	0.0%	1	
Bolivia (Plurinational State of)	265	0.3%	265	
Bosnia and Herzegovina	4	0.0%	1	3
Bulgaria	586	1.9%	146	438
Cambodia	11	0.0%		11
Canada	1'884	2.9%	1'884	
Chile	161	0.2%		161
Colombia	82	0.1%	82	
Costa Rica	174	1.2%		
Croatia	146	1.3%	118	28
Cyprus	37	1.3%	24	13
Czech Republic	739	3.9%	664	74
Denmark	2'064	22.0%	2'061	3
Dominican Republic	161	0.5%	161	
Ecuador	1'663	1.0%	1'648	15
El Salvador	34	0.6%	34	
Estonia	113	4.4%	95	18
Ethiopia	180	0.0%		180
Finland	230	3.1%	230	
France	12'491	6.0%	10'927	1'564
French Guiana (France)	34	1.8%	33	1
Georgia	5	0.0%		5
Germany	18'800	18.6%		
Ghana	5	0.0%	5	
Greece	3'205	2.7%	2'741	464
Guadeloupe (France)	9	0.2%	5	5
Guatemala	565	0.7%	485	80
Hungary	1'770	3.8%	1'618	152
Indonesia	146	0.0%	146	
Iran (Islamic Republic of)	345	0.0%	45	300
Ireland	274	5.6%	254	20

### Statistics: Crops - Vegetables

Country	Organic area [ha]	Organic share [ha]	Area fully converted [ha]	Area under Conversion [ha]
Israel	497	0.8%	497	
Italy	22'694	4.3%	18'382	4'312
Jamaica	241	1.8%		
Jordan	15	0.0%	15	
Kenya	598	0.3%	575	23
Kosovo	0.1	-		0.1
Kyrgyzstan	239	0.5%	91	148
Lao People's Democratic Republic	518	0.4%	18	500
Latvia	328	4.9%	243	85
Lebanon	76	0.3%	76	
Liechtenstein	5	-	4	1
Lithuania	82	0.4%	75	7
Luxembourg	33	77.3%		
Macedonia (FYROM)	75	0.2%	11	63
Madagascar	34	0.0%		
Malta	7	0.1%	7	0
Martinique (France)	19	0.9%	17	2
Mauritius	5	0.1%		
Mexico	35'550	5.8%	35'550	
Moldova	221	0.5%		
Morocco	980	0.5%		
Myanmar	23	0.0%	23	
Namibia	56	0.2%	56	
Netherlands	4'939	5.9%		
Nicaragua	1	0.0%	1	
Norway	230	5.1%	230	
Oman	16	0.1%	16	
Panama	5	0.0%		
Peru		0.0%	45	956
Philippines	6	0.0%	6	
Poland	7'364	3.3%	3'626	3'738
Portugal	737	0.9%		
Republic of Korea	3'138	1.2%		
Réunion (France)	71	0.9%	36	35
Romania	911	0.3%	402	509
Russian Federation	55	0.0%	7	48
Saudi Arabia	1'892	2.0%	1'702	190
Senegal	515	0.6%	129	386
Serbia	59	0.0%		

Country	Organic area [ha]	Organic share [ha]	Area fully converted [ha]	Area under Conversion [ha]
Slovakia	722	2.8%	712	10
Slovenia	148	4.9%	117	32
South Africa	749	0.7%	431	286
Spain	11'284	3.2%	8'457	2'827
Sri Lanka	2	0.0%		
Sudan	4'500	-	3'500	1'000
Sweden	958	4.4%	937	21
Switzerland	1'582	12.1%		
Taiwan	1'692	-	1'692	
Thailand	1'141	0.2%		
Tunisia	170	0.1%	170	
Turkey	2'276	0.2%	1'354	923
Ukraine	5'358	1.0%		
United Kingdom	13'527	5.7%	13'225	302
United States of America	63'380	7.4%	63'380	
Uruguay	300	4.1%	300	
Zambia	525	0.5%	225	300
Total	242'451	0.4%	180'637	20'555

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

### Data collection on organic agriculture worldwide: Background

For the 14th survey on organic agriculture worldwide, data on organic agriculture were available for 162 countries. Since 1999, when the data collection started, the number of countries included has almost doubled.

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).

### 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; and mostly based on data of the certifiers.

The availability of *domestic market and international trade data* is also improving. Domestic market data are mostly based on research carried out by market research companies and statistical offices. Import and export data are mainly collected by governments and can be based on the data of certifiers and/or customs but is most commonly based on company 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 and on imports.

In most countries, the government collection systems for area, livestock and operator data are based on the data of the certifiers.<sup>1</sup> 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.<sup>2</sup> The data

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.

\_

<sup>&</sup>lt;sup>1</sup>Other systems include:

 $<sup>^2</sup>$  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:

<sup>&</sup>quot;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:

<sup>1.</sup> 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.

collected by the government are mostly (though not 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. However, the private sector often does not have full access to the data.

Finally, there are *countries that have no data collection system* in place. Collection systems are still underdeveloped, particularly in Africa and in Asia, but also in countries in other regions such as Oceania. 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 with 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 accessible on the Eurostat homepage. 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 2010. A new European-funded research project, OrganicDataNetwork ,which aims to improve collection of market data started in January 2012.

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 them. 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/.

- 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;
- (c) the organic livestock numbers and the organic animal products;
- (d) the data on organic industrial production by type of activities.
- 3. For the transmission of the statistical information referred to in paragraphs 1 and 2, Member States shall use the Single Entry point provided by the Commission (Eurostat).
- 4. The provisions relating to the characteristics of statistical data and metadata shall be defined within the context of the Community Statistical Programme on the basis of models or questionnaires made available via the system referred to in paragraph 1.
- $^{1}$  Access via http://epp.eurostat.ec.europa.eu/portal/page/portal/agriculture/data/database
- <sup>2</sup> OrganicDataNetwork: Data network for better European organic market information. Information is available at http://ec.europa.eu/research/bioeconomy/agriculture/projects/organicdatanetwork\_en.htm

### Statistics: Background

Pacific Islands: In the Pacific Islands, there are currently efforts to better coordinate the organic activities in the region, which also includes the setting up of data collection systems (see also article by Karen Mapusua, page 303).

### Next global survey on organic agriculture

The next global organic survey will start in mid-2013. 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 2014 edition of "The World of Organic Agriculture". Corrections will also be posted at www.organic-world.net.

### Contact

Helga Willer. Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Switzerland, e-mail helga.willer@fibl.org.

### Further reading

Censkowsky, Udo, Ulrich Helberg, Anja Nowack and Mildred Steidle (2007): Overview of Word Production and Marketing of Organic Wild Collected Products. ITC/WTO, Geneva. Available at:

 $www.intracen.org/Organics/documents/World\_Production\_and\_Marketing\_of\_Organic\_Wild\_Collected\_Products.pdf$ 

 $FiBL-IFOAM/SOEL: The World of Organic Agriculture\ 2000-2010\ editions\ are\ available\ at\ www.organic-world.net/former-editions.html$ 

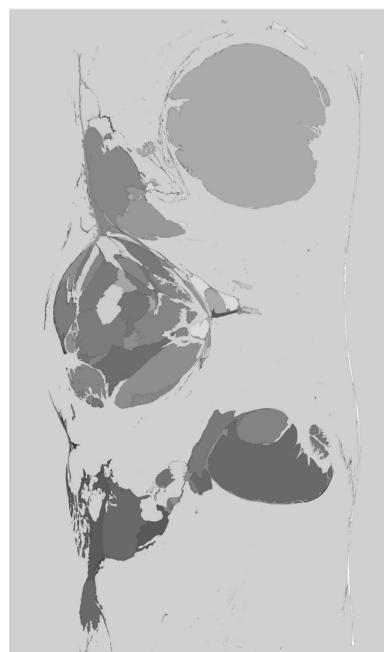
Granatstein, David; Kirby, Elisabeth and Willer, Helga (2010) Current World Status of Organic Temperate Fruits. ISHS Acta Horticulturae, 873.

Granatstein, David; Kirby, Elizabeth and Willer, Helga (2010) Organic Horticulture Expands Globally. Chronica Horticulturae, 50 (4).

Grolink (2013): Organic Certification Directory 2013. Höje, Sweden. www.organicstandard.com Willer, Helga and Minou Yussefi (2000): Organic Agriculture World-wide. Statistics and Future Prospects. Bad Dürkheim, Germany

### The World of Organic Agriculture - Density-equalizing map

### JOHN PAULL AND BENJAMIN HENNING



# Map 2: The World Map of Organic Agriculture

The World Map of Organic Agriculture presents countries as proportional in size to their share of the total of world organic hectares. Such a map can be geographic data sets. The World Map of Organic Agriculture accounts for all of the hectares of organically managed agricultural land (certified organic and in-conversion organic) reported by FiBL and IFOAM in 'The World of Organic Agriculture - Statistics' & Emerging Trends 2013". The map visually reveals relationships between the territories of the world and highlights the regional strengths and weaknesses of the global diffusion of organic agriculture. The World Map of Organic Agriculture is generated by the Worldmapper GIS algorithm developed at the University of Sheffield as a cartographic visualisation tool. referred to as an equal-area cartogram or a density-equalizing map. Equal-density cartograms are a tool for presenting a fresh view of tabulated

World of Or			

## The Global Market for Organic Food & Drink

### The Global Market for Organic Food & Drink<sup>1,2</sup>

### Amarjit Sahota<sup>3</sup>

### Introduction

In spite of the slowdown in the global economy, international sales of organic products continue to rise. Organic Monitor estimates organic food & drink sales reached almost US 63 billion US dollars in 2011. As shown in Figure 44, the market has expanded by 170 percent since 2002.

### The Global Market for Organic Food & Drink: Market growth 2002-2011

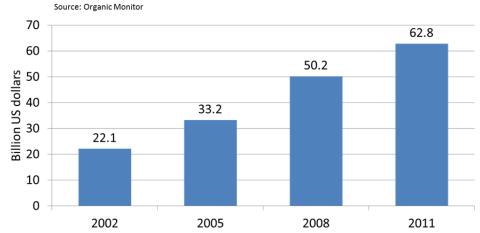


Figure 44: The Global Market for Organic Food & Drink: Market growth 2002-2011
Source: The Global Market for Organic Food & Drink (Organic Monitor). Note: All figures are rounded

Demand for organic products is mainly in North America and Europe; these two regions comprise 96 percent of sales. Although organic farming is now practiced in every continent, demand is concentrated in these regions. Lack of awareness of organic production methods and low consumer spending power limits demand in other countries.

Amarjit Sahota is the president 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

\_

<sup>&</sup>lt;sup>1</sup> This chapter has been prepared from the upcoming report 'The Global Market for Organic Food & Drink' (Organic Monitor, expected publication date May 2013)'. No part of this chapter maybe reproduced or used in other commercial publications without written consent from Organic Monitor. To request permission, write to: Organic Monitor, 20B The Mall, London W5 2PJ, postmaster@organicmonitor.com, www.organicmonitor.com

<sup>&</sup>lt;sup>2</sup> Please note that due to differences in the methodology some of the figures presented in this chapter differ from those collected in the framework of the FiBL-IFOAM survey (page 36).

<sup>&</sup>lt;sup>3</sup> Amarjit Sahota, Organic Monitor, 20B The Mall, London W5 2PJ, Tel. +44 20 8567 0788, postmaster@organicmonitor.com, www.organicmonitor.com

Production of organic foods in other regions, especially Asia, Latin America and Africa is mainly export-geared. The organic food sector in some countries is almost entirely dependent on exports. Primary crops, such as fruits, vegetables, grains, seeds, herbs are grown and exported. Many international organic food companies -including SunOpta and ProNatura- have set up grower projects in such countries.

As growth in the global market for organic products slows, supply-demand imbalances are expected to increase. There is already oversupply in certain sectors of the European organic food industry since demand is not keeping pace with supply. With the typical 18 months conversion period to organic farming, undersupply-oversupply swings are expected to remain.

The new equivalency agreement between the US and the EU aims to facilitate trade of organic products between these two regions. A critique is that organic products made in other regions, and which are certified according to European Union or USDA NOP¹ standards, are not part of the trade arrangement. The global organic food industry may be converging in terms of standards, but trade of organic products remains hindered by standards.

### The global market for organic food and drink: Distribution by region 2011



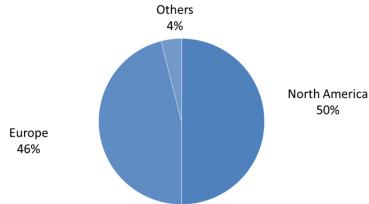


Figure 45: Global market for organic food and drink: Distribution by region 2011
Source: The Global Market for Organic Food & Drink (Organic Monitor). Note: All figures are rounded

### Europe<sup>2</sup>

The European market for organic food & drink has been adversely affected by the financial crisis. A number of European countries are mired in debt, making retailers take a cautious approach to organic and premium foods. The reduction in consumer spending power is also affecting product purchases.

-

 $<sup>^1</sup>$  USDA NOP is the National Organic Program of the United States Department or Agriculture. More information is available at http://www.ams.usda.gov/AMSv1.0/nop

<sup>&</sup>lt;sup>2</sup> For more information about the European market see chapter in the section about Europe in this book.

Organic food & drink sales were about 29 billion US dollars in 2011. Germany has the largest market for organic products, comprising roughly 30 percent of total sales. Along with France, the UK, and Italy, these countries have about two-thirds sales share. The largest consumers of organic foods however are in Scandinavian and Alpine countries. Denmark has the highest market share where organic products comprise over 7 percent of food and drink sales.

With the second largest organic farmland area, Europe is a large consumer and producer of organic foods. Organic foods are grown across the continent; however, production in many countries is export-oriented. Much of the organic foods produced in southern, central and eastern parts of Europe are destined for the north-west. For instance, over 90 percent of the organic fruits, vegetables, olives, herbs and ingredients produced in Greece, Spain and Portugal is sold outside these countries.

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

The European organic food industry is considered the most competitive in the world. A high degree of fragmentation with strong national players creates a difficult environment for new entrants, especially those from outside Europe. Indeed, there have been a number of high-profile market exits in recent years. Some American companies - including Stonyfield Farm and Horizon Organic - have looked to expand in Europe, only to withdraw a few years later.

Consolidation is occurring in the European organic food industry. A number of mergers, acquisitions, and investments are taking place. In Germany, Sunval has been acquired by DMK, whilst Swiss Emmi (via its Molkerei Biedermann subsidiary) has taken a stake in the German Gläserne Molkerei. The Lea Nature Group became the second largest organic food company in France when it acquired Ekibio in 2011.

### **North America**

Organic food & drink sales are growing at a healthy pace in North America. Although economic conditions remain weak, the organic food & drink market expanded by about 10 percent to 31.3 billion US dollars in 2011. Most sales are from the US market, which has the largest organic food & drink market in the world. Organic products account for 4 percent of total food & drink sales in the country.

Increasing distribution of organic foods is a major driver of market growth. Organic products are making significant inroads in conventional grocery channels and catering & foodservice establishments. All leading food retailers are marketing organic products under their private labels. O Organics, the private label of Safeway supermarkets, is the leading brand of organic foods in the US. Housing over 300 organic products, O Organics generates over sales of over 500 million US dollars. In Canada, the PC Organics private label of Loblaw's supermarket is the leading brand of organic foods.

The Catering & Foodservice Sector (CFS) has become an important channel for organic products. A growing number of foodservice outlets are serving organic products, whilst

catering establishments are increasingly using organic ingredients. For instance, Starbucks serves organic coffee and milk in many of its 11'000 outlets in North America. The Bon Appetit Management Company is providing a 'Sustainable Food Service' option to its catering establishments, offering organic milk, vegetables, wheat, and other organic ingredients.

The North American organic products market is larger than the European market; it is also much more concentrated with large companies operating at every level of the supply chain. Whole Foods Market and Trader Joe's are the leading natural food retail chains, whilst UNFI is the main distributor and wholesaler. Large food corporations, including Dean Foods, Danone, Hershey's, Coca-Cola and PepsiCo have an important market presence. Many have acquired organic food brands. Nature's Path, Earthbound Farms and Amy's Kitchen are some of the few privately owned organic food companies in the region.

The new organic equivalency agreement between the US and EU is encouraging many American companies to look at Europe as a viable export market. However, few European companies are actively targeting the American market because of market entry hurdles. Although the US is a large producer of organic crops, many sectors of the organic food industry remain import dependent. Significant volumes of organic fruits, vegetables, meats, beans, seeds, herbs & spices and ingredients are imported. Latin America is the main source, although imports are also increasing from Africa, Europe and Australasia.

### Asia

The Asian market for organic products is growing at a steady rate. Rising awareness of organic production methods is fuelling demand for organic food & drink. The continent is however divided in terms of consumption and production.

Most organic product sales are from the affluent countries, such as Japan, South Korea, Taiwan, Hong Kong, Malaysia and Singapore. However, a small share of the organic products sold is grown in these countries. Large quantities of organic food & drink products (especially processed foods) are imported from Australasia, Europe and the US into these countries.

Other Asian countries mainly have export-geared organic food sectors whereby organic crops are grown for other regions. Such countries include the Philippines, Indonesia, Sri Lanka and Vietnam. However, organic crops are also meeting domestic demand in some countries. India, China, and Thailand are countries where production has been traditionally export-geared, but increasingly meeting local needs. The development is expanding the number of organic food retailers in these countries.

Organic foods are making inroads in mainstream food retailers in Asia. Large supermarkets, especially in the major cities, are retailing organic products. As in Europe and North America, private labels are being introduced for these products. Asian consumers are buying organic products as they become more aware of food safety and ecological issues. Scandals, especially those involving tainted food products, are making consumers more concerned about food safety issues.

The lack of standards in Asia 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, which are often marketed on similar attributes such as "chemical-free" or "low pesticides". There is also an absence of equivalency arrangements between national standards. Thus, producers and importers often have to get multiple certifications for their organic products.

### Oceania

The market for organic products in Australia, New Zealand and the Pacific Islands is relatively small. Although the continent houses about a third of the world's organic agricultural land, the share of global organic food & drink sales is less than 2 percent.

Australia and New Zealand are important producers, consumers and exporters of organic products. These countries export significant volumes of organic beef, lamb, wool, kiwi fruit, wine, apples, pears and vegetables. Asia is the major destination, followed by Europe and North America.

Widening availability of organic products is a major driver of market growth. Organic foods are making inroads in conventional grocery channels, with leading food retailers taking up important market share. The major food retailers are Woolworths and Coles. Large food companies, including Fonterra, Heinz Wattie's Australasia, and Sanitarium, have also taken up strong market positions.

### Other regions

Organic food & drink sales in other regions are also rising. Latin America is an important producer and exporter of organic products, however internal markets are slowly developing. Brazil has the largest market for organic food & drink in the region; rising production levels and growing consumer awareness are expanding the organic food market. Organic foods are becoming increasingly available in the major cities.

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

### **Conclusions & challenges**

Growth in the global market for organic food & drink is linked to the health of the world economy. Although consumer demand for organic products continues to strengthen, market growth rates have slightly declined since 2008. The lingering European debt crisis and concerns about the US financial cliff continue to provide economic uncertainty. The organic products market is thus expected to grow at a slow rate in the short term.

Slowing market growth rates bring many challenges; a major one for the organic food industry is supply-demand imbalances. Organic crops are grown in all parts of the world;

however, sales are concentrated to two regions. With Europe and North America reporting slower growth, oversupply is envisaged to affect growers in Africa, Asia and Latin America. If many of these growers convert back to conventional farming, the organic food industry could face another swing of undersupply when growth rates recover from the economic recession.

Food inflation is another major challenge. Poor agricultural harvests in the US, Russia and South America have led to another bout of food inflation, raising food prices. Conventional farmers are less inclined to convert to organic agricultural practices when such price hikes occur. Growing production of bio-fuel crops is also competing for land area with food crops, raising product prices. The FAO (United Nations) predicts the average basket of food products will rise by 15 percent by summer 2013. Organic product prices could show larger rises because of their smaller supply base.

Standards and certification are an ongoing challenge. Lack of harmonization of existing standards remains an impediment to global trade of organic products. The US-EU trade arrangement came into effect in June 2012; it aims to facilitate inter-regional trade of organic foods. However, certified products made in other regions are not party to the equivalency agreement. In Asia, the number of national standards continues to proliferate; however, there is no harmonization between these standards. A growing and persisting problem is multiple certification of organic crops. With agricultural commodity prices rising and competition for agricultural land growing, duplicate certification costs discourage growers from taking the organic road.

In spite of the numerous challenges ahead, the outlook for the global organic food industry remains rosy. As this contribution has showed, positive growth is continuing during the economic slowdown. The doubling in global revenues since 2003 exemplifies the positive trend.

### Standards and Regulations

### Standards and Regulations

### BEATE HUBER<sup>1</sup>, OTTO SCHMID<sup>2</sup>, AND GBATI NAPO-BITANTEM<sup>3</sup>

The European Union and the United States achieved a breakthrough in their negotiations concerning the mutual recognition of their organic standards and control systems. The agreement makes it possible for organic products (with a few exceptions) that are certified in the EU or the USA to be sold in the other country/region without any further inspection or certification. The European organic scheme is the second scheme after the Canadian scheme to be recognized by the US as equivalent with their National Organic Program. For the EU it is the first time that bilateral negotiations have led to mutual recognition of the organic standards and control system. The arrangements will lead to a considerable reduction in bureaucracy for trading organic products between the EU and the US. The EU-US agreement came into force on July  $1^{\rm st}$ , 2012 along with the revised European import scheme for organic products. With the new EU scheme, imports into the EU are possible for products that are certified by a control body recognized for operations in the export country. The EU recognizes certification bodies either directly or via the so-called "Third Country List". The revised system will replace the system of import authorizations step by step.



Dacian Ciolos, Commissioner EU, and Kathleen Merrigan, United States Deputy Secretary of Agriculture are signing the contract of the EU/USA. Copyright: NuernbergMesse/Frank Boxler

 $<sup>^{\</sup>rm 1}$  Beate Huber, Research Institute of Organic Agriculture (FiBL), CH-5070 Frick, Internet www.fibl.org

<sup>&</sup>lt;sup>2</sup> Otto Schmid, Research Institute of Organic Agriculture (FiBL), CH-5070 Frick, Internet www.fibl.org

 $<sup>^3</sup>$  Gbati Napo-Bitantem, Research Institute of Organic Agriculture (FiBL), CH-5070 Frick, Internet www.fibl.org

The dominating topic in the Asian region in 2012 was the implementation of revised production rules in China: further tightening the already strict rules. The new rules require inspection for each growing season and sampling of all crops. Furthermore, products for export have to be certified according to the Chinese organic regulations and must either be labelled with the Chinese national organic logo or cover up any organic claims on the original packing of the imported product.

### 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 86. Twenty-six countries are in the process of drafting legislation. The data on regulations around the world were collected by various authorities and experts. Categorization of regulations as being "not fully implemented" or "fully implemented" was based directly on the feedback from the persons interviewed and the information was not subject to verification. We received responses from experts and authorities from the majority of the countries. It is assumed that the non-responding countries did not pass legislation on organic production, although the share of countries in the process of developing legislation is probably greater than that reflected in the tables.

The list of countries with regulations or in the process of drafting regulations on organic agriculture is shown in Table 37 and Table 38. Please send comments or information on countries that are not listed to Beate Huber (beate.huber@fibl.org).

Table 37: Countries with regulations on organic agriculture

Region	Country	Remark
European Union (27)1	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
	Ireland	Fully implemented
	Italy	Fully implemented
	Latvia	Fully implemented
	Lithuania	Fully implemented
	Luxemburg	Fully implemented
	Malta	Fully implemented
	Poland	Fully implemented
	Portugal	Fully implemented

 $<sup>^1</sup>$  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://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:189:0001:0023:EN:PDF

### Standards and Regulations: Overview

Region	Country	Remark
	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
	Iceland¹	Fully implemented
	Kosovo	Not fully implemented
	Macedonia, FYROM	Fully implemented
	Moldova	Fully implemented
	Montenegro	Fully implemented
	Norway	Fully implemented
	Serbia	Fully implemented
	Switzerland <sup>2</sup>	Fully implemented
	Turkey	Fully implemented
Asia & Pacific Region (25)	Armenia	Fully implemented
	Australia	Fully implemented
	Azerbaijan	Not fully implemented
	Bahrain	Not fully implemented
	Bhutan	Not fully implemented
	China	Fully implemented
	Georgia	Fully implemented
	India³	Fully implemented
	Indonesia	Fully implemented
	Iran	Not fully implemented
	Israel	Fully implemented
	Japan <sup>4</sup>	Fully implemented
	Jordan	Not fully implemented
	Korea, South	Fully implemented
	Kuwait	Not fully implemented
	Lebanon	Not fully implemented
	Malaysia	Fully implemented
	New Zealand⁵	Fully implemented
	Oman	Not fully implemented
	Philippines	Fully implemented
	Qatar	Not fully implemented
	Saudi Arabia	Fully implemented
	Taiwan	Fully implemented

 $<sup>^1\,</sup>www.landbunadarraduneyti.is/log-og-reglugerdir/Reglugerdir/Allar\_reglugerdir/nr/79$ 

 $<sup>^2</sup>$  www.admin.ch/ch/d/sr/c910\_18.html

http://www.apeda.gov.in/apedawebsite/organic/index.htm
 JAS Standards for organic plants and organic processed foods: www.maff.go.jp/e/jas/specific/organic.html

 $<sup>^{5}</sup>$  New Zealand Food Safety Authority (NZFSA) Official Assurance Programme for Organic Products: http://www.foodsafety.govt.nz/industry/sectors/organics

Region	Country	Remark
	Thailand¹	Fully implemented
	<b>United Arab Emirates</b>	Not fully implemented
The Americas & Caribbean (21)	Argentina	Fully implemented
	Bolivia²	Fully implemented
	Brazil³	Fully implemented
	Canada	Fully implemented
	Chile	Fully implemented
	Colombia	Fully implemented
	Costa Rica	Fully implemented
	Cuba	Not fully implemented
	Dominican Republic	Fully implemented
	Ecuador	Fully implemented
	El Salvador	Not fully implemented
	Guatemala	Fully implemented
	Honduras <sup>4</sup>	Fully implemented
	Mexico	Fully implemented
	Nicaragua	Fully implemented
	Panama	Fully implemented
	Paraguay <sup>5</sup>	Not fully implemented
	Peru <sup>6</sup>	Fully implemented
	Uruguay	Not fully implemented
	USA <sup>7</sup>	Fully implemented
	Venezuela	Not fully implemented
Africa (2)	Morocco Tunisia	Not fully implemented Fully implemented

Source: Huber, Napo-Bitantem 2013

Table 38: Countries in the process of drafting regulations

Region	Country
Europe (3)	Bosnia & Herzegovina
	Russia
	Ukraine
Asia and Pacific Region (9)	Bangladesh
	Hong Kong
	Kyrgyzstan
	Laos
	Nepal
	Pakistan
	Sri Lanka
	Syria

 $<sup>^{\</sup>rm 1}$  Homepage of the National Bureau of Agricultural Commodity and Food Standards, www.acfs.go.th/eng/index.php

<sup>&</sup>lt;sup>2</sup> www.aopeb.org/

³www.planetaorganico.com.br

<sup>4</sup> www.senasa-sag.gob.hn/

 $<sup>^5\,</sup>www.senave.gov.py/index.php?pag=ampliamos\&Cod\_noticias=102$ 

 $<sup>^6</sup> www.senasa.gob.pe/0/modulos/JER/JER\_Interna.aspx?ARE=0\&PFL=3\&JER=134$ 

<sup>&</sup>lt;sup>7</sup> www.ams.usda.gov/AMSv1.0/nop

### Standards and Regulations: Overview

Region	Country
	Vietnam
The Americas & Caribbean (2)	Jamaica
	St. Lucia
Africa (8)	Egypt
	Kenya
	Senegal
	South Africa¹
	Tanzania
	Uganda
	Zambia
	Zimbabwe

Source: Huber, Napo-Bitantem 2013

### The Codex Alimentarius Guidelines: Recent Developments<sup>2</sup>

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. They also provide guidance to governments in developing national regulations for organic food.

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

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

<sup>1</sup> www.afrisco.net/Html/Product\_Stardards.htm

<sup>&</sup>lt;sup>2</sup> Information about Codex Alimentarius is available via www.codexalimentarius.net/web/index\_en.jsp.

<sup>&</sup>lt;sup>3</sup> The Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods, amended in 2010, can be downloaded from www.codexalimentarius.net/download/standards/360/cxg\_032e.pdf.

Another issue, which has been on the agenda since 2010, is the use of ethylene for sprout inhibition in onions and potatoes. This issue will be discussed again in 2013 with the supported of a working group. The debate on the use of ethylene continued in 2011 with the aim of extending its use to ripening of a broader range of tropical fruits: not just for bananas and kiwis for which it is already allowed. However, as no official request was forwarded, the Codex Committee for Food Labeling decided in 2012 to leave the current restriction to bananas and kiwi unchanged.

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

Furthermore, it has been agreed to take up another new area: organic aquaculture and seaweed production. In 2011, a first working paper was presented by the EU. A redrafted version by the EU was circulated for comments and was discussed at the meeting of the Codex Committee for Food Labeling in May 2012. The discussion will continue, first through an working group (chaired by the European Union) and then in a physical meeting of the Codex delegates prior to the next CCFL meeting in May 2013 in Canada.

#### EU regulation on organic production

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. It came into force on January 1, 2009. 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.

#### Import requirements of major economies

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

#### Bilateral agreements between the exporting and the target importing country

Most importing countries - including the United States, the European Union, and Japan - have options for bilateral recognition (i.e., the option to confirm that another country's control system and its standards are in line with domestic requirements and that the products certified in those countries can be sold on the national market).

\_

 $<sup>^1</sup>$  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.

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.

After nearly ten years of negotiations, the United States and the European Union finally achieved a breakthrough by recognizing their respective national organic standards and control systems as being equivalent. Animal products from the EU and apples and pears from the US are exempted from the agreement and require extra certification. Furthermore products from aquaculture and wine are not yet in the scope of the agreement. The formal arrangements came into force in July 2012. These arrangements will lead to a considerable reduction of bureaucracy for trading organic products between the EU and the US.

The US-EU agreement is the second bilateral agreement. The first agreement was between the US and Canada in 2009. Under a determination of equivalence, producers and processors, who are certified according to the US 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 labelled in the United States as organically produced.

In addition, the US is negotiating equivalency agreements with Australia, India, and Japan.

The European Union currently recognizes eleven countries<sup>2</sup> as being equivalent with the EU system (what is known as the Third Country list).

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 Program (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 EU, 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 EU is currently implementing the 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.<sup>3</sup> The European Union publishes the list of approved control bodies and

<sup>&</sup>lt;sup>1</sup> National Organic Program (NOP) www.ams.usda.gov/AMSv1.0/NOP

<sup>&</sup>lt;sup>2</sup> Argentina, Australia, Canada, Costa Rica, Japan, India, Israel, New Zealand, Switzerland, Tunisia and US

 $<sup>^{\</sup>rm 3}$  There will be three different lists:

List of control bodies that apply a control system and production standards equivalent to the EU regulation on organic production (this list will enter into force on July 1, 2012).

authorities recognized for applying equivalent standards and control schemes in non-EU countries in updates to EU regulation 1235/2008. Certification from recognized control bodies is accepted for imports to the EU since July 1, 2012. No import authorizations will be needed anymore for such imports.

The US National Organic Program (NOP) requires all produce labelled 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 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.

#### Literature

- Commission Regulation (EC) No 1235/2008 of 8 December 2008 laying down detailed rules for implementation of Council Regulation (EC) No 834/2007 as regards the arrangements for imports of organic products from third countries; Consolidated version:
  - $http://cogent.controlunion.com/cusi\_production\_files/SISI\_files/FL\_081012024318\_1235\_2008\_consolidated\_2012JULY.pdf$
- Commission Implementing Regulation (EU) No 126/2012 of 14 February 2012 amending Regulation (EC) No 889/2008 as regards documentary evidence and amending Regulation (EC) No 1235/2008 as regards the arrangements for imports of organic products from the United States of America
- Commission Implementing Regulation (EU) No 508/2012 of 20 June 2012 amending Regulation (EC) No 1235/2008 laying down detailed rules for implementation of Council Regulation (EC) No 834/2007 as regards the arrangements for imports of organic products from third countries
- Commission Regulation (EC) No 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control; Consolidated Version: http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2008R0889:20130101:EN:PDF
- Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91; Consolidated version: http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2007R0834:20081010:EN:PDF
- DiMatteo, Katherine (2007) Overview of group certification. Prepared for the 7th meeting of the UNCTAD/ FAO/ IFOAM International Task Force on Harmonisation and Equivalence in Organic Agriculture in Bali, Indonesia. 27-30 November 2007. http://www.unctad.org/trade\_env/itforganic/meetings/itf7/ITF0711\_GrowerGroups.pdf
- European Commission (2008) Guidelines on imports of organic products into the European Union. 15.12.2008. Rev.1. European Commission, Brussels. Available at http://ec.europa.eu/agriculture/organic/files/news/download-material/guidelines\_for\_imports\_en.pdf
- European Union Group of the International Federation of Organic Agriculture Movements (IFOAM EU Group) (2012)
  European Organic Regulations (EC) No 834/2007, 889/2008 and 1235/2008. An Evaluation of the First
  Three Years. Looking for Further Development. IFOAM EU Group, Brussels. Available at
  http://www.ifoam.org/about\_ifoam/around\_world/eu\_groupnew/positions/publications/regulation/index.php
- List of control 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 (the Commission did not yet assess applications for this list).
- 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 database, 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).

#### Standards and Regulations: Overview

- Huber, Beate et al. (2012) "Standards and Regulations," In: Willer/Kilcher (Eds.) The World of Organic Agriculture.

  Statistics and Emerging Trends 2012, International Federation of Organic Agriculture Movements (IFOAM),
  Bonn, Germany and Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.organic-world.net/yearbook.html
- Kilcher, Lukas et al. (2011): The Organic Market in Europe. Overview and Market Access Information for Producers and International Trading Companies. Fourteen Country Examples in the European Free Trade Association and the European Union, with a Special Focus on Switzerland. SIPPO, Zürich and FiBL, Frick
- Schlueter, Marco, Camilla Mikkelsen et al. (2009): The New Organic Regulation for Organic Food and Farming in Europe: EC 834/2007 Background, assessment and interpretation for stakeholders. IFOAM European Group, Brussels

#### Websites

 $www.fao.org/organicag/en: Information \ on \ organic \ agriculture \ by \ FAO \ with \ detailed \ country \ reports \ including \ legal \ situation$ 

 $www.ifoam.org/about\_ifoam/standards/index.html: IFOAM\ Guarantee\ system$ 

www.ams.usda.gov/nop/indexIE.htm: Information about the US National Organic Program (NOP)

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)

www.codexalimentarius.net/ download/standards/360/CXG\_032e.pdf: The Codex Alimentarius Commission and the FAO/WHO Food Standards Programme: Organically Produced Foods, Rome 2007

ec.europa.eu/agriculture/organic/splash\_en: Internet site of the European Commission on organic farming in all European Union languages.

### World of Organic Certification 2013

#### Kolbjörn Örjavik1

The tenth edition of The Organic Certification Directory will be published in February 2013. The directory lists all the organic certification bodies in the world and is distributed for free.

#### **Number of certification bodies**

The total number of certification bodies is 576; up from 549 in 2011. Most certification bodies are located in the European Union, South Korea, Japan, the United States, China, India, and Canada. For the first time, Asia now has more organic certification bodies than Europe.

There has been a slight decrease in the number of certification bodies in most regions of the world (Figure 46), although the number has increased rapidly in South Korea (see Table 39).

Table 39: Countries with the most certification bodies 2010-2012

Country	2012	2011	2010
South Korea	76	33	33
Japan	61	61	59
United States of America	49	51	57
Germany	32	31	32
Spain	27	28	28
China P.R.	24	28	27
India	24	22	17
Canada	23	23	21
Romania	17	17	18
Italy	13	13	15
Poland	11	11	11
Bulgaria	10	10	10
France	10	7	6

Source: Grolink, The Organic Certification Directory 2013

Eighty-six countries have a domestic certification body, but this does not mean that producers in the other countries are without the service of certification. Many of the listed certification bodies also operate outside their home country, and there are very few countries that do not have a certification body operating within its borders. Generally, certification bodies that are operating internationally are based in a developed country and offer their certification services in developing countries; very few operate in several developed countries. A handful of certification bodies work on several or all the continents. Twenty-three larger certification bodies have ninety-three branch offices with local approvals worldwide.

\_

 $<sup>^1</sup>$  Kolbjörn Örjavik, The Organic Standard, Grolink, Uppsala, Sweden, news@organicstandard.com, www.organicstandard.com

## Development of the number of certification bodies by region 2004-2012

Source: Grolink, The Organic Certification Directory 2013

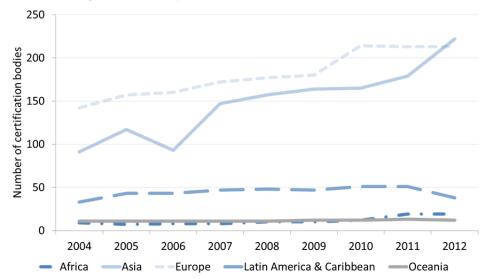


Figure 46: Development of the number of certification bodies by region 2004-2012 Source: Grolink, The Organic Certification Directory 2013

Most of Africa and large parts of Asia still lack local service providers. There are only nineteen certification bodies in Africa (in Cameroon, Egypt, Kenya, Senegal, South Africa, Tanzania, Tunisia, Uganda and Zambia). Asia has 222 certification bodies, most of them based in South Korea, China, India, and Japan. The Caribbean has very few certification bodies. The Pacific has certification bodies only in Australia and New Zealand, and these operate in most of the countries in the region.

Since 2003, the number of certification bodies has risen sharply in Asia and Europe; it increased in Latin America and has been relatively stable in Africa and the Pacific region. In the US, the introduction of the NOP initially caused a fairly drastic reduction in the number of certification bodies, after which the situation stabilized. In Brazil, the number of certification bodies decreased to less than half when the government published a list of approved bodies. In some countries, notably China, Japan and South Korea, the introduction of a regulation led to a growth in the number of certification bodies between 2006 and 2010. In 2012, a rise in the number of certification bodies is noted in the Asian countries: South Korea, India, Thailand and Turkey while the number in China decreased by four. Japan reports a steady number of around sixty certifiers since 2008. The number has also stabilized in Europe with around 190 certification bodies since 2010.

In Europe, the United Kingdom and Spain experienced a decrease while France increased with three new certification bodies. Azerbaijan got their first locally based certification body and Bosnia and Herzegovina, Germany and Sweden increased with one certification body each. The number in Oceania remains stable with the only change

taking place in Australia with one certification body less. In North America, the number decreased by two in the United States.

#### Number of operators and farmers

Certification bodies were asked for information about the number of operators they certify. Of the 234 certification bodies that responded, representing a total of 208'629 operators, 204 gave an answer regarding the number of farmers. They certified, in total, 1'199'504 farmers, with BCS (Germany) topping the list; claiming to certify more than 300'000 farmers. IMO's head office (Switzerland) alone reports certifying more than 120'000 and IMO Control Latinoamérica Ltda in Bolivia reports certifying 36'000. Many of the farmers are certified in group certification for smallholders. India has the highest number of organic farmers in the world with an estimate of more than 800'000 farmers (2012). Naturland (Germany) reports that they certify 50'000 farmers, and Certimex (Mexico) nearly 30'000 farmers. It should be noted that a farm can be certified twice. For example, Naturland does not have its own inspectors and uses other organizations, such as IMO, to inspect their farmers to Naturland standards. IMO may then certify the same farmer for e.g. EU approval or NOP, and therefore the same farmer will be included in Naturland and IMO's figures and counts as two in the statistics. Nevertheless, the worldwide number of certified farms is likely to be more than three million, as information is lacking from many important countries and more than half the certification bodies.

#### **Turnover**

Most certification bodies are still not transparent about their turnover and only eighty-two organizations responded to the question. Of these, many report figures in the range of 100'000 to 500'000 euros. The certification bodies reporting a turnover of 2 million euros or more are Ecocert (France), Organic Trust (Ireland), CCPB ltd (Italy), Suolo e Salute s.r.l. (Italy), CCOF Certification Services (USA), DIO Certification & Inspection Organization of Organic Products (Greece), Stichting Skal (The Netherlands), Debio (Norway), Instituto per la certificazione Etica e Ambientale (ICEA) (Italy), bio.inspecta AG (Switzerland), Qualité-France SA, Ecocert SA (International Department) and BIO HELLAS SA Inspection Institute of Organic Products (Greece). When comparing the reported turnover and the number of operators, one can draw the conclusion that many of the certifiers generate income from activities other than certification. The global turnover in organic certification is clearly above 300 million euros, and could be double that amount.

#### Starting date

Of the 343 certification bodies that responded to the question concerning the starting date of their organization, only 14 started before 1985 and more than half of them started in the decade between 1995 and 2004 (Table 40).

#### Standards and Regulations: Certification Bodies 2013

Table 40: Certification bodies: Start of operation of organic certifiers

Year	Share of certification bodies by time period
2005-2012	22%
1995-2004	51%
1985-1994	23%
Before 1985	4%

Source: Grolink, The Organic Certification Directory 2013

#### **Approvals**

Worldwide, there are six significant approval schemes for certification bodies: IFOAM, Japan (JAS), ISO 65, EU, USA and Canada. Only eleven certification bodies; four Italian and two each from Argentina, Australia, New Zealand and one from Japan reported approval under all six schemes. Notably, the number of certification bodies approved to the IFOAM, Japan and ISO 65 schemes are stable. The US represented the biggest increase in approval status with an increase from 129 in 2011 to 283 approved bodies in 2012. The majority of the approvals to the US are through the EU-USDA trade agreement. Of the 283 approved bodies, only fifty-one operate out of the US. In Canada, the number of approvals has decreased to ninety-six in 2012 from 107 in 2011. The EU has an increase of forty-five approvals, all from the US. It should be noted that the European Commission has not released the list of approvals for 2012 at the time of writing this report, and that the most recent official list was published in late 2010.

## Development of the certification bodies by type of approval 2004-2012

Source: Grolink, The Organic Certification Directory 2013

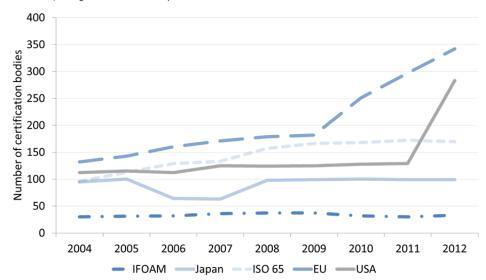


Figure 47: Development of the number of certification bodies by type of approval Source: Grolink, The Organic Certification Directory 2013

IFOAM has gained three accredited certification bodies: one in China, one in India and one in Palestine. These are Biocert India Pvt Ltd, Company for Organic Agriculture in Palestine, and Hong Kong Organic Resource Centre Certification Ltd.

There were 112 certification bodies that claim to have their own standard, which is a decrease from 127 in 2011.

#### The Organic Certification Directory 2013

The Organic Certification Directory will be published in February 2013 and will be available online. More information can be found on www.organicstandard.com/ocd.

Finally, we at The Organic Standard would like to send out special thanks to all of the certification bodies that have provided us with the information.

## The Organic Guarantee System - Keeping up with the Times

#### DAVID GOULD<sup>1</sup>

#### Instilling confidence - A consistent objective

Since its inception, the International Federation of Organic Agriculture Movements (IFOAM) has sought to define and spread organic practices. One of the most powerful tools for this is the market. Instilling confidence about organic goods in the market is critical. Unless consumers generally believe that the products labeled as organic really are organic, there is little hope this market category can survive. This concept has not changed over the years.

The word "organic" describing a product in the market means two things: (1) that the product was made according to certain practices, i.e. in accordance with a standard or set of norms; and (2) that somebody checked to make sure those standards were really followed. Both aspects are important: the standard must be meaningful enough to make a difference, and consumers have to believe that claims about following the standard are sincere. These two complementary aspects create a "guarantee" of sorts to the market. IFOAM's Organic Guarantee System (OGS) embraces these two critical components in innovative and leading ways.

#### Systematizing a concept

#### From grass-roots to global - the IFOAM basic standards

The organic movement sprung from many places around the globe. IFOAM is after all the International Federation of Organic Agriculture Movements. There were (and still are) regional variations in relatively minor aspects of what "organic" means to people, but the common ground has always dwarfed the differences. Accepting these minor differences however has been a longstanding challenge. What is "organic enough?" "How can we trust that you are really organic compared to us?"

The IFOAM Basic Standards (IBS) first came into being in 1980, an attempt to describe the common ground in organic practices, the baseline. It was a "standard for standards," without enough detail to be fully enforceable or verifiable in an objective way. Those who wanted to fill in the missing details or improve upon this baseline were welcome to do so. The IBS went through various amendments and improvements over the next 25 years, and have served as the foundational material for most if not all of the organic standards existent on the planet today.

A multiplicity of regional, national, governmental or private organic standards stemming from the IBS was cause for some confusion or inconsistency among different standards owners (usually national organic movements or governments, and their certification bodies) and their users (namely farmers, processors, and traders). In the earlier stages of the organic movement's evolution, it was logical to jealously guard every detail one

 $<sup>^1</sup>$  David Gould, IFOAM Value Chain Facilitator, International Federation of Organic Agriculture Movements (IFOAM), Charles-de-Gaulle Strasse 5, 53113 Bonn, Germany, www.ifoam.org

believed important, to protect the integrity of the standard and keep it from being eroded by people you didn't know or necessarily trust. Thus, gaps were plugged on a case-by-case basis – usually bilaterally between two standards owners or certification bodies (CBs) – so that they could each be sure the other's standard met their own expectations.

#### Building trust in the market

With a growing organic market, there were more demands for certification - so more CBs came into being, aiming to provide this service. But who's to say that the CB checked well enough? That they have personnel that really know what they are looking at? That they don't have a conflict of interest and therefore go too leniently on some clients?

Who could be the judge of whether a CB is competent? By 1986, IFOAM's technical committee started evaluating CB performance, helping critique, improve and/or weed out the weaker players. As the market continued to grow, this became a world of activity in itself, separate from continued development of the IBS, and it became necessary to more formally separate the tasks of standards development from that of verification or certification against the standards. Thus, in 1992, IFOAM established its own accreditation program, with a set of requirements that CBs needed to fulfill in order to be deemed competent to verify that the IBS were indeed being met in a consistent, transparent, impartial way across all operators they served.

The IFOAM Accreditation Program (IAP), with its own set of accreditation criteria, began implementation in 1993. The IAP went a long way toward standardizing the practices of organic certification. This was becoming increasingly important in a market going global and needing to be seen as credible across international borders.

Seeing that the growth of the organic market was gaining significance, governments followed IFOAM's lead. Most notably the European Union began demanding more consistency and rigor, and in 1997 began demanding that CBs achieve accreditation to globally recognized procedural norms for certification bodies, namely EN45011 or ISO Guide 65, a set of norms for CBs and similar conformity assessment bodies.

Impartiality is needed throughout the system to assure fairness. One strategy for achieving this is to have separate job responsibilities, to help avoid conflicts of interest. Thus, to help assure legitimacy of the IAP, in 1997 IFOAM separated its accreditation functions from itself by creating the International Organic Accreditation Service (IOAS), a separate legal entity with its own governance structure independent of IFOAM. The IOAS remains a daughter company of IFOAM and under its oversight, but makes all accreditation decisions independently from IFOAM.

The IOAS is the world's only international accreditation body for the organic sector, and specializes in sustainable agriculture only. IFOAM believes that international accreditation is often a better model for organic certification than national accreditation. The IOAS operates internationally in one sector, as opposed to national accreditation bodies that cover a wide variety of sectors in a given country. This affords the IOAS the ability to build greater expertise in evaluating the organic sector in particular. Additionally, international accreditation bodies can accredit certifiers worldwide, thus establishing a basis for equivalence and recognition of certificates issued by different CBs around the world.

#### The latest evolution

#### Standards: Equivalence tather than compliance

In a world where organic products are certified in different places to different standards by different CBs and traded between potentially any country and market, easing bureaucracy and reducing technical barriers to trade is imperative. The IBS may have been the basis for organic standards worldwide, but in and of itself it never became an actual standard in force in any country. Instead, the world saw the development of many very similar standards with minor differences among them. Sometimes these differences acted as trade barriers between countries or private standards owners, each demanding the other comply exactly with every point of its own standard. Negotiations to harmonize standards carried on for years, usually without full satisfaction.

Nonetheless, the organic sector kept growing. The wave of progress by the organic movement and market has become in fact so large and compelling - as a market driver as well as a social and ecological one - that it now overwhelms these minor details and realizes that the dynamics of a mainstream market require an acceptance of minor regional differences, with the knowledge and pragmatism that the objectives held by different standards are indeed common to all of those standards.

In 2010, IFOAM, in partnership with FAO and UNCTAD, working together through the GOMA (Global Organic Market Access) Project, led the wave forward by creating the COROS - Common Objectives and Requirements of Organic Standards<sup>1</sup> - an organic standard developed through a multi-stakeholder consultation, which reflects the core content and objectives of all organic standards. Standards owners (governmental or private) can each compare their standard to the COROS, and the results of this comparison then be shared with all. Even further, the IFOAM Secretariat performs an assessment of standards, using its team of experts, who provide a consistent lens for doing these assessments. Standards deemed equivalent to the COROS can be included in the IFOAM Family of Standards<sup>2</sup>, a visualization of a goal of organic certification - to draw a line between what is organic and what is not.



Figure 48: Logo IFOAM Family of Standards

The IBS was one of the standards included in the IFOAM Family of Standards. In 2012, the IBS gave way to the new IFOAM Standard,3 a fully complete, off-the-shelf organic standard that can be used anywhere in the world. The IFOAM Standard is now just one member in the Family of Standards. The Family is a key part of the Organic Guarantee

 $<sup>^{1}</sup>$  Information on the COROS – Common Objectives and Requirements of Organic Standards is available here: http://www.ifoam.org/about\_ifoam/standards/norms.html

<sup>&</sup>lt;sup>2</sup> Information on the IFOAM Family of Standards is available here :

http://www.ifoam.org/about\_ifoam/standards/ogs.html

<sup>&</sup>lt;sup>3</sup> Information about the IFOAM standard is available here

 $http://www.ifoam.org/about\_ifoam/standards/norms/IFOAMNormsVersionAugust 2012 with cover.pdf and the control of the control$ 

System, which qualifies as a valid standard because it is deemed equivalent to the COROS.

#### Accreditation: IFOAM and IGOSA

Acknowledging both the excellence of the IOAS and the fact that there is also widespread national accreditation of CBs, and building on the concept of standards equivalence, in 2012 IFOAM adjusted its OGS to allow for two kinds of accreditation:

 IFOAM accreditation, based on compliance with the IBS as well as the IFOAM Accreditation Criteria. This now evolves into compliance with the new IFOAM Standard and the slightly re-named IFOAM Accreditation Requirements (IAR).



#### Figure 49: Logo IFOAM accredited

2) IFOAM Global Organic System Accreditation or IGOSA, which is accreditation of a CB to the IFOAM Accreditation Requirements (IAR) as long as it uses a standard included in the IFOAM Family of Standards.



#### Figure 50: Logo IGOSA - IFOAM Global Organic System Accreditation

Both types of accreditation are administered by the IOAS and recognized as equally credible under the OGS.

#### Brand Recognition: The Global Organic Mark

Aiming to further lead and unite the organic world, IFOAM offers a branding mark for products from operators in good standing in the OGS – the Global Organic Mark.¹ First offered in late 2010, this additional service of the OGS allows operators and consumers alike to reap the benefits of an organic market that is globally present and united, regionally relevant and accessible, and credible to all concerned.

 $<sup>^1</sup>$  Information on the Global Mark is available here <code>http://www.ifoam.org/about\_ifoam/standards/OGS/GlobalMark.html</code>



#### Figure 51: Global Organic Mark

In 2012 IFOAM began forming partnerships with the first organizations to act as agents for spreading the Global Organic Mark in their respective countries, in Thailand and Malaysia. IFOAM anticipates further promotion of the Mark in other countries, by other agents and through direct efforts from the IFOAM Head Office itself.

#### Moving forward

Some of IFOAM's greatest strengths – and benefits to the organic movement and organic markets worldwide – are its long-term vision and its strategies for leading and uniting the sector. IFOAM believes the increased spread of organic practices by farmers is inevitable. There is mounting scientific evidence on the ecological, economic, and social benefits to support such development. Farmers and the value chains that stem from them will benefit from the sustainability benefits that organic agriculture brings. But rewards in the market can likely only be assured if guarantee systems remain credible and are scalable. Although still in its early stages, the Organic Guarantee System is a model that shows a way forward, a uniting approach that affords efficiencies and creates a common language that can be used by the private sector and governments alike.

### Overview of Participatory Guarantee Systems in 2012

#### FLÁVIA CASTRO<sup>1</sup>

Participatory Guarantee Systems (PGS) are locally focused quality assurance systems. According to the definition of the International Federation of Organic Agriculture Movements (IFOAM), they certify producers based on active participation of stakeholders, which is built on a foundation of trust, social networks and knowledge exchange.<sup>2</sup>

IFOAM is the only organization that compiles global data about PGS. IFOAM's efforts to compile comprehensive data on PGS worldwide have recently started and are ongoing, so the data provided here can be considered a reasonable approximation of the situation in 2012 rather than an exhaustive appraisal.

Some of the organic producers involved in PGS may be included in overall national organic agriculture statistics presented in this book. This might be the case for example in the following situations:

- If they are linked to, or recognized by, a national organic agriculture association which compiles national data on the organic sector (e.g. in New Zealand).
- When some of the producers involved in PGS also have a separate third party certification and are therefore included in the data reported by certification bodies.
   This is, for example, the case in France, where 50 percent of the PGS-certified farmers have double certification.
- When entire PGS groups are connected to the third party certification system by being audited and certified as a group (where the PGS manages an Internal Control System). In this case, they would also be included in the data provided by certification bodies. This is, for example, the case for a few PGS in Latin America.

However, in several cases, organic producers certified through PGS are not yet included in the national organic agriculture statistics because they are not sufficiently recognized by other institutions and they might even be denied the right to call themselves "organic" according to the regulations in place.

It is estimated that at least 41 PGS initiatives exist now on all continents, and a similar number of initiatives are currently under development. Asia and Latin America remain the leaders in terms of both the number of farmers certified through PGS and the level of recognition achieved by the national governments.

<sup>&</sup>lt;sup>1</sup> Project Coordinator at the International Federation of Organic Agriculture Movements (IFOAM), Charles-de-Gaulle-Str. 5, 53113 Bonn, Germany, f.castro@ifoam.org, www.ifoam.org

<sup>&</sup>lt;sup>2</sup> Editors' note: Other than PGS, an internal control system (ICS) is the part of a documented quality assurance system that allows an external certification body to delegate the periodical inspection of individual group members to an identified body or unit within the certified operator. More information is available at http://www.fao.org/organicag/oag-glossary/en/

#### PGS in the international agenda

The IFOAM definition of PGS was adopted in 2008¹, but the concept had been applied even before third-party certification became the most common organic guarantee system. In the past seven years, the number of initiatives implementing PGS has been growing steadily, as well the number of producers involved in them.

This growth is a result of the recognition by governments in many countries, and especially in Latin America<sup>2</sup>, of PGS as a tool for organic guarantee. In some cases, such recognition is restricted to accessing the domestic market, which PGS are in any case more likely to serve. In Bolivia, for example, the National Technical Rule of PGS for the local and national trade of organic products was approved on 17 January 2012.

The potential for boosting the domestic market for organic products is one of the many reasons why PGS have been promoted as a tool for sustainable development. PGS have received increased attention between 2011 and 2012, and have been included in the international debate on food security and sustainable development. The concept was discussed and PGS initiatives were presented as examples and references in sessions that took place during major international conferences, from the IFOAM OWC in September 2011, to the high level 2012 UN Conference on Sustainable Development (Rio +20).<sup>3</sup>

To facilitate identification of PGS initiatives around the world, IFOAM has developed a PGS Logo<sup>4</sup> that is granted to applicant PGS once they have passed an evaluation conducted by the IFOAM PGS Committee.



Figure 52: The IFOAM PGS logo

160

<sup>&</sup>lt;sup>1</sup> Agreed upon for the first time in 2004, in the framework of the first International Workshop on Alternative Certification in Torres, Brazil, the PGS concept was further defined by an international PGS Task Force. The definition, which is now used by IFOAM, was established in 2008 by the PGS Task Force in the framework of the 16th IFOAM Organic World Congress on Modena, Italy.

<sup>&</sup>lt;sup>2</sup> For reference, please see: The World of Organic Agriculture, Statistics and Emerging Trends, 2012 and 2011.
<sup>3</sup> For reference, see the IFOAM Global PGS Newsletter, issues 10 (September, 2011), 14 (January 2012) and 19 (June, 2012). The newsletter is available here: http://www.ifoam.org/about\_ifoam/standards/pgs/18479.php
<sup>4</sup> PGS initiatives officially recognized by IFOAM are allowed to use the PGS logo on their websites, flyers and other communication materials, but not on the organic products. For more information on application and conditions for use of the PGS Logo, please consult: http://www.ifoam.org/about\_ifoam/standards/pgs/PGS\_LOGO.html

As of September 2012, four PGS have been officially recognized by IFOAM and have been granted access to the logo (Table 41).

Table 41: PGS initiatives officially recognized by IFOAM

Name of the PGS initiative	Country	Number of producers involved	Number of producers certified
Associação de Agricultura Natural de Campinas e Região - ANC	Brazil	58	54
Associacao Brasileira de Agricultura Biodinamica - ABD	Brazil	50	50
Certified Naturally Grown - CNG	USA	900	750
Organic Farm New Zealand - OFNZ	New Zealand	150	130

Source: IFOAM Survey 2012

#### **PGS** worldwide in figures

IFOAM conducted a worldwide survey of PGS initiatives during 2012. Some PGS initiatives did not provide detailed data to distinguish between "producers involved" and "producers certified" and so are not included when calculating the number of producers certified per country. Therefore, the number of certified producers might be higher than the figures presented here. This information was provided directly by PGS initiatives in the respective countries, as of 14 September 2012.

There are more than 31'000 small operators who are currently involved in PGS worldwide. This includes mostly small farmers and a few small processors.

- The leading countries are the Philippines, with over 10'500 producers involved and 850 certified, followed by India, with over 5'370 producers involved, of which at least 2'512 are certified, and Brazil, with over 3'692 producers involved and at least 2'754 producers certified.
- Asia is the continent with the highest number of producers involved in PGS, with over 16'000 producers involved and more than 3'860 producers certified.
- Latin America is the continent with the second highest number of producers involved (over 9'600). The total number of producers certified in Latin America is at least 5'600.
- More than 3400 farmers are involved in PGS in Africa. Figures related to PGS certified producers are available only for South Africa and Namibia, 252 and 4 respectively.
- Despite the unfavorable legal framework, PGS initiatives exist in Europe and North America and there are at least 2000 farmers involved in both continents combined. Most are based in France and the USA but there are also many strong initiatives either being implemented or under development in Canada, Italy and Spain. The European CSA¹ movement and the European PGS community have been working closely together to define alternative marketing approaches and to strengthen the link between producers and consumers.

\_

 $<sup>^{1}</sup>$  CSA is the abbreviation for Community Supported Agriculture.

#### Standards and Regulations: Participatory Guarantee Systems

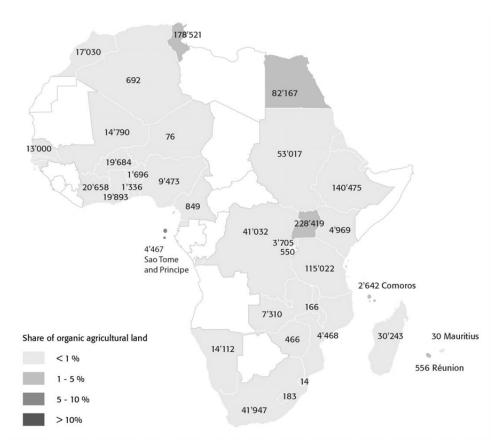
- More than 250 producers are involved in PGS in Oceania, where there are about 170 PGS certified producers, mostly based in New Zealand.

Other details on PGS initiatives are available on the IFOAM Online Global PGS Database and regularly updated.

#### **Online references**

- The IFOAM Participatory Guarantee Systems website: www.ifoam.org/about\_ifoam/standards/pgs.html
- The IFOAM Online Global PGS Database: a comprehensive database accessible from the IFOAM PGS website
  - www.ifoam.org/about\_ifoam/standards/pgs\_projects/pgs\_projects/index.php
- The IFOAM Global PGS Newsletter: a free electronic monthly publication. To subscribe, please contact pgs@ifoam.org.

# **Africa**



Map 3: Organic agricultural land in the countries of Africa 2011

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, governments and, for North Africa, the Mediterranean Organic Agriculture Network (MOAN). For detailed data sources see annex, page 322.

### Latest Developments in Organic Farming in Africa

#### HERVÉ BOUAGNIMBECK<sup>1</sup>

Organic agriculture is growing momentum in Africa as it is increasingly seen as significant for addressing food insecurity, land degradation, poverty, and climate change. It is becoming an important sector with demand for organic produce increasing in Africa and beyond.

Research and specific experiences of farm families engaged in organic agriculture show that organic agriculture offers African smallholders and family farmers a wide range of economic, environmental and social benefits (Badgley et al. 2006, FAO 2007, IAASTD 2008; UNCTAD-UNEP 2008, Ifejika Speranza 2010) by:

- Increasing yields in the long run through the use of affordable inputs: largely based on local biodiversity;
- Improving livelihoods and food security;
- Building resilience to climate change;
- Reducing the financial risk by replacing expensive chemical inputs with locally available renewable resources;
- Integrating traditional farming practices;
- Allowing farmers access to new market opportunities: both at home and abroad;
- Combating desertification;
- Providing much greater resilience of the farming systems in times of climate extremes such as drought and heavy rains;
- Improving human health and maximizing environmental services;
- Contributing to climate change mitigation, as it reduces greenhouse gas emissions and affordably sequesters carbon in the soil.

Given its affordability and the valuable tool-kit provided by organic agriculture, government policies could significantly benefit from the integration of organic practices into their agriculture, climate change, food security, and rural development policies and action plans.

The International Federation of Organic Agriculture Movements (IFOAM) is currently working with the African Union, the African organic sector and other agencies in the framework of its "Organic Alternative for Africa Initiative" to facilitate the integration of organic agriculture into the core of African policies and agricultural development agenda: including the Comprehensive African Agriculture Development Programme (CAADP).<sup>2</sup>

 $<sup>^{\</sup>rm 1}$  Hervé Bouagnimbeck, Organic for Africa!, International Federation of Organic Agriculture Movements (IFOAM), Charles-de-Gaulle-Str. 5, 53113 Bonn, Germany, www.ifoam.org

 $<sup>^2</sup>$  Information CAADP, the Comprehensive African Agriculture Development Programme is available here http://www.nepad-caadp.net.

### GSF recognizes the role of organic agriculture in increasing agricultural productivity and production in a sustainable manner

The 39th Session of the Committee on World Food Security (CFS)¹- the most important meeting in the global agricultural calendar - was held at the United Nations in Rome in October 2012. The major outcome for IFOAM and Civil Society Organizations in general was the adoption of the Global Strategic Framework for Food Security and Nutrition (GSF) by the Committee on World Food Security (CFS). The GSF is aimed at enhancing action by a wide range of stakeholders in support of global, regional and country-led actions to prevent future food crises, eliminate hunger and ensure food security and nutrition for all human beings.

A major outcome for IFOAM's advocacy work was the GFS recognition of the role of organic agriculture in increasing agricultural productivity and production in a sustainable manner. The policy frameworks and recommendations of the Committee on World Food Security are important developments that can facilitate the uptake of organic agriculture in Africa, and provide new opportunities for the organic movement to bring affordable, resilient and productive practices to farming communities.

#### Ugocert and Certysis recognized as third country certification bodies

In December 2011<sup>2</sup>, the Uganda Organic Certification Ltd (UgoCert) and Certysis from Belgium were the first certification bodies providing services in Africa to be approved by the European Commission to work in equivalence with the EU Organic Regulation. The system entered into force only in July 2012. Ugocert's recognition covers Uganda, while the recognition of Certisys covers Burkina Faso, Ghana, Mali and Senegal. This recognition means that importers of organic products from Uganda, Burkina Faso, Ghana, Mali and Senegal no longer need of an import permit for products certified by Ugocert and Certysis. This makes it easier for producers who are certified by the two certification bodies to export their organic products into the EU. With these developments, the potential for the development of African certified organic exports has improved.

Moreover, with the support of the Global Organic Market Access (GOMA) and the IFOAM OSEA II project<sup>3</sup>, UgoCert has taken the next major step. It has applied for approval of the European Union to use the East African Organic Products Standard (EAOPS) as an equivalent standard to the EU Regulation 834/2007. The East African Organic Products Standard (EAOPS) was developed by a public-private partnership in

1

<sup>&</sup>lt;sup>1</sup> The report of the 39th CFS meeting is available at:

 $http://www.fao.org/fileadmin/user\_upload/bodies/CFS\_sessions/39th\_Session/39emerg/MF027\_CFS\_39\_FINAL\_REPORT\_compiled\_E.pdf$ 

 $<sup>^2</sup>$  COMMISSION IMPLEMENTING REGULATION (EU) No 1267/2011 of 6 December 2011 amending Regulation (EC) No 1235/2008 laying down detailed rules for implementation of Council Regulation (EC) No 834/2007 as regards the arrangements for imports of organic products from third countries http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:324:0009:0022:EN:PDF

<sup>&</sup>lt;sup>3</sup> The OSEA II Project (Regional cooperation for Organic Standards and certification capacity in East Africa) is funded by the Swedish International Development Cooperation Agency (Sida). The project is running from November 2010 to December 2013 and aims at improving income and livelihood of rural communities in East Africa through facilitation of trade in organic products by means of a regional standard, development of the conformity assessment system, promotion of a regional mark and raising consumer awareness. Information about the project is available here: http://www.ifoam.org/partners/projects/osea.html

East Africa, supported by IFOAM and the UNCTAD-UNEP<sup>1</sup> Capacity Building Task Force on Trade, Environment and Development (CBTF). It was adopted as the official East African Community organic standard in 2007.

### Second African Organic Conference<sup>2</sup>: Key step towards bringing organic agriculture into the mainstream in Africa

The Second African Organic Conference, entitled "Mainstreaming Organic Agriculture in the African Development Agenda", was held in Lusaka, Zambia, in May 2012. Some 300 participants from 35 countries attended the conference, including representatives from farmers' organizations, governments, the private sector, universities, research institutions, the African Union, FAO, UNCTAD, IFOAM and the EU.

The conference, organized by the IFOAM member OPPAZ, the Organic Producers and Processors Association of Zambia, in cooperation with the Ministry of Agriculture and Livestock of Zambia, UNCTAD and Grow Organic Africa, and under the auspice of the African Union and IFOAM, was an excellent platform for experience sharing and discussions on best practices, standards, research, trade, certification, policy formulation and other development initiatives.

The conference had a number of important outcomes:

- The networking within African sub-regions was strengthened, and the African Organic Network (AfroNet), the umbrella organization uniting and representing African ecological/organic stakeholders, was institutionalized.
- Plans for strengthening the Network for Organic Agriculture Research in Africa (NOARA) were further developed.
- A call for increased support for African organic agriculture from technical, financial and institutional perspectives was made.
- A conference declaration titled the Lusaka Declaration on Mainstreaming Organic Agriculture into the African Development Agenda was adopted. It will be used to continue lobbying a comprehensive range of stakeholders capable of unlocking the potential that organic/ecological agriculture offers for Africa.

Among others, the Declaration called for the implementation of the African Union (AU) Heads of State and Government Decision on Organic Farming (Doc. EX.CL/631 (XVIII). It called upon the African Union to mainstream organic agriculture into all areas of its work, including the Comprehensive African Agriculture Development Programme (CAADP) and to take the lead in implementation of the African Organic Action Plan (and its associated pillars), in close collaboration with AfroNet and other partners. The Declaration urged all African Governments to include organic agriculture in their policies and agricultural development agenda in consultation with the organic agriculture stakeholders in their countries. It furthermore requested the European Union, other global trade partners, and international organizations to take all possible steps to facilitate the participation of Africa in global organic markets: in particular by applying

-

 $<sup>^{\</sup>rm 1}$  UNCTAD is the United Nation's Conference on Trade and Development; UNEP is the United Nation's Environment Programme.

<sup>&</sup>lt;sup>2</sup> Presentations, the conference declaration, and other documents are available at: www.africanorganicconference.com. A short video from the conference is available at: http://www.youtube.com/watch?v=tnynZtPSFd4&feature=youtu.be

equivalency. This includes a request to recognize the East African Organic Products Standard (EAOPS) as equivalent and that all possible steps be taken to ensure that equivalency agreements among regulators of major organic markets directly improve the market access of organic products from Africa and other developing countries. The next African Organic Conference will be held in Nigeria in 2015.

## More support for the implementation of the Action Plan of the African Ecological Organic Agriculture (EOA) Initiative

Currently, the Action Plan of the Ecological Organic Agriculture (EOA) Initiative has been implemented on a pilot basis in six countries: Kenya, Tanzania, Uganda, and Ethiopia in East Africa; Nigeria in West Africa; and Zambia in South Africa. Provisions have been made for expanding the initiative to other countries using lessons learnt. The pilot phase is funded by the Swedish Society for Nature Conservation (SSNC) with support from Sida, the Swedish International Development Cooperation Agency.<sup>1</sup>

It is planned that the SSNC will support the implementation of the EOA Initiative beyond piloting (from 2013 to 2015) in Ethiopia, Kenya, Uganda and Tanzania with an estimated budget of 2.5 million euros.

With additional support from the Swiss Development Cooperation (SDC), the initiative will be rolled out in about eight countries in both Eastern and Western Africa. The Eastern countries will be Kenya, Tanzania, Uganda, and Ethiopia. The Western Africa countries will be Nigeria, Mali, Senegal and Benin.

#### Non-certified organic agriculture

In addition to certified organic agriculture covered in the FiBL-IFOAM survey on organic agriculture worldwide, it should be noted that much organic production also takes place in Africa without certification. There are many African organic farmers for whom formal certification does not have any advantages: this is true for farmers who practice subsistence farming and do not engage in the market at all, and for farmers for whom the organic claim has little or no marketing value. These groups engage in organic agriculture because of benefits such as increased productivity and resilience, lower production costs, a healthier working environment, and other social, environmental, and economic sustainability considerations. Non-certified organic agriculture might also be a first step on the way to certification. There are no statistics on this type of organic production.

#### Outlook

There is undoubtedly room for a substantial increase in organic production in Africa, with the potential that millions of smallholder farmers and their families can move out of poverty and hunger and enjoy a better quality of life.

Key elements to achieving this increase include, among others, more research, training and extension in affordable and resilient organic practices to ensure that all African farmers, particularly the poorest small holder farmers, can improve their yields and resilience by adopting the appropriate best practice organic systems.

-

<sup>&</sup>lt;sup>1</sup> Information about Sida is available at their website at http://www.sida.se/English

The new Technology and Innovation Platform of IFOAM (TIPI) as well as the Network for Organic Agriculture Research in Africa (NOARA) can help take the necessary actions in this area that will help underpin the organic alternative for Africa.

#### References

- Badgley, C., Moghtader, J., Quinterio, E., Zakem, E., Chappell, M.J., Avilés-Vázquez, K., Samulon, A. and Perfecto, I. (2006). Organic agriculture and the Global Food Supply. Renewable Agriculture and Food Systems, Volume 22, Issue 02, pp 86-108. Available from the website:
- http://agr.wa.gov/FoodAnimal/Organic/Certificate/2008/NewsRelease/BadgleyResearchPaper.pdf FAO (2007). Report on the International Conference on Organic Agriculture and Food Security. Available from the website: ftp://ftp.fao.org/docrep/fao/meeting/012/j9918e.pdf
- IAASTD (2008). Intergovernmental Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD). Available from the website: http://www.agassessment.org/
- Ifejika Speranza, C. (2010). Resilient Adaptation to Climate Change in African Agriculture. German Development Institute Studies. Bonn, Germany. Available online from the website: http://www.die-gdi.de/CMS-Homepage/openwebcms3\_e.nsf/%28ynDK\_contentByKey%29/ANES-84NGFJ/\$FILE/Studies%2054.pdf
- $\label{thm:condition} \begin{tabular}{ll} UNCTAD (2008). Organic Agriculture and Food Security in Africa. New York and Geneva, United Nations. Available online from the website: http://www.unctad.org/en/docs/ditcted200715_en.pdf \end{tabular}$

#### **Africa: Current Statistics**

#### HERVÉ BOUAGNIMBECK<sup>1</sup>, JULIA LERNOUD<sup>2</sup> AND HELGA WILLER<sup>3</sup>

Organic agricultural land in Africa has remained steady compared with 2010. There were 1.07 million hectares of agricultural land in 2011, constituting 0.1 percent of the continent's total agricultural area, and 2.8 percent of the global organic agricultural area. In 2011, 37 countries reported data on organic farming. Compared with 2000 (52'000 hectares), the organic agricultural land has increased by more than 1 million hectares. Uganda is the country with the largest organic area (with more than 220'000 hectares) and with the largest number of organic producers. The country with the highest proportion of organic agricultural land is the island state Sao Tome and Principe with 8 percent of its agricultural area being organic, followed by Egypt with 2.2 percent and Tunisia with 1.8 percent.

#### Land use

Land use details were available for only about two thirds of the organic agricultural land. In 2011, 38 percent of all organic farmland was used for permanent crops (400'000 hectares), 14 percent was used for arable crops (150'000 hectares), and six percent (62'000 hectares) were grassland/grazing area. Ethiopia (122'000 hectares), Tunisia (117'000 hectares) and the United Republic of Tanzania (35'000 hectares) have the largest permanent crop areas. The key permanent crop is coffee: Fourteen percent of the organic area is for coffee production, amounting to 150'000 hectares in total. As no crop details were available for some of the biggest African coffee producers, it can be assumed that the total figure for organic coffee is higher. The largest coffee areas are in Ethiopia and Tanzania. Fourteen percent of the organic farmland was used for arable crops; most of this land is oilseeds, olives (113'000 hectares), and nuts (27'000 hectares). Organic oilseeds (mainly sesame) were grown on 62'000 hectares in 2011; the key producing countries were Ethiopia (17'000 hectares), Mali (14'000 hectares) and Former Sudan (12'000 hectares).

#### **Producers**

There are more than 540'000 organic producers in Africa. The countries with the most organic producers are Uganda (188'000), United Republic of Tanzania (145'000), and Ethiopia (122'000). It can be assumed that the number of growers is higher because some countries only report the number of farm enterprises/companies.

#### Wild collection

Wild collection has an important role in Africa, with more than 11 million hectares certified as organic. Zambia is the country with the largest beekeeping area with 5.9 million hectares (data from 2009), followed by Namibia (2.4 million hectares), and Cameroon (1.4 million hectares). Medicinal plants such as devil's claw (*Harpagophytum procumbens*) play the most important role in wild collection.

 $<sup>^1</sup>$  Hervé Bouagnimbeck, Organic for Africa!, International Federation of Organic Agriculture Movements (IFOAM), Charles-de-Gaulle-Str. 5, 53113 Bonn, Germany, www.ifoam.org

 $<sup>^2</sup>$  Julia Lernoud, Communication, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org

<sup>&</sup>lt;sup>3</sup> Dr. Helga Willer, Communication, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org

### Organic Agriculture in Africa: Graphs

#### Africa: The ten countries with the largest organic area 2011

Source: FiBL-IFOAM survey 2013 228'419 (2010) Uganda Tunisia 178'521 140'475 Ethiopia 115'022 Tanzania 82'167 (2010) Egypt 53'017 Sudan South Africa 41'947 Democratic Republic of the Congo 41'032 30'243 Madagascar Côte d'Ivoire 20'658 100'000 Hectares 200'000 300'000

#### Figure 53: Africa: The ten countries with the largest organic agricultural area 2011

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

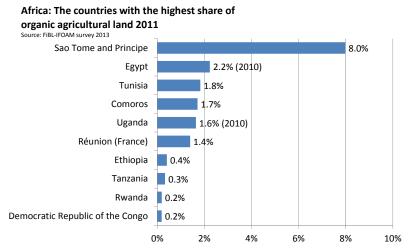


Figure 54: Africa: The countries with the highest share of organic agricultural land 2011

#### Africa: Development of organic agricultural land 2000 to 2011

Source: FiBL-IFOAM-SOEL 2001-2013

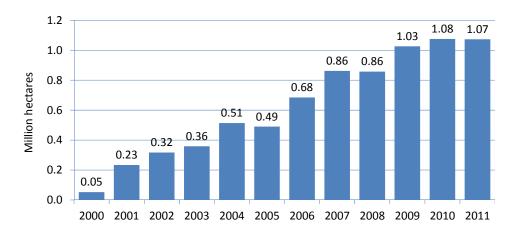


Figure 55: Africa: Development of organic agricultural land 2000 to 2011

Source: FiBL-IFOAM-SOEL-Surveys 2001-2013

#### Africa: Use of agricultural organic land 2011

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments.

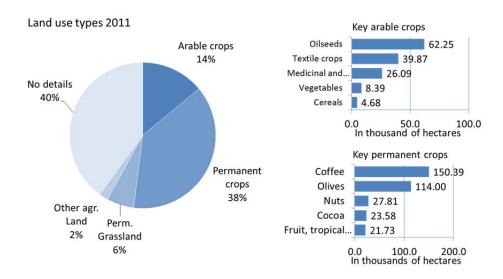


Figure 56: Africa: Use of agricultural land 2011

## Africa: The ten countries with the largest number of organic producers 2011

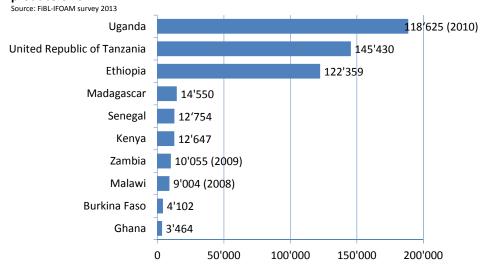


Figure 57: Africa: The ten countries with the largest number of organic producers 2011 Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

## Organic Agriculture in Africa: Tables

Table 42: Africa: Organic agricultural land, share of total agricultural land and number of organic producers 2011

Country	Area [ha]	Share of total agr. land	Producers
Algeria	692	0.00%	No data
Benin	1'696	0.05%	2'424
Burkina Faso	19'684	0.16%	4'102
Burundi	550	0.03%	36
Cameroon	849	0.01%	34
Chad	Wild co	llection only	No data
Comoros	2'642	1.70%	1'416
Côte d'Ivoire	20'658	0.10%	597
Democratic Republic of the Congo	41'032	0.18%	1'122
Egypt (2010)	82'167	2.23%	790
Ethiopia	140'475	0.40%	122'359
Ghana	19'893	0.13%	3'464
Guinea-Bissau	Productio	on volume only	No data
Kenya	4'969	0.02%	12'647
Lesotho	183	0.01%	1
Madagascar	30'243	0.07%	14'550
Malawi	166	0.00%	9'004
Mali	14'790	0.04%	2'951
Mauritius	30	0.03%	4
Morocco (2010)	17'030	0.06%	120
Mozambique	4'468	0.01%	6
Namibia	14'112	0.04%	6
Niger	76	0.00%	1
Nigeria	9'473	0.01%	597
Réunion (France)	556	1.39%	115
Rwanda	3'705	0.19%	876
Sao Tome and Principe	4'467	7.98%	2'056
Senegal	13'000	0.14%	12'754
South Africa	41'947	0.04%	167
Sudan	53'017	0.04%	221
Swaziland	14	0.00%	2
Togo	1'336	0.04%	2'057
Tunisia	178'521	1.82%	2'396
Uganda (2010)	228'419	1.64%	188'625
United Republic of Tanzania	115'022	0.32%	145'430

#### Africa: Tables

Country	Area [ha]	Share of total agr. land	Producers
Zambia (2009)	7'310	0.03%	10'055
Zimbabwe	466	0.00%	3
Total	1'073'657	0.10%	540'988

Table 43: Africa: All organic areas 2011

Country	Agriculture [ha]	Wild collection [ha]	Total [ha]
Algeria	692	477	1'169
Benin	1'696		1'696
Burkina Faso	19'684	54'966	74'650
Burundi	550		550
Cameroon	849	1'412'000	1'412'849
Chad	0	110'000	110'000
Comoros	2'642	70	2'712
Côte d'Ivoire	20'658		20'658
Democratic Republic of the Congo	41'032		41'032
Egypt (2010)	82'167		82'167
Ethiopia	140'475	458	140'933
Ghana	19'893	40'000	59'893
Kenya	4'969	99'905	104'874
Lesotho	183		183
Madagascar	30'243	23'711	53'953
Malawi	166	5'346	5'512
Mali	14'790	7'515	22'304
Mauritius	30		30
Morocco (2010)	17'030	618'200	635'230
Mozambique	4'468		4'468
Namibia	14'112	2'453'200	2'467'312
Niger	76		76
Nigeria	9'473		9'473
Réunion (France)	556		556
Rwanda	3'705	80	3'784
Sao Tome and Principe	4'467		4'467
Senegal	13'000	200	13'200
South Africa	41'947	127'106	169'052
Sudan	53'017		53'017
Swaziland	14		14
Togo	1'336	249	1'585
Tunisia	178'521	66'885	245'406
Uganda (2010)	228'419	158'328	386'747
United Republic of Tanzania	115'022		115'022

Country	Agriculture [ha]	Wild collection [ha]	Total [ha]
Zambia (2009)	7'310	5'910'000	5'917'310
Zimbabwe	466		466
Total	1'073'657	11'088'694	12'162'350

Table 44: Africa: Land use in organic agriculture 2011

Main use	Crop category	Area [ha]
Agricultural land and crops, no details	Agricultural land and crops, no details	415'509
Arable crops	Arable crops, no details	8'017
	Cereals	4'676
	Flowers and ornamental plants	48
	Industrial crops	146
	Medicinal and aromatic plants	26'113
	Protein crops	1'578
	Oilseeds	62'248
	Plants harvested green	1'150
	Root crops	846
	Seeds and seedlings	7
	Sugarcane	21
	Textile crops	39'872
	Vegetables	8'388
Arable crops total		153'108
Cropland, no details	Cropland, no details	17'680
Other agricultural land	Fallow land, crop rotation	5'860
	Other agricultural land, no details	10'694
Other agricultural land total		16'554
Permanent crops	Berries	44
	Citrus fruit	7'325
	Cocoa	23'581
	Coconut	2'129
	Coffee	150'394
	Flowers and ornamental plants, permanent	1
	Fruit	4'980
	Fruit, temperate	747
	Fruit, tropical and subtropical	21'731
	Grapes	499
	Medicinal and aromatic plants, permanent	22'635
	Nuts	27'805
	Olives	114'068
	Other permanent crops	22'820
	Tea/mate, etc.	9'664

#### Africa: Tables

Main use	Crop category	Area [ha]
Permanent crops total		408'424
Permanent grassland	Pastures and meadows	61'846
	Permanent grassland, no details	131
	Rough Grazing	405
Permanent grassland total		62'381
Total		1'073'657

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

Table 45: Africa: Use of wild collection areas 2011

Category of crops harvested	Area [ha]
Beekeeping	5'910'458
Forest honey	1'458'617
Fruit, wild	17'618
Medicinal and aromatic plants, wild	2'742'253
Nuts, wild	103'491
Oil plants, wild	400'000
Wild collection, no details	294'760
Wild collection, other	161'497
Total	11'088'694

# Asia



Map 4: Organic agricultural land in the countries of Asia 2011

Source: FiBL-IFOAM 2013; based on information from the private sector, certifiers, governments and the Mediterranean Organic Agriculture Network. For detailed data sources see annex, page 322.

### Developments in Asia 20121

#### ONG KUNG WAI<sup>2</sup>

At the international level, the Chinese revised organic rules, implemented in March, was the big topic in the region in 2012. Operators who are keen to participate in the biggest emerging market of the region are sorely challenged. The already strict Chinese rules are now even stricter. Dark clouds of national organic regulations and import requirements add to technical barriers to intra-regional trade and continue to cast shadows over the development of the sector. Progress of the Global Organic Market Access (GOMA) project<sup>3</sup> in Asia is less known at the regional level but may result in a first regional mutual recognition arrangement in the near future - much like the awaited for monsoon, that seasonally washes over the region providing fresh growth. The ground scenario stands ready for such rains. Country contacts who have responded to an ad-hoc annual survey reported a wide range of in-country development activities, and noted that 2012 has been a fair to good year for sector development. Domestic markets based on participatory guarantee systems are growing. Three new national associations were formed: in Nepal, Lao People's Democratic Republic and Vietnam. The Malaysian and Thai national associations, namely the Organic Alliance Malaysia (OAM) and Thai Organic Trade Association (TOTA) concluded negotiations to be the first national agents for the IFOAM Global Organic Mark in their respective markets. A resurgence in regional collaboration, which was boosted by the IFOAM Organic World Congress held in November 2011 in Korea, precipitated the reconstitution of Organic Asia as an Internal Body of IFOAM.

Of particular note is the announcement of the Bhutanese Prime Minister at the Rio + 20 summit, that Bhutan aims to become a 100 percent organic nation. Although small and without market influence, Bhutan, nested on the rugged global rooftop of the Himalayas, may yet be a leading light in its full-hearted adoption of organic agriculture as integral to its national gross happiness agenda: implemented simply because that is the most sensible thing to do.

#### China's new rules

Regional fora, such as the NutraCon Organic seminar held annually in Hong Kong and where China's new rules were presented, had larger participation than previous years. However, audiences keen to learn about the new rules were left somewhat despondent. Operators in and out of China now face more requirements, including inspection for each growing season and sampling of all crops. The grey area, where importers do not make an organic claim in the Chinese translated label, and thus avoid the need for

\_

<sup>&</sup>lt;sup>1</sup> This article incorporates presentation material from the NutraCon 2012 Organic seminar, Hong Kong; GOMA meeting, September 2012, Bangkok; and additional input from Kesang Tshomo (Bhutan); Thatsaka Saphangthong & Thavisith Bounyasouk (Lao PDR); Basanta Ranabhat (Nepal), Pablito Villegas (Philippines); Vitoon Panyakul (Thailand); Keerthi Mohotti (Sri Lanka); Nhung Tu Tuyet & Koen den Braber (Vietnam)

<sup>&</sup>lt;sup>2</sup> Ong Kung Wai, Humus Consultancy, Penang, Malaysia

<sup>&</sup>lt;sup>3</sup> The Global Organic Market Access (GOMA) project is a three party collaboration between the United Nations Conference on Trade and Development (UNCTAD), the Food and Agriculture Organisation (FAO) and the International Federation of Organic Agriculture Movements (IFOAM). Information on the project is available at http://www.goma-organic.org/.

certification under the Chinese rules, while maintaining foreign language organic claims<sup>1</sup> on the original packaging, has been abolished. Exporters to, or importers in, China must gain certification under the Chinese organic regulations. They must either add the Chinese national organic logo or cover up any organic claims on the original packing of the imported product.

Some refer to the new rules as the Organic Great Wall. When asked why the Chinese Government is setting up more technical barriers to trade, the representative of the Certification and Accreditation Administration of China (CNCA) at the NutraCon 2012 Organic seminar, responded that China is only doing what the European Union (EU), the USA and others have implemented earlier, namely conformity to national requirements. The ensuing discussion revealed that the rules are applied equally inside and outside China, which is more than can be said of the manner in which the EU and USA treat operators certified under EU and USA rules outside of the EU and USA. Although it was a major event for the sector globally, the mutual recognition arrangement between the EU and the USA, which was implemented in June 2012, is not celebrated in the region because it does not apply to duly certified operators outside the EU and USA. The same applies to mutual recognition arrangement between the EU and Canada. For operators in the region, who are long used to multiple certifications, the Chinese position is par for the course. EU and US operators, who are looking for export opportunities in the face of projected sluggish home markets, are surprised that they need certification by a developing country to trade.

Despite claims of equal treatment, the CNCA has yet to follow the lead of the EU and USA and register foreign certification bodies. Furthermore, registration requirements for inspectors under the Chinese rules make it almost impossible for Chinese certification bodies to contract external inspectors to do inspection work rather than fly inspectors from China all over the world. The situation is similar to that of the initial introduction of the EU and US National Organic Program (NOP) rules, except that the new Chinese rules include use of a unique labeling code, certificate and product webbased database, which are primarily intended to clean up fraud and maintain credibility of government enforcement rather than facilitate enlargement of the domestic market. That said, equivalence discussions between China and the EU are reported to be progressing and there is hope that their agreement will be an inclusive one.

While some smaller operators have reportedly left the organic system due to the difficulty and cost of compliance with the new rules, most established operators are continuing. Interest in China's domestic market remains strong and the sector continues to grow despite the constraints.

A critical concern is that detection of any trace level of prohibited substances is prohibited under the new rules, which reflects what Chinese consumers reportedly expect of organic products in light of food safety mishaps in recent times. The no tolerance policy changes China's organic paradigm from non-use of prohibited materials to one of non-contamination and residue-free production and assurance. This departs from the principles of organic agriculture, which the rest of the world currently applies. The EU and US rules influenced the development of organic rules elsewhere due to the

\_

 $<sup>^1</sup>$ Examples of such claims are the inclusion of foreign organic certification marks, or terms such as "organic" or "bio".

size of their respective markets. Will China's rules change the rules of the game? Can equivalence between different tolerances in organic regimes be established?

#### GOMA's initiative in Asia and ASEAN Economic Community (AEC)1

Whilst the new Chinese rules raised additional challenges, the Global Organic Market Access (GOMA) project initiative in Asia has offered some solutions. Following GOMA's publication of the Common Objectives and Requirements for Organic Standards (COROS) in 2011 to facilitate equivalence assessment, the GOMA initiative in Asia created the Asia Regional Organic Standard (AROS) in February 2012. This standard serves as a regional benchmark for equivalence, as well as adoption, by countries that have not yet set their own national organic standards. It then assisted self-assessments of participating countries' production and certification norms against the GOMA tools, such as COROS, AROS and the International Requirements for Organic Certification Bodies (IROCB). It also established a task force to explore multi-party mutual recognition models in line with the ASEAN Framework Agreement for Mutual Recognition Arrangements.

A single market and production base is one of the four pillars of the ASEAN Economic Community (AEC) Blueprint, to be implemented by the end of 2015.<sup>2</sup> A top priority for cooperation in agriculture has been the harmonization of Good Agricultural Practices (GAPs). An ASEAN GAP was adopted in 2006. Several ASEAN member states implement voluntary national GAP programs. However, market demand for GAP-labeled products is weaker than for organic products in the region. Development of public and private sector technical infrastructure for organic certification has since overtaken the development for GAP. Fifty percent of the member states have established national organic standards and conformity assessment systems, while two have established labeling and import regulations and more are expected to follow. Implementation of country specific organic import regulations within the region will contradict the AEC Blueprint. The establishment of an ASEAN Sectoral Mutual Recognition Arrangement (MRA) for Organic Products will remove technical barriers to trade between countries that have established, or intend to establish, national labeling and import regulations as well as provide guidance for others in developing their technical infrastructure.

A proposal to the ASEAN Agriculture Task Force for Harmonization to adopt the Asia Regional Organic Standard (AROS) in April 2012 was postponed for further consultation to be conducted by a special working group. The next ASEAN Task Force meeting is scheduled for April 2013 in Brunei and will review results of the Special Working Group for decision. Parallel to the ASEAN process, the Greater Mekong Sub-region, which is supported by the Asian Development Bank, took a position to support adoption of AROS

1

<sup>&</sup>lt;sup>1</sup> ASEAN is the Association of Southeast Asian Nations a geo-political and economic organization of ten countries in Southeast Asia. The ASEAN Economic Community (AEC) shall be the goal of regional economic integration by 2015. AEC envisages the following key characteristics: (a) a single market and production base, (b) a highly competitive economic region, (c) a region of equitable economic development, and (d) a region fully integrated into the global economy. For further information see http://www.asean.org/communities/asean-economic-community

<sup>&</sup>lt;sup>2</sup> The ASEAN Leaders adopted the ASEAN Economic Blueprint at the 13th ASEAN Summit on 20 November 2007 in Singapore to serve as a coherent master plan guiding the establishment of the ASEAN Economic Community 2015. The Blueprint is available here: http://www.asean.org/archive/5187-18.pdf

in ASEAN at its July 2012 meeting. The Greater Mekong Sub-region (GMS) includes Yunnan, China as well as five ASEAN member states.

At the concluding meeting of the Global Organic Market Access (GOMA) project in September 2012 in Bangkok, which was held in collaboration with the ASEAN Secretariat, ASEAN member country delegates, including India, were invited to discuss the way forward. Delegates from Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand and Vietnam acknowledged that the Asia Regional Organic Standard (AROS) and the proposed GOMA Asia mutual recognition model can facilitate ASEAN to establish an Organic Sector Mutual Recognition Arrangement (MRA) in a relatively short time. It could also provide a blueprint for the completion of other ASEAN harmonization programs such as ASEAN GAP. The ASEAN Secretariat has expressed support for two follow up recommendations from that meeting.

- 1. To establish an electronic discussion forum on the ASEAN Regional Organic Standard for the Special Working Group on Organic, to enable them to begin discussion prior to the physical meeting of the group in April 2013.
- 2. To identify plans/initiatives to support the promotion and implementation of the ASEAN Regional Organic Standard, if adopted, including:
  - (a) The possibility of establishing a framework for conformity assessment and recognition of organic systems among governments in the region.
  - (b) The support of capacity building and dissemination of the standard.
  - (c) The development of interpretative guidelines.

The GOMA Asia mutual recognition model takes an inclusive approach and recommends system recognition in case of countries with supervision of certification and recognition of certification in countries where supervision is not set up. It proposes the use of the GOMA tools, such as the Common Objectives and Requirements for Organic Standards (COROS), the Asia Regional Organic Standard (AROS), and the International Requirements for Organic Certification Bodies (IROCB) for determining the equivalence of standards and certification norms. Furthermore, it proposes a tiered peer review to assess operation functionality, such as:

- Countries with supervision systems that are already peer reviewed and broadly recognized will be subject to only a peer review of the organic sector-specific requirements of IROCB.
- Government certification programs (not accredited) will be subject to regular peer review.
- There will be a regular peer review of certification bodies that operate in countries which do not have a supervision system in place.

# **Country updates**

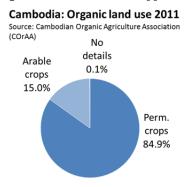
# > Bhutan

2012 was a year of accelerated growth. Farmers, extension and research staff received training and were given support for seeds, seedlings and soil fertility improvement to prepare them for the market under the Bhutan National Organic Program (NOP). In June 2012, the Prime Minister declared at the Rio Summit that Bhutan will strive to become 100 percent organic. This has resulted in the NOP receiving special attention in

preparation of the 11th National Five-Year-Plan that brings more focus to organic development and promotion. The outlook for organic production is very positive, and there is a high level of support from the government. Human resources and technical capacity are, however, limiting factors.

## > Cambodia

The Cambodian Organic Agriculture Association (COrAA) was formed by NGOs engaged in organic agriculture and has established private standards and voluntary certification for the domestic market. There is no government standard or regulatory supervision. The government has been approached to develop a harmonized national standard.



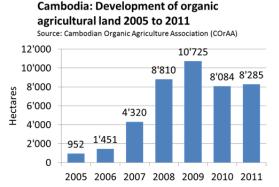
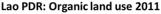


Figure 58: Cambodia: Organic land use 2011
Figure 59: Cambodia: Development of organic agricultural land 2005-2011
Source: Cambodian Organic Agriculture Association (COrAA)

#### > Lao PDR

The respondent from the Department of Agriculture reported that 2012 was a good year for organic agriculture in Laos. More farmers were interested, and the department had a busy year. The Department focused on improving its certification program, which included self-assessments against the International Requirements for Organic Certification Bodies (IROCB), the Common Objectives and Requirements for Organic Standards (COROS), and the Asia Regional Organic Standard (AROS). The Department aims to operate its certification program in line with IROCB in 2013. It is considering adoption of the AROS as the national organic standard in support of harmonization, which is in line with the ASEAN Economic Community Blueprint agenda.

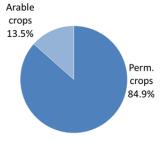
A series of Lao Organic Agriculture Forum meetings was initiated under the UN Inter Agency Cluster on Trade and Productive Capacity project, which aims to enhance sustainable tourism, clean production, and export capacity. An initiative to establish the Lao Organic Movement Association (LOMA) was announced at the second meeting at the end of 2012.



Source: Helvetas Laos and private control body

# Lao PDR: Development of organic agricultural land 2008 to 2011

Source: Helvetas Laos and private control body



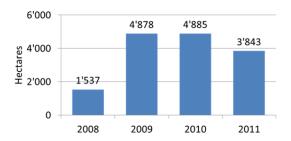


Figure 60: Lao PDR: Organic land use2011

Figure 61: Lao PDR: Development of organic agricultural land 2008-2011

Source: Helvetas Laos and private control body

## > India

The National Program for Organic Production (NPOP) of organic products for export, which has been in effect since 2001, has been revised. The new production standard is expected to be released soon and is reported to be largely in line with the Common Objectives and Requirements for Organic Standards (COROS).

# India: Development of organic agricultural land 2004 to 2011

Source: Agricultural and Processed Food Products Export Development Authority

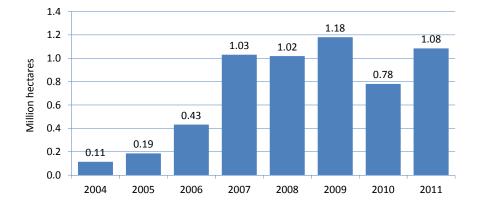


Figure 62: India: Development of organic agricultural land 2004-2011

Source: Agricultural and Processed Food Products Export Development Authority

Certification requirements, which had been oriented mainly to ISO 65, will include other requirements of the IROCB. "TraceNet" is a web-based certification tracking system in which each operator is the assigned a bar code linked to a GPS indicator number, which enables products to be traced back to the farm plot including certificates, operator

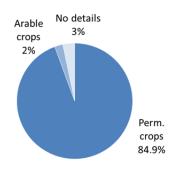
sanctions and appeals. Implementation of TraceNet is reportedly doing well and the system will be expanded to track and regulate imports. The domestic market is growing and now has over 2'000 organic shops and markets. There is a movement to establish mandatory certification under the Food Safety Authority for the domestic market.

## > Indonesia

The Ministry of Agriculture undertook revision of the organic regulation, based on a selfassessment of norms against the Common Objectives and Requirements for Organic Standards (COROS), the Asia Regional Organic Standard (AROS), and IROCB. After sector consultation and finalization of technical regulations, a Ministry of Agriculture Decree expected in 2013 will implement the revised requirements. There is intent to introduce organic labeling and related import regulations in the near future.

As part of the FAO Merapi volcano rehabilitation programmer, the first ever regional buyers' tour was organized in collaboration with the Indonesian, Malaysian and Thai national organic associations. Domestic and regional buyers from Malaysia and Thailand made a two-day visit in December 2012 to organic producers and ready exporters of Salak fruit, vegetables and rice who were affected by the Merapi volcano eruption in 2010.

Indonesia: Organic land use 2011 Source: Indonesia Organic Alliance OAI



# Indonesia: Development of organic agricultural land 2003 to 2011

Source: Indonesia Organic Alliance OAI

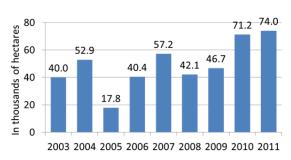


Figure 63: Indonesia: Organic land use2011 Figure 64: Indonesia: Development of organic agricultural land 2003-2011 Source: Indonesia Organic Alliance (OAI)

# > Malaysia

Malaysia implemented organic labeling regulations at the beginning of 2012. The Malaysian Standard (MS1529) is based on Codex Organic Guidelines, IFOAM Basic Standards, and the Indian NPOP. Operators must be certified by either the government organic certification program, called Skim Organic Malaysia (SOM), which was initiated by the Department of Agriculture (DoA) in 2003 or an equivalent certification that is recognized by the DoA. As SOM's scope is limited to organic crop production, the DoA is in discussion with Organic Alliance Malaysia (OAM) regarding collaboration between the public and private sectors in developing a system of certification of processing and verification of imported products. The SOM organic mark is being revised. The domestic market continues to grow albeit slower than in the past OAM reportedly finalized preparations to launch a private sector organic mark scheme in 2013 to complement the DoA program and also completed negotiations to be the national agent for the IFOAM Global Organic Mark.

## Malaysia: Development of organic agricultural land 2003 to 2008

Source: Department of Agriculture (DoA). The latest information was provided in 2008

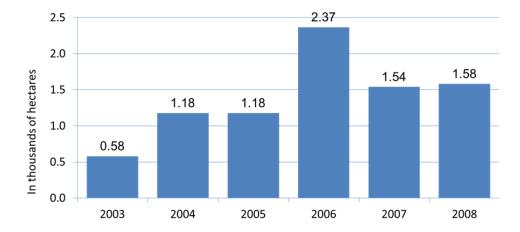


Figure 65: Malaysia: Development of organic agricultural land 2003-2011 Source: Department of Agriculture (DoA). The latest information was provided in 2008.

# > Nepal

In Nepal, 2012 was a good year for organic agriculture. The Government allocated a budget to provide a 50 percent subsidy for capital investment in compost production facilities and a 25 percent subsidy on the price of organic manure for farmers. Exporters of organic products received Government support for certification costs. The Government also collaborated with the private sector to develop working guidelines for an Internal Control System (ICS), a Participatory Guarantee System (PGS) and a National Accreditation System. The Ministry of Agricultural Development (MOAD) organized a 3-day national organic fair in Pokhara, in western Nepal. The fair is expected to be held annually in collaboration with the private sector. Active stakeholders met to establish the Organic Association Nepal (ORGAN). District chapters of ORGAN are being formed in several of the 75 districts in Nepal. Up to seventeen Government officers were trained for organic farming extension and three were trained in organic inspection and certification.

Nepal: Development of organic agricultural land 2005 to 2011

Source: FiBL-IFOAM surveys 2007-2013

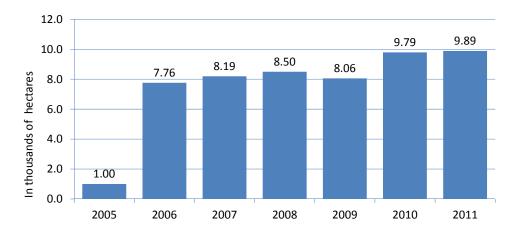


Figure 66: Nepal: Development of organic agricultural land 2005-2011 Source: FiBL-IFOAM surveys 2007-2013

# > Philippines

The national organic standard established in 2003 is undergoing revision with reference to the IFOAM Standard and self-assessment against the Common Objectives and Requirements for Organic Standards (COROS). The scope is expected to be expanded to include beekeeping. A supervision system, based on international norms such as ISO Guide 17011 and the IROCB, is under development.

In the Philippines, 2012 has reportedly been a good year. Since passage of the Organic Agriculture Act in 2010, the National Organic Agriculture Program (NOAP) has been formulated and a budget of 900 million pesos was allocated to it in 2012. A similar amount of funding is projected for 2013. Funds filter down to the regional units of the Department of Agriculture (DA) and to local governments and NGOs at the grassroots level. Development activities include organic technology demonstrations, research, extension, establishment of organic trading posts, and support for information dissemination, development of participatory guarantee systems and third party certification.

A group of NGOs (One Organic Movement) initiated the establishment of a Farmers All Natural and Organic Marketers Association (FANOMART Inc.) and operated a market in collaboration with the Quezon City local government. The concept of 'cluster farms' is supported by the DA, which is establishing a network of farmer-managed trading posts to enable farmers to market their products collectively. Climate Change funds raised from the 17th IFOAM Organic World Congress held in Korea were channeled towards development of an organic eco-village and further assistance from KOICA: the Korean development aid agency, was committed.

The DA has institutionalized the annual national organic conference and the 9th conference was held in November 2012 in Cebu. The DA also supported an organic

marketing conference held in October in collaboration with OPTA (the Organic Producers and Trade Association).

# Philippines: Development of organic agricultural land 2005 to 2011 Source: FIBL-IFOAM survey 2013

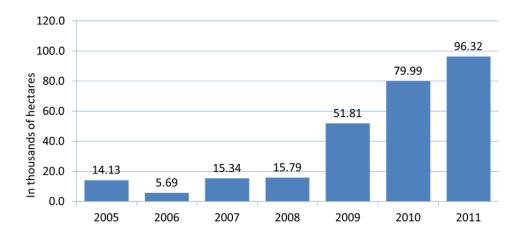


Figure 67: Philippines: Development of organic agricultural land 2003-2011 Source: FiBL-IFOAM surveys 2007-2013. For detailed data sources see annex, page 322.

# > Sri Lanka

According to a sector insider, 2012 was a fair year for the organic sector in Sri Lanka. Many pseudo organic claims have surfaced in attempts to ride on the organic bandwagon. The major commodity segments, such as tea, coffee, spices, and fruits are doing well, while others remain weak. National Government promotion of organic manures has encouraged farmers to adopt organic methods although an enhancement of a fertilizer subsidy for all crops has demotivated farmers to change to organic production. Rainforest Alliance and UTZ certifications have made good progress and offer alternatives to organic certification for export. New local markets and fairs that feature organic products have emerged in light of reported food contaminations, which have also provoked calls for stronger enforcement through the pesticide registrar. Unfortunately, awareness of organic as a solution is yet to happen!

# Sri Lanka: Development of organic agricultural land 2005 to 2011

Source: FiBL-IFOAM survey 2013

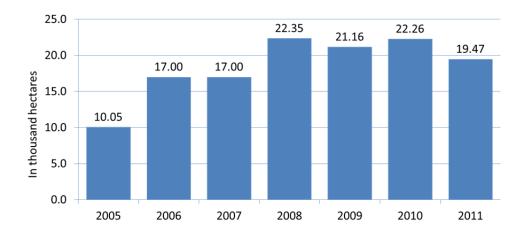
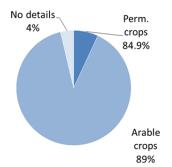


Figure 68: Sri Lanka: Development of organic agricultural land 2003-2011 Source: FiBL-IFOAM survey 2013. For detailed data sources see annex, page 322.

## > Thailand

An organic pioneer in Thailand lamented that 2012 was just another average year for the country. A few more PGS groups established themselves: the most notable of which are those producing silk and coffee. The extent of organic imports into the country was surprising. A market study, released in 2012 by Green Net, found that 58 percent of the organic products sold in Thailand are imported. The profusion of organic certification marks in the market has prompted TOTA, the national trade association, to negotiate, along with its Malaysian counterpart, with the aim of becoming the national agent for the IFOAM Global Organic Mark and thereby to adopt the role of a national organic mark for market promotion in Thailand. Further good news includes the approval of the Bangkok-based organic certification body ACT by the Swiss government for export to Switzerland. This comes on top of the IFOAM Accreditation, Canada accreditation and EU approval that ACT has collected earlier. Thailand is also listed as an applicant country for EU equivalence. The Ministry of Commerce sponsored an organic symposium and exhibition in conjunction with ThaiFex, a regional food Expo, and announced the Ministry's intent to make ThaiFex a platform for ASEAN organic trade. Her Royal Highness Princess Soamsawali opened the organic exhibit. All in all, that is quite a bit going on for an 'average year'.

Thailand: Organic land use 2011 Source: Green Net, Organic Farming in Thailand



Thailand: Development of organic agricultural land 2003 to 2011

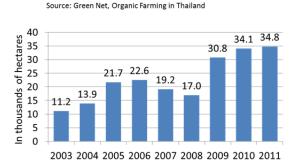


Figure 69: Thailand: Organic land use 2011
Figure 70: Thailand: Development of organic agricultural land 2003-2011
Source: Green Net, Organic Farming in Thailand

# > Vietnam

According to the Ministry of Agriculture and Rural Development (MARD) and the Vietnam National Farmers' Union (VNFU), the area under organic production reached 23'400 hectares (0.2 percent of agriculture land) in 2011. The sector is driven by NGOs and private enterprises. The Vietnam Organic Association (VOA) is a national body and was formed in 2012. Certified exports in 2012 include 38 tons of organic tea and 1'000 tons of rice.

# Vietnam: Development of organic agricultural land 2005 to 2011 Source: ADDA Vietnam

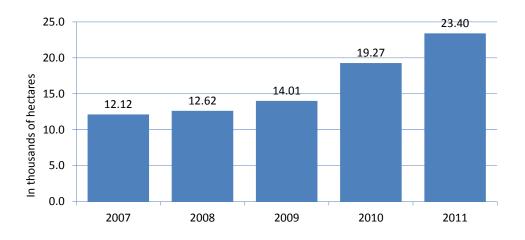


Figure 71: Vietnam: Development of organic agricultural land 2005-2011 Source: ADDA Vietnam. For detailed data sources see annex, page 322.

## Asia: Overview

In January 2012, the Prime Minister issued a policy decision (01/2012/QĐ-TTg) to support good agricultural practices for agriculture, forestry and fisheries: a decision that includes organic production practices. Over the year, organic agriculture has often featured in newspapers, and on radio and other mass media, which indicates growing public interest. This is complemented by market growth in the major cities, such as Hanoi and Ho Chi Minh City. Organic projects report a growing number of enquiries from traders and retailers looking for fresh organic products for the domestic market. Demand outstrips supply so prices are from 50 to 200 percent higher than the prices for similar non-organic products. However, despite the attractions of a seller's market, a constraining factor to conversion is the absence of local private or state quality assurance schemes to underpin trust in organic claims. Furthermore, new government land re-location policies, which are related to a New Rural Program, delay up scaling and expansion as farmers wait for implementation.

In May 2012, MARD began the revision of the national organic standards with the aim of harmonizing it with the Asia Regional Organic Standard (AROS). The revision process is expected to be completed in 2013.

# Organic Agriculture in Saudi Arabia: Country Report 2012

# Marco Hartmann<sup>1</sup>, Saad Khalil<sup>2</sup>, Thomas Bernet<sup>3</sup>, Felix Ruhland<sup>4</sup>, Ayman Al Ghamdi<sup>5</sup>

# **Recent developments**

Over the past years, food safety has gained increased attention within the Kingdom of Saudi Arabia, and Saudi Arabia recognizes the potential of organic agriculture. The Saudi government started taking steps to support more environmentally friendly farming systems and, in 2005, the Ministry of Agriculture commissioned GIZ International Services (GIZ IS) to help develop an organic sector within Saudi Arabia. In close cooperation with various stakeholders, a functional institutional and legal framework was put in place. Saudi Arabia's overall goal today is to further strengthen the sector's development by boosting the organic market. Saudi Arabia has shown its commitment to developing a strong organic sector by introducing the first National Regulation & Standards for Organic Agriculture in 2011. At present, organic farming is among the priorities of the Ministry of Agriculture, which aims to promote the organic sector in all regions for the benefit of producers and consumers alike. Organic farming is seen as a viable development strategy for the agricultural sector to cope with the growing demand for healthy food products that also help safeguard the scarce water and soil resources. In recent years, the Kingdom has committed significant financial resources to develop and strengthen this sector, and has drawn upon valuable international expertise.

# History

The agricultural sector in Saudi Arabia has undergone a drastic change over the last decades. While extensive governmental support programs have favoured intensive conventional farming practices since the 1970s, the recognition of sustainable agriculture systems first started in the early 2000s when it had become apparent that intensive and high input agriculture could only be maintained by utilizing scarce and non-renewable fossil water resources. Furthermore, the widespread use of chemical fertilizers to boost yields had led to serious food safety concerns. In the course of negotiations regarding the country's accession to the World Trade Organization (WTO) in 2005, the Kingdom agreed to downsize its agricultural support and liberalize its trade regime as necessary steps to accelerate its integration into the world economy. However, the Kingdom's scarce water resources remained of paramount concern, and in 2008, the

\_

<sup>&</sup>lt;sup>1</sup> Dr. Marco Hartmann, Team Leader - Project Director, Organic Farming Project, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, GIZ International Services, P.O. Box 2730, 11461 Riyadh, www.giz.de, www.saudi-organic.org.sa

<sup>&</sup>lt;sup>2</sup> Dr. Saad Khalil, Organic Farming Supervisor, Ministry of Agriculture & Saudi Organic Farming Association (SOFA), Secretary General, P.O.Box 204, 11321 Riyadh, http://www.sofa.org.sa/

<sup>&</sup>lt;sup>3</sup> Dr. Thomas Bernet, Research Institute of Organic Agriculture (FiBL), 5070 Frick, Switzerland, www.fibl.org
<sup>4</sup> Felix Ruhland, Organic Farming Project, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
GmbH, GIZ International Services, c/o Ministry of Agriculture of the Kingdom of Saudi Arabia, P.O. Box 2730, 11461 Riyadh, www.giz.de, www.saudi-organic.org.sa

<sup>&</sup>lt;sup>5</sup> Ayman Al Ghamdi, Department of Organic Agriculture (DOA), General Manager, Ministry of Agriculture of the Kingdom of Saudi Arabia, P.O.Box 204, 11195 Riyadh, www.moa.gov.sa

government decided to continue down this path and phase out wheat production by 2016.

This policy has also reduced the country's food self-sufficiency and, in 2009, Saudi Arabia started to compensate for the annual reduction of wheat production (12.5 percent annually) with imports. A further consequence is that Saudi Arabia's attention is now increasingly directed towards production structures that support sustainable development of the domestic market. In this backdrop, Saudi Arabia has made an important strategy shift in recent years by aiming to favour sustainable production while abandoning conventional production structures. An important component of this strategy is the promotion of modern water-saving technologies, especially drip irrigation. In addition, farmers are encouraged to grow crops with higher economic value, such as fruits and vegetables, to take better advantage of the limited water resources. In this context, organic agriculture has become a vital part of the country's new "sustainability pathway", as its positive effects on food quality and water conservation are well recognized.

# **Production data and operators**

Currently almost 20'000 hectares are under organic agricultural management. Organic production can be found throughout the country in various agricultural areas (see Figure 72: Saudi Arabia: Organic production by region). The most important are Qassim and Al Kharj, located in the centre of Saudi Arabia, which is considered to be the agricultural heart of the Kingdom. The main products of these areas include dates, vegetables (e.g. carrots, cucumbers, tomatoes, lettuce), and fodder crops. Saudi Arabia's most important olive production area is located in the northern region of Al Jouf. This region is also prominent for its date-tree cultivation. Major fruit production centres are located in the southwest along the Red Sea coast. Jizan is especially well known for its production of tropical fruits, such as mangos and papayas. Asir's mountainous area is famous for small-scale agricultural production on terraces. The main crops cultivated there include fruits and vegetables – such as peaches, apricots potatoes, and lettuce.

Organic animal husbandry is still of little relevance compared to organic crop production. In 2012, about 3'100 farm animals were kept in accordance with organic standards: the majority of which were sheep and goats. In addition, approximately 735 small ruminants are currently certified "under conversion", i.e. in the process of becoming organic. To date (mid 2012), organic livestock production is entirely focused on meat production, and specialized organic dairy farms are virtually non-existent. Currently, the insufficient production of organic fodder hinders the expansion of the organic livestock sector.

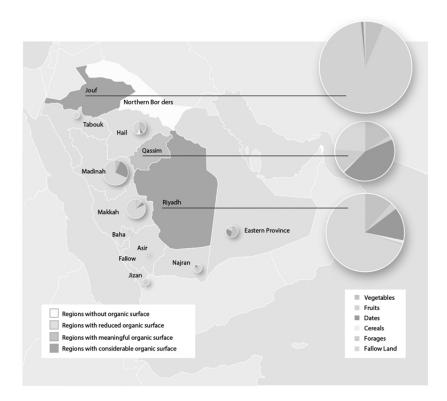


Figure 72: Saudi Arabia: Organic production by region Source: GIZ Organic Farming Project & FiBL (2012)

The most important organic crops in Saudi Arabia are vegetables - in particular tomatoes, eggplants, cucumbers, and onions - and fruits, such as dates, citrus, olives, and grapes. Organic vegetables are produced both on the open field and under controlled conditions such as polytunnels and greenhouses. Production under controlled conditions is particularly common for crops such as tomatoes, cucumbers, and eggplants. Legumes are mainly cultivated as part of a sound crop rotation. Of the fruits, date palms are of major importance in Saudi Arabia and their production is distributed throughout the country while alfalfa is the major organic forage crop. Organic cereal production has little significance compared to conventional agriculture with only a few farmers growing organic barley, sorghum, and corn.



Organic sweet pepper. Picture: Marco Hartmann, GIZ

# Key institutions/organizations

The entire organic sector of Saudi Arabia, including all key stakeholders, is closely related to the Organic Farming Project managed by GIZ IS. The Saudi Organic Farming Association (SOFA) and the Department of Organic Agriculture (DOA) are the most relevant and influential actors in the Kingdom. SOFA's main services, in addition to the overall promotion of organic agriculture, are focused on the support of its members through the provision of relevant information about all aspects of organic agriculture - such as requirements and procedures for certification, marketing opportunities and contacts, innovative farming methods, and legal guidelines. The DOA represents the Ministry of Agriculture in all matters relating to organic agriculture and acts as a driving force for the establishment of all relevant public services and legal guidelines in favour of the organic sector. Its core task is the monitoring and surveillance of all organic sector activities. The DOA also defines, develops, and fine-tunes the necessary legal guidelines to ensure optimal sector development.

The Organic Agriculture Research & Development Center, located in Qassim region, is another important actor. As a research institution, it trains farmers in organic production methods and delivers farm-based consultancy on special topics. Above all, the Center is dedicated to the delivery of practical solutions for meeting the needs of organic producers throughout the Kingdom.

# **Domestic market**

Saudi Arabia's major urban areas are the main consumption centres for organic products. The majority of specialized organic shops, as well as supermarkets with organic sections, are located in some of the country's largest cities: Riyadh, Dammam, Al Khobar,

and Jeddah. Overall, the market for organic produce is still small, fragmented, and often personalized. The limited and seasonal supply makes it difficult to establish close collaboration with traders and retailers. This is particularly true for perishable crops, which are sold predominantly within the production region - through the local markets or at the farm gate. The home delivery system that a number of farmers have developed to reach consumers directly represents an interesting alternative. Farmers have responded to the current situation by using a direct distribution system, delivering organic vegetable baskets to their customers - on a weekly basis.

# Increasing number of specialized retail shops & involvement of supermarket chains

Retailers specializing in organic and health foods are gaining importance. Although the philosophy behind both types of retail shops is the same – to provide healthy and high-quality foods to consumers in urban area - there are important differences in terms of ownership and product range. For instance, Al Watania, is Saudi Arabia's leading organic retailer, currently with a total of 20 outlets in all major cities, and is the commercial branch of a large agricultural cooperation. The product range consists exclusively of organic in-house products, with a clear focus on fresh fruits and vegetables in addition to other grocery products, such as olive oil, pasta, tomato paste, and flour.



Organic assortment in a Saudi supermarket. Picture: Felix Ruhland, GIZ

Other important specialized retailers use a different marketing strategy: Abazeer, located in Jeddah, and BioBest, in Riyadh, both sell a broad range of fresh and processed organic products and their organic product portfolios also include beauty products, Most of the processed groceries are imported. They are the first and largest completely organic

retail stores in Saudi Arabia. In response to the increasing consumer awareness for natural and organic products, most of the hypermarkets in the Kingdom now also offer a selection of organic groceries. However, they still focus considerably more on international products, and organic is not yet of strategic relevance to them.

Major obstacles that hamper better commercial relations between organic producers and supermarkets are, on the one hand, the small and inconstant production volumes, and, on the other hand, the relatively high fees charged by supermarkets for shelf display and storage. The latter is especially critical for small and medium-sized producers, who are not able to compensate for these fees with the revenues that they receive from such sales: particularly as they are in a weak position to negotiate favourable price and payment -conditions in this context.

# Legislation

The legal and institutional framework for organic agriculture is still young. The fast growing sector is supervised by the Department of Organic Agriculture, which ensures that framework conditions favour development of the organic sector. The national control system for organic agriculture serves as the basis for the sector's functional development. Its sound implementation, together with the monitoring and surveillance of all organic-sector activities, is the core function of the Department of Organic Agriculture. Legally, the national control system is rooted within the National Regulation & Standards for Organic Agriculture, which are in line with the European Organic Regulation. Due to the arid production environment, specific local conditions have been considered and included. While the Regulation provides the general framework for organic farming, the Standards define all allowed substances and technical details related to organic production. The National Organic Regulation was approved by H.E. the Minister of Agriculture in 2009, and the Standards, titled the "Saudi Technical Specifications for Good Practices in Organic Production", were added in 2010 to complement the Regulation.

# Saudi Organic Law

Subsequent to the approval of the National Organic Regulation, the Saudi Organic Law was drafted to provide a legal basis for sanctions and penalties in the case of irregularities and violations of the requirements laid down in the National Regulation & Standards for Organic Agriculture. The Saudi Organic Law was developed by a technical committee of the Ministry of Agriculture and is currently under revision by the Government (Figure 73).

# Government support for organic farming

The Saudi government acknowledges that the organic sector in Saudi Arabia is still in a nascent stage. The Ministry of Agriculture has put the development of an Organic Agricultural Policy at the top of its agenda to reinforce on the achievements to date and to further enhance the sector's development through sound governmental support. The overall goal of this policy is to upgrade the framework conditions and support measures that favour a steady and well-balanced growth of the sector in the coming years. Of special concern is a sustainable expansion of organic food production in line with the increasing market demand.



Figure 73: Saudi Arabia: Organic logo

In 2011, the Ministry of Agriculture delegated the development of the Organic Agricultural Policy to GIZ IS, as a key activity of its Organic Farming Project (OFP). The OFP finalized a comprehensive organic support policy concept in mid-2012, incorporating input from numerous Saudi stakeholders and drawing on international expertise in this field. The organic agricultural policy links market orientation with a resource-oriented strategy and focuses on the following four major objectives:

- 1) Increase in productivity and in the number of organic farms,
- 2) Production of healthy foods,
- 3) Conservation of natural resources,
- 4) Preservation of water/sustainable water use.

Policy priority measures have been suggested by the Organic Farming Project that are aimed at achieving these objectives.

One area that merits special attention is the government's commitment to promoting awareness of organic agriculture. The main instrument for this strategy is the Saudi National Organic Label. Since its launch in early 2011, it has helped differentiate organic products and promote organic foods in various exhibitions and trade fairs. Nevertheless, the label, and its message, has not reached the general public. A nationwide public consumer awareness campaign was undertaken in early 2012, with road banners placed in all major cities in the Kingdom, including Jeddah, Riyadh, and Al Khobar. In parallel, the "organic message" was spread through various media, such as newspapers, Facebook and Google advertisements.

# Outlook

Compared to other countries, the Saudi organic market is still small. From a market development perspective, Saudi Arabia's organic sector is at a stage where a fast

## Asia: Country Report Saudi Arabia

expansion of organic sales can be expected in the coming years. This rapid growth will be stimulated mainly by a governmental support program that sets a strong focus on linking organic production with the retail sector, thus improving market access for producers. With increasing organic production and a growing consumer interest for healthy and environmentally friendly products, retailers will be encouraged to progressively include more organic products in their sales portfolios. From 2005 to 2012, the organic sector in Saudi Arabia has developed remarkably and a sound institutional and supportive framework has been established during this period, which will serve as a sound basis for further sector development. Most of the important actors, as well as the essential legal and structural conditions, are in place: e.g. organic production systems, the National Organic Regulation & Standards, the National Organic Label, a certification system for organic operators, and the relevant sector institutions, such as the Saudi Organic Farming Association (SOFA) and the Department of Organic Agriculture (DOA), Ministry of Agriculture. The organic sector will certainly benefit from these achievements in the coming years.

However, sustainable sector development does not only require a regulatory framework and favourable sector conditions but also a consolidated institutional setting to promote organic agriculture. An organic agricultural policy concept has been elaborated and presented to the Government. Ideally, the Saudi government will support the strategic establishment and implementation of an organic action plan, which is expected to further stimulate and enhance sector development in the future.

# Further reading

Hartmann Marco, Khalil Saad, Bernet Thomas, Ruhland Felix, and Al Ghamdi Ayman. Organic Agriculture in Saudi Arabia – Sector Study 2012, Deutsche Gesellschaft für Internationale Zusammenarbeit GIZ (GmbH), Saudi Organic Farming Association (SOFA), Research Institute of Organic Agriculture (FiBL) & Ministry of Agriculture of Saudi Arabia (MoA), Riyadh, KSA 2012. © 2012 GIZ (ISBN 978-3-939394-87-7) and FiBL (ISBN 3-03736-230-8). The study is available at https://www.fibl.org/en/shop-en/article/c/international-en/p/1592-sectorstudy2012-saudiarabia.html

## Links

www.saudi-organic.org.sa www.sofa.org

# **Asia: Current statistics**

# JULIA LERNOUD<sup>1</sup> AND HELGA WILLER<sup>2</sup>

Organic agricultural land in Asia has reached 3.7 million hectares, constituting 0.3 percent of the total agricultural area. Compared with 2001 (300'000 hectares), the organic land has increased tenfold. Between 2010 and 2011, the area increased by almost one million hectares or one third, mainly due to major increases reported from India and China. The country with the largest organic agricultural area is China (1.9 million hectares) and the country with the most producers is India (540'000 producers). The countries with the highest share of organic agricultural land are Timor-Leste (6.6 percent) and Bhutan (4.1 percent).

#### Land use

Land use details were available for only one fifth of the agricultural area. In 2011, it was reported that seven percent of all organic farmland was used for arable crops (almost 260'000 hectares), 16 percent for grassland (600'000 hectares), and seven percent (250'000 hectares) for permanent crops. No detailed information was available for 68 percent of the organic land, so we can assume that each category has a far larger share of the total organic land.

The key *arable crop* group is cereals with 140'000 hectares reported in total. Most cereals were grown in Kazakhstan (91'000 hectares) and Thailand (22'500 hectares, rice). Big cereal producers, such as India and China, did not provide land use information in 2011, so it can be assumed that the total cereal area is larger than that shown in this report.

Organic coffee was grown on at least 70'000 hectares in 2011; key producing countries were Indonesia and Timor-Leste. Oilseeds are also an important crop grown on at least 43'000 hectares, mainly in Kazakhstan and Nepal. Almost 7 percent of the organic farmland was used for *permanent crops*; most of this land is coffee, nuts (at least 40'000 hectares), and tea (at least 32'000 hectares).

# Market

Market data are not available for all countries, but we can assume that the market is continually growing. Seven countries provided retail sales values (Table 12, page 71). More information about the Asian market is available in the chapter about the global market from Amarjit Sahota (page 132).

For more information about the Asian figures see data tables for Asia, page 202.

<sup>&</sup>lt;sup>1</sup> Julia Lernoud, Communication, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org

 $<sup>^2</sup>$  Dr. Helga Willer, Communication, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org

# Organic Agriculture in Asia: Graphs

# Asia: The ten countries with the largest organic area 2011

Source: FiBL-IFOAM survey 2013

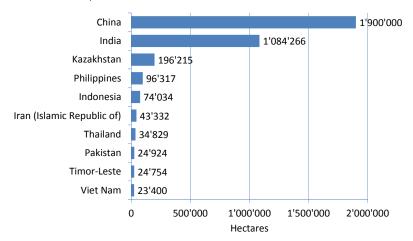


Figure 74: Asia: The ten countries with the most organic agricultural land 2011

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

# Asia: The countries with the highest share of organic agricultural land 2011

Source: FiBL-IFOAM survey 2013

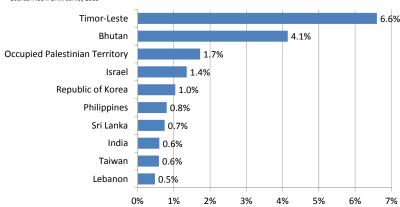


Figure 75: Asia: The ten countries with the highest percentage of organic agricultural land 2011

# Asia: Development of organic agricultural land 2000 to 2011

Source: FiBL-IFOAM-SOEL 2002-2013

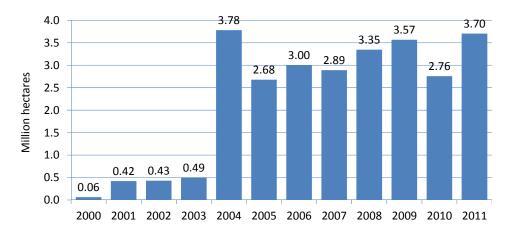
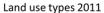


Figure 76: Asia: Development of organic agricultural land 2000 to 2011

Source: FiBL-IFOAM-SOEL Surveys 2002-2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

# Asia: Use of agricultural organic land 2011

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments.



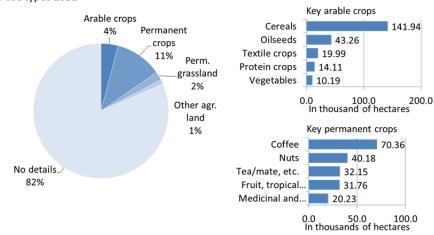


Figure 77: Asia: Use of organic agricultural land 2011

# Organic Agriculture in Asia: Tables

Table 46: Asia: Organic agricultural land, share of total agricultural land and number of producers 2011

Country	Area [ha]	Share of total agr. land	Producers
Afghanistan	61	0.00%	264
Armenia	750	0.04%	34
Azerbaijan	21'959	0.46%	322
Bangladesh	6'810	0.07%	9'335
Bhutan	20'995	4.14%	No data
Cambodia	8'285	0.15%	5'182
China	1'900'000	0.36%	No data
Georgia	1'999	0.08%	150
India	1'084'266	0.60%	547'591
Indonesia	74'034	0.14%	8'612
Iran (Islamic Republic of)	43'332	0.09%	6'120
Israel	7'095	1.36%	500
Japan	9'401	0.24%	2'137
Jordan	2'567	0.25%	98
Kazakhstan	196'215	0.09%	No data
Kyrgyzstan	15'097	0.14%	988
Lao (PDR) (2009)	3'843	0.16%	2'178
Lebanon	3'303	0.48%	181
Malaysia	1'582	0.02%	24
Myanmar	202	0.00%	13
Nepal	9'892	0.23%	247
Occupied Palestinian Territory (2010)	6'354	1.73%	832
Oman	38	0.00%	4
Pakistan	24'924	0.09%	1'045
Philippines	96'317	0.81%	3'010
Republic of Korea	19'312	1.04%	13'376
Saudi Arabia	18'563	0.01%	78
Sri Lanka	19'469	0.75%	403
Syrian Arab Republic (2010)	19'987	0.14%	2'458
Taiwan	5'016	0.59%	2'300
Tajikistan (2010)	460	0.01%	75
Thailand	34'829	0.18%	7'405
Timor-Leste	24'754	6.60%	71
United Arab Emirates	958	0.17%	15
Uzbekistan	209	0.00%	6
Viet Nam	23'400	0.23%	4'385
Total	3'706'280	0.26%	619'439

Table 47: Asia: All organic areas 2011

Country	Agri- culture [ha]	Aqua- culture [ha]	Forest [ha]	Wild collection [ha]	Total [ha]
Afghanistan	61				61
Armenia	750			800	1'550
Azerbaijan	21'959		109	802	22'871
Bangladesh	6'810	7'717			14'527
Bhutan	20'995			15'605	36'599
Cambodia	8'285				8'285
China	1'900'000			900'000	2'800'000
Georgia	1'999			1'405	3'404
India	1'084'266			4'477'526	5'561'792
Indonesia	74'034	94		16'007	90'135
Iran (Islamic Republic of)	43'332			38'510	81'842
Israel	7'095				7'095
Japan	9'401				9'401
Jordan	2'567				2'567
Kazakhstan	196'215				196'215
Kyrgyzstan	15'097				15'097
Lao (PDR) (2009)	3'843				3'843
Lebanon	3'303			1'686	4'989
Malaysia	1'582				1'582
Myanmar	202				202
Nepal	9'892		24'422		34'314
Occupied Palestinian Territory (2010)	6'354				6'354
Oman	38				38
Pakistan	24'924				24'924
Philippines	96'317				96'317
Republic of Korea	19'312				19'312
Saudi Arabia	18'563				18'563
Sri Lanka	19'469				19'469
Syrian Arab Republic (2010)	19'987			8'000	27'987
Taiwan	5'016				5'016
Tajikistan (2010)	460				460
Thailand	34'829	294		701	35'824
Timor-Leste	24'754				24'754
United Arab Emirates	958				958
Uzbekistan	209			145'621	145'830
Viet Nam	23'400	7'000		1'300	31'700
Total	3'706'280	15'105	24'531	5'607'964	9'353'880

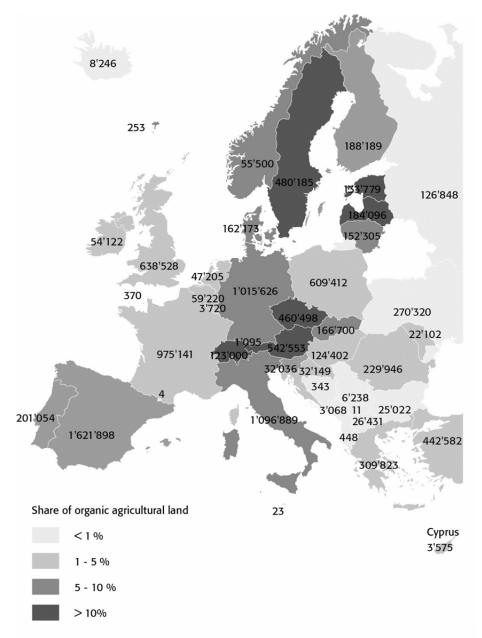
Table 48: Asia: Land use in organic agriculture (fully converted and in-conversion) 2011

Main use	Main crop category	Area [ha]
Agricultural land and crops, no details	Agricultural land and crops, no details	2'430'555
Arable crops	Arable crops, no details	16'044
	Arable crops, other	6
	Aromatic plants, medicinal and culinary plants	4'947
	Cereals	142'039
	Mushrooms and truffles	204
	Protein crops	14'108
	Oilseeds	43'257
	Plants harvested green	3'775
	Root crops	1'499
	Seeds and seedlings	69
	Strawberries	8
	Sugarcane	3'447
	Textile crops	19'985
	Vegetables	10'277
Arable crops total		259'664
Cropland, no details	Cropland, no details	128'125
Other agricultural land	Fallow land, crop rotation	5'699
	Home gardens	115
	Other agricultural land, no details	23'813
	Unutilised land	581
Other agricultural land total		30'207
Permanent crops	Citrus fruit	545
·	Cocoa	1'321
	Coconut	18'409
	Coffee	70'363
	Flowers and ornamental plants, permanent	4'821
	Fruit	10'258
	Fruit, temperate	7'696
	Fruit, tropical and subtropical	31'656
	Fruit/nuts/berries	3
	Grapes	8'232
	Medicinal and aromatic plants, permanent	20'227
	Nuts	40'175
	Olives	1'873
	Other permanent crops	8'693
	Tea/mate, etc.	32'155
Permanent crops total		256'425
Permanent grassland	Pastures and meadows	16'792
-	Permanent grassland, no details	584'511
Permanent grassland total		601'303
Total		3'706'280

# Table 49: Asia: Use of wild collection areas 2011

Category of crops harvested	Area [ha]
Beekeeping	12
Berries, wild	154
Forest honey	9'007
Fruit, wild	350
Medicinal and aromatic plants, wild	23'394
Nuts, wild	155
Wild collection, no details	5'574'892
Total	5'607'964

# **Europe**



Map 5: Organic agricultural land in the countries of Europe 2011

Source: FiBL Survey 2013; based on information from the private sector, certifiers, governments, Eurostat and the Mediterranean Organic Agriculture Network. For detailed data sources see annex, page 322.

# Organic Farming in Europe 2012

# HELGA WILLER<sup>1</sup>

In 2011, the area of organic land, the number of organic farmers and the organic market continued to grow in Europe. Provisional figures for 2012 indicate that these positive developments have continued.

# **Current statistics**

In Europe, organic agricultural land exceeded the ten million hectare mark in 2010, and in 2011, 10.6 million hectares, constituting 2.2 percent of the agricultural area, were under organic agricultural management. There were more than 290'000 producers. The area of organic land in 2001 was 5.4 million hectares and so has doubled since then, while the number of producers has increased by 70 percent. The total value of the European organic market in 2011 was 21.5 billion euros and the overall growth rate was approximately nine percent. For details see chapter on European organic farming statistics (page 215) and the European market (page 224).

# Two projects with relevance to organic farming statistics: OrganicDataNetwork and ICOPP

In January 2012, the new European research project "OrganicDataNetwork" (European Data Network for Improved Transparency of Organic Markets) started. It is expected to be a significant step toward improving European market data. The project aims to increase the transparency of the European organic food market through better availability of market information about the sector, thus meeting the needs of policy makers and actors involved in organic markets. The partnership will act as coordinating centre between stakeholders, and will result in a proposal for the establishment of a permanent network to achieve collaboration on statistical issues regarding organic market data. The first of the two planned stakeholder workshops will take place in March 2013.<sup>2</sup> For more information see also article by project coordinator Raffaele Zanoli in this volume (page 230).

A second project of interest is called "Improved Contribution of local feed to support 100% Organic feed supply to Pigs and Poultry (ICOPP)".3 One part of the project is the assessment of the current protein supply and the protein demand in European organic agriculture. To that end, the current feedstuff production, imports, and exports are assessed along with the protein needs. The results of this survey should be available by the end of 2013.

# EU regulation on organic farming and related issues

Organic farming has had legal protection in the European Union since the beginning of the 1990s with Council Regulation (EEC) No 2092/91. On July 20, 2007, a completely

<sup>&</sup>lt;sup>1</sup> Dr. Helga Willer, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Switzerland,

 $<sup>^2</sup>$  Information on the project "Improved Contribution of local feed to support 100% Organic feed supply to Pigs and Poultry (ICOPP)" is available at the project website www.organicdatanetwork.net.

 $<sup>^3</sup>$  Information about the project is available at the project website www.organicresearchcentre.com/icopp/.

revised 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, came into force on January 1, 2009. The new rules include the mandatory use of the EU organic logo on pre-packaged organic products. The logo can be accompanied by national or private logos. The organic logo of the EU has been mandatory since July 1, 2010 on all pre-packaged organic products that were produced in any of the EU Member States and meet the necessary standards.

On February 15, 2012, at BioFach Germany, European Commissioner Dacian Ciolos for the European Union's (EU) Agriculture and Rural Development and Deputy Secretary Kathleen Merrigan of the U.S. Department of Agriculture signed the organic equivalence arrangement between the world's two largest markets for organic food. Since the publication of the agreement, quite a few obstacles, problems and instances of misleading language were identified by the sector, and IFOAM EU feeds into the discussions between EU officials and American officials. For more information about the agreement, see articles by Beate Huber et al. on Standards and Regulations (page 140) and Barbara Ha



Figure 78: European Union: Logo for organic products. The "Euroleaf" design shows the EU stars in the shape of a leaf against a green background conveying the message: Nature and Europe.

Standards and Regulations (page 140) and Barbara Haumann's chapter on the USA: (page 282).

A review of the Organic Regulation is currently in progress and the European Commission held three hearings at which a wide range of stakeholders participated. The European Union Group of the International Federation of Organic Agriculture Movements (IFOAM EU) recommended not to opt for a total revision as the organic sector has just experienced a major revision from 2006 to 2012. Furthermore, IFOAM EU urged the Commission to update the European organic action plan and to put organic farming in the context of the new policy framework.

# **Government support**

countries have similar support schemes.

The current cycle of the Common Agricultural Policy (CAP) in the European Union is due to end in 2013. Discussions are now underway to reform the policy for the period 2014 to 2020.¹ Support has been granted to organic farming under the European Union's agrienvironmental programs (Pillar II of the CAP, rural development) since the beginning of the 1990s.² IFOAM EU stresses the importance of having a strong rural development budget for mainstreaming sustainable outcomes, including the expansion of organic food and farming systems, which can help to ensure a real future for rural economies by providing healthy food, employment and environmental services. Final budget allocations are expected to be defined at an EU Summit in February or March 2013.

 $<sup>^1</sup>$  Detailed information on the Common Agricultural Policy after 2013 is available at the website of the European Commission at http://ec.europa.eu/agriculture/cap-post-2013/index\_en.htm.

<sup>&</sup>lt;sup>2</sup> Switzerland and Denmark 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 programs, 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. Non-EU

Organic action plans are a further important support measure for organic farming. In 2011, 26 countries and regions in Europe had an action plan (Gonzalvez et al. 2011): many of them with quantitative targets. Austria, for instance, aimed to have 20 percent organically managed agricultural land by the end of 2010: an aim that was achieved in 2010 when 19.7 percent of the agricultural land was organic. The European Action Plan for organic food and farming was launched in 2004. 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 website offers a wide-range of information on organic agriculture.

In January 2013, the European Commission announced a public consultation for the review of the European policy on organic agriculture.¹ All citizens, organizations, and public authorities who have an interest in a review of the European policy on organic agriculture are welcome to contribute to this consultation. The consultation runs from January 15, 2013 to April 10, 2013. In this consultation, the European Commission would like to gather views on how best to develop organic farming. Key issues are: simplifying the legal framework while ensuring standards are not watered down; coexistence of GM crops with organic farming; better control systems and trade arrangements for organic products; and impact of the new labelling rules. Other issues are the European action plan, controls and imports.

## Research

Today, organic farming research is substantially funded under national research programs or national organic action plans, as well as through European projects.<sup>2</sup> 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<sup>3</sup> amounted to more than 60 million euros in 2006 (Lange et al. 2007). Newer data are not available.

Several organic farming research projects have been funded under the framework programs of the European Commission since the mid-1990s. Furthermore, there are several European projects that do not have organic farming as their focus but carry out research related to organic farming. In the Seventh Framework Programme for Research and Technological Development, launched in 2008, ten funded projects are currently focusing on organic farming. The main projects are listed here:

 IMPRO: Impact matrix analysis and cost-benefit calculations to improve management practices regarding health status in organic dairy farming (2012-2016), www.impro-dairy.eu

1

 $<sup>^1</sup>$  Information on the "Consultation for the review of the European policy on organic agriculture" is available at http://ec.europa.eu/agriculture/consultations/organic/2013\_en.htm

 $<sup>^2</sup>$  For a list of organic farming research projects funded by the European Commission, see http://www.organic-research.org/european-projects.html

<sup>&</sup>lt;sup>3</sup> CORE Organic (Co-ordination of European Transnational Research in Organic Food and Farming); Internet www.coreorganic.org. CORE Organic was a three-year coordination action in organic food and farming (2004 to 2007). The overall objective was to gather a critical mass and enhance quality, relevance and utilization of resources in European research in organic food and farming. It has been succeeded by the CORE Organic II project.

- OSCAR: Optimising Subsidiary Crop Applications in Rotations (2012-2016), web3.wzw.tum.de/oscar
- OrganicDataNetwork: Data network for better European organic market information (2012-2014), www.organicdatanetwork.net
- Co-Free: Innovative strategies for copper-free low input and organic farming systems (starting 2012), www.co-free.eu
- SOILIBAM: Strategies for organic and low-input integrated breeding and management, www.solibam.eu
- CERTCOST: Economic analysis of certification systems for organic food and farming, www.certcost.eu
- LowInputBreeds: 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 (2009-2014); www.lowinputbreeds.org
- Organic Sensory Information System (OSIS) (ww.ecropolis.eu): Documentation of sensory properties through testing and consumer research for the organic industry, www.ecropolis.eu;
- BioBio: Indicators for biodiversity in organic and low-input farming systems, 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 builds on the outcome of the first CORE Organic project - successfully completed in 2007 - with the aim of building an effective and sustainable transnational research program. CORE Organic is a network of funding bodies and has 21 partner countries. CORE Organic's goal is to identify common research priorities for the organic sector where a transnational approach gives added value, initiate research projects, organize project monitoring and dissemination of results, and consider funding models. A call for proposals was launched in 2010, and eleven projects were selected, covering three thematic organic research areas: Cropping, monogastric animals and quality.<sup>1</sup> A second call was launched in autumn 2011 with two main focus areas: breeding and market development. One project was selected for each of the thematic research areas of the second call.<sup>2</sup> A CORE Organic research seminar will take place in the Netherlands on May 15, 2013, and the projects initiated by CORE Organic II will be presented.

The Technology Platform (TP) Organics (www.tporganics.eu), which was founded in 2008, joins the efforts of industry and civil society in defining organic research priorities and defending them vis-à-vis policy-makers.<sup>3</sup>

 $<sup>^{1}</sup>$  Information on CORE Organic II is available on www.coreorganic2.org.

 $<sup>^{2}</sup>$  COBRA - Coordinating Organic plant BReeding Activities for Diversity coordinated by Thomas Döring, The Organic Research Centre, United Kingdom and HealthyGrowth and "Healthy growth: From niche to volume with integrity and trust" coordinated by Egon Noe, Agroecology, Aarhus University, Denmark.

<sup>&</sup>lt;sup>3</sup> 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). In February 2010 the Strategic Research Agenda (SRA), the second major document of the Technology Platform TP Organics (www.tporganics.eu) was  $finalized, underlining\ research\ priorities\ and\ a\ number\ of\ suggestions\ for\ research\ projects\ (Schmid\ et\ al.$ 

At the end of 2012, TP Organics proposed amendments for the next EU framework programme for research (called HORIZON 2020 and running from 2014 to 2020), which the Industry Technology Research and Energy (ITRE) Committee of the European

Parliament approved. IFOAM EU sees this as a major step towards obtaining funding for organic farming research in the future. The next steps in the legislative procedure are the plenary vote of the European Parliament and the negotiations with the Member States. TP



Organics will continue its lobby work to ensure that organic food and farming receives an important place within the European Research Area for the next seven years.

From the 24<sup>th</sup> to the 26<sup>th</sup> of September 2012, around 100 participants gathered in Larnaca, Cyprus for the "Organic Days". One day focused on "Organic and Low-input Agriculture. Implementing innovation to respond to EU challenges." At the conference, the European Commission presented a catalogue of 49 EU research projects on low-input and organic agriculture that were funded in the period from 2000-2012.¹ Speakers proposed several topics for inclusion in the European Innovation Partnership (EIP)² "Agricultural Productivity and Sustainability", such as participatory plant breeding, the design of agroforestry systems for better nutrient efficiency, and the development of processing methods that preserve the original quality of the raw materials.

# Successful policy work of IFOAM EU

The European Union Group of the International Federation of Organic Agriculture Movements (IFOAM EU) can look back on another year of successful policy work. The activities of the group are very well documented in its monthly newsletter.<sup>3</sup> In 2013, IFOAM EU will celebrate its 10th anniversary.

Its work focuses on three areas:

- Regulation - to work on the implementation and evaluation of the EU organic regulation EC 834/2007 according to IFOAM standards;

2009). The Implementation Action Plan explains how the research priorities and research topics, identified in the Strategic Research Agenda, can be implemented. A focus is laid on funding instruments, research methods, and communication of results (Padel et al. 2010). Many of the topics covered in these documents were taken into consideration in recent European calls.

 $http://www.ifoam.org/about\_ifoam/around\_world/eu\_group-new/positions/newsletters/newsletters.php$ 

 $<sup>^1{\</sup>rm The~publication~,A~decade~of~EU-funded,~low-input~and~organic~agriculture~research~(2002-2012)"~is~available~at~http://ec.europa.eu/research/bioeconomy/pdf/189756_2011_2695\_a\_decade\_of\_eu\_en.pdf}$ 

<sup>&</sup>lt;sup>2</sup> European Innovation Partnerships (EIPs) are a new approach to EU research and innovation. EIPs are challenge-driven, focusing on societal benefits and a rapid modernisation of the associated sectors and markets. EIPs act across the whole research and innovation chain, bringing together all relevant actors at EU, national and regional levels in order to: (i) step up research and development efforts; (ii) coordinate investments in demonstration and pilots; (iii) anticipate and fast-track any necessary regulation and standards; and (iv) mobilise 'demand' in particular through better coordinated public procurement to ensure that any breakthroughs are quickly brought to market. Rather than taking the above steps independently, as is currently the case, the aim of the EIPs is to design and implement them in parallel to cut lead times. Taken from the website of the European Commisssion, page "European Innovation Partnerships", available at http://ec.europa.eu/research/innovation-union/index\_en.cfm?pg=eip

<sup>&</sup>lt;sup>3</sup> The newsletter of the IFOAM EU Group is available at

- Agricultural policy to achieve an effective European organic action plan and to lobby for a more sustainable Common Agricultural Policy;
- Research to lobby for organic farming research as coordinator of the Technology Platform for organic food and farming and to participate in relevant research projects, especially in the dissemination of results.

The sixth congress of IFOAM EU was organized in cooperation with Organic Denmark and held in Copenhagen, Denmark on April 17-18, 2012. With 200 participants, including high-level speakers from the European Commission, the European Parliament and the European organic sector, the 6th European Organic Congress took place at a crucial point in time for the debate on the future Common Agricultural Policy (CAP). The 7th European Organic Congress of IFOAM EU will take place from the 8th to the 10th of July, 2013 in Vilnius, Lithuania.

A second important event for IFOAM EU were the "Organic Days" in Cyprus in September 2012: 100 participants gathered in Larnaca, Cyprus. The event was organized by IFOAM EU, TP Organics, Pasybio - the Cypriot organic association, the European Commission and the Cyprus Presidency of the EU Council, and offered the organic sector and wider civil society the opportunity to discuss the future of European agricultural and research policy with researchers and representatives of the European Commission.<sup>2</sup>

# Further reading

- European Commission (2010) Commission Regulation (EU) No 271/2010 of 24 March 2010 amending Regulation (EC) No 889/2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007, as regards the organic production logo of the European Union (OJ L 084, 31.03.2010, p.19.) http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:084:0019:0022:EN:PDF. Official Journal of the European Union March 31, 2010.
- 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 http://eurlex.europa.eu/LexUriServ/site/en/oj/2007/l\_189/l\_18920070720en00010023.pdf
- 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 <a href="http://ec.europa.eu/agriculture/analysis/markets/organic\_2010\_en.pdf">http://ec.europa.eu/agriculture/analysis/markets/organic\_2010\_en.pdf</a>
- European Commission, Directorate General for Research and Innovation (2012): A decade of EU-funded, low-input and organic agriculture research. European Commission, Brussels, available at http://ec.europa.eu/research/bioeconomy/pdf/189756\_2011\_2695\_a\_decade\_of\_eu\_en.pdf
- FiBL: European Organic Farming Statistics. The Organic-World.net homepage, FiBL, Frick at www.organic-world.net/statistics.html.
- Gonzalvez, Victor et al. (2011) Organic Action Plans in Europe. In: Willer, Helga and Kilcher, Lukas (Eds.) (2011) The World of Organic Agriculture Statistics and Emerging Trends 2011. IFOAM, Bonn; FiBL, Frick
- Niggli, Urs; Slabe, Anamarija; Schmid, Otto; Halberg, Niels und Schluter, Marco (2008) Vision for an Organic Food and Farming Research Agenda 2025. Organic Knowledge for the Future. Technology Platform Organics, Brussels. Archived at http://orgprints.org/13439/
- Padel, Susanne; Niggli, Urs; Pearce, Bruce; Schlüter, Marco; Schmid, Otto; Cuoco, Eduardo; Willer, Helga; Huber, Machteld; Halberg, Niels and Micheloni, Cristina (2010) Implementation Action Plan for organic food and farming research. Technology Platform TP organics, Brussels.
- Schaack, Diana et al. (2012): Development of the Organic Market in Europe. In: Willer, Helga and Kilcher, Lukas (Eds.) (2012) The World of Organic Agriculture Statistics and Emerging Trends 2012. IFOAM, Bonn; FiBL, Frick

 $<sup>^1</sup>$ Information on the congress is available at http://www.organic-congress-ifoameu.org/

<sup>&</sup>lt;sup>2</sup> A detailed report is available in Newsletter No. 58 of IFOAM EU at http://www.ifoam.org/about\_ifoam/around\_world/eu\_group-new/positions/newsletters/pdf/2012/IFOAMEU\_newsletter\_September\_final\_.pdf

# Europe: Organic Farming in Europe 2012

## Websites

ec.europa.eu/agriculture/cap-post-2013 : Webpages of the European Commission on the CAP reform www.ifoam-eu.org: European Union Group of the International Federation of Organic Agriculture Movements - IFOAM EU Group

 $www.ifoam.org: International Federation of Organic Agriculture Movements (IFOAM) \\ europa.eu.int/comm/agriculture/qual/organic/index_en.htm: The European Commission's organic farming website ec.europa.eu/Eurostat: Eurostat: Organic farming data: ec.europa.eu/eurostat > Statistics > Statistics A-Z >$ 

Agriculture > Data > Main tables > Organic Farming
www.fibl.org: FiBL - Research Institute of Organic Agriculture
www.organic-congress-ifoameu.org: Website of the organic congresses of the IFOAM EU Group
www.organic-europe.net: Organic Europe, maintained by FiBL: Country reports, address database, statistics
www.organic-market.info: Organic Market Info: Market News and updates: www.organic-market.info
www.organic-world.net: Organic World (maintained by FiBL): Statistics, country information, news

www.tporganics.eu: Technology Platform TP Organics

# **Current statistics**

# HELGA WILLER<sup>1</sup> AND JULIA LERNOUD<sup>2</sup>

# Agricultural land and producers

Organic agricultural land in *Europe* exceeded the ten million hectare mark in 2010, and in 2011, 10.6 million hectares were under organic agricultural management, constituting 2.2 percent of the agricultural area. Compared with 2001 (5.4 million hectares), the organic land has doubled. In 2011, the area increased by 0.63 million hectares or six percent and there were more than 290'000 producers. Since 2001, the number of producers has increased by 70 percent.

In the *European Union*, there were 9.5 million hectares in 2011, constituting 5.4 percent of the agricultural land. Compared with 2001 (5 million hectares), the organic land has almost doubled. In 2011, the area increased by 0.5 million hectares or six percent and there were almost 240'000 producers. Since 2001, the number of producers has increased by 60 percent.

The country with the largest organic agricultural area is Spain (1.6 million hectares), followed by Italy (1.1 million hectares) and Germany (1 million hectares). The country with the most producers is Turkey (almost 44'000), followed by Italy (42'000) and Spain (more than 32'000). For more information about the European figures, see data tables for Europe, page 219.

#### Land use

In 2011, 41 percent of the organic farmland was used for arable crops (4.3 million hectares) and 45 percent was grassland (4.8 million hectares), with ten percent (one million hectares) being used to grow permanent crops (Table 52).

Regarding permanent grassland/grazing land, which increased by 7 percent from 2010, the countries with the largest areas are Spain (0.87 million hectares), Germany (0.58 million hectares) and the United Kingdom (0.44 million hectares). To convert extensively used areas and grassland to organic farming requires relatively few changes in production and few investments.

The largest arable crop areas, which increased by eight percent compared with 2010, are in Italy (0.5 million hectares), followed by France (0.48 million hectares) and Germany (0.41 million hectares). The key arable crop group is cereals. Forty percent of the arable land is for cereal production, amounting to 1.8 million hectares in total: an increase of 4.5 percent compared with 2010. The largest cereal areas are in Turkey (220'000 hectares), Germany (204'000 hectares), Italy (184'00 hectares), and Spain (175'000 hectares). Organic vegetables were grown on 116'000 hectares in 2011, with Italy (22'000 hectares), Germany (18'000 hectares), and the United Kingdom (13'500 hectares) as the key producing countries.

 $<sup>^1\</sup>mathrm{Dr}.$  Helga Willer, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Switzerland, www.fibl.org

 $<sup>^2</sup>$  Julia Lenroud, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Switzerland, www.fibl.org

## **Europe: Current Statistics**

Ten percent of the organic farmland was used for permanent crops, and the permanent crop area increased by seven percent compared with 2010. The countries with the largest permanent crop areas are Spain (0.36 million hectares), Italy (0.27 million hectares) and France (83'000 hectares). A large part of the permanent cropland is used for olives (420'000 hectares; +14 percent), grapes (230'000 hectares; +20 percent), and nuts (190'000 hectares; +0.3 percent).

It should be noted that, in addition to the agricultural land, there are 11.5 million hectares of wild collection areas. A large part of this area is in Finland (7 million hectares), where wild berries are collected.

#### Market

In 2011, the organic market continued to grow in Europe. While some countries, such as the UK or Ireland were still affected by the financial crisis, which has led to stagnation or even decline, the organic market grew significantly in many European countries. The total value of the European organic market in 2011 was 21.5 billion euros, and the overall growth rate was approximately nine percent. The largest markets were Germany, France, the UK, and Italy. The countries with the highest per capita spending were Switzerland, Denmark, and Luxembourg. For more information about the European market see separate chapter by Schaack et al. on page 224.

# Organic Agriculture in Europe: Graphs

Europe: The ten countries with the largest organic area 2011 Source: FIBL-IFOAM survey 2013

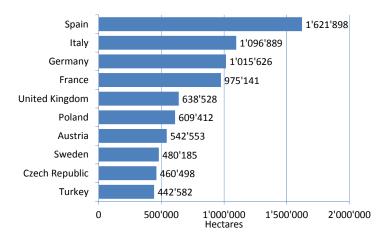


Figure 79: Europe: The ten countries with the largest area of organic agricultural land 2011

FiBL Survey 2013, based on national data sources and Eurostat. For data sources see annex, page 322.

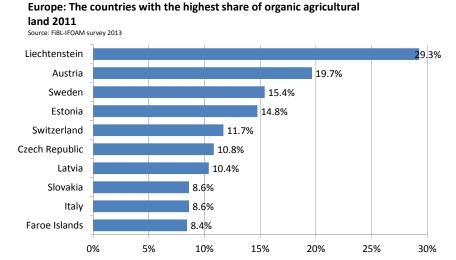


Figure 80: Europe: The ten countries with the highest shares of organic agricultural land 2011

FiBL Survey 2013, based on national data sources and Eurostat. For data sources see annex, page 322.

#### Europe: Development of organic agricultural land 1999 to 2011

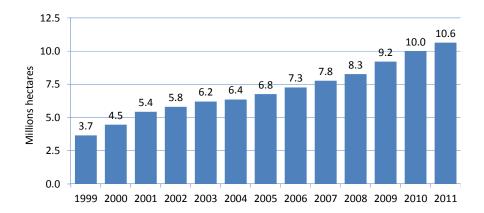


Figure 81: Europe: Development of organic agricultural land 1999-2011

Source: Lampkin, Nic and FiBL, based on national data sources and Eurostat. For data sources see annex, page 322.

# Europe: Use of agricultural organic land 2011 Source: FIBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments.

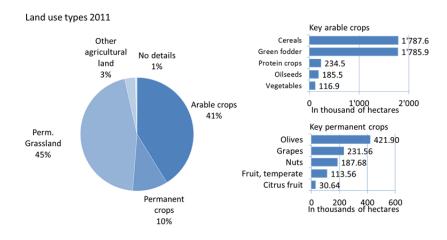


Figure 82: Europe: Use of agricultural land 2011

Source: FiBL Survey 2013, based on national data sources and Eurostat. For data sources see annex, page 322.

Europe: Tables

# Organic Agriculture in Europe: Tables

Table 50: Europe: Organic agricultural land, share of total agricultural land and number of producers 2011

Country	Area [ha]	Share of total agr. land	Producers
Albania	448	0.0%	146
Andorra	4	0.0%	1
Austria	542'553	19.7%	21'575
Belarus	Wild co	ollection only	
Belgium	59'220	4.3%	1'274
Bosnia and Herzegovina	343	0.0%	25
Bulgaria	25'022	0.8%	978
Channel Islands	370	4.2%	
Croatia	32'036	2.5%	890
Cyprus	3'575	2.4%	732
Czech Republic	460'498	10.8%	3'904
Denmark	162'173	6.1%	2'677
Estonia	133'779	14.8%	1'431
Faroe Islands	253	8.4%	1
Finland	188'189	8.2%	4'114
France	975'141	3.6%	23'135
Germany	1'015'626	6.1%	22'506
Greece	309'823	3.7%	21'274
Hungary	124'402	2.9%	1'433
Iceland	8'246	0.4%	39
Ireland	54'122	1.3%	1'400
Italy	1'096'889	8.6%	42'041
Kosovo	11	0.003	6
Latvia	184'096	10.4%	3'484
Liechtenstein	1'095	29.3%	34
Lithuania	152'305	5.7%	2'652
Luxembourg	3'720	2.8%	96
Macedonia (FYROM)	26'431	2.5%	419
Malta	23	0.2%	9
Moldova	22'102	0.9%	172
Montenegro	3'068	0.6%	62
Netherlands	47'205	2.4%	1'672
Norway	55'500	5.4%	2'725
Poland	609'412	3.9%	23'430
Portugal	201'054	5.8%	2'434

_			
Euro	no·		IAC
EUIV	UC.	Iau	11-5

Country	Area [ha]	Share of total agr. land	Producers
Romania	229'946	1.7%	9'471
Russian Federation	126'848	0.1%	49
Serbia	6'238	0.1%	177
Slovakia	166'700	8.6%	365
Slovenia	32'149	6.6%	2'363
Spain	1'621'898	6.5%	32'195
Sweden	480'185	15.4%	5'508
Switzerland	123'000	11.7%	6'060
Turkey	442'582	1.8%	43'716
Ukraine	270'320	0.7%	155
United Kingdom	638'528	4.0%	4'650
Total Europe	10'637'128	2.2%	291'480
Total European Union	9'518'234	5.4 %	236'803

Source: FiBL Survey 2013, based on national data sources and Eurostat. For data sources see annex, page 322.

Table 51: Europe: All organic areas 2011

Country	Agricul- tural land and crops Area [ha]	Forest Area [ha]	Grazed non agricul- tural land Area [ha]	Wild collection Area [ha]	Other non agricul- tural land Area [ha]	Total
Albania	448			273'552		274'000
Andorra	4					4
Austria	542'553					542'553
Belarus				103		103
Belgium	59'220					59'220
Bosnia and Herzegovina	343			78'550		78'893
Bulgaria	25'022			543'655		570'277
Channel Islands	370					370
Croatia	32'036	7		331		32'375
Cyprus	3'575		261			3'836
Czech Republic	460'498					460'498
Denmark	162'173					162'173
Estonia	133'779					133'779
Faroe Islands	253					253
Finland	188'189			7'007'363		7'195'552
France	975'141					975'141
Germany	1'015'626					1'015'626
Greece	309'823					309'823
Hungary	124'402					124'402

Europe: Tables

Country	Agricul- tural land and crops Area [ha]	Forest Area [ha]	Grazed non agricul- tural land Area [ha]	Wild collection Area [ha]	Other non agricul- tural land Area [ha]	Total
Iceland	8'246			212'436		220'682
Ireland	54'122					54'122
Italy	1'096'889			14'747		1'111'636
Kosovo	11			180		191
Latvia	184'096					184'096
Liechtenstein	1'095					1'095
Lithuania	152'305					152'305
Luxembourg	3'720					3'720
Macedonia (FYROM)	26'431			120'000		146'431
Malta	23					23
Moldova	22'102					24'182
Montenegro	3'068			139'809		142'877
Netherlands	47'205					47'205
Norway	55'500					55'500
Poland	609'412					609'412
Portugal	201'054	9'977				211'031
Romania	229'946			338'051		567'997
Russian Federation	126'848			2'186'507		2'313'355
San Marino						
Serbia	6'238					6'238
Slovakia	166'700					166'700
Slovenia	32'149					32'149
Spain	1'621'898			181'763		1'803'661
Sweden	480'185					480'185
Switzerland	123'000		6'121		6'385	135'506
Turkey	442'582			172'037		614'619
Ukraine	270'320			300'000		570'320
United Kingdom	638'528	8'000				638'528
Total Europe	10'637'128	17'984	6'382	11'569'083	6'385	22'236'962
Total EU	9'518'234	17'977	261	8'085'578	1'600	17'622'050

Source: FiBL Survey 2013, based on national data sources and Eurostat. For data sources see annex, page 322.

Table 52: Europe: Land use in organic agriculture 2010 and 2011

Main use	Main crop group	2010 [ha]	2011 [ha]
Agricultural land and crop	os, no details total	144'345	34'813
Arable crops	Arable crops, no details	34'630	88'155
	Arable crops, other	55'468	48'566
	Aromatic plants, medicinal and culinary plants	48'339	57'666
	Cereals	1'709'704	1'787'562
	Dried pulses and protein crops for the production of grain	230'020	234'543
	Flowers and ornamental plants	175	244
	Hops	228	263
	Industrial crops	14'864	10'124
	Medicinal and aromatic plants	129	34
	Mushrooms and truffles		426
	Oilseeds	188'248	185'501
	Plants harvested green	1'583'721	1'785'927
	Root crops	53'738	49'157
	Seeds and seedlings	5'425	8'574
	Strawberries	3'110	2'898
	Textile crops	17'641	18'692
	Tobacco	51	118
	Vegetables	112'894	116'888
Arable crops total		4'058'385	4'395'339
Cropland, no details		39'341	18'149
Other agricultural land		276'965	295'279
Permanent crops	Berries	26'096	28'628
	Citrus fruit	31'760	30'644
	Flowers and ornamental plants, permanent		15
	Fruit, temperate	94'812	113'607
	Fruit, tropical and subtropical	11'370	18'859
	Fruit/nuts/berries	148	2'445
	Grapes	192'671	231'556
	Medicinal and aromatic plants, permanent	2'400	1'742
	Nurseries	492	459
	Nuts	187'034	187'679
	Olives	367'463	421'903
	Other permanent crops	68'933	17'486
Permanent crops total		983'180	1'055'023
Permanent grassland		4'499'872	4'838'525
Total		10'002'087	10'637'128

Source: FiBL Survey 2013, based on national data sources and Eurostat. For data sources see annex, page 322.

**Europe: Tables** 

Table 53: Europe: Use of wild collection areas 2011

Main use	Total
Beekeeping	314
Berries, wild	7'074'158
Fruit, wild	2'093'983
Medicinal and aromatic plants, wild	312'073
Mushrooms, wild	413'182
Nuts, wild	4'592
Seaweed	200'000
Wild collection, no details	1'467'824
Wild collection, other	2'958
Total	11'569'083

Source: FiBL Survey 2013, based on national data sources. For data sources see annex, page 322.

# The Organic Market in Europe 2011 - Nine Percent Increase Compared with 2010

### DIANA SCHAACK<sup>1</sup>, JULIA LERNOUD<sup>2</sup>, SUSANNE PADEL<sup>3</sup>, AND HELGA WILLER<sup>4</sup>

Data compiled by the Research Institute of Organic Agriculture (FiBL) and the Agricultural Market Information Company (AMI) show that the organic market in Europe increased by nine percent in 2011 and it is now at 21.5 billion euros. The Dutch and the Danes spent more than ten percent more for organic food than in 2010 and Germany, the largest market, had a growth rate of nine percent.

Germany showed retail sales of 6.59 billion euros. France held second place with 3.76 billion euros, this market has shown a very dynamic growth in the past couple of years. In contrast, retail sales continued to fall in Ireland and decreased for the third consecutive year in the United Kingdom (1.88 billion euros). Italy's organic market was estimated at 1.72 billion euros, and we expect it to supersede the United Kingdom in 2012.

As in the past years, the highest market shares were reached in Denmark, Austria, and Switzerland. The highest per capita consumption of organic food in 2011 was in Switzerland (177 euros), Denmark (162 euros), Luxembourg (134 euros) Austria (127 euros), Sweden (94 euros) and Germany (84 euros). The average per capita consumption for all 39 countries for which data were available was 27 euros.

The European Union, with 9 percent growth and a market size of 19.7 billion euros is the second largest market in the world after the United States, which showed a market growth of 9.4 percent in 2011 to a market size of 21 billion euros. The comparison of the whole of Europe (21.5 billion euros) and North America (22.9 billion euros) shows that North America has the lead.

It is interesting to note, that in the United States half of the turnover is made with fresh fruit and vegetables, but animal products are increasing in importance. Fruit and vegetables were also the pioneer organic products in Europe. They now have market shares between one third and one fifth of many national markets. Animal products, especially milk and dairy products but also eggs, are achieving higher market shares in Europe than in the USA. Also dry products and bread have a higher importance in many European countries. More details on the importance of products and of product groups in the individual European markets have been compiled within the framework of a European research project (OrganicDataNetwork) and the results of the detailed analysis are expected to be published in the European spring 2013.<sup>5</sup>

-

 $<sup>^{\</sup>rm 1}$  Diana Schaack, Agrarmarkt Informations-Gesellschaft mbH, Dreizehnmorgenweg 10, 53175 Bonn, Germany, www.ami-informiert.de

 $<sup>^2</sup>$  Julia Lernoud, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Switzerland, www.fibl.org

 $<sup>^3</sup>$  Dr. Susanne Padel, The Organic Research Centre Elm Farm, Newbury, UK, www.organicresearchcentre.org  $^4$  Dr. Helga Willer, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Switzerland, www.fibl.org

<sup>&</sup>lt;sup>5</sup> For information about the OrganicDataNetwork project see www.organicdatanetwork.net.

In 2012 many European countries experienced further dynamic growth, and growth rates were similar to those in 2011 (final figures are expected to be available in the first months of 2013). A preliminary analysis suggests that it is likely that the retail sales in France amounted to more than 4 billion euros in 2012, and an increase of six percent was noted in the first six months of the year in the Netherlands and Italy.

Consumer interest in organic products remains high in most major markets, even though organic products have to compete more and more with other sustainability and regional labels. In spite of the difficult economic climate in some European countries, in which market shares are still low, consumer concern about the way food is produced is increasing.

#### Graphs

# Europe: The ten countries with the largest markets for organic food and beverages 2011

Source: FiBL-AMI Survey 2013 6'590 Germany France 3'756 **United Kingdom** 1'882 1'720 Italy Switzerland 1'411 1'065 Austria Spain 965 Denmark 901 Sweden 885 Netherlands 761 0 2'000 4'000 6'000 8'000 Million euros

Figure 83: Europe: The ten countries with the largest markets for organic food and beverages 2011

FiBL-AMI Survey 2013; data collected in the framework of the OrganicDataNetwork EU FP7 project. For data sources see annex, page 322.

# Europe: Distribution of organic food sales 2011 (total sales: 21.5 billion euros)

Source: FiBL-AMI Survey 2013

Others
23%

Germany
31%

Austria
5%

Switzerland
7%

Italy
8%
United Kingdom
9%

Figure 84: Europe: Distribution of organic food sales 2011

FiBL-AMI Survey 2013; data collected in the framework of the OrganicDataNetwork EU FP7 project. For data sources see annex, page 322

# Europe: The ten countries with the highest per-capita consumption 2011

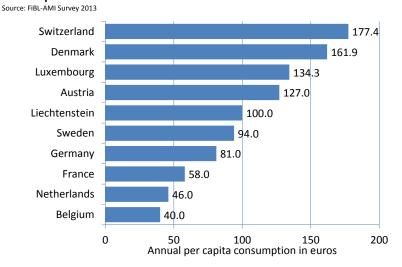


Figure 85: Europe: The ten countries with the highest per-capita consumption 2011
FiBL-AMI Survey 2013; data collected in the framework of the OrganicDataNetwork EU FP7 project.
For data sources see annex, page 322

#### Europe and European Union: Market development 2004-2011

Source: FiBL-AMI Surveys 2006-2013

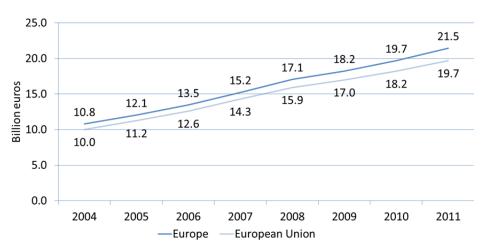


Figure 86: Europe and European Union: Market development 2004-2011

Source: FiBL-AMI Surveys 2006-2013. For data sources see annex, page 322.

### Table: The European market for organic food

Table 54: Europe: The market for organic food 2011

Country	Data year	Retail sales [Mio €]	Euros/ person	Retail sales: Growth 2011 [%]	Share of all sales [%]
Austria	2011	1'065	127	8.0	
Belgium	2011	435	40	3.3	
Bosnia and Herzegovina	2010	1	0		
Bulgaria	2010	7	1		
Croatia	2011	83	19	20.3	
Cyprus	2006	2	2		
Czech Republic	2010	59	7		0.6
Denmark	2011	901	162	13.0	7.8
Estonia	2009	12	9		1.0
Finland	2011	120	22	50.0	1.7
France	2011	3'756	58	11.0	2.3
Germany	2011	6'590	81	9.0	3.8
Greece	2006	58	5		
Hungary	2009	25	3		0.3
Ireland	2011	99	22	-4.4	
Italy	2011	1'720	28	11.0	
Latvia	2011	4	2		
Liechtenstein	2009	3.4			
Lithuania	2011	6	2		
Luxembourg	2011	68	134	5.0	
Moldova	2011				
Montenegro	2010	0.1	0		
Netherlands	2011	761	46	15.9	2.0
Norway	2011	160	33	9.5	
Poland	2011	120	3		0.2
Portugal	2011	21	2		
Romania	2011	80	4		
Russian Federation	2009	65	0		
Serbia	2010	40	5		
Slovakia	2010	4	1		
Slovenia	2010	38	19		
Spain	2011	965	21		1.0
Sweden	2011	885	94	3.6	4.1
Switzerland	2011	1'411	177	4.2	6.0
Turkey	2009	4	0		
Ukraine	2011	5.1	0.1		
United Kingdom	2011	1'882	30	-3.7	

FiBL-AMI Survey 2013; data collected in the framework of the OrganicDataNetwork EU FP7 project. For data sources see annex, page 322

#### Note on table

- Blank cells: no information available
- Where no published data exists, best estimates from a range of experts have been used, but these were not available for all cases, so sometimes earlier estimates are shown.
- $Values\ published\ in\ national\ currencies\ were\ converted\ to\ Euros\ using\ the\ 2011\ average\ exchange\ rates.$
- Please note that due to fluctuating exchange rates it is not possible to make a year-to-year comparison for countries that do not have the Euro as their currency.
- For details on data sources please see annex.
  Corrections, revisions and updates should be sent to helga.willer@fibl.org
- Corrections and revisions will be posted at www.organic-world.net

# Improving European Organic Market Information - The OrganicDataNetwork Project<sup>1</sup>

#### RAFFAELE ZANOLI<sup>2</sup>

The United Nations Food and Agriculture Organisation (FAO) has observed an increased need for the provision of market information and Market Information Services (MIS) in recent years.

Efficient market information is essential for sound decision-making: farmers, traders and policymakers benefit from up-do-date and timely information, and businesses need information to make appropriate investment decisions, including whether or not to enter or leave the organic sector. This is particularly relevant for SMEs<sup>3</sup>, which have limited market intelligence resources and for which capital is often the most significant limiting factor.

Access to timely information on prices and quantities plays a crucial role in reducing the risk of losing money on a market transaction, and this applies to farmers, traders and consumers. Policy makers need information to determine the appropriate levels and nature of regulation and support measures.

Market information can be regarded as a public good, particularly for the numerous SMEs which are unable to pay for information. The rationale for running public Market Information Services and for providing statistical data is based on the fact that lack of information can lead to sub-optimal functioning of markets through information asymmetry, absence of transparency (particularly in price setting) and increased costs and investment risks. The availability of timely and accurate information to all interested parties is therefore essential, whether it be provided by the government itself or by the private sector. Unfortunately, Market Information Services are quite costly and increasingly become targets of budget cuts in a world of spending reviews and diminishing public resources.

In the rapidly changing global environment, the organic sector has now developed to the point where the need for improvement in statistical data is becoming particularly pressing, and the consequences of failing to address these needs are potentially significant in financial terms for organic businesses.

The OrganicDataNetwork was launched with two primary reasons in mind. Firstly, without transparency, the European market for organic food will face increasing asymmetries, and all stakeholders will be somewhat affected. Secondly, better availability of market intelligence will lead policy makers and organic market actors

<sup>&</sup>lt;sup>1</sup> The OrganicDataNetwork project is co-financed as a Collaborative Project under the Seventh Framework Programme for Research and Technological Development of the European Union (Grant agreement No 289376). The contents of this article are the sole responsibility of the author, and they do not necessarily represent the views of the European Commission or its services. The article was originally published in the first Newsletter of the OrganicDataNetwork project at http://www.organicdatanetwork.net/newsletter-odn.html.
<sup>2</sup> Prof. Dr. Raffaele Zanoli, coordinator of the OrganicDataNetwork project, Università Politecnica delle Marche, Via Brecce Bianche, 60131 Ancona, Italy, www.univpm.it, www.organicdatanetwork.net
<sup>3</sup> SME = Small and medium-sized enterprises

involved in organic markets to better decision-making. The availability of timely and accurate market information on organic markets may encourage market entry and make the market more competitive and more efficient.

The OrganicDataNetwork has the following key objectives:

- (a) To bring together stakeholders and bodies actively involved in organic market data collection and publication and review the needs of end-users with respect to organic market data.
- (b) To provide an inventory of relevant private and public bodies that are involved with the collection, processing and dissemination of organic market data in the European Union, the Candidate countries, the Potential Candidate and the EFTA countries;
- (c) To classify existing methods of organic market data collection and analyse their suitability and compatibility and develop criteria for quality improvement of available data.
- (d) To collect, store in a common format and provide access to currently available data on organic markets in Europe.
- (e) To develop and test common methodologies to assess the consistency of national data, with special reference to available data on trade flows.
- (f) To test innovative approaches to improve the data collection and market reporting in six case study regions.
- (g) To disseminate project results and develop recommendations including a code of practise for organic market data collection and a proposal for a future European organic data network beyond the conclusion of the project.

All those directly or indirectly involved in organic Market Information Services provision are invited to contribute to our project via the numerous tools the stakeholder involvement platform provides. It is possible to register on the OrganicDataNetwork website to receive the newsletter, information about the project's workshops, and updated information on progress in enhancing organic Market Information Services at the European level. For those who want to contribute more, it is possible to post opinions on the online forum, and actively participate in the network by proposing topics and issues to be considered in order to make organic market information more accurate, more relevant and more available.

#### Link

www.organicdatanetwork.net

## Survey of the Demands of End Users in Europe for **Organic Market Data**

#### ROBERT HOME<sup>1</sup>, MATTHIAS STOLZE<sup>2</sup>, MICHAL LOSTÁK<sup>3</sup>

Few European countries produce complete coverage of important market data, standardization is missing, and data are seldom comparable within one country over time and between countries. Furthermore, detailed information on specific commodities is missing. Many different data collection methods are currently used and the variety of agencies collecting data in the various European countries mean that gaining a European level overview of the quality of existing data is difficult. As part of the EU research project "OrganicDataNetwork", a survey was carried out in 2012 to identify the needs and demands of end users of organic market data, and to find areas of information asymmetry. A further goal of the survey was to undertake an appraisal of the quality of the existing available data that is used. This contribution presents some of the highlights of the results, which will be published in full during 2013.

In an online questionnaire, 390 people from 36 European countries were surveyed. Most of the responses (40 percent) came from France, Germany, Italy, the Netherlands, Spain and the UK, which are all countries with a more developed organic market corresponding with a higher number of organic operators and thus a higher number of potential end users of organic data. Of the 390 respondents, 152 (39 percent) worked for organic producers, 113 (29 percent) for distributors of organic produce/products, and 86 (22 percent) for processor of organic products. 164 (46 percent) respondents were engaged in executive/management, 97 (27 percent) in sales, and 80 (22 percent) in marketing. The primary uses for organic market data are marketing strategy formulation (41 percent), decision support (39 percent), strategy/policy development (34 percent), research (26 percent), and forecasting (23 percent) (note: these total more than 100 percent as each respondent was allowed to indicate more than one use). The regions described by the data that are used are primarily national data (62 percent), and also to a large extent regional data (41 percent). Approximately 32 percent of the respondents use international European data or whole of Europe data, while 20 percent of the respondents use data from non-European countries or data on world level respectively.

The respondents expressed that 'relevance' is always the main quality need for existing data that they used, with other quality indicators ranked about equal: namely that data should be affordable, available as often as needed, accurate, up to date, easily accessible, comparable with other data that respondents use, of high quality, and sufficient for the respondents' needs. The most common criticisms of organic market data were with regard to accessibility, availability as often as needed, and whether it is up to date. Data on organic import volumes were also criticized as being inaccurate and incomparable with other used data, while retail consumer price data for organic food and organic sales

<sup>&</sup>lt;sup>1</sup> Robert Home, Socio-Economics, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org.

<sup>&</sup>lt;sup>2</sup> Matthias Stolze, Socio-Economics, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org.

Michal Lošťak, Czech University of Life Sciences Prague (CULS) – Faculty of Economics and Management, Prague, Czech Republic

data at retail level were both criticized on their affordability. When asked about available data that is not used, the main reason was lack of relevance. Price and comparability were rarely the reason, and infrequency and inaccuracy were almost never the reason. The majority of respondents reported however that the quality of the data was rarely the reason that it is not used.

In many cases, the frequencies of responses to export volume and value data were very similar or the same against all of the quality criteria. Using the same means of comparison, import volume and value data, and commercial /public organic procurement price and volume data were evaluated very similarly. These data types are all considered to be quite different from the data collection perspective, but seem to be bundled from the end user perspective. When asked about data that is unavailable, about 30 respondents (up to 25 percent of respondents) could not access each data type, although most would use the data if available and would wish for monthly or annual data to be available for all data types. There was an almost universal expression of feeling at a competitive disadvantage because of lack of available data for all data types.

The following figure shows the number of respondents who report using each of 15 data types that were the focus of this survey. The figure also shows the number of respondents who report that the data types do not exist.

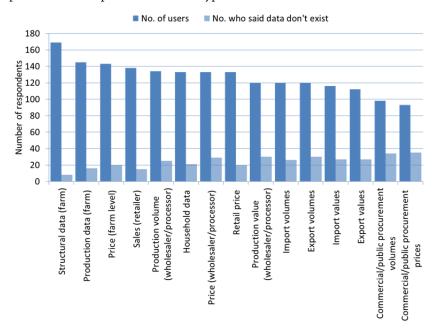


Figure 87: Number of users of each data type and number of respondents who reported that the respective data type does not exist Source: Home at al.2013

#### Reference

Robert Home, Michal Lošťák, Matthias Stolze (2013): Survey of the organic market data needs of end users. Draft 27.1.2013. Deliverable D1.1 of the EU FP7 OrganicDataNetwork project. Project number: 289376. Research Institute of Organic Agriculture (FiBL), Frick, Switzerland

## Organic Agriculture in Albania: Country Report 2012

#### THOMAS BERNET<sup>1</sup> AND IRIS S. KAZAZI<sup>2</sup>

#### **Recent developments**

The most noteworthy recent developments in the organic sector include the establishment of the government subsidy scheme for organic operators, the foundation of the Institute of Organic Agriculture (IOA) and the steadily growing exports, especially of medicinal & aromatic plants, wild collected mushrooms and berries, chestnuts, and organic olive oil. Recent investments in the local processing infrastructure are an important step toward competing on the international market with higher product quality and a wider range of products.

#### History

The starting point of the organic movement in Albania was in 1997, when the Organic Agriculture Association (OAA) was founded by a group of intellectuals, who aimed at promoting organic agriculture in Albania. In 2001, the Research Institute of Organic Agriculture (FiBL) was mandated by the Swiss Agency for Development and Cooperation (SDC) to help develop the organic sector with local stakeholders. The resulting project - SASA (Sustainable Agricultural Support in Albania) - enabled the new sector to develop in the following years. The first important milestones were the Albanian law on "production, processing, certification and marketing of organic products", which was issued in 2004, the formation of an organic producers' association (BioAdria) in 2005, and the creation of a local inspection body (Albinspekt) in 2006.

Participation (since 2006) by Albanian organic producers at BioFach Nuremberg has been most important for the development and marketing of organic production. This fair has fostered organic export activities and generated investment in the sector. Consequently, organic exports have grown steadily in the last years. In contrast, the development of the domestic market has been slow, due to the low purchasing power in the country.

The Institute of Organic Agriculture (IOA) is based in Durrës and was founded in 2010 to institutionalize the technical support that was previously provided to farmers through SASA. The Albanian government currently supports this institute with the aim of bringing organic expertise into the public extension system. The government's commitment to organic agriculture is also expressed through the subsidy scheme for organic agriculture, which has been in place since 2008.

#### **Production data and operators**

Albania's organic sector involves a range of different actors: Producers, collectors, processors, traders, and retailers. The introduction of the subsidy scheme for organic

234

 $<sup>^{1}</sup>$  Dr. Thomas Bernet, Research Institute of Organic Agriculture (FiBL), 5070 Frick, Switzerland, www.fibl.org

 $<sup>^2</sup>$  Iris Kazazi, Albanian association of Marketing (AAM), Ave. "Zogu I", Bld. "Kirschberger", No 2/3, 1000 Tirana, Albania, www.albanianguarantee.org

producers and the growing export opportunities has caused the number of organically certified operators to increase dramatically (Table 55).

Table 55: Albania: Development of organically certified actors, by category

	2006	2007	2008	2009	2010	2011
Primary producers	30	40	43	31	110	146
Processors	3	3	4	5	25	25
Collectors	2	2	3	6	20	14
Exporters	2	2	4	7	18	23
Total operators	34	45	49	38	137	

Source: Bernet & Kazazi 2012 (based on information from Albinspekt)

The organic actors are spread across all parts of the country, but with a clear concentration in certain regions (Figure 88): primarily because of the regional focus of the BioAdria activities, and the geographical conditions. For example, the mild winter climate, good soil conditions, and access to irrigation explain why organic vegetable production is concentrated on the coast. In contrast, wild collection is mostly in remote mountain areas, away from the coastal region.

The location and number of operators per region does not reflect the importance of certain crops and the regions in which they are produced. The 250'000 hectares of organically certified wild collection (Table 56) are of greatest relevance for inland regions, but the operators with processing infrastructure are mainly in urban centres, especially Tirana.

Table 56: Albania: Development of organic agricultural land (ha) by crop/crop group

	2006	2007	2008	2009	2010	2011
Cereals					1.2	
Vegetables	7.0	11.0	23.0	6.0	5.1	6.1 <sup>1</sup>
Olives	21.0	22.0	147.0	85.0	63.0	166
Cultivated herbs	102.0	123.0	123.0	137.0	153.1	88
Grapes	9.0	15.0	15.0	13.0	25.3	35
Fruit and citrus	9.0	8.0	13.0	8.0	13.6	24.9
Berries					0.3	
Nuts						120
Vine seedlings			1.0		1.0	
Fruit seedlings			1.0		0.2	
Fodder	1.0	1.0	3.0		2.6	
Pastures and fallow land	2.0	18.0	20.2	22.0	18.8	
Total cultivated area	151	198	346	271	284	448
Wild collected plants	152'660	95'089	139'298	205'529	251'717	273'552
Total organic area	152'811	95'287	139'644	205'800	252'001	274'000
Operators	34	45	49	38	137	

Source: Bernet & Kazazi 2012 (based on information from Albinspekt), Kazi 2013

-

<sup>&</sup>lt;sup>1</sup> All arable crops

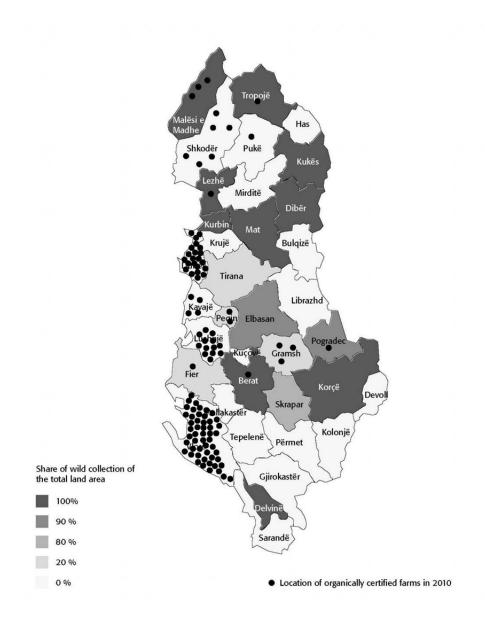


Figure 88: Albania: Geographical location of organic operators Source: Bernet & Kazazi 2012 (based on information from Albinspekt)

Albinspekt certifies more than 90 percent of all organic operators. It is the only certification body with authorization to certify according to national law (Law No. 9199), which is binding for national subsidy payments.

#### Key institutions/organizations

The organic producers' association, BioAdria, is the main organization, with more than 100 members. The Institute of Organic Agriculture is an important entity involved in organic on-farm research and the propagation of organic seed. The Albanian Association of Marketing (AAM) acts as a facilitating entity and supports international fair participation of organic exporters. The Ministry of Agriculture, Food, and Consumer Protection (MoAFCP) supervises the sector from the legal point of view and implements the subsidy scheme for organic agriculture.

In addition to Albinspekt, which is the only Albanian certification body with international recognition, seven foreign certifying bodies operate in Albania, although exclusively for export: ICEA, BCS Öko-GarantieGmbH, BioInspecta AG, CERES GmbH, Control Union Certifications B.V., IMO CH, and IMC srl.

#### Market and trade

An overview of the markets for organic produce shows there is very little overlap between the export market and the domestic market (Table 57). While the domestic market is focussed on fresh produce – especially vegetables and fruits – and organic wine, the export market focuses entirely on processed products: mainly special herbs and wild collected plants such as medicinal and aromatic plants, chestnuts, berries, mushrooms. Olive oil is sought after also on the domestic market for its taste and quality, and it has found a specialty niche market abroad due to its exclusive taste, exotic origin, and fair-trade certification.

While the export market is growing quickly, the domestic market is not yet well developed. Organic products are sold through a few specialized retail points such as street markets, specialty shops, and through home delivery. Organic products are mainly sold locally to save transportation costs. In 2011, a few restaurants have started to offer organic food as part of their local dishes.

Table 57: Albania: Estimated amounts of traded organic produce during 2010 (in tons)

Product categories	Exports in metric tons	Sales on the domestic market in metric tons
Cereals	0	52
Vegetables	0	77
Fruits and citrus	0	182
Vineyards	0	258
Olive oil	2	8
Cultivated herbs	120	18
Wild collected plants	5'991	78

Source: Bernet & Kazazi 2012 (based on information from Albinspekt)

#### Legislation and sector support

A national law on the production, processing, certification and marketing of organic products was adopted on February 26, 2004 (Law No. 9199). This initial law is largely aligned with the EU Regulation 2092/91 on organic production of agricultural products. This law is currently under revision to better align it with the present EU Regulation.

#### **Europe: Country Report Albania**

On the part of the government, the most obvious support for the organic sector is the subsidy scheme for organic farmers, which was introduced in 2008 and has grown steadily in monetary terms.

In 2007, the Ministry of Agriculture MoAFCP launched the National Action Plan for Organic Agriculture, for which it received support from the Mediterranean Agronomic Institute of Bari.

On the part of international donors, the support provided by the Swiss Agency for Development and Cooperation (SDC) and the Swiss State Secretariat for Economic Affairs (SECO) has been most important.

The SDC has supported the development of the sector and the domestic market, while SECO has supported the establishment of Albinspekt and the participation of organic exporters at BioFach in Germany. With the end of the SASA project in December 2011, the SDC stopped its support for Albania's organic agriculture. SECO's support for organic export promotion continues, which is now facilitated by the Swiss Import Promotion Programme (SIPPO) in collaboration with the Albanian Association of Marketing (AAM).

#### Research, advice and training

The development of the organic sector during the last ten years has been strongly supported by FiBL, which was the lead institution in the SASA project. Through FiBL experts and their involvement in the project, important capacities were built in the sector relating to organic research and extension. The newly founded Institute of Organic Agriculture (IOA), with activities relating mainly to organic on-farm research and extension is most important for organic production. The Albanian Association of Marketing (AAM) provides advice in the area of marketing. Staff from both IOA and AAM have previously been involved in the SASA project team.

#### Outlook

In recent years, a significant export business has developed for medicinal & aromatic plants, wild collected mushrooms and berries, chestnuts, and organic olive oil. The experience that has been gained by companies and the new investments in the processing infrastructure suggest a strong increase of organic exports for these crops in the coming years. In parallel, further development of the domestic market can be expected, although at a much slower pace.

#### Further reading

Bernet Thomas & Kazazi Iris S. 2012. Organic Agriculture in Albania – Sector Study 2011. Swiss Coordination Office in Albania (SCO-A), Research Institute of Organic Agriculture (FiBL) & Ministry of Agriculture, Food, and Consumer Production of Albania (MoAFCP), Tirana, Albania. (https://www.fibl.org/shop/pdf/st-1585-sectorstudy2011-albania.pdf)

#### Links

- www.albinspekt.com
- www.ibb.al

## Organic Agriculture in Hungary - Past, Present and Future

#### ZOLTÁN DEZSÉNY¹ AND DÓRA DREXLER²

#### Introduction

Hungary offers promising conditions for organic production. Its constitution bans the use of GMOs and many of its low-intensity agricultural areas (mostly pastures, meadows, fallows) are free from the effects of agro-chemicals. There are currently 124'000 hectares of certified organic land, which is about 2.5 percent of the total agricultural area. The domestic market is estimated to amount to 25 million Euros. However, it is also clear that the country's organic sector has not yet reached its full potential and there are numerous unexploited opportunities. While the sector grew quickly between 1996 and 2004, it has since been stagnating (Figure 89). The percentage of organic land in Hungary is just half of the European Union average, and Hungary is one of the few European countries where the organic sector has not been expanding. The stagnation is partly due to a lack of effective policy incentives, such as suitable subsidies or administrative support, a lack of coordination of export marketing initiatives and a lack of broad awareness-raising campaigns for domestic consumers. A large part of the organic produce is still sold as conventional. Better cooperation between stakeholders is required for the sector to move forward.

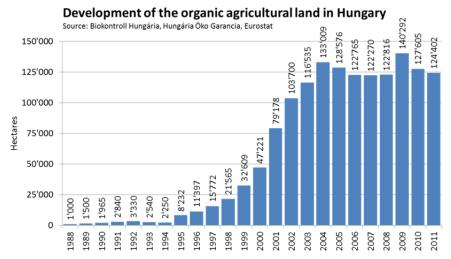


Figure 89: Development of organic agricultural land in Hungary 1988-2011 Source: Biokontroll Hungária, Hungária Öko Garancia, Eurostat

The Hungarian Government recently approved the National Rural Strategy, which aims to generate demand for high-quality, GMO-free, locally produced food, and the

 $<sup>^1</sup>$ Zoltán Dezsény, Hungarian Research Institute of Organic Agriculture (ÖMKi), Miklós tér 1, 1033 Budapest, Hungary, info@biokutatas.hu, www.biokutatas.hu

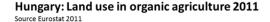
 $<sup>^2</sup>$  Dr. Dóra Drexler, Hungarian Research Institute of Organic Agriculture (ÖMKi), Miklós tér 1, 1033 Budapest, Hungary, info@biokutatas.hu, www.biokutatas.hu

#### **Europe: Country Report Hungary**

document considers organic agriculture as a strategic sector that deserves strong support. The strategy sets very ambitious objectives for the future development of organic agriculture in Hungary. It aims to have 350'000 hectares of certified organic land by 2020, which is almost a threefold increase on the current total. It is anticipated that subsidies for organic conversion and for yearly certification costs will play a major role in achieving this goal. Organic producers will also receive priority in future calls from the Rural Development Ministry for diverse support programmes, such as the young farmers' initiative. Organic animal husbandry and apiculture will receive particular support, as these are priority areas within the Ministry's agricultural development policy. The National Rural Strategy also foresees the creation of an Organic Action Plan, which will set out a detailed programme for the sector's development.

#### Production volume and structure

Organic farming in Hungary first started in the 1980s, but there were just 15 organic farms by 1988. This figure rose to 108 by 1995, 471 by 2000 and reached its peak in 2009 when there were 1660 certified organic units. The area under organic cultivation grew from 1'000 hectares in 1988 to 128'690 hectares in 2004, and 140'292 hectares in 2009. Since 2009, both the number of operators and the total cultivated area have decreased, dropping back to the 2005 level.



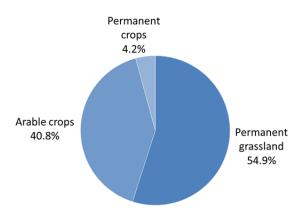


Figure 90: Land use types of certified organic area in Hungary in 2011 Source: Eurostat

Grassland makes up the majority of registered organic land (55 percent), followed by arable crops (41 percent), perennial crops (4.2 percent).

Although more than half the organic area is grassland, organic animal husbandry is relatively insignificant compared to crop production. In 2010, less than 100 farms kept certified organic livestock, which is less than one tenth of the organic producers. The reason is that most of the animals grazing on organic fields are not certified because farmers consider the certification costs to be too high, and the existing regulations do

not stipulate that only certified animals can be kept on organic grassland. As a result, organic grasslands receive substantial subsidies without creating any significant organic production: a situation that shows the inadequate structure of the current support scheme.



Picture: An organic wheat field in western Hungary. Photo courtesy: ÖMKi

#### The organic market - wholesale and retail structure

Today, organic products in Hungary have just a small market share and about 85 percent of the organic production is exported. Most of the products leave the country as raw materials or as low added-value produce and most of go to the European Union: mainly to Germany, Austria and the Netherlands, and to Switzerland. At the same time, the majority of the (modest) organic product range in Hungarian food stores consists of processed imports. Some estimates suggest that 90 percent of domestic organic consumption is made up of imports.

There is a significant lack of organic processing capacity in Hungary, and this could provide interesting potential market opportunities for organic food processing companies. This market opportunity is further enhanced by Hungary's proximity to countries with large organic markets.

Supermarket chains are playing an ever-increasing role as distributors of organic products (Table 58) and it can be assumed that they will play a major role in expanding the domestic market. However, only few domestic organic producers can currently meet the volumes, quality standards and the regularity of deliveries demanded by the supermarket chains. Pilot projects for product development, quality assurance and

#### **Europe: Country Report Hungary**

cooperation in production are needed to help domestic producers tap into this market. The formation of farmers' production and marketing groups, organic farmers' markets and local producer-consumer networks can also be important vehicles for distributing certified local organic products and expanding the domestic market.

Table 58: Retail channels for organic products

Туре	Share
Supermarkets	60%
Specialized stores	20%
On-line sales	6-7%
Farm sales	2-3%
Organic markets, fairs, events	6-10%

Source: Ferenc Frühwald 2012



Weekly organic market in Újpest, Budapest. Photo courtesy: ÖMKi

#### Factors that motivate consumption of organic produce

Hungarian consumers are mainly motivated to buy organic for health considerations. Studies have shown that organic products are favoured in Hungary because they are free from GMOs, toxic chemicals, additives, artificial flavourings and colourings, preservatives, and are perceived as having a higher quality. Taste, nutritional value and price are less important motivating factors, and ecosystem protection plays a minimal role for most Hungarian consumers.

Although domestic demand for organic products is growing, a large percentage of the population - even some of those who regularly purchase organic products - cannot define what organic means or state the difference between organic and non-organic products. Effective outreach programmes and marketing campaigns are needed to disseminate credible information and to develop consumer awareness. Removing misconceptions about organic production is crucial for increasing domestic consumption.

#### **Future trends**

The future development of organic agriculture in Hungary is heavily dependent on the European Union's Common Agriculture Policy, how this will be implemented nationally and, most of all, on the realisation of the new National Rural Strategy. Hungarian organic production needs a stronger practice-oriented research basis, and there needs to be more dissemination work that is underpinned by local scientific evidence. Furthermore, efforts are needed to increase local consumer awareness to enable the local organic market to grow.

Cooperation and a better communication between organic stakeholders, including producers, traders, umbrella organisations, certifiers, and research institutions, is crucial for effective lobbying work and for Hungarian agriculture to play a role in addressing global challenges, such as climate change or water and oil scarcity.

It is anticipated, that market demand for organic products will continue to increase steadily, and some organic farming methods will soon become mainstream agricultural practices. The development of organic agriculture could play a key role in maintaining Hungary's competitiveness in agricultural markets. This is increasingly recognised within current agricultural policy. Joint efforts by Hungarian organic stakeholders are needed to ensure the realisation of the promising policy plans.

#### The role of ÖMKi for organic farming research in Hungary

The Hungarian Research Institute of Organic Agriculture (ÖMKi, www.biokutatas.hu) is a private non-profit research centre, founded by the Swiss Research Institute of Organic Agriculture (FiBL) in 2011. The aim of ÖMKi is to advance science and innovation in organic agriculture in Hungary. ÖMKi's motivated team works closely with many stakeholders in the Hungarian organic movement: initiating, coordinating and implementing innovative research projects, as well as providing training and extension services. In 2012, it started to build up an on-farm experimentation network that has engaged many organic farmers. ÖMKi regularly organises workshops and vocational training for farmers and other stakeholders: often in partnership with other organisations. It has also established a popular PhD and Postdoctoral scholarship programme in order to foster the development of a new generation of Hungarian scientists, who will be deeply involved in researching organic agriculture and sustainable production methods. Thus, ÖMKi is striving to support the development and competitiveness of Hungarian organic agriculture and food production in the long term.

## Organic Farming in Kosovo

#### SYLË SYLANAJ<sup>1</sup>

Organic production in Kosovo is still in an early phase of development. Kosovo has natural conditions that are quite suitable for development of organic farming. This is especially true for the mountain areas, where organic production has a high potential.

The number of organic farms, all of which are in conversion, is still small and, technical information, training and advice, as well as financial support for farmers is needed to facilitate the conversion of more areas.

In 2002, the Association for Organic Farming of Kosovo (AOFK) was founded, but it is currently not active due to the lack of financial resources.

#### **Production**

The Association for Organic Farming of Kosovo (AOFK) reports that 11.1 hectares were under conversion to organic agriculture in 2011 (Table 59).

Table 59: Kosovo: Use of organic agricultural land 2011

Crop/crop group	Hectares (all in conversion to organic)
Orchards	4.0
Vineyards	1.0
Wheat	1.0
Vegetables in greenhouses	0.1
Medicinal plants, cultivated	5.0
Total	11.1

Source: Association for Organic Farming of Kosovo (AOFK)

Organic wild collection is an interesting option for Kosovo: The country has appropriate natural resources and a diverse mountain flora with 1800 different types of medicinal plants and fruits. Among the wild fruits collected are blueberries, cranberries, juniper, dry apples, and plums. Several companies (6), some of which are also exporters (3) collect mountain fruits and medicinal plants and 550 tons of wild fruits, worth 815 000 Euros, were exported in 2011. Since 2010, there has been one organic honey producer.

#### Certification

Two organic certification bodies operate in Kosovo: ALBINSPEKT from Albania and PROCERT from the Former Yugoslav Republic of Macedonia.

#### Legislation

In 2010, the Organic Farming Unit was established at the Ministry of Agriculture. Its task is to support the development of the organic sector and to implement Legislation

244

Prof. Dr. Sylë Sylanaj, University of Prishtina, Faculty of Agriculture & Veterinary, Department of Pomology, Bul. Bill Clinton, 10 000 Prishtinë, Republic of Kosova

No. 02/L-122 on Organic Farming that was issued by the Ministry of Agriculture (MAFRD).

The legislation includes two implementing rules:

- Rules on packaging, storing and transport of organic products; and
- Rules on inspection and control.

Organic regulation of Kosovo is based on the EU Regulation on organic agriculture, and is amended, depending on the developments of the EU Regulation. A project is currently running to amend and supplement the Kosovo Legislation on Organic Farming as well as to prepare secondary legislation. This project is carried out with the support of the Mediterranean Agronomic Institute of Bari.

### **Further government support**

The Kosovo Government provides subsidies for agriculture and there are lobbying activities that seek to ensure that organic farming will benefit from these subsidies in future. This would show the public support for sustainable agriculture and would also constitute an important step towards the integration of Kosovo into the European Union.

### **Montenegro - Country Report**

#### NATASA MIRECKI<sup>1</sup>

#### Introduction

The agricultural sector plays an important role in Montenegro's economy, which is reflected in its high share of the total GDP (7.7 percent of the total GDP in 2010). Agricultural land covers 516'070 hectares (Statistical Yearbook 2010) and accounts for 37.4 percent of Montenegro's total territory. Organic farming is one of the priorities for the development of Montenegrin agriculture, and plays an important role in both the "Strategy of Food Production and Rural Development" and the "National Programme for Food Production and Rural Development". This priority should also be recognized in the Instrument for Pre-Accession Assistance in Rural Development (IPARD²) 2007-2013. The Montenegrin public knows of the term "organic", but the majority associate it with traditional production, which is not defined. Only a very small number of (mostly urban) consumers understand the term.

#### Historical development of the organic sector

More intensive activities with regard to the development of organic agriculture in Montenegro have taken place over the past ten years.

In the early days of the development of Montenegrin organic agriculture, NGOs organised promotion campaigns, which resulted in a growth in interest by consumers and agricultural producers. The Law on Organic Production was adopted at 2004, followed by associated secondary legislation during 2005/06. The law created the legal basis for the establishment of the Montenegrin certification body "Monteorganica" in 2005.

The FAO project "Organic Agriculture in Montenegro: a concerted support for small-scale growers in organic agriculture" (2008-2011) made an important contribution to the development of the organic sector in Montenegro. The overall objective of the project was to support rural development in Montenegro through strengthening the institutional framework and supporting capacity building for organic agriculture. The project strengthened the technical capacity of the Montenegrin certification body and the extension service in the field of organic agriculture. Through demonstration sites, the project contributed to building small-scale growers' awareness of organic agriculture and their capacities for production, processing and marketing of organic products. The project contributed to an increase in public awareness of the potential benefits of organic agriculture and products. All of the capacity building activities have contributed to preparing the country for harmonization with the EU organic agriculture legal and policy framework.

<sup>&</sup>lt;sup>1</sup> Prof. Dr Natasa Mirecki, Biotechnical Faculty, University of Montenegro, Mihaila Lalica, 81000 Podgorica, Montenegro, http://www.btf.ac.me/en/

 $<sup>^2</sup>$  With the Rural Development component of the Instrument for Pre-accession Assistance (IPA) of the European Commission, candidate countries will be assisted through a particular instrument called IPARD, the Instrument for Pre-Accession Assistance in Rural Development. Further information is available at http://ec.europa.eu/agriculture/enlargement/assistance/ipard/index\_en.htm

Further support for the organic sector is being given by the ongoing DANIDA<sup>1</sup> project "Organic Agriculture Development Porgramme" (2009-2013). This support is implemented through:

- a) institutional development to prepare Monteorganica for accreditation, training of extension service providers and providing support to the development of producers' associations, and
- b) increasing the competitiveness by establishment of a grant scheme for investments in organic production.

Although the realization of project activities contributed to the development of the sector and increased the number of organic producers, the market is not yet sufficiently developed. There is no system under which relevant data on the domestic market or imports and exports of organic products from Montenegro are collected.

#### **Key institutions**

The **Ministry of Agriculture and Rural Development** is the competent authority responsible for the overall co-ordination of the policy related to organic production. The Ministry also runs the register of organic producers.

**Monteorganica** is the certification body, which performs inspections and issues certificates. It was registered in 2005 and approved for operation by the Ministry of Agriculture and Rural Development in 2006.

Furthermore, the Ministry of Agriculture and Rural Development has issued approvals for three foreign certification bodies: BCS Öko-Garantie GmbH, Germany, Organic Control System, Serbia, and Suole e Salute, Italy.

Since May 2011, producers have been united in the national association of organic producers: "Organic Montenegro" (organicmontenegro.me). The objectives of Organic Montenegro are to promote the development of organic farming and the organic market in Montenegro.

The Biotechnical Faculty of the University of Montenegro has introduced a course on organic production for students of agriculture.

Several NGOs are also working on the development of organic farming in Montenegro: especially on the promotion of organic farming and the education of organic producers.

#### Training and education

Advisory support for producers is provided by the State Advisory Service, which has regional offices throughout Montenegro. Training for the advisers of the State Advisory Service is provided by several international and national projects. A manual for extension service providers has been prepared. In the last five years, capacities in the area of training in organic farming have started to be built. Several training opportunities for producers, farm advisers and staff from certification bodies have been offered.

\_

<sup>&</sup>lt;sup>1</sup> DANIDA is Denmark's development cooperation, see http://um.dk/en/danida-en/

#### **Europe: Country Report Montenegro**

The students of the Biotechnical Faculty of the University of Montenegro have access to basic training on organic production, and they can gain practical experience at Faculty's experimental field, which includes a greenhouse. On this field, only organic methods are applied. The Faculty is currently working on the introduction of formal education in secondary agricultural schools, non-formal education as well as on Life Long Learning programmes for adults.

#### Legislation

A legislative framework for organic production is in place. The Law on Organic Production was adopted in  $2004^1$  and secondary legislation during  $2005.^2$  This legislation is largely in line with the EU regulations EC2092/91 and 2381/94. The operation of foreign legal entities for control and certification of organic agriculture products has been regulated since  $2007.^3$  In the course of 2011, the existing regulation in the field of organic production was adjusted to the new EU regulations.<sup>4</sup>

An officer at the Ministry of Agriculture and Rural Development (MARD) is in charge of the supervision of organic production. Agricultural inspectors perform the supervision of the implementation of the Law on Organic Production, the associated regulations, and the organic support programme.

#### **Production**

The Ministry of Agriculture and Rural Development maintains the register of organic producers, however, only producers whose products are certified by "Monteorganica" are currently registered. There are a number of organic products certified by the other three certification bodies that are authorized to operate in Montenegro but there are no available data.

Table 60: Montenegro: Trend in organic production 2009-2011

Year	2009	2009 2010			2011		
	In con- version	Organic	In con- version	Organic	In con- version	Organic	
Arable land (ha)	27.87	1.3	60.88	0.4	121.6	0.5	
Perennial crops (ha)	15.85	3.0	45.74	3.0	73.45	4.74	
Collection of medical herbs (ha)	-	101'800	-	101'800.95	8.76	139'800	
Meadows and pasture (ha)	3448.8	1106.41	-	3451.1	336.18	2531.6	
Animal husbandry (No.of animals)	150 goats, 700 sheep, 210 lambs, 79 cows, 11 beehives	430 goats, 100 goatlings, 120 sheep, 40 lambs, 56 cows, 31 beehives	75 goats, 52 beehives	308 goats, 60 goatlings, 790 sheep, 570 lambs, 53 cows, 41beehives	190 sheep, 135 lambs, 74 goats, 57 cows, 121beehives	833 sheep, 709 lambs, 38 beehives	

Source: Annual report from the certification body Monteorganica (2011)

 $^2$  OG of Montenegro, No 36/05,38/05, 52/05, 82/05, 31/07

248

 $<sup>^{1}</sup>$  OG of Montenegro, No 49/04

<sup>&</sup>lt;sup>3</sup> OG of Montenegro, No 82/08and 26/07

<sup>&</sup>lt;sup>4</sup> EC834/2007; 889/2008 and 1235/2008

#### Government support and organic policy

With the adoption of the Law on Organic Production and the secondary legislation, the conditions were provided to support organic production through agricultural policy measures. This is especially true for the second group of rural development measures, under which organic and integrated farming have a special place (agri-environmental measures). From 2009 to 2012, basic payments under the direct support measures for livestock and plant production were available. Organic producers receive additional payments as follows:

- Field crops and medicinal herb up to 150 euros per hectare,
- Fruit, seeds and plantation material up to 250 euros per hectare,
- 50 euros per livestock unit,
- 2 euros per head of poultry, and
- 30 euros per beehive.

Organic production is also stimulated through measures for product quality improvement and for strengthening the competitiveness of agriculture. This includes support for producers during the first five years after conversion to organic agriculture. In 2009 and 2010, this amounted to 1'200 euros.

In addition, from 2010 to 2012, support for investments in organic agriculture was provided through a grant scheme within the DANIDA project. The total value of the grants was one million Euros, with 75 percent of the contribution was from Denmark and 25 percent of the contribution from the MARD.

#### Action plan

The Action Plan for Organic Production in Montenegro 2012-2017 is the Ministry of Agriculture and Rural Development's contribution to the development of the Montenegrin agriculture and food sector towards increased competitiveness, environmental sustainability, and to the improvement of the basis for sustainable development of rural areas.

The overall goal of the action plan is to support the development of organic farming, and the processing and consumption of organic products. It also aims at using the comparative advantages of Montenegro to create a coherent, market-oriented organic sector with the necessary professional staff at all levels.

As a first step in supporting the implementation of the National Action Plan for Organic Agriculture, the on-going DANIDA¹ project "Organic Agriculture Development Programme" has supported three workshops on the advocacy and promotion of organic agriculture and food. The workshops are intended to contribute to achieving the action plan's third objective: to improve public awareness of organic agriculture and food. Due to a lack of understanding, media coverage has sometimes created more confusion about organic agriculture rather than promoting it. The purpose of the workshops was to provide producers, NGOs, institutions and journalists with a better understanding of

<sup>&</sup>lt;sup>1</sup> DANIDA is Denmark's development cooperation, see http://um.dk/en/danida-en/

#### **Europe: Country Report Montenegro**

how to communicate clear and simple messages about organic agriculture and of which tools to apply.

#### **Outlook and challenges**

Montenegro has a comparative advantage for organic production. It has very diverse climate zones and agricultural conditions, which allow the production of a large variety of agricultural products, although in limited quantities. It has well preserved nature and a number of traditional food products. Montenegrin agriculture production systems are largely extensive with limited chemical pesticide and fertilizer use, which makes conversion to organic production methods less difficult. This means that there is a large potential for a substantial part of the agricultural sector to become organic. Supporting conversion to organic production also helps to meet increasing domestic and foreign demand for organic products.

Organic production is closely linked to Montenegro's intention to develop high-level tourism. High quality food is integral to that goal however; tourists also seek traditional and authentic Montenegrin food. This means that Montenegrin organic production can support the development of tourism while tourism in combination with organic production can create jobs and improve livelihoods in rural areas.

#### References

Grupa autora (2006): Crnogorska poljoprivreda i Evropska unija, Ministarstvo poljoprivrede, šumarstva i vodoprivrede Crne Gore.

Action Plan for Organic Production in Montenegro (2012-2017)

Mirecki, Nataša (2007): Contry Study Montenegro. Study of the organic and safety agriculture in Adriatic cross-border region and of training needs. Options Mediterranees Series B: Studies and Research, Number 60. CIHEAM /Bari

Mirecki, N.(2009): Razvoj organske poljoprivrede u Crnoj Gori. IV Symposium with International Participation innovation in Crop and Vegetable Production (4; 2009; pg. 14; Beograd) – Book of abstracts.

# Organic Farming in Serbia: The Challenge to Officially Register all Operators and Control Bodies<sup>1</sup>

#### GUIDO HAAS<sup>2,3</sup>

The first part of this country report provides an overview based on the 2011 key production data. The second part focuses on control, certification, and export challenges.

#### Organic agricultural land

According to official data from the Ministry of Agriculture, 6'335 hectares, including 3'327 hectares of permanent grassland, were under organic production in Serbia in 2011. In 2010, the organic area was 5'855 hectares.<sup>4</sup> The proportion of the country's total utilized agricultural area (5.05 million hectares) under organic agricultural production is 0.13 percent. A first assessment for 2013 shows that the organic area could be approximately 11'000 hectares. In 2011, 80 percent of the organic annual cropland and 58 percent of the permanent cropland was in conversion. These figures indicate dynamic growth of the organic agricultural land. However, there is some fluctuation in the number of farms and the organic land, as many farmers convert to organic farming, but farmers also convert back to conventional.

#### Cropland dominated by fruit orchards

The area under crops was 3'008 hectares, of which 39 percent were used for permanent crops: predominantly fruits. The two most important fruit crops are apples and raspberries. Export operators, some of who have up to 200 hectares, dominate organic fruit production in Serbia.

Vegetable, spice and herb production is almost negligible with 129 hectares in total, but it is important because it meets the growing domestic demand. Fresh products are often sold in so-called 'green markets' in big cities. Domestic processed organic food is becoming more visible as these products are offered in supermarkets.

In general, organic crop yields are about 20 percent lower than in conventional farming, but they can also be higher than the national average (Table 61). However, the national yield mean does not reflect the yield potential, which professional modern conventional farms in Serbia are able to realize.

-

 $<sup>^1</sup>$ This article is extracted from a more detailed version of the 2011 data, and an interpretation report is available on request. The article solely expresses the author's personal viewpoint and observations.

 $<sup>^2\,\</sup>mathrm{Dr}.$  Guido Haas, agrar<br/>Expertise, Am Weiher 78, 53604 Bad Honnef, Germany, g.haas@agrarhaas.de, www.agrarhaas.de

<sup>&</sup>lt;sup>3</sup> The author was employed by the Ministry of Agriculture Serbia as senior advisor for the organic farming unit in 2011 and 2012. The unit serves as the Competent Authority for the national organic farming surveillance system. The position was supported by the German development cooperation unit CIM, Frankfurt.

<sup>&</sup>lt;sup>4</sup> Editor's note: Please note that this figure is lower than the figure provided in previous editions of this book, due to the change of the data source. Whereas the data in this report are based on the data of the operators and control bodies officially registered by the government, the data communicated previously were collected by GIZ that aims to cover all players that are active in the country.

Table 61: Yield assessment for some key organic crops in Serbia

Crop	Yield mean [t/ha]	Yield range [t/ha]
Cereals (wheat, barley, etc.)	2.7	1.5-4.0
Buckwheat	1.2	0.8-1.5
Corn (maize grain)	5.0	2.0-7.0
Sunflower	1.8	1.3-3.0
Soybean	2.5	1.5-4.0
Apple, plum, apricot	12.5	0.5-30.0
Sour cherry	7.0	0.3-12.0
Raspberry	9.0	4.0-12.0
Strawberry	9.0	4.0-12.5
Blackberry	12.5	8.0-30.0

Source: Own calculation based on control data verified and adapted by Serbian expert statements and cross-checks

#### Wild collection area - Definition missing

For some operators - in particular for processors and exporters - certified organic wild collection of berries, tree fruits, mushrooms and herbs is of high importance. Some sources publish high numbers for large areas of organic wild collection for Serbia. However, a systematic evaluation of these areas is needed to avoid multiple counting of the same areas and realistic collecting area coverage of single operations, so that only officially registered operators are considered.

#### Low share of livestock and legumes

Approximately 5'800 head of livestock were kept in 2011, of which more than half were sheep. The overall stocking rate of 0.24 livestock per hectare is very low. An unbalanced biological nitrogen supply and humus budget is critical to farm sustainability. The proportion of leguminous crops is low at 16 percent of the annually sown area. Thus productivity and soil fertility are hardly ensured and are certainly not enhanced. These and other basic principles of organic farming, such as the recycling of nutrients, need to be more emphasized in general, but also as part of the legislation, advisory and specific control efforts.

#### Operator and control bodies (CBs)

A total of 211 operators were certified as organic or in conversion. When combined operations are considered, and depending on the definition of operator type, there were 177 producers<sup>1</sup> (25 processors, 18 importers, 15 exporters, and 10 beekeepers). Of the 15 exporters, 14 cover the whole agri-food supply chain with production, processing and export. Some of the bigger export units are based on group certification, covering up to hundreds of small farmers (more than 1'000 in total, who are not included in the figure above).

Seven officially registered control bodies controlled operators in 2011. Some control bodies had less than 20 operators as clients, which can be critical in the long run.

<sup>&</sup>lt;sup>1</sup>There are 700'000 producers in total.

#### Import of processed food - Export of fruits

In 2011, the import value reached about 1.2 million euros, which is three times as much as in 2010. By far the biggest quantity was processed food: in particular for babies. Most food items were imported from other European countries and the Far East. The volume of single products is usually small. However, there is significant potential for domestic food processors to replace some of the expensive products that are imported. Examples are grains and flakes from crops that are already growing organically in Serbia.

The export volume is estimated at between three and four million euros. This figure includes the export volume of operators that are not officially registered by the Serbian government. About 98 percent of the recorded export products were fruits in 2011: most of it delivered to the European Union. Fruit production profits from beneficial conditions and competitive low labour cost.

#### Exports to the European Union - not organic until after the border

A comparison of production and export data indicates a large discrepancy because of recording issues. Customs can only record the quantity and type of product if the delivery export papers state the organic status, however:

- Some operators, though fully certified, do not complete all the documentation properly.
- Some operators are not legally certified within Serbia but have been certified according the European Union legislation by non-authorized control bodies. In such cases, the organic status of products is not declared when passing the border and the EU certificate is added to the consignment afterwards.

Primarily it is the task of the Serbian authorities to officially register, control or sanction all operators according the national legal framework. However, it should also be the task of the importers, their control bodies and the competent authorities of the importing EU-member states to check the correctness of all delivery papers as requested by the EU legislation (always stating the organic status). Neighbouring states also face similar problems.

#### EU list of non-authorized control bodies

Some control bodies and operators still work in Serbia without official registration by the Serbian government. Furthermore, some control bodies were recently listed by the European Commission (EU regulation 508/2012) as certifying bodies in Serbia without being authorized to do so by the Serbian authorities. Some control bodies are now trying to set up cooperation contracts with authorized control bodies, but the situation remains unclear.

#### Unleash exporters and control bodies

While revising the law (next section), an alternative option has been considered to overcome the problem of non-officially registered operators and control bodies working in Serbia. The suggestion is to let the exporters and their international CBs freely float on the international control business and organic market. Such an approach would release

much of the domestic tension and internal lobbying conflicts at the cost of giving up the full national surveillance and coverage.

#### Legislation, labelling, and administration not settled yet

The national organic production law has been in force since January 2011 and the core rulebook has been in force since July 2011. A thorough revision process started in October 2012 because of some shortcomings of the legal framework. The key objectives of the revision are to:

- Restructure and expand the focus of the law beyond control and certification.
- Add more specific production principles and rules.
- Clarify and define more clearly the supervision task sharing, responsibilities and coordination within the related units of the Ministry of Agriculture.



Figure 91: Serbia: Organic logo

The national logo was introduced with the current law in 2011. However, some food companies that sell conventional products are still able to use misleading brand and company names such as Bioland, BioTrend, EcoFarm, and HalloOrganic.

#### Subsidy payments unsure: as is agricultural policy in general

Serbia, along with other countries in the region, has been facing enormous financial and general economic problems since the world financial crisis. On top of that, agriculture was hit by a very severe drought during summer 2012 with significant yield losses of the key commodity crops.

As a consequence of the overall struggle, the hectare payment for organic farmers in 2012 was offset, and the payments for support in 2011 did not arrive before mid-2012. It is likely that the low lobbying power, due to the small share of organic land and the low number of operators, are additional reasons for the sudden halt to financial support. The latest per hectare payment level was 250, 350, and 450 euros for arable crops, vegetable and fruit production, respectively. The rate is high compared to other European countries, but most farms are smaller than five hectares so the amounts paid per farm are also small.

In May 2012, the agricultural ministers, the top staff, and some medium management level staff were replaced after the previous minister and staff had just been in office

since March 2011. Such short ruling periods are rather typical. Consequently, hardly any long-term, strategically sound, policy development exists.

Organic farming is predominantly a topic among the Serbian EU membership efforts and is thus more driven from the outside rather than being a real domestic topic. For example, the National Action Plan for Organic Farming has been discussed and developed for years but has never reached beyond paperwork status. Apart from a lack of real priority setting within the ministry, the key obstacle for implementing an action plan organic farming is lack of financial resources.

Some stakeholders, such as control bodies, processors, traders, scientists and advisory agents are becoming more organized but the basic farmer representation and participation is still insufficient. Overall, the private sector in Serbia is developing organic farming very much on its own.

#### Connect organic with rural area challenges

From a strategic point of view, it seems hardly sufficient to nominate organic farming as a relevant corner stone of the Serbian agricultural policy. Exporting fruit and serving a small domestic market falls far short. Expanding the export range by growing some grain cash crops requires high investment in land and capital-intensive machinery. If any, only the few commercial farms and cooperatives of at least 100 hectares located in the beneficial northern part of Serbia (Vojvodina) would be able to produce significant quantities of grain.

Organic farming could be of much higher relevance on the political agenda if it was seen as a solution to some key problems of the Serbian agricultural sector. Organic farming can offer perspectives for the essential social-economic challenges in rural areas. These are particularly important in the central and southern hilly and mountainous regions of Serbia, which suffer from an immense domestic migration drain of young people due to high poverty, high unemployment rates, and a high level of land fragmentation of the smallholder farms.

#### References

Berkum, van S. & N. Bogdanov 2012: Serbia on the road to EU accession - consequences for agricultural policy and the agri-food chain. Cabi publisher, UK, 224 p.

European Commission - Directorate-General for Agriculture and Rural Development 2010: An analysis of the EU organic sector. Download http://ec.europa.eu/agriculture/organic/files/eu-policy/data-statistics/facts en.pdf

European Court of Auditors 2012: Audit of the control system governing the production, processing, distribution and imports of organic products. Special Report No 9/2012. Download: http://eca.europa.eu/portal/pls/portal/docs/1/15290741.pdf

Government of the Republic of Serbia - European Integration Office 2011. Answers to the European Commission's questionnaire submitted to the European Commission on 31 January 2011. Download www.seio.gov.rs

Statistical Yearbook of the Republic of Serbia 2011 - part on agriculture, listing data for the years 2008 - 2010.

Download http://webrzs.stat.gov.rs

Europe: Country Report Serbia

# Latin America and the Caribbean



Map 6: Organic agricultural land in the countries of Latin America and the Caribbean 2011 Source: FiBL-IFOAM Survey 2013; based on information from the private 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 322.

### Organic Agriculture in Latin America and the Caribbean

#### PATRICIA FLORES<sup>1</sup>

#### Introduction

Latin America and the Caribbean is a region covering 22'222'000 km<sup>2</sup>, and it has 577.2 million inhabitants. It is characterized by a high level of biodiversity, large areas of cropland, pastures and forests, and a high level of cultural diversity.

Organic agriculture in Latin America and the Caribbean is an activity, which brings welfare and livelihood improvements to thousands of smallholders who produce mainly for the international market. It has the potential to contribute to poverty alleviation in areas with a population living on less than two US dollars per day. Therefore, organic production has become a tool to fight against rampant poverty and food insecurity. In addition to providing work opportunities in rural areas, organic agriculture contributes to environmental conservation. A significant proportion of the regional organic products, such as brazil nuts, coffee, cacao and bananas, come from high value conservation areas. Nowadays, several government programs and national policies, as well as efforts and projects of civil society, are based on agro-ecology and organic production for a truly sustainable development.

While exports remain the main activity, the domestic market for organic products is becoming more diverse, and steadily growing especially in Mexico, Costa Rica and South America. The most developed domestic market is in Brazil, where farmers' street markets and cooperatives have been organized for 30 years, and where a balance has been kept between domestic and international organic markets. Following Brazil, other countries in the region, including Ecuador, Colombia, Mexico and Peru, have started to develop alternative certification schemes and marketing strategies aiming at directly reaching responsible consumers. For example, the domestic organic market in Peru has been strengthened by the gastronomy movement (www.apega.pe) and its alliance "cocinero-campesino" since 2009.

#### Organic markets and exports

The main destination markets for organic exports, which constitute approximately 85 percent of the region's production, are the European Union, the United States, and Japan. Argentina and Costa Rica are the only countries in the region with third country status for the European Union although most Latin American countries are applying for this status: a process that started ten years ago when governmental organic regulations began to be developed in the region.

In the past decade, several innovative schemes, which were mostly initiated by civil society (producer organizations and NGOs) and local governments, have contributed to the development of domestic markets. These schemes include farmers' street markets, delivery schemes, supermarkets, organic shops, pick-yourself schemes and on-farm sales.

 $<sup>^1\,</sup>Patricia\,Flores,\,Representative\,of\,the\,Latin\,American\,and\,Caribbean\,Group\,of\,the\,International\,Federation\,of\,Organic\,Agriculture\,Movements\,(GALCI),\,Lima,\,Peru,\,www.ifoam.org/about_ifoam/initiativ-es/galci.html$ 

Both the quality of the organic products and the related services are undergoing improvement to satisfy the increasing demand by consumers who are becoming better informed about the benefits of organic production. With the exception of Brazil, the domestic market is still in an early stage of development and there is much potential to cover the increasing demand for fresh vegetables and fruits, processed products, dairy products, and eggs.

Despite efforts of governments in the region to systematically organize data on organic production, only a few countries have established a centralized data collection system. Argentina is a good example of governmental data collection, and the competent authority in charge of organic agriculture, SENASA, publishes an annual statistical report. The Peruvian government also delivers a brief document on the main statistics, which are provided by the certification bodies operating in the country. The Brazilian government, through the Agroecology Coordination of MAPA, is also working on updating data and has recently released a map of the most representative organic products (including imports). The data sources for most countries in the region are reports from private certification bodies and non-profit organizations.

#### Mexico

In Mexico almost 370'000 hectares of agricultural land are organic, managed by almost 170'000 producers According to data from CIIDRI¹ (from 2008), the annual revenue from organic exports is 400 million US dollars. Almost all producers (99.95 percent) are smallholders with less than two hectares. The main organic products by cultivated area are coffee, avocados, fresh vegetables, and aromatic herbs.

Chiapas and Oaxaca are the leading states in organic production, followed by Michoacán, Querétaro y Guerrero: collectively accounting for about two thirds of Mexico's total organic production. Much of the organic production takes place in areas of ecological importance, with Chiapas, together with Oaxaca and Veracruz, containing 70 percent of the country's biodiversity.

Mexico is a country with a highly diversified organic production. Although almost all of the organic production area is used for the 15 main crops, there is a trend to diversify organic production as farmers wish to broaden their product range. Bamboo (Bambusa arundinacea), garlic (Allium sativum), neem (Azadirachta indica), peanuts (Arachis hypogaea), apricots (Prunus armeniaca), and chiotilla (Escontria chiotilla) have been grown organically only for the past three years. Furthermore, there are several non-traditional products cultivated in large areas compared with conventional agriculture. An example is rambutan (Nephelium Lappaceum), of which 80 percent of the total rambutan production area is under organic cultivation. High proportions of organic production have also been reached for passion fruit (Passiflora edulis), blackberry (Rubus fructicosus) and lychee (Litchi chinensis), and their areas continue to grow in response to external market demand

The "Red Mexicana de Tianguis y Mercados Orgánicos" network plays a key role in the development of the domestic market. In addition to marketing support, the network

<sup>&</sup>lt;sup>1</sup> CIIDRI – Interdisciplanary Research Centre on Integrated Rural Development at the University of Chapingo (Centro de Investigaciones Interdisciplinarias para el Desarrollo Rural Integral, Programa de Investigación en Agricultura Sustentable y Departamento de Agroecología, Universidad Autónoma Chapingo).

steadily works on organic policies and advocacy, and it is recognized as an outstanding organic stakeholder. In 2010, SENASICA (the competent authority in charge of organic agriculture at the Ministry of Agriculture) and the network signed an agreement with the objective of developing domestic markets based on Participatory Guarantee Systems. The network has also inspired other marketing initiatives in Mexico and the region. Fresh vegetables and fruits, added value and home-made products, are the main products offered by organic producers at the local markets.

#### Mexico: Development of organic agricultural land 2005 to 2011

Source: Universidad Autónoma Chapingo (no new data was provided between 2008-2010)

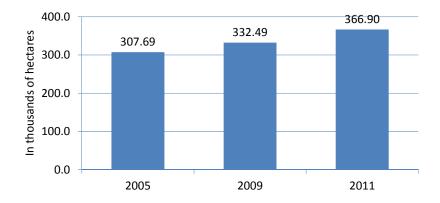


Figure 92: Mexico: Development of organic agricultural land 2005-2011
Source: Universidad Autónoma Chapingo (no new data was provided between 2008-2010)

#### **Central America**

Central America is composed of seven countries: Belize, Guatemala, Honduras, El Salvador, Costa Rica, Nicaragua, and Panama. Even though it is not a Central American country, the Dominican Republic is frequently included in regional integration efforts. One of these integration efforts and policies is the Central American Agricultural Policy (PACA), which includes two measures that specifically address organic agricultural development and support. The most notable initiative so far has been the development of a regional standard for organic agriculture, which should be applied soon. It was drafted over two years by the competent authorities, in a process that included intensive consultation with the organic movements in each country.

Among the main reasons for the development of organic agriculture in Central America are:

- The lack of availability of conventional inputs during the re-establishment of farms
  that were abandoned as a consequence of military conflicts and civil wars, such as in
  Nicaragua, Guatemala and El Salvador, which has facilitated the conversion of coffee
  and cacao production on these farms to organic;
- Indigenous farming with wild plants or introduced crops, which are traditionally managed and produced for export. Examples are organic morus (blackberry) production in Guatemala and Costa Rica; and

- "Modern" certified farms that were initially conventionally managed and which have adopted organic management to meet market demand.

The main organic product in Central America is coffee, which represents in some Central American countries as much as 90 percent of the organic production. Cacao is also a major source of income for small farmers throughout Central America. Other important organic products are sesame, cashew, honey, tropical fruits (banana, pineapple, coconut), citrus fruit (orange, mandarin, lemon), medicinal herbs & aromatics, ginger, turmeric, vanilla, and indigo. Most producers are smallholders who are organized in cooperatives and associations and, together with processors and traders, are the main suppliers and responsible for the dynamics of the sector. Very few organic producers sell their products directly to importing countries. Most certified organic farms are less than six hectares in size. The PROAMO Support Program for Organic Markets is a sub-regional project in Central America with the aim of giving organic smallholders' organizations better access to domestic, regional and international markets.

The key organic export products undergo little or no value adding prior to export due to trade barriers, which especially apply to coffee. A further factor is the limited local processing capacity for products such as cacao, sesame and fruits. Other products, including indigo, marañon, pineapple, banana, vegetables, morus, and brown sugar are traded in smaller quantities on the international markets. The domestic market is supplied with basic grains, and roots and tubers, which are mostly sold as conventional. Fresh vegetables are mostly grown for local markets, and the number of street fairs and other points of sale are increasing throughout the region. Many kinds of fresh organic vegetables such as lettuce, tomatoes, coriander, onions, spinach, cucumber, parsley, and broccoli can be found at affordable prices for local consumption.

Honduras has the largest organic coffee area, followed by the Dominican Republic, Nicaragua and Guatemala. According to PROAMO's database, 91 percent of the organic coffee is sold as green coffee beans/grano de oro processed, and only one percent is sold as fresh product. Pergamino coffee, which is the unfinished processed product, constitutes nine percent of the production, and all of it comes from Guatemala. Ground and toasted coffee beans constitute six percent of the organic coffee that is sold. Almost 25 percent of the organic coffee is also sold on the fair trade market. Organic producers from Costa Rica produce cacao with added value (liquor, butter, powder, chocolate bars, nibs). Another key organic product for Costa Rica is, pineapple: both fresh and processed (vinegar, juice, dehydrated, marmalade, and canned). Costa Rican bananas are mostly sold as fresh product although a few operators produce dried banana, puree, and vinegar.

The main organic areas in Nicaragua are located in Northwest Nicaragua. There are several organizations providing organic seeds to smallholders as a way to encourage organic production. The main organic product is coffee, followed by sesame, fresh vegetables, cacao, honey and a wide range of other products such as maize, beans, sorghum, curcuma, citrus, and cardamom. Nicaragua also has organic operators producing processed organic cacao as fermented-dried bean and leads the organic sesame production (fresh and processed) in Central America.

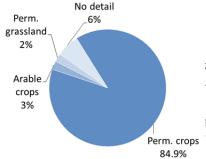
Honduras has a significant production of cashew, citrus, processed mango, aloe vera, tilapia and shrimps in addition to coffee and cacao. Organic producers in El Salvador grow sesame, cashew and coconut, as well as coffee.

#### Organic land use in Central America 2011

Source: FiBL-RUTA-IFOAM survey 2013

#### Development of organic agriculture land in Central America 2005 to 2011

Source: FiBL-RUTA-IFOAM-SOEL surveys 2007-2013



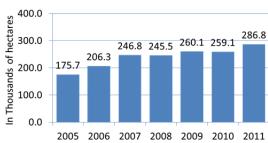


Figure 93: Central America: Organic agricultural land use 2011. (Belize, Costa Rica, Guatemala, Honduras, El Salvador, Nicaragua and Panama)
Figure 94: Central America: Development of organic agricultural land 2005-2011. (Belize, Costa Rica, Guatemala, Honduras, El Salvador, Nicaragua and Panama)
Source: FiBL, RUTA, IFOAM, SOEL; Surveys 2007-2013, based on national data sources

#### **South America**

South America plays a unique role in the world because of its high biodiversity, especially in the countries of the Amazon basin: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Surinam, and Venezuela. These countries are regarded as biological reservoirs of the planet. The region has an enormous capacity for food and non-food agricultural production and, therefore, its resources are under high pressure for land use change to industrial agriculture.

#### Andean sub-region

The Andean sub-region is composed of four countries: Colombia, Ecuador, Peru, and Bolivia. The Inter-American Institute for Cooperation on Agriculture (IICA), which hosts the secretariat of CIAO (Inter American Commission for Organic Agriculture), has started to develop a regional organic regulation in collaboration with organic agriculture competent authorities in the four countries. The Andean Community is a sub-regional integration organization.

#### > Peru

The total organic certified area in Peru is approximately 350'000 hectares (which includes wild collection areas). The organic area decreased in 2011. This reduction is mainly due to a significant loss of organic cultivated area in Lambayeque (coffee, banana, cotton) and Piura (banana, mango, coconut).

The main organic certified products of Peru are coffee, cacao, bananas, quinoa and Brazil nuts (*Bertholletia excelsa*), of which the latter is wild collection. There are more than 100 organic certified products that are produced in smallholdings, which are marketed in small quantities. Other products that are reported as certified organic include fiber cotton and textiles, fresh vegetables and fruits, grapes, papaya, native and exotic fruits, Andean tubers and grains, sesame, olives and olive oil, palm heart, lemon, tomato and

tomato sauce, honey bee, and essential oils. Furthermore, there is an extensive production of natural colorants, and aromatic and medicinal herbs.

Coffee is the major organic crop, with about 96'000 hectares under production in half of the departments in Peru: mainly Junin, Cuzco, San Martin, and Cajamarca. Organic production is organized in cooperatives and associations. Almost one third of the organic producers (13'676) run their organic operations in Piura and Cajamarca in northern Peru. They have an outstanding production of coffee, cacao in Cajamarca and banana, mango and coconut in Piura. The departments with the largest organic cultivated area are Junin and Cuzco with 40'732 hectares and 22'174 hectares respectively. On the other hand, wild collection is concentrated in the department of Madre de Dios with 159'721.60 hectares, and constitute about 52 percent of the total organic area in the country.

Organic exports in Peru have experienced a growth rate of 25 percent in the past years. The total value of organic exports reached 324 million US dollars in 2011 and is expected to reach up to 400 million US dollars in the near future according to Prompex. The latest report on organic exports stated that organic banana exports for the first ten months of 2012 were valued at 67 million US dollars: an increase of 28 percent over the same period in 2011 and higher than for the whole of 2011 (63.1 million US dollars). The main target markets were the Netherlands (53 percent) followed by the US (21 percent) and 14 other countries. The main exporter is an organic smallholder association "Asociacion de Pequeños Productores Orgánicos", which accounts for nine percent of the total revenue (5.7 million US dollars), followed by the Organic Banana Association with eight percent (5.1 million US dollars) and 44 other export companies.

In addition to the export-oriented production, Peru has a growing organic domestic market due to a gastronomy boom. The Peruvian cuisine makes use of extraordinary quality grown organic products, which highlights the contribution of organic smallholders to a diversified diet. Organized organic producers trade with the private sector, such as restaurants and hotels. Street fairs in Lima have become consolidated and their number is growing. New initiatives are developing in other departments such as in Cuzco and Cajamarca, where the AGROECO Project is investing in domestic market development.

The organization united in the Agroecological Consortium of Peru had the long-standing objective of establishing regulations for the Law for Promotion of Organic Production, which was finally approved on July 23, 2012 (Law 29196). After four years of waiting for the regulations, the Decree 010-2012 of the Ministry of Agriculture stipulates the tools to stimulate organic production. The law especially takes the needs of the organic smallholders, the regional and local governments and the multi-level stakeholders into consideration. With regard to the smallholders, the regulation establishes the need to develop a participatory guarantee system to address the domestic market, which should be done jointly by the competent authority and civil society organizations. The regional Participatory Guarantee Systems (PGS) council of the Lima region approved the organic guarantee compliance of 216 organic farmers in November 2012. These farmers supply organic tubers, grains, roots, fruits, aromatic herbs and processed products for the domestic market with a focus on Lima.

#### Peru: Distribution of organic key crop groups 2011

Source: SENASA Peru

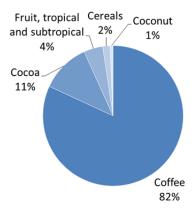


Figure 95: Peru: Distribution of key agricultural crop groups 2011 (total area 185'964 ha) Source: SENASA Peru 2012

#### > Bolivia

Similar to Peru, brazil nuts, coffee, and cacao are major organic products in Bolivia. Further important crops in the Bolivian organic food supply are Andean cereals, including royal quinoa (red, white, and black), amaranth, and kaniwa (*Chenopodium pallidicaule*). Organic producers have managed to add value to their Andean products, such as by producing chocolate, flour, flakes, puffed cereals, granola, and muesli. In the past years, many other products have been added to the organic product range, including medicinal plants, mango, wheat, achiote or annatto (*Bixa orellana*), rice, maca, lemon grass, papaya, avocado, banana, tamarind, guava, cherimoya, pineapple, aloe, wild collected cocoa, lemon, soybean, and tea.

On the domestic market, organic food production and supply plays a key role in providing products for the governmental food support programs, which aim at achieving food security and food sovereignty. This role has been strengthened by the creation of the National Council for Organic Production (CNAPE) and the implementation of the Joint Program "Integration of indigenous and Andean producers to new national and global value chains". In the department of Chuquisaca, three municipalities (Zudáñez, Tomina and Yamparáez) bought 120 tons of organic products for the school food program for almost 6'000 students. The organic products that were purchased were mainly made up of wheat, yellow corn, peanuts, amaranth, toasted peanut, amaranth biscuits, and honey. Another similar effort of governmental food procurement will be launched in the city of Sucre.

#### Bolivia: Distribution of organic key crop groups 2011

Source: GIZ Bolivia. Survery among certifiers and national movement 2012

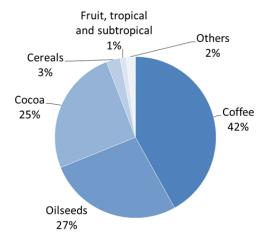


Figure 96: Bolivia: Distribution of key agricultural crop groups 2011 (total area 32'710 hectares)

Source: GIZ Bolivia

#### > Ecuador

Ecuador is developing an important industry to give added value to their organic products, with several of the main crops being processed into various forms for sale. Bananas are the most important organic product of Ecuador, with a quarter of the organic bananas sold in the world coming from Ecuador. Organic certified bananas are sold in several forms including as fresh fruit, dried, powder, puree, flakes, and essence of banana.

The second major organic product is cacao, which is processed in nibs, liquor, powder, butter, fermented and fine chocolate. The extraordinary quality of the Ecuadorian cacao is among the reasons for the importance of Latin American cacao to the chocolate industry. In 2012, an Ecuadorian biodynamic chocolate won 10 gold and silver medals at the International Chocolate Awards. This was the first time that a chocolate maker from Latin America has won the most significant categories of the award. Similar to coffee growers, partnerships with small-scale cacao growers have been established to preserve the traditional way of farming, thereby contributing to biodiversity conservation during cacao production in Ecuador.

Mangos are the third ranked crop in Ecuador, and are sold as fresh fruit and as processed product, such as puree, chutney, flakes and powder. Although coffee is not as important to Ecuador as it is to Peru, Mexico and the Central American countries, Ecuador has also a tradition as a coffee producing country and coffee is the fourth most important organic crop. In addition to the major products listed above, Ecuador produces a wide variety of organic foods such as vegetables, grains, cereals, beans, tropical fruits, avocado, or sugarcane.

The domestic market has an interesting dynamic with farmers' agro-ecological street fairs in different regions. These fairs are promoted online by the *Circuito de Ferias* 

Agroecologicas de Quito (circuitoagroecologico.org) which offer consumers quick information on producers and products offered. Organic products are guaranteed by participatory guarantee systems (PGS). PROBIO is actively working on strengthening these self-organized initiatives by organic farmers.

#### Ecuador: Distribution of organic key crop groups 2011

Source: Agrocalidad, Consolidado de Exportación de Productos Orgánicos, Puerto Bolivar y Guavaguil

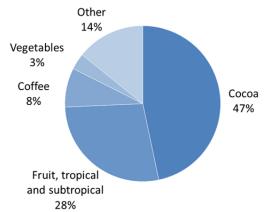


Figure 97: Ecuador: Distribution of key agricultural crop groups 2011 (total area 52'196 ha) Source: Agrocalidad 2012

#### > Colombia

In Colombia, organic and agro-ecological production is mostly in the hands of smallholders. Organic farmers are therefore organized in associations, federations, and cooperatives to be able to meet the requirements of the access markets better.

According to the Ministry of Agriculture and Rural Development, the national figures for 2011 in Colombia show 34'000 hectares of organic certified and in transition land area, including wild products. Coffee and fruits are grown in half of the cultivated organic area. There are no significant changes compared with the previous year. Other sources state that Colombia has more than 200'000 hectares of both organic certified and noncertified land (organic and agroecological production), which involves more than 80'000 families.

The main organic products are coffee, banana, sugar, panela<sup>1</sup>, fruit pulp, and palm oil. For the domestic market, fresh vegetables and fruits, medicinal plants, panela and livestock products are of high importance.

Civil society organizations have been working on the development of alternative guarantee systems for local market development in Valle del Cauca, Antioquia and Sabana de Bogotá. Domestic markets are developing strongly. The Mercados Campesinos Agroecologicos del Valle del Cauca, the marketing efforts of Agrosolidaria: a nationwide

<sup>&</sup>lt;sup>1</sup> Panela is unrefined whole cane sugar, typical in Central and Latin America, which is basically a solid piece of glucose and fructose obtained from the boiling and evaporation of sugarcane juice. (Source: Wikipedia, download of December 23, 2012, available at http://en.wikipedia.org/wiki/Panela)

cooperative of responsible consumers and producers, and the markets and further points of sale offering an increasing number of organic products are clear indicators of local market development. These local market initiatives are mostly based on participatory guarantee systems.

Since 2006, the Ministry of Agriculture and Rural Development has been the competent authority for organic agriculture and is in charge of the organic regulation and control system according to Resolution 0187-2006. Colombia has started the revision of its national organic regulations, including modifications that will help organic smallholders to access local markets. The creation of the "Cadena Productiva Agroecologica" (organic and agroecological food chain) in December 2011 led to the foundation of Fedeorganicos: the federation of organic farmers, in 2012.

#### Colombia: Distribution of organic key crop groups 2011

Source: ECONEXOS, Conexión Ecológica 2012

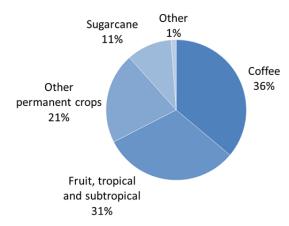


Figure 98: Colombia: Distribution of key agricultural crop groups 2011 (total area 34'060 hectares)

Source: ECONEXOS, Conexión Ecológica 2012

Colombia is unique with its diverse agenda of events, training opportunities, high level education, and research opportunities in organic agriculture and agro-ecology. This involves universities, specialized institutes, civil society organizations, farmers' organizations and the private sector.

However, Colombia, like many other countries in the region, lacks sufficient organic public policies to adequately foster the country's potential in organic production for a sustainable development.

#### South Cone sub-region

The South Cone sub-region includes Brazil, Argentina, Chile, Paraguay, and Uruguay. This sub-region is characterized by some large organic projects with large pastures for animal grazing. Argentina and Chile have a high number of organic vineyards and wineries. Soybean, sugar, and meat are also notable organic products of this sub-region.

#### > Brazil

Brazil is the organic production giant in the region. International organic exports are significant, but they are not the only target for Brazilian organic producers and operators: the domestic market is also significant.

As a pioneer country, Brazil has developed a deep understanding of organic production, and it is the country with the best country specific organic policies in the region. According to the Brazilian organic regulation, a product is organic if the production system follows the organic principles and guidelines, which include aspects such as local economies, justice, dignity as well as considering technology self-sufficiency, biodiversity and ecosystem services.

The Law 10.831/2003 enabled creation of the Brazilian System of Organic Conformity Assessment – SISORG, which places the Ministry of Agriculture as the authority for accreditation to audit organic certification bodies and the Participatory Guarantee Systems (PGS). Organic products that are monitored and approved by these certification bodies and systems are entitled to use the national organic seal: SISORG.

Brazilian organic products (fresh and processed) include açaí (*Euterpe oleracea*), sugarcane (sugar, liquor), cotton, poultry and eggs, babassu palm (*Attalea speciosa*), cacao, coffee, cashew and cashew nut, beef, brazil nut, coconut, cupuassu (*Theobroma grandiflorum*), dende palm oil (*Elaeis guineensis*), yerba mate (*Ilex paraguariensis*), flowers, fruits, grains, guarana (*Paullinia cupana*), vegetables, dairy products, honey, palm heart, and grapes.

Brazil is divided into five regions: North, Northeast, Midwest, Southeast, and South. Brazil has 1.8 million hectares under organic certification (including wild collection). The most important region, with 50 percent of the organic area and 33.5 percent of the organic production units, is the North. The most important state is the state of Para, which produces Brazil nuts, dende palm oil, acai, and cacao. The South has 20 percent of the organic production units but only 1.2 percent of the total organic land. The North and the South of Brazil account for 49 percent of the total production units. The States of Mato Grosso in the Midwest and Para in the North together account for 79 percent of the organic land and for 35 percent of the production units. This is due to the large areas for livestock in the Midwest and for wild collection in the North.

On the domestic market, organic farmers' fairs and small markets create the direct link between producers and consumers. The Brazilian legislation recognizes the importance of the bonds of trust that are directly established between producers and consumers in the direct sale system, without the presence of middle men.

If a farmer is not certified, the farmer must register with the Ministry of Agriculture (MAPA) for a Declaration of Registration (affidavit) showing that the producer is linked to a social control organization, thus making the traceability of the production possible. Therefore, even if a farmer does not hold the SISORG Organic Product seal, the farmer can market his/her production by advertising the declaration to consumers.

Brazil has five Participatory Guarantee Systems (PGS), which are formally registered with the competent authority and more than 120 Social Control Systems (OCS), which do not need to be a legal entity. In the framework of government food procurement programs, thousands of organic producers have contributed to a significant growth of

the domestic market. It is estimated that there are more than 300 fairs each week throughout the country. This is only possible due to the openness of the organic regulation under which thousands of family farmers, indigenous people, and quilombolas<sup>1</sup> are now able to market their products in their local communities, schools and fairs. Considering that Brazil has more than 190 million inhabitants and considerable market growth with these innovative mechanisms and regulation, the organic sector finds itself in the initial stages of the formation of a mass domestic organic market in the region.

On August 20, 2012, the President of Brazil published the National Policy on Agroecology and Organic Production. The policy aims to better integrate public policies and programs for the transition to agro-ecology and organic production. It is a very comprehensive policy that was built with the broad participation of public and private sector and civil society organizations. It also highlights the importance of food security and sovereignty for a sustainable food system and includes biodiversity value, rural youth participation, and the reduction of gender inequities.

#### Brazil: Distribution of organic land 2011

Source: Ministério da Agricultura, Brazil 2012

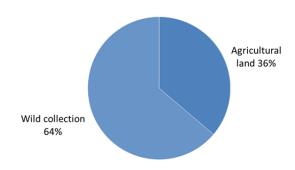


Figure 99: Brazil: Certified wild collection and agricultural land (total: 1.8 million hectares)

Source: Ministry of Agriculture Brazil

#### > Argentina

According to the annual report on organic farming in Argentina that was issued by the competent authority SENASA, 2011 was characterized by the following developments:

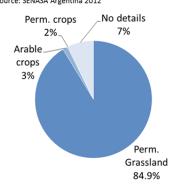
- The European Union and the USA continue to be the main destinations for organic products;
- A recovery of export levels was observed: driven mainly by US market requirements;
- Consumption of organic horticultural products in the domestic market increased;

 $<sup>{}^{1}\</sup>text{ Quilombolas are the descendents of Afro-Brazilian slaves who escaped from slave plantations that existed in Brazil until abolition in 1888. For more information see http://en.wikipedia.org/wiki/Quilombola$ 

#### Latin America and Caribbean: Overview

- A significant increase in the volume of exported plant products was observed, reaching record levels. Animal products have decreased in importance, except for wool, which has increased significantly;
- The certified land area for organic agriculture and livestock farming decreased by 25 and 7 percent respectively from 2010;
- Cattle stocks further declined and have reached a 12-year low. Sheep stocks also declined;
- Apiculture experienced a 10 percent decrease in the number of certified beehives.
- The harvested agricultural area (excluding grazing areas) includes industrial crops, aromatic herbs, vegetables, pulses, fruit, grains and oilseeds. This area decreased by 6 percent from 2010.
- The number of organic operators decreased by eight percent from 2010.
- Exports have remained stable. Among the most important products are cereals and oilseeds (wheat and soybean), fruits (pear and apples), vegetables (onions, garlic and squash) and processed products (sugar and wine).

### Argentina: Organic land use 2011 Source: SENASA Argentina 2012



## Argentina: Development of the organic cereal area 2007 to 2011

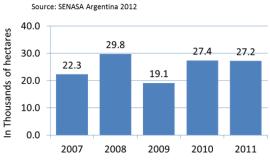


Figure 100: Argentina: Land use in organic agriculture 2011
Figure 101: Argentina: Development of the organic cereal area 2007 - 2011
Source: SENASA Argentina

On the domestic market, organic products can be found in supermarkets, at specialized points of sale in the cities, at fairs, via online services, in organic restaurants and at organic and biodynamic farms. There are also Participatory Guarantee Systems (PGS) initiatives in Northeast Argentina and INTA, the national agency of agricultural extension, has been supporting farmers with an organic approach through the national Prohuerta program.

#### > Chile

During the period 2010/11, almost 110'000 hectares were organic (including wild collection) in Chile. Compared with the previous period, the organic area decreased by 30 percent. This was mainly due to the decrease of the wild collection area (a single operator with more than 38'000 hectares ceased production).

The organic cropland (30'000 hectares) also decreased due to a loss of organic fruit areas. Organic grapes for wineries continue to grow in importance and went up to 4'567 hectares. Increased organic production in nurseries and seeds shows new business opportunities.

For 2010/11, the most important crops and crop groups in terms of land area were vineyards, fruit trees and berries. The area used for production of aromatic and medicinal plants has changed little over the past years, which shows the relative stability of this type of organic production.

Starting in January 1, 2012, a new trade tariff (arancel aduanero) was established for organic products. This will facilitate the identification of organic products, imported and exported, which is an important step towards the implementation of a national data collection system for organic agriculture.

Overall, organic agriculture is developing steadily in Chile. The main organic products are wine, fruit, fresh, frozen and dried vegetables, fruit purees and pulps, marmalades, medicinal and aromatic herbs, olive oil, avocado oil, rosehip oil, honey, tea, and coffee. New organic products are seeds and flowers.

### Chile: Distribution of organic key crop groups 2011 Source: Servicio Agrícola y Ganadero (SAG), Chile, 2012

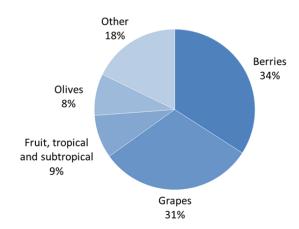


Figure 102: Chile: Distribution of key crops/crop group area 2011 Source: Servicio Agrícola y ganadero (SAG), Chile 2012

The domestic market is growing, with the main marketing channels being street fairs, restaurants and specialized stores, and internet sites offering a wide range of organic products. Even though Chile is a very strict country with regard to norms and standards, the Chilean organic regulations allow participatory certification (or Participatory Guarantee Systems) for local markets. In December 2011, the Ministry of Agriculture (SAG) accredited a group of organic smallholders of Aconcagua. The authority highlighted the outstanding internal control system that the group managed.

#### > Paraguay

According to the Investments and Exports Network of the Ministry of Industry and Commerce, organic exports in Paraguay reached up to 99.4 million US dollars in 2011, with organic sugar representing 90.5 percent of organic exports. Organic sugar from Paraguay has a significant market share and presence in the organic world. It is marketed in specialized stores, via online organic businesses, and in supermarkets in the USA, Germany and France, followed by Belgium, Italy, Sweden and Switzerland.

The second most important organic product that has experienced a significant increase is sesame. It is mainly exported and corresponds to five percent of the total exports of the organic sector (5 million US dollars). The main target markets are Germany and Japan. Molasses is the third most important product (1.5 million US dollars) and is mainly exported to Germany and the US.

A new relevant organic product for Paraguay is chia, which is an oilseed used in the bakery industry and for direct consumption. Exports of organic chia in 2011 represented more than 1 million USD with the US as the key target market.

The domestic market is emerging, and there are a few farmers' initiatives selling organic fresh vegetables and fruits at street markets. There is a need to foster and strengthen producers' organizations to enable them to supply the local markets.

#### > Uruguay

Since 2008, organic certification is regulated in Uruguay (Decree 557/08 of the Ministry of Agriculture and Fisheries). Through this Decree, the national certification system includes third party certification bodies and Participatory Guarantee Systems, which are supervised and audited by the Ministry of Agriculture and Fisheries. Urucert is the only certification body that has been approved by the competent authority and is still in the process of registration.

#### References

Agencia Agraria de Noticias. www.agraria.pe.

MAPA – Brazil. 2012. Coordination of Agroecology. Brochure: Organic Products. It is Better for Everyone's Life and the Planet.

Schewentesius, R., University of Chapingo

Soto, Carlos. 2012. PROAMO. Personal communication.

Escobar, Fernández, Carlos A. and Guzmán, Pedro. 2012. Written contribution. Colombia.

Meirelles, Laércio. 2012. Personal communication. Brazil.

ODEPA Ministerio de Agricultura - Chile (2011) Agricultura Organica en Chile. Temporada 2010-2011.

Red de Inversiones y Exportaciones (REDIEX) del Ministerio de Industria y Comercio de Paraguay.

 ${\tt G\'omez, Alberto-CEUTA, Uruguay; Personal communication.}$ 

Acosta, Diego (URUCERT). Personal communication.

Red de Agroecología de Uruguay

SENASA Argentina. Situación de la producción orgánica en la Argentina. March 2012.

SPO-DIAIA-SENASA-2011 Sub Dirección de Producción Orgánica –DIAIA-SENASA, Peru. Estadísticas de Producción Orgánica Perú Año 2011.

#### Links

http://web.undp.org/latinamerica/biodiversity-superpower/http://www.proamo.org.http://www.aaoch.cl

#### Latin America and the Caribbean: Current statistics

#### JULIA LERNOUD<sup>1</sup> AND HELGA WILLER<sup>2</sup>

#### Organic agricultural land

In 2011, 6.86 million hectares were reported as being under organic production, constituting 1.1 percent of the total agricultural land in Latin America and the Caribbean. Compared with the revised figures for 2010, almost 700'000 hectares less were reported. This can be partly attributed to a major decrease, of mainly grassland, in Argentina (almost 400'000 hectares). Another reason is a revision of the data for Brazil (for details see chapter on the development of organic agricultural land, page 48, and on data sources, page 322). Compared with 2000 (3.9 million hectares), the organic land has almost doubled. The country with the largest organic agricultural area was Argentina (almost 3.8 million hectares) (Figure 103), and the country with the largest number of producers is Mexico (more than 169'000) (Table 62). The highest proportion of the total agricultural area was reached in the Falkland Islands (36 percent), which is the country with the highest share of organic land worldwide.

#### Land use

Land use details were available for more than 80 percent of the agricultural land. In 2011, only three percent of all organic farmland was used for arable crops (183'000 hectares), 70 percent was grassland (4.8 million hectares) and 11 percent (754'000 hectares) was used to grow permanent crops (see Figure 106). Argentina (3.4 million hectares), Uruguay (926'000 hectares, data from 2006) and the Falkland Islands/Malvinas (398'000 hectares) had the largest permanent grassland/grazing areas.

The key *arable crop* is sugarcane: Twenty-two percent of the Latin America and Caribbean organic area was given to sugarcane production, amounting to almost 50'000 hectares. Most of the sugarcane was grown in Paraguay (30'000 hectares), Argentina (4'800 hectares), and Colombia (2'700).Organic vegetables were grown on 40'000 hectares in 2011; key producing countries were Mexico (35'500 hectares, data from 2008) and Ecuador (1'600 hectares). The main *permanent crops* were coffee (376'000 hectares), cocoa (196'000 hectares) and tropical and subtropical fruits (113'000 hectares).

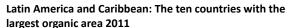
#### Wild collection

Wild collection plays an important role in Latin America and the Caribbean, with more than 3 million hectares certified organic. This area is mainly used for the collection of wild nuts (945'000 hectares), beekeeping areas (708'000 hectares), wild palmito (66'000 hectares) and wild fruits (12'000 hectares), with an estimated production of 7 million tonnes. Information on wild collection is not available for many countries so it can be assumed that the total wild collection organic area is higher than that presented in this report.

<sup>&</sup>lt;sup>1</sup> Julia Lernoud, Communication, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org

 $<sup>^2</sup>$  Dr. Helga Willer, Communication, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org

# Organic Agriculture in Latin America and Caribbean: Graphs



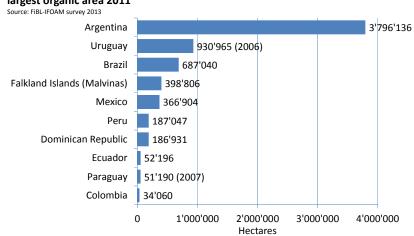


Figure 103: Latin America and Caribbean: The ten countries with the largest areas of organic agricultural land 2011

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

# Latin America and Caribbean: The countries with the highest share of organic agricultural land 2011

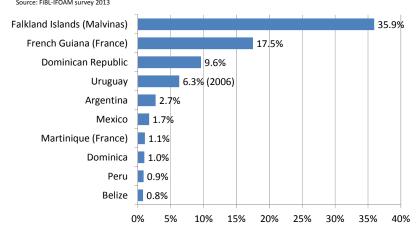


Figure 104: Latin America and Caribbean: The ten countries with the highest shares of organic agricultural land 2011

# Latin America and Caribbean: Development of organic agricultural land 2000 to 2011

Source: FiBL-IFOAM-SOEL 2002-2013

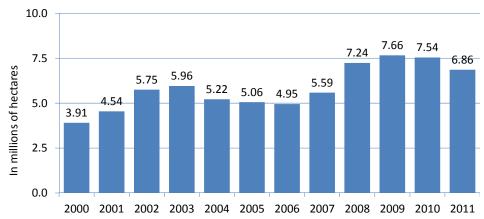


Figure 105: Latin America and Caribbean: Development of organic agricultural land 2000-2011

Source: FiBL-IFOAM-SOEL Surveys 2002-2013

# Latin America and Caribbean: Use of agricultural organic land 2011

Source: FiBL-IFOAM Survey 2013; based on information from the private sector, certifiers, and governments.

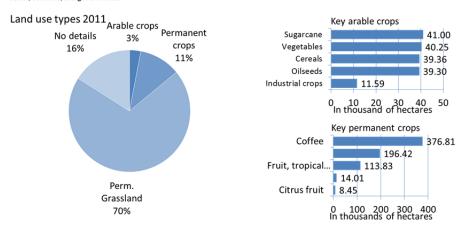


Figure 106: Latin America and Caribbean: Land use in organic agriculture 2011

# Organic Agriculture in Latin America and Caribbean: Tables

Table 62: Latin America: Organic agricultural land, share of total agricultural land and number of producers 2011

Country	Area [ha]	Share of Total agr. land	Producers
Argentina	3'796'136	2.70%	1'699
Belize	1'204	0.79%	1'291
Bolivia (Plurinational State of)	32'710	0.09%	9'837
Brazil	687'040	0.27%	14'437
Chile	29'068	0.18%	600
Colombia	34'060	0.08%	4'775
Costa Rica	9'570	0.53%	3'000
Cuba	2'209	0.03%	14
Dominica	240	0.98%	No data
Dominican Republic	186'931	9.61%	24'161
Ecuador	52'196	0.69%	9'485
El Salvador (2009)	6'736	0.44%	2'000
Falkland Islands (Malvinas)	398'806	35.94%	8
French Guiana (France)	3'974	17.51%	31
Grenada (2010)	85	0.68%	3
Guadeloupe (France)	166	0.42%	28
Guatemala	13'380	0.30%	3'008
Guyana	4'249	0.25%	74
Haiti	912	0.05%	1'005
Honduras	23'827	0.75%	4'989
Jamaica (2009)	542	0.12%	80
Martinique (France)	298	1.06%	31
Mexico	366'904	1.71%	169'570
Nicaragua(2009)	33'621	0.65%	10'060
Panama	4'570	0.20%	10
Paraguay (2007)	51'190	0.24%	11'401
Peru	185'964	0.87%	43'661
Uruguay (2006)	930'965	6.29%	630
Venezuela (Bolivarian Republic of) (2009)	59	0.00%	1
Total	6'857'611	1.12%	315'889

Table 63: Latin America: All organic areas 2011

Country	Agri- culture [ha]	Aqua- culture [ha]	Wild collection [ha]	Total
Argentina	3'796'136		614'776	4'410'912
Belize	1'204			1'204
Bolivia (Plurinational State of)	32'710		785'453	818'163
Brazil	687'040		1'209'773	1'896'812
Chile	29'068		80'870	109'938
Colombia	34'060		6'850	40'910
Costa Rica	9'570			9'570
Cuba	2'209			2'209
Dominica	240			240
Dominican Republic	186'931			186'931
Ecuador	52'196		3'000	55'196
El Salvador (2009)	6'736			6'736
Falkland Islands (Malvinas)	398'806			398'806
French Guiana (France)	3'974			3'974
Grenada (2010)	85			85
Guadeloupe (France)	166			166
Guatemala	13'380		5	13'385
Guyana	4'249		59'930	64'179
Haiti	912			912
Honduras	23'827			23'827
Jamaica (2009)	542		0	542
Martinique (France)	298			298
Mexico	366'904		145'342	512'246
Nicaragua (2009)	33'621		11'463	45'084
Panama	4'570			4'570
Paraguay (2007)	51'190			51'190
Peru	185'964	4	159'717	345'685
Uruguay (2006)	930'965		2'300	933'265
Venezuela (Bolivarian Republic of) (2009)	59			59
Total	6'857'611	4	3'079'479	9'937'094

#### Latin America and Caribbean: Tables

Table 64: Latin America: Land use in organic agriculture 2011

Main use	Crop category	Area [ha]
Agricultural land and crops, no details	Agricultural land and crops, no details	1'027'758
Arable crops	Arable crops, no details	3
	Arable crops, other	52
	Cereals	38'452
	Flowers and ornamental plants	2
	Industrial crops	11'586
	Medicinal and aromatic plants	7'196
	Mushrooms and truffles	1'260
	Protein crops	1'261
	Oilseeds	39'303
	Plants harvested green	15
	Root crops	779
	Seeds and seedlings	36
	Strawberries	217
	Sugarcane	40'999
	Textile crops	657
	Tobacco	43
	Vegetables	40'247
Arable crops total		182'106
Cropland, no details	Cropland, no details	27'857
Other agricultural land	Other agricultural land, no details	30'974
Permanent crops	Berries	6'304
	Citrus fruit	8'451
	Cocoa	196'421
	Coconut	14'010
	Coffee	376'808
	Flowers and ornamental plants, permanent	8
	Fruit	1'073
	Fruit, temperate	4'945
	Fruit, tropical and subtropical	113'830
	Fruit/nuts/berries	1'000
	Grapes	7'800
	Medicinal and aromatic plants, permanent	348
	Nurseries	40
	Nuts	1'065
	Olives	4'174
	Other permanent crops	11'518
	Tea/mate, etc.	7'038
Permanent crops total		754'832
Permanent grassland		4'834'083
Total		6'857'611

#### Table 65: Latin America: Use of wild collection areas 2011

Category of crops harvested	Area [ha]
Beekeeping	708'429
Forest honey	168
Fruit, wild	12'032
Medicinal and aromatic plants, wild	239
Mushrooms, wild	
Nuts, wild	945'175
Palmito, wild	66'780
Wild collection, no details	1'343'426
Wild collection, other	3'230
Total	3'079'479

Latin America and Caribbean: Tables

# **North America**



Map 7: Organic agricultural land in Canada and the US 2011

Source: Canadian Organic Growers (COG) und United States Department of Agriculture (USDA, data 2008). For detailed data sources see annex, page 322.

#### **United States of America**

#### BARBARA FITCH HAUMANN<sup>1</sup>

For the U.S. organic sector, the biggest milestone for 2012 was the signing and implementation of an historic equivalency arrangement between the United States and European Union (EU).

On February 15, 2012, officials from the world's two largest markets for organic food signed the arrangement recognizing each other's organic standards as equivalent. Under the agreement, the EU and United States are working together to promote strong organic programs, protect organic standards, enhance cooperation, and facilitate trade in organic products. The arrangement reduces duplicative requirements and certification costs on both sides of the ocean while continuing to protect organic integrity.

As a result, certified organic products meeting the terms of the arrangement began moving freely between the United States and EU borders on June 1. The agreement allows access to each other's markets provided antibiotics were not administered to animals for products entering the United States, and antibiotics were not used to control fire blight in apples and pears for products entering the European Union. To facilitate trade, the EU and United States have agreed to promote electronic certification of import transaction certificates. The arrangement is limited to organic products of U.S. or EU origin produced, processed or packaged within these jurisdictions. Additionally, both programs have agreed to exchange information on animal welfare, and on methods to avoid contamination of organic products from genetically modified organisms. General country labeling requirements must still be met.

Prior to this agreement, the EU was identified by the U.S. organic food and farming sector as its largest untapped export opportunity.

#### Organic production

In October 2012, the U.S. Department of Agriculture's (USDA's) National Agricultural Statistics Service (NASS) published the results of its first survey focusing exclusively on certified organic production throughout the nation. The findings showed U.S. certified organic growers sold more than US\$3.5 billion in organically grown agricultural commodities in 2011.

Based on this total of farm-gate sales, organic ranks fifth among U.S. commodity classes, and is larger than peanuts and cotton combined. Thus, as pointed out by the Organic Trade Association (OTA), this verifies that organic deserves a seat at the table when agricultural policy is decided by policy makers in Washington, D.C.

Certified organic farmers and ranchers sold more than US\$ 2.2 billion in organically grown agricultural commodities and more than US\$ 1 billion in livestock products in 2011, according to the survey. Of the total, the 9'140 U.S. certified organic farms generated US\$ 1.1 billion in farm-gate sales of vegetables and US\$ 494.8 million in sales

<sup>&</sup>lt;sup>1</sup> Barbara Fitch Haumann, Organic Trade Association (OTA), 28 Vernon St, Suite 413, Brattleboro VT 05301 United States, www.ota.com

of fruits, including US\$ 122.2 million for certified organic apples and US\$ 160.6 million for certified organic grapes. Considered separately from the other fruit sales, organic berries represented US\$ 125.3 million in farm sales.

The states with the most certified organic farms were California (1'898), Wisconsin (870), New York (597), Washington (493) and Iowa (467). Wisconsin led the nation in organic field crop acreage, with 110'000 acres¹ harvested in 2011, followed by New York, with more than 97'000 acres harvested in 2011. In third place was California, with more than 91'000 acres harvested.

The average sales per farm worked out to be US\$ 414'726, compared with the US\$ 134'807 for all farms taking part in the 2007 U.S. Census of Agriculture.

Sales of certified organic livestock products included US\$ 765 million for organic milk, US\$ 276 million for eggs, and US\$ 115 million for chicken.

The survey also polled certified farms on where their products were marketed. Eightyone percent of sales were through the wholesale market, with 13 percent of sales direct to retail, and the remaining 6 percent of sales direct to consumers.

NASS conducted the survey for USDA's Risk Management Agency to help refine federal crop insurance offerings for organic producers.

#### Enforcement

With added staff in the past few years, USDA's National Organic Program (NOP) in September 2012 announced that it had suspended the organic certifications of 200 operations up to that point during the year and revoked six. It also issued seven penalties, worth a total of US\$ 80'000, to willful violators of national organic regulations.

NOP has explained that a suspended operation may not sell or represent its products as USDA Organic until it is reinstated in writing by NOP. A revoked operation or a person responsible for a revoked operation may not obtain certification for a period of five years.

#### Organic's role in market

Driven by consumer choice, the U.S. organic industry grew by 9.5 percent overall in 2011 to reach US\$ 31.5 billion in sales. Of this, the organic food and beverage sector was valued at US\$ 29.22 billion, while the organic non-food sector reached US\$ 2.2 billion, according to findings from the Organic Trade Association's (OTA's) 2012 Organic Industry Survey.

Overall organic product sales growth of 9.5 percent continued to outpace total sales of comparable conventionally produced food and non-food items, which experienced 4.7 percent growth. Organic food sales experienced 9.4 percent growth in 2011. The easing of the recession, consumer price inflation due to input price increases, and consumers' increasing desire for convenience products were all factors that elevated growth for the year. The organic food sector grew by US\$ 2.5 billion during 2011, with the fruit and

 $<sup>^{1}</sup>$  A hectare of land is about 2.47 acres.

vegetable category contributing close to 50 percent of those new dollars. The fastest-growing sector was the meat, fish & poultry category, posting 13 percent growth over 2010 sales, but still remaining the smallest of the eight organic food categories.

Organic food sales now represent 4.2 percent of all U.S. food sales, up from 4 percent in 2010. Meanwhile, organic non-food sales, which reached 2.2 billion US dollars in 2011, experienced strong 11 percent growth, while total comparable non-organic items grew only 5 percent.

Prospects for 2012 and 2013, as indicated through the 2012 survey results, indicate that organic food and non-food sales will continue to sustain growth levels of nine percent or higher.

#### Good for the economy

In June, the Obama Administration released a report on rural communities and businesses highlighting the tremendous value of the organic sector in the nation's diverse agricultural economy. The report, prepared by the Council of Economic Advisers, the White House Rural Council, and USDA, pointed to numerous examples of how organic agriculture and trade are expanding opportunities for agricultural production.

The White House report noted that the U.S. organic industry grew by 9.5 percent overall in 2011 to reach US\$ 31.4 billion in sales. A report released by OTA in April showed the organic food industry

#### "An audacious goal..."

As of January 2011, there were 28'386 USDA certified organic operations across 133 countries. USDA's strategic plan strives to have 2'719 additional U.S. farms and businesses certified to its organic regulations by 2015, reaching a goal of 20'000 U.S. organic operations.

As noted in a video address given at the Fall 2012 meeting of the National Organic Standards Board by U.S. Deputy Secretary of Agriculture Kathleen Merrigan, this is "an audacious goal, but if everyone does their part to help organic farmers and ranchers and processors, we believe we will cross that finish line."

generated more than 500'000 American jobs in 2010. Organic dairy and produce, which account for the two largest organic product categories, were specifically highlighted for their critical roles in creating opportunities for farmers and ranchers, and for their influence in helping rural businesses become more competitive.

In addition, a report released in mid-November by the Union of Concerned Scientists (UCS) again confirmed the organic dairy sector provides more economic opportunity and generates more jobs in rural communities than conventional dairies. The first-of-its-kind study, "Cream of the Crop: The Economic Benefits of Organic Dairy Farms," calculated the economic value of organic milk production based on 2008-2011 financial data from Vermont and Minnesota, two major milk-producing states.

"Over the past 30 years, dairy farmers have had a choice: either get big or get out. Dairy farmers either had to expand dramatically and become large industrial operations or they went out of business," said Jeffrey O'Hara, agricultural economist for the Food and Environment Program at UCS and author of the report. "However, organic dairy production offers farmers another option – one that is better for the environment, produces a healthier product, and leads to greater levels of economic activity."

The report also compared the economic value that would be generated by conventional and organic farms in the two states if both experienced the same hypothetical level of increased sales. In Vermont, organic dairy farms under that scenario would be expected to contribute 33 percent more to the state's economy than conventional farms, and employ 83 percent more workers. Similarly, in Minnesota, organic dairies would increase the state's economy by 11 percent more and employment by 14 percent more than conventional dairy farms.

Consumer demand for organic dairy products has jumped dramatically over the past decade, with emerging research showing that well-managed organic dairy farms are less harmful to the environment than conventional dairies, and that the milk produced may be better for human health. Organically raised cows graze on pasture during the growing season, eat organically grown feed, and are not treated with synthetic hormones or antibiotics.

Meanwhile, the Organic Farming Research Foundation (OFRF) released a science-based, peer-reviewed report extolling the multiple societal benefits of organic farming in North America. The report, entitled *Organic Farming for Health & Prosperity*, also outlines policy recommendations to support the expansion of organic farming in the United States.

#### **Challenges**

One of the biggest challenges for the organic industry during the year was the unresolved outlook for a new farm bill. Although the U.S. Senate last summer approved its version of a new farm bill, the House of Representatives never brought its version approved by its agriculture committee to the House floor for discussion and a vote. As a result, provisions in the 2008 Farm Bill expired Sept. 30, 2012.

In the waning hours of 2012, U.S. Senate Minority Leader Mitch McConnell (R-KY) and Vice President Joe Biden negotiated a nine-month extension of the 2012 Farm Bill attached to the complex "fiscal cliff" legislation known as the American Taxpayer Relief Act. This legislation passed the Senate early January 2013, with the House of Representatives approving it less than 20 hours later. While this passage brought general taxpayer relief, the organic sector was not so fortunate.

The Farm Bill extension measure (going through September 30, 2013) attached to the fiscal cliff legislation slashed such critical organic programs as organic data collection, organic research and extension, and certification cost-share money to help reimburse farmers for certification costs, and overall eliminated any investment in the future of rural communities, family farming and organic farming. Smaller, targeted programs that invest in proven strategies to create rural jobs, revitalize rural communities, and initiatives to foster a new generation of family farmers and ranchers were completely left out of the final farm bill extension. The eleventh hour deal also prevents farmers and ranchers from being able to improve soil and water conservation through enrollment in the Conservation Stewardship Program in 2013.

Thus, in 2013, work on a full five-year farm bill must begin anew. Such legislation will need to work its way back through committee mark-up and to the floors of both House and Senate prior to being enacted into law.

Meanwhile, for U.S. farmers, whether organic or non-organic, 2012 will be remembered as the year of severe drought. A telling indication of the drought's impact on organic farmers was reflected in the temporary variances issued by USDA's National Organic Program to address producers' challenges in meeting requirements for at least 30 percent of dry matter intake for organic ruminant livestock (cattle, sheep and goats) to come from organic pasture.

By November 2, 2012, USDA had designated approximately 2'200 U.S. counties as primary natural disaster areas due to severe drought and approximately 390 other counties as contiguous disaster areas. USDA granted temporary variances for organic ruminant livestock producers in counties declared as primary or contiguous natural disaster areas and with non-irrigated pastures. With the variances, organic farmers in designated disaster counties were allowed to supply just 15 percent of their dry matter intake (on average) from certified organic pasture for the remainder of 2012.

In addition, studies revealing the presence of arsenic in foods became a hot topic for all food producers, including organic. As a result, the Organic Trade Association set up a task force that researched and produced a white paper on arsenic and food production to develop future steps and strategies on the issue.

Meanwhile, many within the U.S. organic sector continue to actively seek labeling on foods produced using genetically modified organisms (GMO). In the November 2012 election, a California ballot initiative that would have required labeling on foods containing GMOS failed to win voter approval. Efforts, however, now continue on a possible initiative in the state of Washington as well as in a national campaign for mandatory GMO food labeling.

#### **Check-off discussions**

The U.S. organic industry continues to discuss a possible research and promotion program (ORPP) for the sector. OTA's role has been to facilitate the process, including hosting numerous in-person and online meetings with the ultimate goal of reaching an industry-wide decision on whether this is a viable option for the sector.

The goal of such a program would be to offer a collective industry solution to distinguish organic in the marketplace, grow demand, and educate consumers on all that organic delivers. Examples of existing research and promotion orders - industry-funded programs designed to increase demand for agricultural commodities that are administered by the government - include the dairy industry's Got Milk campaign and the egg industry's Incredible Edible Egg promotion.

Several technical legislative fixes are required in order for the organic industry to even have the option to pursue an ORPP. Currently, most organic producers and handlers do not qualify for the narrow 100 percent organic exemption from other commodity check-off programs. This is because many market both organic and conventional agricultural products. A solution would be to broaden the exemption to allow those who produce at least 95 percent organic products or produce both organic and conventional products to qualify for the exemption.

In addition, organic is not recognized as a distinct commodity class because it covers a wide diversity of commodities. As a result, the organic sector currently does not qualify

for a promotion program like the existing ones. To fix this will require amending legislation to recognize organic as a commodity class.

OTA has begun the process to pursue these solutions. Even so, it will be up to the entire organic sector on whether to pursue such a program.

#### Research and consumer education

It is evident, however, that there is a continuing need for additional research for organic agriculture and education of consumers about the benefits of organic. During 2012, several research reports added to consumer confusion as the media - and the framework offered by researchers - claimed organic products were no more nutritious than conventional counterparts, yet the studies cited, in fact, revealed numerous benefits associated with organic agriculture and products.

For example, a review article published in September in the *Annals of Internal Medicine* by Stanford University researchers confirmed that consuming organic foods reduces consumers' exposure to pesticide residues and to bacteria resistant to antibiotics. In addition, a clinical report published online in October by the American Academy of Pediatrics (AAP) highlighted the many attributes of organic foods and provided guidance to parents confused by conflicting marketing messages regarding healthy food choices for their children. Calling the report a major milestone for the organic sector, OTA hailed it as a confirmation of the significance of the benefits that organic provides. OTA noted that the science cited in this report points firmly towards positive aspects of organic farming, and confirms many reasons for purchasing organic foods.

#### **Further readings**

U.S. Department of Agriculture's National Agricultural Statistics Service, 2011 Certified Organic Production Survey, October 2012 (http://bit.ly/2011OrganicSurvey).

U.S. Department of Agriculture's National Organic Program (www.ams.usda.gov/nop).

Organic Trade Association, 2012 Organic Industry Survey, 2012 (www.ota.com).

Council of Economic Advisors, White House Rural Council, and the U.S. Department of Agriculture, "Strengthening Rural Communities: Lessons From a Growing Farm Economy," June 2012.

"U.S. Job and Income Creation Impacts of the Organic Food Industry in 2010: An Input-Output Analysis," prepared for the Organic Trade Association by M+R Strategic Services, June 2012.

Union of Concerned Scientists (UCS), "Cream of the Crop: The Economic Benefits of Organic Dairy Farms," November 2012 (http://www.ucsusa.org).

 $Organic\ Farming\ Research\ Foundation,\ Organic\ Farming\ for\ Health\ \&\ Prosperity\ (www.ofrf.org).$ 

#### Canada

#### MATTHEW HOLMES AND ANNE MACEY

#### Organic market

Canada's organic market continues to grow and broaden at the consumer level, with evidence of many new product offerings, a continued "mainstreaming" of organic products into conventional retail locations, and obvious growth in non-food sectors such as personal care. In the absence of more current data, the Canada Organic Trade Association (COTA) has maintained its estimated market value of 2.6 billion Canadian dollars (2010), though it is likely that this significantly underrepresents the true market place. In late 2012, COTA and the Certified Organic Associations of British Columbia were able to leverage support to launch the first full market and consumer study since the national regulations came into effect, with full results in 2013.

Following on the heels of the 2011 equivalency between Canada and the EU, in late 2012, Swiss and Canadian authorities announced an equivalency arrangement between the two countries, continuing Canada's progressive approach to facilitating international organic trade and recognizing other market systems. The deal is similar to the EU-Canada arrangement, however, there is hope within the Canadian sector that both will soon be expanded to better facilitate trade in products made with imported ingredients.

#### Organic farming statistics

#### Data collection systems

Without coordinated government data collection, the Canadian sector continues to struggle with access to consistent and reliable national production data, and it depends on voluntary disclosure by certifiers to maintain the baseline information provided by the Canadian Organic Growers (COG). For 2011, data was collected from a variety of sources: certifiers, website listings and from provincial organizations and governments.

Unique in 2012 was that Statistics Canada released findings of the 2011 Census of Agriculture, conducted every five years. There are discrepancies between the Census and COG data, as the May 2011 Census numbers are considered to be more reflective of the numbers at the end of 2010 than the numbers after the 2011 growing season. It is also possible that the Census is not capturing the growth of certified organic market gardeners and small-scale community supported agriculture, which may not classify as farms under Statistics Canada's collection. Additionally, single-farm certifications with multiple families producing on that land will introduce discrepancies in the numbers. The authors have chosen to include both sets of data where appropriate and it should be noted that acreage figures are best estimates only.

The Census is valuable in providing a long-term perspective, for example: while total Canadian farms have declined by 17 percent in the ten years from 2001-2011, the

\_

 $<sup>^1</sup>$  Matthew Holmes, Executive director, Canada Organic Trade Association (COTA), PO Box 6364, Sackville, NB E4L 1G6, Canada, www.otacanada.

<sup>&</sup>lt;sup>2</sup> Anne Macey, Canadian Organic Growers (COG), www.cog.ca

Census shows Canadian organic operations have seen explosive growth of 66.5 percent. It also shows that organic farmers typically have earnings concentrated in the mid to high-ranges, whereas total farms tend to be below subsistence earnings or in high earnings typical of concentrated industrialized systems. `

### **Producers**

The numbers of primary producers remain relatively stable in Canada, however at the provincial level more change is evident. This is a concern, as the market growth continues to rely on imports to Canada when more could be done to link it to domestic supply. Primary producers include those with the following types of enterprises: crops of all kinds including mushrooms, livestock operations, bees and wild harvest.

# Source: Canadian Organic Growers 5'000 4'000 2'000 1'000 1'992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Canada: Development of the number of organic farms 1992-2011

Figure 107: Canada: Development of the number of organic farms 1992-2011 Source: Canadian Organic Growers

Declines in producer numbers appear to be continuing in Saskatchewan (-4.6 percent) and Manitoba (-15 percent), but in Saskatchewan the census data does not reflect this trend and one can only speculate on the difference. In Quebec the total number of certified enterprises (crops, livestock & maple syrup) has increased but total number of operators with agricultural activities appears to be lower than in 2010. Numbers in British Columbia are higher than in 2010, up 5.5 percent, but small farms selling only into the local market are continuing to drop out of formalized certification programs. Nova Scotia is also showing an increase.

### Organic agricultural land

Total acreage in certified production, including both annual and perennial crops, forages and pasture, is estimated at 840'000 hectares. In addition there is considerable acreage classified as wild and not included in this total, including maple forest in Quebec (37'572 hectares) as well as areas used for the collection of wild blueberries.

### Livestock production

The only reliable numbers on a national scale are those for the organic dairy sector provided by Agricultural & Agri-food Canada. In British Columbia and Quebec the increased volume of milk production indicates an increase in the size of dairy herds rather than more dairy farmers transitioning to organic production. Data for other livestock types is incomplete. The beef herd is likely at least 26'000 animals with most in Alberta, Saskatchewan, British Columbia and Manitoba. There is significant organic egg production in Quebec (57'479 layers reported), Ontario (est. 106'000) and British Columbia (est .119'000), although it is probable that these numbers include pullets as well as layers. Quebec has the most beekeepers (10) reporting a total of 2'175 hives.

### Processors and handlers

A total of 993 operators are involved in the manufacture of organic products or their handling and distribution. This is less than reported in 2010 (1'115) but data was not obtained from all certifiers so it is possible there are some missing from the 2011 total.

### Highlight

COG and COTA partnered for the third consecutive year to hold Canada's National Organic Week celebrations from September 22-29, 2012, with hundreds of community events and participating retailers helping to showcase organic products and practices to consumers across the country. A special event honoring the 50<sup>th</sup> anniversary of Rachel Carson's *Silent Spring* was also organized at the University of Toronto. In conjunction with Organic Week, the Canadian Organic Growers (COG) and the Canadian Organic Trade Association (COTA) organized the third Parliament Day, October 23-24, which included a conference, a series of industry meetings with Members of Parliament and the Senate, and an all-organic reception on Parliament Hill in Ottawa.

### Research

In June 2012, a major new research centre for organic agriculture was announced in Saint-Bruno-de-Montarville, Quebec, with federal and provincial combined investment of over 13 million Canadian dollars. This funding will result in the creation of the "Platform for Innovation in Organic Agriculture", a multi-purpose research centre, and the acquisition of the machinery and scientific equipment. This is expected to revitalize research, development and knowledge transfer in the area of organic crop production.

The Organic Agriculture Centre of Canada (OACC) continued its work on the Organic Science Cluster, a multi-year project funded by 6.5 million Canadian dollars in Canadian government funds, and 2.2 million Canadian dollars in industry contributions. OACC and the Organic Federation of Canada (OFC) hosted a Canadian Organic Science Conference in Winnipeg in February 2012, featuring a diverse set of research on organic agriculture, also serving as a strategy session for planning the next Science Cluster project. In 2012, OACC opened calls for letters of interest for the Organic Science Cluster II: set to launch in April 2013, industry contributions will be tripled with government funding to support up to five years of organic research.

### Challenges

Canada's organic sector continued to express serious concern on the impacts and dangers of plans to expand genetic engineering (GE) in the country. In mid-2012, the Canadian Food Inspection Agency received an application to approve the GE "Arctic Apple", which does not to brown when cut. A final decision by the government is yet to be announced at time of printing. Allowing the "low level presence" (LLP) of genetically engineered products in imported shipments is also on the agenda of Canada's government. Under the umbrella of the Organic Value Chain Roundtable, the organic sector has been united in advocating against any loosening of current government regulatory prohibition of unapproved GE products shipped into Canada, and to further protect the organic sector from such dangers. Concerns cited included: potential loss of market access, increased cost to organic producers and companies in trying to mitigate this risk, dangers of becoming a GE "dumping ground" for international trade.

Finally, the challenge of finding a mechanism for the organic sector to maintain and update its national organic standards is a critical challenge. Given the mood of fiscal restraint in government, it has been difficult to find support for the needed updates to the standards. Many in the sector believe that in order to ensure we meet our obligations under the domestic regulations, but also our equivalency agreements with trading partners, we must have a transparent system with public sector commitments than ensures the standards can be reviewed, evaluated and updated on an ongoing basis into the future.

### **Expanding production and supply**

In May 2012, the Canadian General Standards Board published Canada's new organic aquaculture standards. The standard is not referenced by government regulation at this time, so organic aquaculture products may not carry the official Canada Organic logo, nor are they covered under the scope of Canada's equivalency arrangements with both the U.S. and EU. However, the new standards are based on the same principles and accredited certification system of organic agriculture.

The aquaculture standards include language to prohibit antibiotics, limit the stocking density of animals (by species), prohibit GE aquatic animals and plants, and prohibit chemical antifoulants. Pesticide treatments are carefully restricted, and feed is tightly controlled, including prohibitions on growth-promoting hormones, GE feed, artificial coloring and other synthetics. Fishmeal and fish oil must be organic when commercially available (or otherwise sourced from trimmings of fish already caught for human consumption in sustainable fisheries).

There are a number of efforts underway to expand production and supply in Canada, especially given the growth market conditions. A group is trying to form the Canadian Organic Extension Network for organic farmers. COG also announced in 2012 that it is embarking on a significant project to digitize its organic library, including a number of its important production guides and resources, as well as the long-running *Canadian Organic Grower Magazine*, which will soon be available online and will become a considerable resource to producers in Canada and abroad.

Last year, we reported on a significant drop in certified operators in Canada, particularly in the Prairie region. As anticipated, this decline has continued, though seems to be

### North America: Canada

leveling off, and the hope is that producers will again return to organic with new supports in place.

### Outlook

As always, the Canadian organic sector continues to demonstrate seemingly indefatigable growth amidst the many challenges and "growing pains" it faces daily. Consumer demand remains strong, and the sector eagerly awaits detailed data on Canadian organic sales and consumer behavior in 2013. Despite favorable conditions, the sector is still addressing issues related to domestic capacity development, and must transcend the fragmentation and regionalism that is often the norm. Building better data, both for the market and for production, will likely go a long way in unifying the sector and focusing its priorities.

### **North America: Current statistics**

### JULIA LERNOUD<sup>1</sup> AND HELGA WILLER<sup>2</sup>

### Organic agricultural land and producers

North America's organic agricultural land reached almost 2.8 million hectares in 2011, and constitutes 0.7 percent of the total agricultural area. The area under organic cultivation has almost trebled from the million hectares in 2000. Between 2010 and 2011, the area increased by almost 0.14 million hectares or five percent, due to an increase in organic land in Canada. Data for the United State have not been updated since 2008, so it can be assumed that the total organic area for North America is higher. More than one percent of the farmland in Canada is organic, and in the proportion in the United States is 0.6 percent. There are a total of 16'600 producers in North America: most of them in the United States (77 percent).

### Land use

Detailed land use information was available for both countries. The organic agricultural area was mainly used for arable crops and permanent grassland, constituting almost 90 percent of the organic agricultural land, while 2 percent (64'000 hectares) were used to grow permanent crops.

The key *arable crop* group is cereals, which represent 20 percent of the organic area and are grown on almost 575'000 hectares. Wheat was the main cereal grown, with almost half of the total cereal area at more than 279'000 hectares, followed by maize and oats. The key *permanent crop* was grapes (11'000 hectares), followed by nuts (9'500 hectares) and temperate fruits (8'000 hectares).

Canada reported 225'000 hectares of wild collection, but no detailed information was available.

### Market

In 2011, the organic market continued to grow in North America, reaching 22.9 billion euros. In the United States, the market grew by more than 9 percent in 2011, but no new figures were available for Canada. The United States is the largest single organic market in the world, and North America continues to be the continent with the largest organic market.

For more information about the Northern America figures see data tables, page 296.

<sup>&</sup>lt;sup>1</sup> Julia Lernoud, Communication, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org

 $<sup>^2</sup>$  Dr. Helga Willer, Communication, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org

### Organic Agriculture in North America: Graphs

# Organic Agriculture in North America 2011 Source: COG and USDA United States of America (2008) Canada 841'216

0

Figure 108: North America: Organic agricultural land in Canada and the United States 2011 Source: Canadian Organic Growers and United States Department of Agriculture. US data from 2008.

Hectares

500'000 1'000'000 1'500'000 2'000'000 2'500'000

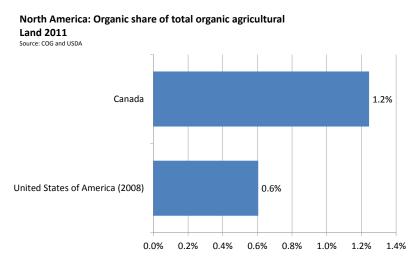


Figure 109: North America: Organic share of total organic agricultural land in Canada and the United States 2011

Source: Canadian Organic Growers and United States Department of Agriculture. US data from 2008

### North America: Development of organic agricultural land 2000-

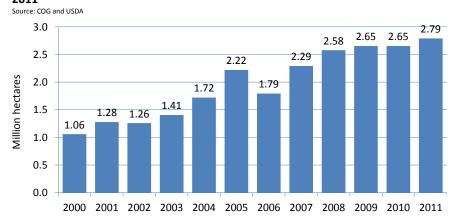


Figure 110: North America: Development of organic agricultural land 2000-2011 (for the US the latest available data are from 2008)

Source: Canadian Organic Growers and United States Department of Agriculture

## North America: Land use in organic agriculture 2011

Source: COG and USDA

Land use types 2011

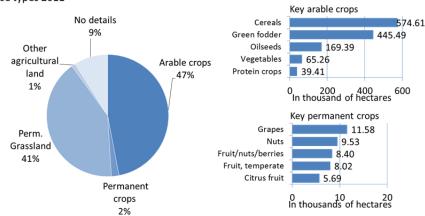


Figure 111: North America: Land use in organic agriculture 2011 (for the US the latest available data are from 2008; land use data for Canada from 2009)

 ${\bf Source: Canadian\ Organic\ Growers\ and\ United\ States\ Department\ of\ Agriculture}$ 

### Organic Agriculture in North America: Tables

Table 66: North America: Organic agricultural land, share of total agricultural land and number of producers 2011

Country	Agr. land [ha]	Share of total agr. land	Producers
Canada	841'216	1.24%	3'718
United States of America (2008)	1'948'946	0.60%	12'941
Total	2'790'162	0.72%	16'659

Source: Canadian Organic Growers (2012) and United States Department of Agriculture (2010)

Table 67: North America: All organic areas 2011

Country	Agriculture [ha]	Wild collection [ha]	Total [ha]
Canada	841'216	225'435	1'066'651
United States of America (2008)	1'948'946		1'948'946
Total	2'790'162	225'435	3'015'597

Source: Canadian Organic Growers (2012) and United States Department of Agriculture (2010)

Table 68: North America: Land use in organic agriculture 2011

Main use	Crop category	Area [ha]
Arable crops	Aromatic plants, medicinal and culinary plants	5'489
	Cereals	574'611
	Flowers and ornamental plants	106
	Mushrooms and truffles	55
	Protein crops	39'409
	Oilseeds	169'385
	Plants harvested green	445'489
	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
Other agricultural land	Fallow land, crop rotation	23'338
Permanent crops	Berries	4'434
	Citrus fruit	5'692
	Fruit, temperate	8'023
	Fruit, tropical and subtropical	3'595
	Fruit/nuts/berries	8'401
	Grapes	11'577
	Nurseries	596
	Nuts	9'533
	Other permanent crops	12'721
Permanent crops total		64'572
Permanent grassland total		1'302'851
Total		2'790'162

Source: Canadian Organic Growers and United States Department of Agriculture. For the US the latest available data are from 2008; the land use data for Canada are from 2009 (total area for 2011).

# Oceania



Map 8: Organic agricultural land in the countries of Oceania 2011

### Organic Farming in Australia

### ELS WYNEN<sup>1</sup> AND ALEXANDRA MITCHELL<sup>2</sup>

### Size of the industry

Until recently, data on organic farming in Australia was derived from data supplied by the certifiers to the Australian Quarantine and Inspection Service (AQIS). In 2010-11 data were available for the first time from the Australian Bureau of Statistics (ABS)<sup>3</sup> (see Table 69). For that year, the ABS included one question on organic agriculture in its agricultural census, which then provided data on area under organic management and the number of holdings with organic certification - including in-conversion.

Table 69: Australia: Area on organic holdings and number of organic producers (1990-2011)

Year	Hectares	% of total hectares	Number of producers	
1990	372'371			1'260
1995	1'119'235			1'462
2001	5'293'732			
2002	6'201'195			
2003	11'249'212	2.5		1'730
2004	12'128'386	2.6		1'859
2005	11'766'768	2.7		1'894
2006	12'345'314	2.8		1'710
2007	11'988'044	2.7		1'776
2008	n.a.			n.a.
2009 (see editor's note)	12'001'724	2.9		2'129
2010-11	11'199'577	2.7		1'775

Sources: 1990-1995: Estimates by Hassall and Associates 1995; 2001-2007: AQIS (adapted by E.Wynen); 2009: AQIS (adapted by A. Mitchell et.al.); 2010-11: ABS (2012)

Editor's note: For the FiBL-IFOAM survey on organic agriculture world-wide, we continued to use the AQIS data for 2009 for the sake of consistency (for differences in counting between AQIS and the ABS, see text). We expect AQIS updated data to be available next year, while the Census data will be available only once in 5 years.

For 2010-11, the ABS recorded organic certification area as 11.2 million hectares, as compared with 12.0 million hectares in 2009 (Mitchell et al. 2010) -obtained via AQIS. The total area of holdings in Australia in 2010-11 was 409.7 million hectares, i.e. 2.73 percent of the total area in agriculture in 2010-11 was on holdings with organic certification. This was a bit lower than in 2009, when it was 2.9 percent of a total of 417.3 million hectares (see below for possible corrections of these data).

ABS figures show 1'775 agricultural businesses certified in 2011-12 out of a total number of 135'447 - i.e. organic holdings make up 1.3 percent of total holdings. This

-

 $<sup>^{1}</sup>$  Dr. Els Wynen, Eco Landuse Systems, Canberra, Australia, www.elspl.com.au

<sup>&</sup>lt;sup>2</sup> Alexandra Mitchell, School of Rural Science and Agriculture, University of New England, Armidale, NSW, Australia

<sup>&</sup>lt;sup>3</sup> The Australian financial year runs from 1July to 30 June.

compares with 2'129 reported for AQIS in 2010. Once again, the figures for the two years are from different sources, and are therefore not strictly comparable. According to Monk, Mascitelli, Lobo, Chen and Bez (2012), there are presently 2'117 organic farmers in Australia.<sup>1</sup>

There are limitations with both methods of data collection. In the data provided to AQIS by the certifiers at least two sources of potential inaccuracies are present. The first limitation arises when certifiers are not willing to provide data. This has meant that, in the past, a small part of the values was based on assumptions, instead of having been supplied. The second limitation is the possibility that some producers were certified by more than one certifier. Thus, double counting may have occurred especially in the years before 2009. On the other hand, the ABS census - which takes place only every five years - counts only those primary producers with an income from agricultural activities of more than 5'000 Australian dollars per year.<sup>2</sup> That is, some certified organic farmers - who could be seen perhaps more as 'hobby-farmers' but were counted under the AQIS scheme - are not counted in the ABS census. Although this last issue may make a difference in number of organic farmers - making the AQIS figure higher due to inclusion of small farmers, it is not likely to change the area under organic management greatly, as the excluded farmers are - by definition - small.

### Standards and certification

There has been little change in the last few years of the Australian regulatory instruments overseeing sales of domestic and export products. The Australian Standard for Organic and Biodynamic Products (AS6000) was published by Standards Australia in 2009 to establish a domestic standard for certification of organic products, but to date has not been broadly adopted by the industry for certification. Certification bodies have noted that the increased cost of operating audit processes for two standards for domestic and export products would be cost prohibitive for the supply chain and await the acceptance of the domestic standard (AS6000) for use in the export compliance processes.

Industry commitment to the review of the AS6000 continues with participation on the committee responsible for reviewing and implementing change of the standard.

Whilst issues of equivalency recognition of the AS6000 in international markets continue to be resolved, the certification agencies and Department of Agriculture, Fisheries and Forestry (DAFF) agree to maintain the use of the established National Standard for Organic and Biodynamic Products established for use of export compliance, i.e. the original standard for export.

There have been subtle changes in the committee structures overseeing the maintenance of the National Standard. Since 2011 DAFF has delegated the responsibilities of secretariat services costs back to industry. An industry-funded structure, the Organic

<sup>2</sup> According to the Australian Taxation Office "... A primary producer is an individual, trust or company carrying on a primary production business." Holdings without an Australian Business Number would not

 $<sup>^{1}</sup>$  The method of compilation for data by from Monk et al. (2012) is similar to that used for the 2010 study by Mitchell et al., where numbers are consolidated from participating certifiers and online verification of business accreditation.

qualify.

### Oceania: Country Report Australia

Industry Standards and Certification Council Inc is now responsible for maintenance of the National Standard for Organic and Biodynamic Produce, and has established the new National Standards Sub-Committee (NSsC) to review changes to the National Standard.

DAFF retains the responsibilities for The Export Control (Organic Produce Certification) Orders that prohibit the export of organic produce unless an organic produce certificate has been issued under these Orders for the produce. Organic and bio-dynamic produce for export must be certified by an approved certifying organization, verifying that the produce has been prepared in accordance with the National Standard for Organic and Bio-Dynamic Produce. Audited certifying organisations - if approved - are issued with a quality management certificate from DAFF, which allows them to issue export certificates.

### Market

Table 70 shows farm gate values of organic produce in different years. Over the last decade, value seems to have more than quadrupled, from less than 100 million in 2000-1 to over 400 million Australian dollars in 2010-11. However, data for the previous four studies include income from only organic produce while the last figure, for the year 2010-11 is the total income of organic farmers irrespective of whether the produce was produced and/or sold on the organic or conventional market. That is, the figures are not strictly comparable. In addition, only the first and last entries are derived from (close to) whole populations, while the other data are estimates based on surveys. In an attempt to estimate the value of only the organically grown products Monk *et al.* (2012) adjusted the data according to their knowledge of the market, and calculated this to amount to 300.6 million Australian dollars. Their estimate of the retail market amounted to 1.15 billion Australian dollars in 2011-12.

Table 70: Australia: Values of organic production 2001-2011

	Year			Farmgate	Retail
		Total (Million Australian dollars)	Beef as share of total (%)	Fruit, vegetables and grain as share of total (%)	Total (Million Australian dollars)
Wynen (2003)	2000/1	89	36.0	51.0	106
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
ABS (2012)	2010-11	432.2	19.5	40.5	n.a.

Source: derived from ABS data .n.a. = not available

Note: ABS - 2010-11, figures are for all produce sold, including that produced and/or sold on the conventional market.

According to the ABS data, beef made up almost 20 percent of the total market (including organic and non-organic products on certified properties) in 2010-11. In total, around half of the returns from organic holdings was derived from livestock -including livestock products such as wool, milk and eggs (totalling 15 percent), sheep and lamb (5.4 percent) and poultry (8.2 percent). Fruit, vegetables

and grains took up just over 40 percent, and the total of the crops just under half of the total value.

### Policy and stakeholder structures

As the growth of the Australian market continues, the structures of the industry informing policy development are also undergoing some change. The peak body of the Australian industry, the Organic Federation of Australia (OFA), is undertaking constitutional structural changes in reducing the number of advisory committees informing the Board, and undertaking new Board representation format. This new dynamic structure now allows for committees to be formed and dissolved according to need, increasing the responsiveness of the Board.

As a not-for-profit peak body structure, OFA has delivered considerable outputs with extremely limited resources. It continues to respond to Australian and international policy reviews in agriculture and food policy.

In the current economic climate, all government departments are substantially reducing staff numbers. This has impacted on the way that the organic industry is serviced at both state and national levels.

As previously mentioned, DAFF has withdrawn financial support to the industry in maintaining the National Standard, and the industry now funds its own secretariat services. DAFF is also examining a cost recovery structure in delivery of all its services to the industry regarding export certifications, which may result in substantial costs being passed back to industry.

Victoria is undergoing changes with the VOICe committee looking at on-going structural changes post the substantial funding provided by the Victorian Government for organic programs in the past. As with the majority of government funding over the last ten years, monies put towards projects have achieved successful outcomes, but ongoing investment in the peak bodies to facilitate the continual co-ordination of industry advice is still missing.

In 2012, Tasmania has seen the closing of its long standing Ministerial Organics Advisory Group (MOAG) but the state peak body, Organics Coalition of Tasmania, worked with the State Government to find an alternative structure to provide advice and a voice for the industry. In winding down its commitment to MOAG, Government has provided specific representation for the organic sector in its overarching committee responsible for the development of the food industry. The Tasmanian Government has publicly stated its recognition of Organics Tasmania as the State peak body.

The Organic Association Western Australia (OGAWA) remains the state based peak group gathering and providing advice and industry support to industry. The OGAWA is a not for profit organisation founded in October 1976 (formerly known as the Organic Growers Association of Western Australia).

### Research and extension

Now that the Rural Industries Research and Development Corporation (RIRDC) has practically ceased its involvement with the organic industry, there seems to be very little

### Oceania: Country Report Australia

going in the area of public funding of research and education that is specific to organic agriculture in Australia.

Some states (such as New South Wales (NSW) and Western Australia) still have one officer who is at least partly working with organic issues, but even those positions seem not to be too sure in the future. The position in NSW is all encompassing, that is, it entails work in areas such as policy, research, advisory, education and industry development. In Western Australia, the focus at present is mainly on producer supply consolidation and market development, i.e. producer co-operative companies, supply consortia etc., to build supply consistency and volume necessary for developing markets.

Two others states (Victoria and Tasmania) have scaled down their involvement with the organic industry, with no organic officer in the Department responsible for Agriculture. In Victoria, the public funding for research for VOICe, a coalition of private organic organizations, finished last year, and no new projects are presently underway.

New South Wales launched a new award: The NSW Organic Pioneers Award as a collaborative initiative from the Department of Primary Industries and organic organizations. The initiative provided an organic business with a professional development travel bursary to the value of 6'000 Australian dollars. The NSW department continues its commitment in the provision of online information tools and updating organic newsletters on a seasonal basis.

In South Australia, several pieces of work are in progress that, though not specifically undertaken for the benefit of organic agriculture, will be of interest also to organic producers, such as compost and soil health, fruit fly baits, and biocontrol options for moths, aphids and weeds.

The OFA is cooperating with the National Association for Sustainable Agriculture, Australia (NASAA) and the University of Canberra (UC) on a marketing project. The OFA Environmental Research and Education Trust has financed a project under one of its three priorities: "What is organics"?

The Biological Farmers Association (BFA) financed a bi-annual marketing report, part of one PhD, and some school gardening programs. It has been instrumental in the greater industry having 700'000 Australian dollars in funding for financing 90 placements of students at the Diploma level at TAFE (Technical and Further Education).

### References

Australian Bureau of Statistics (2012), Customised Report to DPIPWE, Tasmania

Halpin, D. (2004), 'A farm-level view of the Australian organic industry' in DAFF, The Australian Organic Industry: A Profile, Department of Agriculture, Fisheries and Forestry, Canberra

Kristiansen, P. and Smithson, A. (2008), Australian Organic Market Report 2008, Biological Farmers of Australia, Brisbane

Mitchell, A., Kristiansen, P., Bez, N. and Monk, A. (2010), Australian Organic Market Report 2010, Biological Farmers of Australia. Chermside

Monk, A., Mascitelli, B., Lobo, A., Chen, J. and Bez, N. (2012), Australian Organic Marketing Report 2012, Biological Farmers of Australia, Chermside

Wynen, E. (2003), Organic Agriculture in Australia - Levies and Expenditures. RIRDC, Canberra http://www.rirdc.gov.au/reports/org/02-45.pdf

### Organic Agriculture in the Pacific Islands

### KAREN MAPUSUA<sup>1</sup>

### **Recent developments**

In 2012, the secretariat of the Pacific Organic and Ethical Trade Community (POETCom) became formally housed within the Secretariat of the Pacific Community (SPC), which is a regional intergovernmental technical assistance organization. A coordinator was also appointed funded through a European Union funded project: Increasing Agricultural Commodities Trade (IACT). This provided the first dedicated human resources for coordinating and promoting organic agriculture in the Pacific Islands.

POETCom consolidated its governance structure in 2012 with the first Advisory Board elected at the POETcom General Assembly meeting in Papettee French Polynesia in May. The Board will hold its seat for two years. During this period, efforts will be focused on developing core governance documents and will include clarification of membership policies.

In April 2012, the International Federation of Organic Agriculture Movements (IFOAM) accepted the Pacific Organic Standard (POS) into the IFOAM Family of Standards. Approval of the standard by IFOAM is based on an equivalence assessment against the Common Objectives and Requirements of Organic Standards (COROS).<sup>2</sup> The assessment noted that the POS had some significant and innovative variations linked to local conditions. These include wild collection, livestock building materials, no allowance for split production on small farms, biodiversity, residue and contamination limits. The POS also exceeds COROS requirements in the areas of resource management, limiting pollution and social justice.



Figure 112: Organic Pasifika PGS logo

The endorsement will see the Pacific Organic Standard (POS) gain credibility in the organic world because countries are gradually coming to recognise the Family of Standards as a basis for assessing equivalence of foreign standards.

\_

<sup>&</sup>lt;sup>1</sup> Karen Mapusua, Coordinating Officer, Pacific Organic and Ethical Trade Community (POETCom), Increasing Agricultural Commodities Trade (IACT), Land Resources Division, Secretariat of the Pacific Community, Private Mail Bag, Suva FIJI, www.spc.int

 $<sup>^2\,\</sup>mathrm{The}$  POS assessment was conducted by the IFOAM Organic Guarantee System Department, then reviewed by the IFOAM Standards Requirements Committee and finally approved by the IFOAM World Board.

### Pacific Islands: Development of organic agricultural land 2008 to 2011

60.0 50.80 50.80 50.80 20.0 20.0 0.0

2010

2011

Figure 113: Pacific Islands: Development of organic agricultural land 2008-2011 Source: FiBL-IFOAM survey 2013

2009

2008

### History

Organic agriculture is not a new concept in the Pacific. It is very much the traditional farming system that Pacific forefathers have practiced sustainably for centuries, and which has provided for food security and protected the islands' fragile environments. However, the motives for organic farming have changed. In the past, farming was predominantly for subsistence living but, with a new focus on cash crops for export, there is now a need from overseas markets to ensure that products being labelled and sold as organic meet international standards. While third party certification began in the Pacific in the late 1980s, it was initially slow to develop, with more rapid development in the last three to four years.

The organic movement in the Pacific recognized that one of the major challenges facing Pacific Island organic producers is the high cost of certification, auditing and compliance involved in meeting importing country organic standards and/or international standards. In order to address this issue, two projects were funded by the International Fund for Agricultural Development and commenced in 2007, with one implemented by IFOAM and the other by the Secretariat of the Pacific Community (SPC). The main outcomes of these projects were an analysis the existing situation of organic agriculture and fair trade production in the Pacific islands and a set of Pacific Regional Standards for Organic Agriculture, which was developed through a locally owned process and multisector participation. These projects also facilitated the development of a regional strategy to lay the foundation for sustainable organic agriculture development in the region. Two key groupings were formed with the task of driving organics forward in the Pacific. The first was the Regional Organic Task Force (ROTF): a technical group representing all sectors and countries involved in organic agriculture. This group was charged with developing the Pacific Standard. 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 provides 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 ROTF recognized the need to evolve from a technical body to a representative peak body for organics and fair trade in the region and so the Pacific Organic and Ethical Trade Community (POETCom) was formed.

### **Key actors**

Developments in organic agriculture are being spearheaded by the PHLOG, SPC, Pacific Organic and Ethical Trade Community (POETCom) and the POETCom 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
- Kiribati Organic Famers Association, Kiribati
- Niue Organic Farmers Association
- National Agricultural Research Institute (NARI), Papua New Guinea
- Titikaveka Growers Association, Cook Islands
- Tonga National Youth Congress, Tonga
- Women in Business Development Incorporated, Samoa

The movement remains driven by farmers and farm support organizations, with support from national governments as awareness of the potential for organics increases. Regional research and academic institutions (including the University of the South Pacific and the National Agricultural Research Institutes of Papua New Guinea), and increasingly ministries of agriculture, are also engaged.

### International trade

Most of the organically certified products from the region are produced for export. The following is a summary table listing the main crops which are currently organically certified and exported from the Pacific region.

Table 71: Pacific region: Main crops currently organically certified

Products	Countries
Vanilla & other spices & nuts	Fiji, Vanuatu, Niue, Samoa, Papua New Guinea
Cocoa	Vanuatu, Samoa, Papua New Guinea
Virgin coconut oil	Samoa, Fiji, Solomon Islands, Tonga
Nonu /noni (Morinda citrifolia)	Cook Islands, Samoa, Fiji, Niue, French Polynesia
TropicalfFruits	Fiji, Samoa
Bananas	Fiji, Papua New Guinea, Samoa
Coffee	Papua New Guinea, Samoa
Beef	Vanuatu

**Source: POETCom survey** 

The main international markets for the listed products are Australia and New Zealand, due to their proximity, although Japan is a growing market and other markets include North America and the European Union.

There is growing interest and activity in the area of Fair Trade programmes and certification. Efforts are being made by the Pacific Organic and Ethical Trade Community (POETCom) to link organic producers into these systems as a way of adding further value to products and ensuring maximum benefits to the farmers. Currently, there are seven FairTrade certified producer groups in the Pacific, six in Papua New Guinea certified for coffee and one in Fiji for sugar.

### **Domestic markets**

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 a price premium. Some initiatives are on-going to promote the awareness of 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. There is also increasing anecdotal evidence of local market uptake in the tourism and hospitality industry. In Fiji in particular, resorts are now promoting organic produce as part of their unique island experience.

There is continued growth and interest in organic products in New Caledonia and French Polynesia as evidenced by the Participatory Guarantee System (PGS) developments in both countries.

### Legislation

French Polynesia and New Caledonia have both regulated organic certification including PGS. It is unlikely that other countries will follow suit. Despite the policy brief on organic agriculture of the Secretariat of the Pacific Community (SPC) developed in 2009, 2012 saw no changes in legislation or policy development in the region. The policy brief aims to assist Governments and others in the region to develop relevant policy focuses on how organic agriculture can assist in meeting regional challenges. It outlines seven initial policy recommendations.

### Government and international support

National governments continue to support certification costs for small holders in Samoa and Tonga. In September 2012, the Ministers of Agriculture and Forestry Conference in Fiji endorsed the recommendation to include mainstream organic agriculture into SPC and national agriculture strategies. This is an encouraging step and should facilitate increased support for organic growers across the region.

National level activities such as supporting the formation of a coordinating committee in Vanuatu, and development of group certification in countries where to date there has been no certification (Tonga and Kiribati) have been supported by OXFAM New Zealand and the Canada Fund. OXFAM New Zealand is also expanding its livelihood programme in the region and is now supporting three farmer support organizations in organizational capacity building and developing organic certification programmes; Women in Business Development Samoa, Tonga National Youth Congress and Farm Support Association Vanuatu.

### Outlook

While development of the Pacific Organic Guarantee System 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. A key challenge is building production to meet projected demands. Establishment of the POGS and POETCom governance structure within SPC will facilitate implementation of the Pacific Organic Standard (POS). This 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 http://www.spc.int/lrd/lrd/New\_LRD\_Publications.htm
- POETCom Web-pages http://www.spc.int/lrd/index.php?option=com\_content&view=article&id=745&Itemid=495

### **Oceania: Current statistics**

### Julia Lernoud<sup>1</sup> and Helga Willer<sup>2</sup>

### Organic agricultural land

Organic agricultural land in Oceania reached 12.2 million hectares in 2011, and constituted 2.9 percent of the total agricultural area in the region. Compared with 2000 (5.3 million hectares), the area under organic production has more than doubled. Between 2010 and 2011, the area increased by a modest amount of almost 40'000 hectares or 0.33 percent, however, no new data were reported from Australia. The country with the biggest organic agricultural area is Australia (12 million hectares), and the highest proportion of organic agricultural land is in Samoa with more than 10 percent of all farmland under organic cultivation.

### Land use

In 2011, 97 percent of all organic farmland was grassland (11.7 million hectares). Detailed data on land use categories, and arable and permanent crops was however not available for most of the countries.

### **Producers**

There were more than 13'000 producers in the region with the largest number of producers in Papua New Guinea (8'912), Australia (2'129 producers) and New Zealand (1'365 producers).

### Market

In 2011, market data was only available for Australia, New Zealand and Samoa (2010). The total organic market value (the sum of these three countries) was almost 1.15 billion euros. The largest market was Australia with almost 1 billion euros. Australia and New Zealand have a similar per capita consumption of between 42 and 46 euros per person.

For more information see data tables, page 311.

 $<sup>^1 \ \</sup>text{Julia Lernoud, Communication, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 \ Frick, and the property of the p$ 

 $<sup>^2</sup>$  Dr. Helga Willer, Communication, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org

### Organic Agriculture in Oceania: Graphs

### Oceania: Organic agricultural land by country 2011

Source: FiBL-IFOAM survey 2013

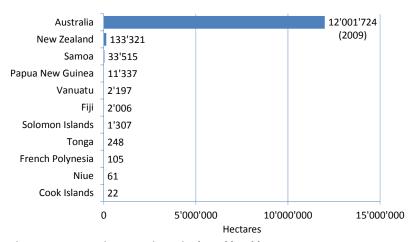


Figure 114: Oceania: Organic agricultural land by country 2011

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.



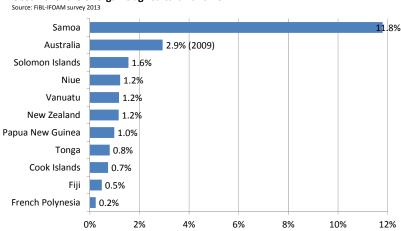


Figure 115: Oceania: Share of organic agricultural land 2011

### Oceania: Development of organic agricultural land 2000-2011

Source: FiBL-IFOAM-SOEL 2002-2013

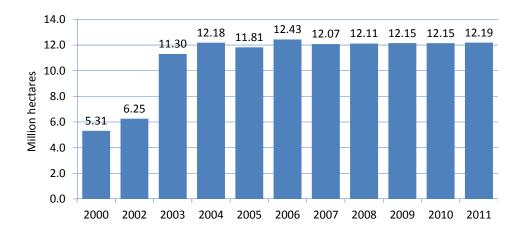


Figure 116: Oceania: Development of organic agricultural land 2000-2011

Source: FiBL-IFOAM – SOEL 2002-2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

# Oceania: Top five countries with the largest growth of organic agricultural land in 2011

Source: FiBL-IFOAM survey 2013

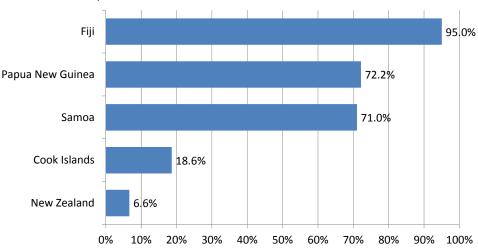


Figure 117: Oceania: Top 5 countries with the largest growth of organic agricultural land in 2011

### Organic Agriculture in Oceania: Tables

Table 72: Oceania: Organic agricultural land, share of total agricultural land and number of producers 2011

Country	Area [ha]	Share of total agri. land	Producers
Australia (2009)	12'001'724	2.93%	2'129
Cook Islands	22	0.73%	75
Fiji	2'006	0.48%	170
French Polynesia	105	0.24%	No data
New Zealand	133'321	1.16%	1'365
Niue	61	1.22%	122
Papua New Guinea	11'337	0.99%	8'912
Samoa	33'515	11.80%	743
Solomon Islands	1'307	1.56%	384
Tonga	248	0.80%	122
Vanuatu	2'197	1.17%	95
Total	12'185'843	2.88%	14'138

Source: FiBL and IFOAM 2013; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 322.

Table 73: Oceania: All organic areas 2011

Country	Agriculture [ha]	Wild collection [ha]	Total
Australia (2009)	12'001'724		12'001'724
Cook Islands	22		22
Fiji	2'006		2'006
French Polynesia	105		105
New Zealand	133'321	1'452	134'773
Niue	61	112	173
Papua New Guinea	11'337		11'337
Samoa	33'515		33'515
Solomon Islands	1'307		1'307
Tonga	248		248
Vanuatu	2'197		2'197
Total	12'185'843	1'564	12'187'407

### Oceania: Tables

Table 74: Oceania: Land use in organic agriculture 2011

Main use	Crop category	Area [ha]
Agricultural land and crops, no details	Agricultural land and crops, no details	293'012
Arable crops	Arable crops, no details	32'843
	Cereals	2'724
	Protein crops	18
	Oilseeds	217
	Strawberries	15
	Vegetables	1'388
Arable crops total		37'205
Cropland, no details	Cropland, no details	40'188
Permanent crops	Berries	15
	Citrus fruit	119
	Coconut	2'724
	Coffee	10'819
	Fruit	12
	Fruit, temperate	793
	Fruit, tropical and subtropical	907
	Fruit/nuts/berries	370
	Grapes	282
	Medicinal and aromatic plants, permanent	19
	Nuts	8'800
	Olives	470
	Other permanent crops	33'784
Permanent crops total		59'113
Permanent grassland	Permanent grassland, no details	11'756'325
Total		12'185'843

# Outlook: The Road to Sustainable Development is Organic

### The Road to Sustainable Development is Organic

### MARKUS ARBENZ<sup>1</sup>

The General Assembly of the Global Organic Movement approved a mandate to IFOAM to lead development of organic agriculture towards sustainability. This mandate is a commitment to the four Principles of Organic Agriculture and shows the willingness to continuously improve. New developments are needed since Organic Agriculture has come under media pressure in various countries that have very important organic markets. At the same time, conventional and other farming systems in some places have improved their sustainability.

The need for sustainability in agriculture is almost undisputed. Creating an affordable, sustainable, economically sound and socially acceptable food future for everyone is a widely agreed goal. The disagreements are in how to define sustainability and probably more importantly, in how to reach sustainability.

The Brundtland commission<sup>2</sup> defined sustainability in 1987 as follows: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

### "Functional Integrity" means sustaining and following ethical values.

The term "Sustainable Agriculture" is widely used among organic stakeholders, but also by many defenders of conventional, industrialized agriculture, so that it is not surprising that the understanding behind the term varies substantially. One can differentiate between three schools of sustainable agriculture. The "food sufficiency school" positions sustainability as a question of enough food production. This school is represented by modern industrialized agriculture. The "stewardship school" considers sustainability as respecting ecological balances. Environmentalists represent this school. The "sustainability as community school" embraces not only ecological concerns, but also vital rural cultures and holistic systems. Modern organic farming belongs to this school.

Based on this analysis there are two overall concepts for sustainability in agriculture: "resource sufficiency" and "functional integrity." The first one is an "accounting" approach on how to fulfill present and future human needs for food. From this perspective, environmental considerations in agricultural production become a question of balancing productivity against externalities such as eutrophication.<sup>3</sup>

Under the "functional integrity" perspective, humans are considered as an integrated part of nature based on an ecological view. This view builds on a systemic approach where our relation with nature is understood as socio-ecological systems and includes crucial elements and properties that must be regenerated and reproduced over time in

-

 $<sup>^{1}</sup>$  Markus Arbenz, Executive Director, International Federation of Organic Agriculture Movements (IFOAM), Bonn, Germany, www.ifoam.org

<sup>&</sup>lt;sup>2</sup> World Commission on Environment and Development (WCED)

<sup>&</sup>lt;sup>3</sup> Halberg, N. 2012. Assessment of the environmental sustainability of organic farming: Definitions, indicators and the major challenges. Can. J. Plant Sci. 92:

order to keep the system sustainable.¹ The functional integrity perspective extends the understanding of sustaining or keeping the level of natural, financial and social capital in order to maintain the opportunities for upcoming generations. It includes ethical perspectives such as food security for all. For instance low salaries for farm laborers or using inhumane slaughtering practices may not compromise the opportunities for future generations, but they are highly unethical practices and touch the functional integrity of the system.

### Commitments and conclusions from the past ...

In 2010, the Organic Movement (i.e. the membership of IFOAM) approved the new Organic Guarantee System. The new system includes the creation of the "IFOAM Community of Best Practices". In 2011, the IFOAM General Assembly in Korea confirmed unanimously that IFOAM should lead a process to improve organic farming and the value chain. Organic Agriculture is supposed to be perceived as the sustainability leader among all farming systems.

As a consequence, in 2012, the IFOAM World Board initiated the Sustainable Organic Agriculture Action Network (SOAAN). The purpose of SOAAN is to support the organic movement in identifying the areas where organic agriculture is sustainable and the areas where it needs to do more. SOAAN's goal is to contribute to improved sustainability and to increase the overall impact of organic farming and of other social and environmental standards. SOAAN's work includes but is not limited to the development of a reference document that describes best practices, a strategy brief paper and a positioning of organic agriculture. Furthermore it aims at providing educational materials for the dissemination of organic knowledge and advocacy purposes.

On the invitation of IFOAM, SOAAN and other organic expert practitioners came together for the "Bonn Sustainability Days" from November 23rd to 26th 2012 to exchange on sustainable development in agriculture and the way forward for the organic sector. They concluded that organic agriculture offers a holistic perspective on agriculture, land use, and their societal and cultural settings, emphasizing the functional integrity of these systems. Organic is a serious and necessary alternative to the dominant agricultural paradigm. Some people may see organic only as the top, but it needs also to be seen as the base, the foundation on which environmentally sound, sustainable systems are built. Organic systems are not perfect though. Therefore the organic movement looks at solutions and best practices to describe its aspirations. It wants to bring organic forward and address a comprehensive range of sustainable development issues. Organic agriculture should fulfill its function as a local and global lighthouse in the development towards sustainable agriculture and food systems.

### ... translate into actions of the future

The year 2013 will see broad consultations of the draft of the Best Practice Reference document. The document describes in detail the vision for sustainable agriculture practices. It describes detailed practices that lead to the manifested objectives embodied by the Principles of Organic Agriculture and aims to provide guidance to further develop

 $<sup>^{1}</sup>$  Halberg, N. 2012. Assessment of the environmental sustainability of organic farming: Definitions, indicators and the major challenges. Can. J. Plant Sci. 92:

### Outlook: The Road to Sustainable Development is Organic

the organic sector. The document can be used as a development guide for stakeholders - in particular for strategy development, innovative research, communications, capacity building, standards development, and benchmarking. This document is a linchpin in the "Community of Best Practices". The content of the document will be eventually approved by the General Assembly. It is subject to changes initiated by IFOAM member motions to future General Assemblies.

# **Annex**

### The FiBL-IFOAM Survey: Overview Table

Table 75: Organic agricultural land, share of total agricultural land and number of producers and domestic sales 2011

For detailed data sources see annex.

Country	Area [ha]	Share of all agr land	Producers	Sales [Mio. €]¹
Afghanistan	61	0.0002%	264	No data
Albania	448	0.04%	146	No data
Algeria	692	0.002%	No data	No data
Andorra	4	0.02%	1	No data
Argentina	3'796'136	2.70%	1'699	No data
Armenia	750	0.04%	34	No data
Australia	12'001'724 (2009)	2.93%	2'129 (2009)	942
Austria	542'553	19.66%	21'575	1'065
Azerbaijan	21'959	0.46%	322	No data
Bangladesh	6'810	0.07%	9'335	No data
Belarus	Wild collect	ion only	No data	No data
Belgium	59'220	4.31%	1'274	435
Belize	1'204	0.79%	1'291	0.02
Benin	1'696	0.05%	2'424	No data
Bhutan	20'995	4.14%	No data	No data
Bolivia	32'710	0.09%	9'837	No data
Bosnia and Herzegovina	343	0.02%	25	1
Brazil	687'040	0.27%	14'437	No data
Bulgaria	25'022	0.82%	978	7
Burkina Faso	19'684	0.16%	4'102	No data
Burundi	550	0.03%	36	No data
Cambodia	8'285	0.15%	5'182	No data
Cameroon	849	0.01%	34	No data
Canada	841'216	1.24%	3'718	1'904
Chad	Wild collect	•	No data	No data
Channel Islands	370 (2009)	4.20%	No data	No data
Chile	29'068	0.18%	600	2
China	1'900'000	0.36%	No data	791
Colombia	34'060	0.08%	4'775	No data
Comoros	2'642	1.70%	1'416	No data
Cook Islands	22	0.73%	75	No data
Costa Rica	9'570	0.53%	3'000	1
Côte d'Ivoire	20'658	0.10%	597	No data
Croatia	32'036	2.46%	890	83
Cuba	2'209	0.03%	14	No data
Cyprus	3'575 (2009)	2.45%	732 (2009)	2
Czech Republic	3 5/5 (2009) 460'498	10.84%	/32 (2009) 3'904	59
Democratic Republic of the Congo	41'032	0.18%	1'122	No data

<sup>&</sup>lt;sup>1</sup> For data year see Table 12, page 71.

318

Country	Area [ha]	Share of all agr land	Producers	Sales [Mio. €]¹
Denmark	162'173	6.09%	2'677	901
Dominica	240	0.98%	No data	No data
Dominican Republic	186'931	9.61%	24'161	No data
Ecuador	52'196	0.69%	9'485	No data
Egypt	82'167 (2010)	2.23%	790 (2010)	No data
El Salvador	6'736 (2008)	0.44%	2'000 (2008)	No data
Estonia	133'779	14.75%	1'431	12
Ethiopia	140'475	0.40%	122'359	No data
Falkland Islands (Malvinas)	398'806	35.94%	8	No data
Faroe Islands	253	8.43%	1	No data
Fiji	2'006	0.48%	170	No data
Finland	188'189	8.21%	4'114	120
France	975'141	3.55%	23'135	3'756
French Guiana (France)	3'974	17.51%	31	No data
French Polynesia	105	0.24%	21	No data
Georgia	1'999	0.08%	150	No data
Germany	1'015'626	6.08%	22'506	6'590
Ghana	19'893	0.13%	3'464	No data
Greece	309'823 (2010)	3.74%	21'274 (2010)	58
Grenada	85 (2010)	0.68%	3 (2010)	No data
Guadeloupe (France)	166	0.42%	28	No data
Guatemala	13'380	0.30%	3'008	No data
Guinea-Bissau		Production vol	ume only	
Guyana	4'249 (2009)	0.25%	74 (2009)	No data
Haiti	912	0.05%	1'005	No data
Honduras	23'827	0.75%	4'989	No data
Hungary	124'402	2.94%	1'433	25
Iceland	8'246	0.36%	39	No data
India	1'084'266	0.60%	547'591	45.9
Indonesia	74'034	0.14%	8'612	No data
Iran (Islamic Republic of)	43'332	0.09%	6'120	No data
Ireland	54'122	1.31%	1'400	99
Israel	7'095	1.36%	500	No data
Italy	1'096'889	8.61%	42'041	1'720
Jamaica	542 (2009)	0.12%	80 (2009)	No data
Japan	9'401	0.24%	2'137	1'000
Jordan	2'567	0.25%	98	No data
Kazakhstan	196'215	0.09%	No data	No data
Kenya	4'969	0.02%	12'647	0.3
Kosovo	11	0.003%	6	No data
Kyrgyzstan	15'097	0.14%	988	No data
Lao (PDR)	3'843 (2009)	0.16%	2'178 (2009)	No data
Latvia	184'096	10.38%	3'484	4
Lebanon	3'303	0.48%	181	No data
Lesotho	183	0.01%	1	No data
Liechtenstein	1'095	29.28%	34	3
Lithuania	152'305	5.75%	2'623	6
Luxembourg	3'720 (2010)	2.84%	96 (2010)	68

### Annex: Table: Organic Agricultural Land, Producers, Domestic Sales

Country	Area [ha]	Share of all agr land	Producers	Sales [Mio. €]¹
Macedonia (FYROM)	26'431	2.47%	419	No data
Madagascar	30'243	0.07%	14'550	No data
Malawi	166	0.003%	9'004	No data
Malaysia	1'582 (2009)	0.02%	24 (2009)	No data
Mali	14'790	0.04%	2'951	No data
Malta	23	0.22%	9	No data
Martinique (France)	298	1.06%	31	No data
Mauritius	30	0.03%	4	No data
Mexico	366'904	1.71%	169'570	21
Moldova	22'102	0.89%	172	No data
Montenegro	3'068	0.60%	62	0.1
Morocco	17'030 (2010)	0.06%	120 (2010)	No data
Mozambique	4'468	0.01%	6	No data
Myanmar	202	0.002%	13	No data
Namibia	14'112	0.04%	6	No data
Nepal	9'892	0.23%	247	No data
Netherlands	47'205	2.45%	1'672	761
New Zealand	133'321	1.16%	1'365	205
Nicaragua	33'621 (2010)	0.65%	10'060 (2010)	No data
Niger	76	0.0002%	1	No data
Nigeria	9'473	0.01%	597	No data
Niue	61	1.22%	122	No data
Norway	55'500	5.36%	2'725	160
Occupied Palestinian Territory	6'354 (2010)	1.73%	832 (2010)	No data
Oman	38	0.002%	4	No data
Pakistan	24'924	0.09%	1'045	No data
Panama	4'570	0.20%	10	No data
Papua New Guinea	11'337	0.99%	8'912	No data
Paraguay	51'190 (2007)	0.24%	11'401 (2007)	No data
Peru	185'964	0.87%	43'661	14
Philippines	96'317	0.81%	3'010	No data
Poland	609'412	3.94%	23'430	120
Portugal	201'054 (2010)	5.79%	2'434 (2010)	21
Republic of Korea	19'312	1.04%	13'376	343
Réunion (France)	556	1.39%	115	No data
Romania	229'946	1.67%	9'471	80
Russian Federation	126'848	0.06%	49	65
Rwanda	3'705	0.19%	876	No data
Samoa	33'515	11.80%	743	0.01
Sao Tome and Principe	4'467	7.98%	2'056	No data
Saudi Arabia	18'563	0.01%	78	No data
Senegal	13'000	0.14%	12'754	No data
Serbia	6'238	0.12%	177	40
Slovakia	166'700	8.61%	365	4
Slovenia	32'149	6.58%	2'363	38
Solomon Islands	1'307	1.56%	384	No data
South Africa	41'947	0.04%	167	No data
Spain	1'621'898	6.52%	32'195	965

Country	Area [ha]	Share of all agr land	Producers	Sales [Mio. €]¹
Sri Lanka	19'469	0.75%	403	No data
Sudan	53'017	0.04%	221	No data
Swaziland	14	0.001%	2	No data
Sweden	480'185	15.40%	5'508	885
Switzerland	123'000	11.69%	6'060	1'411
Syrian Arab Republic	19'987 (2010)	0.14%	2'458 (2010)	No data
Taiwan	5'016	0.59%	2'300	No data
Tajikistan	460	0.01%	75	No data
Thailand	34'829	0.18%	7'405	51
Timor-Leste	24'754	6.60%	71	No data
Togo	1'336	0.04%	2'057	No data
Tonga	248	0.80%	122	No data
Tunisia	178'521	1.82%	2'396	No data
Turkey	442'582	1.82%	43'716	4
Uganda	228'419 (2010)	1.64%	188'625 (2010)	No data
Ukraine	270'320	0.65%	155	5
United Arab Emirates	958	0.17%	15	No data
United Kingdom	638'528	3.96%	4'650	1'882
United Republic of Tanzania	115'022	0.32%	145'430	No data
United States of America	1'948'946 (2008)	0.60%	12'941 (2008)	21'038
Uruguay	930'965 (2006)	6.29%	630 (2006)	No data
Uzbekistan	209	0.00%	6	No data
Vanuatu	2'197	1.17%	95	No data
Venezuela (Bolivarian Republic of)	59	0.003%	1	No data
Viet Nam	23'400	0.23%	4'385	No data
Zambia	7'310 (2009)	0.03%	10'055 (2009)	No data
Zimbabwe	466	0.00%	3	No data
Total	37'245'686	0.86%	1'798'359	47'805

Source: FiBL-IFOAM-Survey 2013, based on data from governments, the private sector, and certifiers. Market data survey in cooperation with AMI. For detailed data sources see annex, page 322.

# Data Providers and Data Sources

# COMPILED BY JULIA LERNOUD<sup>1</sup> AND HELGA WILLER<sup>2</sup>

### Afghanistan

### Source

Certifier data. The number of producers is from 2008

### Albania

### Source

Survey among certifications bodies carried out by the Albanian Association of Marketing.

### Contact

Iris Kazazi, Albanian Association of Marketing, Tirana, Albania.

### Algeria

### Source

Mediterranean Organic Agriculture Network MOAN c/o C.I.H.E.A.M, Bari; Italy.

### Contact

Dr. Marie Reine Bteich, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it

### Note

No separate figure for the number of producers was available, the figure communicated here is that for all operators in the country.

### Andorra

### Source

Ecocert, BO 47, 32600 L'Isle Jourdain, France, www.ecocert.com

### Contact

Claire Saunier, Certification officer South Africa, Nepal and United States of America - L'Isle Jourdain, France, www.ecocert.com

### Angola

For Angola no data were available for 2011.

### **Argentina**

### Source

Land user/operator/production data: SENASA, 2012 "Situación de la Producción Orgánica en la Argentina durante el año 2011". 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.

### **Australia**

### Source

- Land area and the number of producers are from 2009 based on figures from the Australian Quarantine and Inspection Service (AQIS) communicated by Wynen and Mitchell in this and earlier editions of "The World of Organic Agriculture".
- Land use and crop data were taken from:
  Mitchell, A., Kristiansen, P., Bez, N. and
  Monk, A. (2010), Australian Organic Market
  Report 2010. Biological Farmers of
  Australia, Chermside. Please note that the
  crop data from the above mentioned study
  are based on a survey among producers in
  Australia, and only the data of those who
  responded to the survey are included. The
  data may therefore not be complete.
- Domestic market value (2011/2012) according to Monk et al., quoted by Wynen and Mitchell in this volume.

### Contact

- Alexandra Mitchell, School of Rural Science and Agriculture, University of New England, Armidale, NSW Australia
- Els Wynen, Ecolanduse Systems, Canberra ACT 2615, Australia, www.elspl.com.au

### Austria

### Source

Data source for land area, land use and farms: Lebensministerium: Gruener Bericht 2012. Lebensministerium, Wien, www.gruenerbericht.at. Since early 2010

<sup>&</sup>lt;sup>1</sup> Julia Lernoud, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Switzerland, www.fibl.org

 $<sup>^2</sup>$  Dr. Helga Willer, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Switzerland, www.fibl.org

Austria includes the alpine pastures in its organic statistics (also in retrospect). This explains why 2000-2009 figures for the land under organic management is considerably higher than communicated previously.

Market data and trade data: Organic Retailers Association (ORA)

### Contact

- Otto Hofer, 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

### Azerbaijan

### Source

GABA Ganja Agribusiness Association, Ganja, Azerbaijan, www.gaba.az

### Contact

Dr. Vugar Babayev; GABA Ganja Agribusiness Association, Ganja, Azerbaijan; www.gaba.az

### Bangladesh

### Source

Horticulture Export Development Foundation, Dhaka, Bangladesh, www.hortex.org

### Contact

Data supplied by Mitul Saha, Assistant General Manager, Horticulture Export Development Foundation, Dhaka, Bangladesh; www.hortex.org

### Belarus

### Source

Certifier data (wild collection only).

### **Belgium**

### Source

Land area: Eurostat (2011): Certified organic crop area (2010). Last update December 5, 2011. The Eurostat homepage, Eurostat, Luxemburg Operators: Eurostat (2011): Eurostat (2011): Certified organic operators (2010). Last update December 2, 2011. The Eurostat homepage, Eurostat, Luxemburg Market data: Bioforum Wallonie (2011) Report 2011. Namur, Belgium

### Contact

Paul Verbeke, BioForum Vlaanderen vzw, Antwerpen, www.bioforum.be

### Belize

### Source

Survey among the certified companies in Belize by the Belize Organic Producers Organisation BOPA, Belmopan, Belize.

### Contact

Maximiliano Ortega, Belize Organic Producers Organisation BOPA, Belmopan, Belize

### Benin

### Source

FiBL West Africa

### Contact

The data were compiled by Laurent C. Glin, Researcher, FiBL West Africa and Wageningen University

See also country report about Benin from Laurent Glin in the 2012 edition of "The World of Organic Agriculture".

### Bhutan

### Source

Ministry of Agriculture MOA, National Organic Programme DOA, Thimphu, Bhutan, www.moa.gov.bt.

### Contact

Kesang Tshomo, Ministry of Agriculture MOA, National Organic Programme DOA, Thimphu, Bhutan, www.moa.gov.bt.

### **Bolivia**

### Source

GIZ survey based on the data from Bolicert, BioLatina, Ceres, IMO-Control, Camara de Exportadores de La Paz and Bolivian Association of Organic Producers Organisations – AOPEB

### Contact

Verena Batlogg, GIZ Bolivia, La Paz, Bolivia. www.giz.de

### Bosnia Herzegovina

### Source

Area and operators: Survey by Organska Kontrola, Sarajevo, Bosnia & Herzegovina Market data (2010): Ecozept - Dr. Burkhard Schaer, schaer@ecozept.com, www.ecozept.com

### Contact

- Mersida Musabegovic, Organska Kontrola, Sarajevo, Bosnia & Herzegovina
- Aleksandra Nikolic, University of Sarajevo, Bosnia & Herzegovina

### Brazil

### Sources

Land area and producers: The Brazilian government has provided for the first time data on certified organic agricultural land, but only for the fully converted area. This new figure (0.7 million hectares) is therefore not directly comparable with the figure for fully converted and in conversion land, that was communicated in previous

editions (2009-2012) of "The World of Organic Agriculture". The data communicated in the past were from 2007, and they were provided by Organics Brazil, www.organicsbrasil.org. They were based on information of the private certification agencies that are working according to international standards in Brazil. The data included the conversion areas. For historical comparability, the conversion area was taken out of the FiBL database as the new figure from the Ministry of Agriculture presented in this book excludes conversion areas. The official ministry figure for the certified organic land is 1.8 million hectares, which includes 1.2 million hectares of wild collection.

Export data: Instituto de Promoção do Desenvolvimento (IPD) (2010).

### **Further reading**

- Instituto de Promoção do Desenvolvimento (IPD) (2010): Perfil do mercado orgânico brasileiro como processo de inclusão social. Curitiba Paraná, Brazil. http://ipd.org.br/upload/tiny\_mce/arquivos /Perfil\_do\_mercado\_organico\_brasileiro\_co mo\_processo\_de\_inclusao\_social.pdf)
- Ministério da Agricultura, Pecuária E Abastecimento (2012) Produto Organico. The document is available at the Ministry's website at

http://www.agricultura.gov.br/desenvolvimento-sustentavel/organicos/publicacoes.

### Contacts

- > Gwandal Belloqc, Instituto Biodinâmico, 18603-970 Botucatu, Brazil, http://www.ibd.com.br/
- Ming Chao Liu, Organics Brazil, Curitiba Parana, 80210-350 Brazil.
- Angela Pernas Escosteguy, Instituto do Bem-Estar, Porto Alegre, Brazil

### Bulgaria

### Sources

- Land area: Eurostat (2012): Organic crop area (2011). Last update October15, 2012.
   The Eurostat homepage, Eurostat, Luxemburg
- Operators: Eurostat (2012): Number of registered organic operators (2011). Last update July 11, 2012. The Eurostat homepage, Eurostat, Luxemburg
- Livestock and animal production: Eurostat (2012): Number of animal heads and animal production volume (2011). Last update July 11, 2012. The Eurostat homepage, Eurostat, Luxemburg
- Production: Eurostat (2012): Number of production tones (2011). Last update July

- 12, 2012. The Eurostat homepage, Eurostat, Luxemburg
- Domestic market data (2010): Bioselena, Karlovo, Bulgaria. www.bioselena.com

### Contact

Dr. Stoilko Apostolov, FOA Bioselena, Karlovo, Bulgaria. www.bioselena.com

### Note

See also article about organic farming in Bulgaria in the 2012 edition of "The World of Organic Agriculture".

### **Burkina Faso**

### Sources

- The data were compiled by FiBL based on the data of the following international certifiers.
- > Ecocert West Africa, Ougadougou, Burkina Faso
- CERTISYS, B-1150 Bruxelles, Belgium, www.certisys.eu.
- LACON GmbH, Brünnlesweg 19, 77654
   Offenburg, Germany, www.laconinstitut.com

### **Contact**

- Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso
- Emmeline Foubert, CERTISYS, B-1150 Bruxelles, Belgium, www.certisys.eu.
- Fabienne Verzeletti, LACON GmbH, www.lacon-institut.com

### Burundi

### Source

Ecocert East Africa, Madagascar

### Contact

Sandra Randrianarisoa, Ecocert S.A., Villa Arimanantsoa, Madagascar, www.ecocert.com.

### Cambodia

### Source

Cambodian Organic Agriculture Association (COrAA), Khan Chamkar Morn, Phnom Penh, Cambodia, www.coraa.org. Survey among the organic certifiers in the country

### Contact

Winfried Scheewe, Cambodian Center for Study and Development in Agriculture (CEDAC), Toul Kok Phnom Penh, Cambodia, http://www.cedac.org.kh

#### Cameroon

#### Source

The data were compiled by FiBL and IFOAM 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

- Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com.
- Andrew Bayliss, Soil Association
   Certification Limited, Bristol, UK,
   www.soilassociation.org/certification

#### Note

A direct year-to-year comparison with the data prior to 2009 is not possible as since 2009 data from more certifiers have been available than previously.

# Canada

#### Source

Land area, producers and other operator types: Survey of the Canadian Organic Growers (COG), Ottawa, Ontario K1N 7Z2, Canada, www.cog.ca; based on information of the certifiers.

Market data (from 2010): OTA, quoted in the article by Holmes and Macey in this volume.

#### Contact

- Matthew Holmes, Executive Director, Canada Organic Trade Association (COTA), Sackville, Canada, http://ota.com/otacanada.html
- Anne Macey, Canadian Organic Growers (COG), Ottawa, Ontario K1N 7Z2, Canada, www.cog.ca.

# Note

See also article about organic farming in Canada in this and in previous editions of "The World of Organic Agriculture".

# Chad

# Source

Ecocert West Africa, Ougadougou, Burkina Faso **Contact** 

Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso

# Chile

#### Source

Certified areas 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). Domestic market data according to USDA: Organic Products Report Chile. GAIN Report Number CI0031. November 30, 2010

#### Contact

Pilar M. Eguillor Recabarren, Oficina de Estudios y Políticas Agrarias (ODEPA), Ministerio de Agricultura, Teatinos 40, Santiago, Chile, www.odepa.gob.cl.

# **Channel Islands**

#### Source

FAOSTAT (2011): Resourcestat. Land. Last update: July 21, 2011. http://faostat.fao.org/site/377/DesktopDefault.aspx?PageID=377#ancor

The figures are from 2009.

# China

# Sources

Land area. Estimate by IFOAM China. Crop data: As no new land use and crop data were available, for some crops data from previous surveys were used.

Market data (from 2008): Panyakul, Vitoon R. and Zejiang Zhou: Overview of the market for organic food products in China PRC. International Trade Centre ITC. Geneva. Available

http://www.intracen.org/uploadedFiles/intracen org/Content/Publications/Organic-food-products-in-China-market-overview.pdf

# Contact

Zejiang Zhou, IFOAM Representative in Asia, International Federation of Organic Agriculture Movements (IFOAM), Bonn, Germany, http://www.ifoam.org/about\_ifoam/around\_worl d/china.html

# Colombia

# Source

- ECONEXOS, Conexion Ecologica, Calle 5 No. 45A-125, Cali, Colombia, info@econexos.org, www.econexos.com
- Minagricultura Ministro de Agricultura y Desarrollo Rural, Avenida Jiménez No. 7-65, Bogotá DC, República de Colombia, www.minagricultura.gov.co.

# Contact

# **Annex: Data Providers and Data Sources**

- Carlos Escobar, ECONEXOS Desarrollo en Movimiento, Cali República de Colombia, www.econexos.com.
- Luis Eugenio Cinfuentes, Cooordinator of the National Program for Organic Agriculture, Ministry of Agriculture and Rural Development, Bogota, Colombia, www.minagricultura.gov.co

### **Comoros**

#### Source

Ecocert, BO 47, 32600 L'Isle Jourdain, France, www.ecocert.com;

#### Contact

Sandra Randrianarisoa, Ecocert S.A., Villa Arimanantsoa, Madagascar, www.ecocert.com

# Congo, Democratic Republic of Source

Certifier data.

# **Cook Islands**

#### Source

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int.

#### Contact

Karen Mapusua, Secretariat of the Pacific Community (SPC), Private Mail Bag, Suva FIJI, www.spc.int

# Costa Rica

# Source

- Land area, operators and export data:
  Servicio Fitosanitario del Estado (2011):
  Programas Especiales/ Agricultura Orgánica.
  Estadísticas 2010. M.A.G Costa Rica, San
  José
- Export data (2009 data) PROMOCER (2011): Costa Rica: exportaciones de productos orgánicos según destino.
- Domestic market data (2008) were provided by the organic sector organization MAOCO.

# Contact

Roberto Azofeifa, Ministerio de Agricultura y Ganadería, 10094-1000 San José, Costa Rica.

# Côte d'Ivoire

The data were compiled by FiBL based on the data of the following international certifiers.

# Sources

- Control Union, Zwolle, The Netherlands, www.controlunion.org
- Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com.
- Institute for Marketecology (IMO), 8570
   Weinfelden, Switzerland, www.imo.ch;

#### Contact

- Gyorgyi Acs Feketene, Control Union, Zwolle, The Netherlands, www.controlunion.org
- Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com
- Ines Hensler, Institute for Marketecology (IMO), 8570 Weinfelden, Switzerland, www.imo.ch

# Croatia

#### Sources

- Operators and areas: The data were provided via the Mediterranean Organic Agriculture Network (MOAN) by the Ministry of Agriculture, Fisheries and Rural Development, Ulica grada Vukovara 78, 10 000 Zagreb, Croatia, www.mps.hr.
- Market& trade data: Darko Znaor, Independent Consultant, 10000 Zagreb, Croatia

#### Contact

Darko Znaor, Independent Consultant, 10000 Zagreb, Croatia

#### Cuba

#### Source

BioFruta, Cuba; survey among certifiers and Ministry of Agriculture.

#### Contact

- > Elio Palmero, BioFruta, Cuba
- Lukas Kilcher, Research Institute of Organic Agriculture (FiBL), 5070 Frick, Switzerland, www.fibl.org.

# Cyprus

# Source

Land area and producer data (from 2009): Ministry of Agriculture, Natural Resources and Environment, Louki Akrita, Avenue 1412 Nicosia, Republic of Cyprus, www.moa.gov.cy Market data (from 2006): Ecozept

# Contac

Andreas Selearis, Ministry of Agriculture, Natural Resources and Environment, Louki Akrita, Avenue 1412 Nicosia, Republic of Cyprus, www.moa.gov.cy

# Czech Republic

# Sources

All data were provided by ÚZEI, Prague, Czech Republic. The market and international trade data are from 2010.

# Contact

Andrea Hrabalová, ÚZEI, Brno, Czech Republic

#### Denmark

#### Sources

- Land area, land use: Eurostat (2012):
   Organic crop area (2011). The Eurostat homepage. Last update: October 01, 2012
- Operators: Eurostat (2012): Number of registered organic operators (2011). Last update October 6, 2012. The Eurostat homepage, Eurostat, Luxemburg.
- Domestic sales: Source: Landbrug & Fødevarer. Based on data from statistics Denmark and Organic Denmark.
- > Exports, imports: Statistics Denmark.
- Other marketing channels: Organic Denmark. Data compiled by Danish Agriculture & Food Council, Agro Food Park 15, 8200 Aarhus.

#### Contact

Ejvind Pedersen, Danish Agriculture & Food Council, Agro Food Park 13, 8200 Aarhus N, Denmark.

# **Dominica**

# Source

Dominica Organic Agriculture Movement (DOAM) Inc., PO Box 1953 - Roseau,

#### Contact

Ms. Aikuali Joseph, Dominica Organic Agriculture Movement (DOAM) Inc., PO Box 1953 - Roseau, Commonwealth of Dominica.

# **Dominican Republic**

#### Source

Secretaria de Estado de Agricultura, Oficina de Control Orgànico, Santa Domingo, Dominican Republic, www.agricultura.gob.do.

# Contact

José 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 (GIZ), Eloy Alfaro y Amazonas, Edificio MAGAP, Piso 4., Quito, Ecuador, www.giz.de

Export data: C.F.E. Agrocalidad Puerto Marítimo Bolívar. Septiembre 2012, Certificación Orgánica Agrocalidad - Planta Central, Ecuador.

# Contact

Sonia Lehmann, German Technical Cooperation (GIZ), Eloy Alfaro y Amazonas, Edificio MAGAP, Piso 4., Quito, Ecuador, www.giz.de

# Egypt

# Source

Mediterranean Organic Agriculture Network MOAN, c/o IAMB Bari. The data are from 2010.

#### Contact

Dr. Marie Reine Bteich, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.jamb.it.

#### Note

For Egypt only a figure for the total operators is available for 2009, this figure is listed under "producers".

# El Salvador

#### Source

Ministerio de Agricultura y Ganadería, Final 1a. Avenida Norte, 13 Calle Poniente y Avenida Manuel, Gallardo, Santa Tecla, El Salvador. Data are from 2009.

### Contact

Manuel Ernesto Sosa Urrutia, Ministerio de Agricultura y Ganadería, Santa Tecla, El Salvador

#### Estonia

#### Sources

- Land area and land use: Eurostat (2012): Organic crop area (2011). Last Update: July 11, 2012. The Eurostat Homepage, Eurostat, Luxemburg
- Operators: Eurostat (2012): Number of registered organic operators (2011). Last update July 11, 2012. The Eurostat homepage, Eurostat, Luxemburg
- Market data (2009) were provided by the Estonian Organic Farming Foundation, Tartu. Estonia

# Contact

Merit Mikk, Estonian Organic Farming Foundation, Tartu, Estonia

# Ethiopia

# Source

Ethiopian Association of Organic Agriculture and Tepi National Spice Research Centre

# Contact

Addisu Alemayeh, Ethiopian Association of Organic Agriculture and Tepi National Spice Research Centre, Addis Ababa, Ethiopia

# Falkland Islands

# Source

Department of Agriculture, Bypass Road, Stanley, Falkland Islands, www.agriculture.gov.fk.

# Contact

Lucy Ellis, 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.

# Fiji Islands

#### Sources

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int.

#### Contact

Data provided by Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom).

# **Finland**

# Sources

- Land area and land use: Eurostat (2012):
   Organic crop area (2011). Last Update:
   October 15, 2012. The Eurostat Homepage
- Data on wild collection provided by the Finnish Food Safety Authority Evira
- Operator data: Eurostat (2012): Number of registered organic operators (2011). Last update October 15, 2012. The Eurostat homepage, Eurostat, Luxemburg
- Market and international trade data: Pro Luomu, Kauniainen, Finland

# Contact

- > Sampsa Heineon, Evira, Helsinki, Finland
- Marja-Riitta Kottila, Pro Luomu, Kauniainen, Finland

# France

### Source

All data: Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

# Contact

- Camille Moreau, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr
- Nathalie Rison, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

# French Guyana

# Source

Agence BIO: The Agence Bio website, Agence Bio, 93100 Montreuil sous Bois, France. Available at http://www.agencebio.org/pageEdito.asp?IDPAG E=196&n1=6

# Contact

Nathalie Rison, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

# French Polynesia

#### Sources

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int.

#### Contact

Data provided by Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom)

#### 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

Elkana Survey, Elkana, 16 Gazapkhuli street, 0177 Tbilisi, Georgia, www.elkana.org.ge

#### Contact

Elene Shatberashvili, Biological Farming Association Elkana, 16 Gazapkhuli street, 0177 Tbilisi, Georgia, www.elkana.org.ge

# Germany

#### Sources

- > Total organic land area and operators:
  Ministry of Food, Agriculture and Consumer
  Protection BMELV, Bonn, Germany; press
  release of May 29, 2012: ÖkolandbauFläche in Deutschland steigt auf über 1
  Million Hektar; http://www.bmelv.de
- Land use and production details:
  Agrarmarkt Informationsgesellschaft AMI,
  Bonn, Germany, www.ami-informiert.de/
- Market data: Ágrarmarkt Informationsgesellschaft AMI, Bonn, Germany, www.ami-informiert.de;

# Contact

Diana Schaack, AMI, Bonn, Germany, www.ami-informiert.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 West Africa, Ougadougou, Burkina Faso

- > 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, UK,
   www.soilassociation.org/certification
- Emmeline Foubert, CERTISYS, Brussels, Belgium
- Ines Hensler, IMO, Weinfelden, Switzerland
- Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com

#### Note

A direct year-to-year comparison over the past ten years is not possible, because data from more certifiers were available than previously. From 2009 to 2011, the sources have remained the same.

# Greece

#### Sources

- Land area: Eurostat (2011): Organic crop area (2010). The Eurostat homepage. Last update: 11.10.2010.
- Operators: Eurostat (2011): Number of registered organic operators (2010). Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg
- Market data (from 2006) taken from Osch, Susann van, Burkhard Schaer, Claudia Strauch, Caroline Bauer (2008): Specialised Organic Retail Report Europe 2008. Practical Compendium of the Organic Market in 27 European Countries. ORA, Vienna, EKOZEPT, Montepellier/Freising, Biovista, Ettlingen

# Grenada

Data from one international certifier (data from 2010).

# Guinea Bissau

Data were provided by one international certifier.

# Guadeloupe

# Source

Agence BIO: The Agence Bio homepage 93100 Montreuil sous Bois, France. Available at http://www.agencebio.org/pageEdito.asp?IDPAG E=196&n1=6

# Contact

Nathalie Rison, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

### 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

Loli Edeso, RUTA, San Jose, Costa Rica

# Guyana

#### Source

Ecocert, BO 47, 32600 L'Isle Jourdain, France, www.ecocert.com. The data are from 2009.

#### Contact

Vincent Morel, Ecocert, BO 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

### Haiti

Data were received from two international certifiers.

# **Honduras**

#### Source

Agricultura Orgánica Honduras, Secretaria de Agricultura y Ganadería, Tegucigalpa, Honduras, SENASA Honduras

#### Contact

Ing. Sandra Elvir, Jefe del Departamento de Agricultura Organica, Honduras

# Hungary

#### Sources

- Land area: Eurostat (2012): Organic crop area 2011. The Eurostat homepage. Last update: 11.10.2012
- Operators: Eurostat (2012): Number of registered organic operators 2011. Last update November 5, 2012. The Eurostat homepage, Eurostat, Luxemburg
- Market and trade data (from 2009): Survey of Biokorsar, Budapest, Hungary

# Contact

- Dora Drexler, ÖMKI, Budapest, Hungary, www.biokutats.hu
- Ferenc Frühwald, Biokorsar, Budapest, Hungary
- Dóra Kovács, Hungária Öko Garancia Kft., 1033 Budapest, Hungary, www.okogarancia.hu
- Adrienn Sárközy, Biokontroll Hungária, 1027 Budapest, Hungary, www.biokontroll.hu

# 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

- Land area, operators, exports: 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 were provided by Manoj Kumar Menon of the International Competence Centre of Organic Agriculture ICCOA, Bangalore

#### Contact

Dr. P.V.S.M. Gouri, Agricultural and Processed Food Products Export Development (APEDA), New Delhi, India, www.apeda.com

### Indonesia

#### Source

Indonesian Organic Alliance, Bangor, Indonesia (www.organicindonesia.org). Survey among the certifiers active in the country.

#### Contact

Lidya Ariesusanty, Indonesia Organic Alliance, Indonesia, www.organicindonesia.org

# Iran

#### Source

Environmental Sciences Research Institute, Shahid Beheshti University ESRI, Evin, Tehran, Iran. The information is based on the data of the certifiers active in the country

# Contact

Hossein Mahmoudi, Environmental Sciences Research Institute, Shahid Beheshti University ESRI

# Ireland

# Source

- Area, operators and livestock data:
   Department of Agriculture Fisheries and Food, Dublin, Ireland
- Market data: Bord Bia, Dublin, Ireland, based on Data of Kantar

# Contact

- Philipp Cullen, Department of Agriculture Fisheries and Food, Johnstown Castle Estate, Co. Wexford, Ireland www.agriculture.gov.ie.
- Lorcan Burke and 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. .The data are published in the "Annual Report: Export of Fresh and Processed products to the European Union"

#### 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 only the products exported to the European Union.

# Italy

# Sources

- Operator, primary crops and livestock products, SINAB Italian Information System on Organic Farming, Rome, Italy
- Domestic market (totals), ASSOBIO, 35121 Padova, Italy
- Domestic market (details), ISMEA, Research institute for agriculture and market studies, Roma, Italy
- Import volume: Ministry of Agricultural, Food and Forestry Policies MIPAAF, Roma (RM)

#### Contact

- Roberto Pinton, ASSOBIO, 35121 Padova, Italy
- Enrico De Ruvo, ISMEA, Research institute for agriculture and market studies, Roma, Italy
- Marta Romeo, SINAB Italian Information System on Organic Farming, Rome, Italy

# Jamaica

#### . Source

Jamaica Organic Movement JOAM, P.O. Box 5728, Kingston 6, Jamaica, www.joamltd.org. The data are from 2009.

# 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. Domestic market data: Estimates by Masaya Koriyama, IFOAM Japan.

#### Contact

Yu Watanabe, IFOAM JAPAN, 4-30-4 Shimbashi, 5F Fujishiro Building, Minato-ku, Tokyo, 105-0014, Japan, http://www.ifoam-japan.net

# Jordan

#### Source

Mediterranean Organic Agriculture Network (MOAN), maintained by IAM Bari

#### 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

# 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

#### 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, Republic of Source

Land area, land use, production, livestock: Environmentally-friendly Agriculture Dept, Ministry of Food, Agriculture, Fisheries and Forestry, South Korea Sales data: National Agricultural Products Quality

Sales data: National Agricultural Products Quality Management Service

# Contact

Jennifer Chang, Korean Federation of Organic Agriculture Organisations (KFSA), Republic of Korea

# Kosovo

# Source

Association for Organic Farming of Kosovo (AOFK)

#### Contact

The data were provided by Prof. Dr. Sylë Sylanaj, University of Prishtina, Faculty of Agriculture & Veterinary, Department of Pomology, Bul. Bill Clinton, 10 000 Prishtinë, Republic of Kosova

# Kyrgyzstan

#### Source

Helevtas, BioCotton Project, in collaboration with the Agricultural Commodity and Service Cooperative BioFarmer. Jalalabat, Kyrgyzstan.To the data provided by ACSC the data of one international certifier were added by FiBL.

#### Contact

Shaknoza Kurbanalieva and Gulnur Ryskulova, HELVETAS Swiss Association for International Cooperation, "Organic Cotton Production & Trade Promotion" Project (BioCotton), 1 Jamasheva Str., Jalal-Abad, the Kyrgyz Republic, www.helvetas.kg, www.organicfarming.kg

# Latvia

#### Sources

- Land area: Eurostat (2012): Organic crop area (2011). The Eurostat homepage. Last update: 11.10.2012.
- Operators: Eurostat (2012): Number of registered organic operators (2011). Last update November 5, 2012. The Eurostat homepage, Eurostat, Luxemburg
- Market data: Ekoconnect, Dresden, Germany and AMI, Bonn, Germany

# Lao People's Democratic Republic Source

- Area and operator data (from 2009)
  Department of Agriculture (DOA), PO BOX
  811, Vientiane, Laos with additions from,
  Helvetas Laos
- Further data: 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

Mediterranean Organic Agriculture Network (MOAN), maintained by IAM Bari

#### 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

# Lesotho

Certifier data

### Liechtenstein

#### Source

Klaus Büchel Anstalt, Institute of Agriculture and Environment, 9493 Mauren, Liechtenstein, www.kba.li.

#### Contact

Data were provided by: Klaus Büchel, Institute of Agriculture and Environment, 9493 Mauren, Liechtenstein, www.kba.li.

# Lithuania

- Land area and production volume: Eurostat (2012): Organic crop area (2011). The Eurostat homepage. Last update August 18, 2012
- Operators: Source: Eurostat (2012): Certified organic operators 2010.Last update December 17, 2012. The Eurostat Website
- Market data: Ekoconnect, Dresden, Germany and AMI, Bonn, Germany

# Luxembourg

# Source

- Land area and operator data (2010 data): Administration des Services Techniques de l'Agriculture ASTA, Luxembourg. Land use: The data are from 2009
- Market data: Biogros Estimate, 13 Parc d'Activité Syrdall, L-5365 Munsbach, www.biogros.lu/de/home/

# Contact

- > Raymond Aendekerk, bio-LABEL Sekretär, 13, rue Gabriel Lippmann, Parc d'activité Syrdall, L-5365 Munsbach, www.biolabel.lu
- 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

Ministry of Agriculture, forestry and water economy, Skopje, and PROBIO, Skopje, Macedonia, www.probio.com.mk, provided by Mediterranean Organic Agriculture Network (MOAN

#### Contact

Marie Reine Bteich, Mediterranean Organic Agriculture Network (MOAN), c/o IAM Bari, Italy Gordana Pecelj, PROBIO, Skopje, Macedonia, www.probio.com.mk

# Madagascar

# Sources

- Australian Certified Organic ACO, Chermside, Australia, www.aco.net.au (2009 data)
- Ecocert S.A., Villa Arimanantsoa, Madagascar, www.ecocert.com
- ICEA Foreign Office, 40121 Bologna, Italy, www.icea.info
- LACON GmbH, Brünnlesweg 19, 77654
   Offenburg, Germany, www.laconinstitut.com

#### **Contact**

- Milena Belli, ICEA Foreign Office, 40121 Bologna, Italy, www.icea.info
- Sandra Randrianarisoa, Ecocert S.A., Villa Arimanantsoa, Madagascar, www.ecocert.com
- Akiko Nicholls, Australian Certified Organic ACO, Chermside, Australia
- Fabienne Verzeletti, LACON GmbH, www.lacon-institut.com

# Malawi

# Source

The data were collected among several international certifiers, not all of who provided new datat for 2011.

# Malaysia

# Source

Organic Alliance Malaysia, Penang, Malaysia, www.organicmalaysia.com.my. The data are from 2009.

# 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

- CERTISYS, Walhain, Belgium, www.certisys.be
- Control Union, Zwolle, The Netherlands, www.controlunion.org;
- Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com

#### Contact

- > Gyorgyi Acs Feketene, Control Union, Zwolle, The Netherland
- > Emmeline Foubert, CERTISYS, Walhain, Belgium, www.certisys.be
- Data provided by Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com

# Malta

#### Source

- Land area: Eurostat (2012): Organic crop area (2011). The Eurostat homepage. Last update: September 23, 2012.
- Operators: Eurostat (2012): Number of registered organic operators (2011). Last update October 6, 2012. The Eurostat homepage, Eurostat, Luxemburg

#### Contact

Dennis Sciberras, Senior Agricultural Officer, Organic Section, Agriculture Directorate, Department for Rural Affairs and Aquaculture, Agriculture Research and Development Centre, Ghammieri

# Martinique (France)

#### Source

Agence BIO: The Agence Bio website, 93100 Montreuil sous Bois, France. Available at http://www.agencebio.org/pageEdito.asp?IDPAG E=196&n1=6

# Contact

Nathalie Rison, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

# Mauritius

The data were provided by two international certifiers.

# Mexico

# Source

Universidad Autónoma Chapingo, own data (based on data of the certifiers). The land use data are from 2008, all other data are for 2011.

# Contact

Rita Schwentesius, Universidad Autónoma Chapingo, Carretera México - Texcoco Km. 38.5. Chapingo, Estado de México

# Moldova

#### Source

Moldovan Investment and Export Promotion Organisation report on organic farming "Organic Agriculturein Moldova: Local and Regional Perspectives". October-November 2012. The document is available at http://www.rusia.mfa.md/img/docs/organicagric-md-perspectives.pdf

# Mongolia

No data were received from Mongolia.

# Montenegro

#### Source

- Area data : Monteorganica, Podgorica, Montenegro.
- Operator data (from 2010): Ministry of Agriculture, Forestry and Water Management, Podgorica, Montenegro.
- Market data (from 2010): Ecozept Market research and marketing consulting agency.
   Freising, Germany

#### Contact

Prof. Dr Natasa Mirecki, Biotechnical Faculty, University of Montenegro, Mihaila Lalica, 81000 Podgorica, Montenegro, http://www.btf.ac.me/en/

# Morocco

#### Source

Mediterranean Organic Agriculture Network MOAN, C.I.H.E.A.M., c/o 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.

# Note on area data

The latest available data are from 2010, and for 2010 no land use and crop data were available (neither for the wild collection areas). The breakdown of the agricultural land is therefore from 2009, but it should be borne in mind that the overall organic agricultural land increased substantially in 2010.

# Note on producer data

No separate figure for the number of producers was available, the figure communicated is that for all operators in the country.

# Mozambique

# Source

Data were provided by two international certifiers and are from 2010.

# **Annex: Data Providers and Data Sources**

#### Note

Some of the area data provided here are FiBL estimates based on the data from one certifier who, for some crops, only provided production volumes but no area data.

# Myanmar

### Source

Myanmar Organic Agriculture Group. Yangon, Myanmar

#### Contact

San Linn, Myanmar Organic Agriculture Group. Yangon, Myanmar

#### Namibia

#### Source

To the data provided by the Namibian Organic Association, PO Box 1504, Okahandja, Namibia, the figures from one international certifier were added. PGS figures have been included.

#### Contact

Manjo Smith, Namibian Organic Association (NOA), PO Box 1504, Okahandja,

# Nepal

#### Source

The data were provided by Maheswar Ghimire, Kathmandu, Nepal. To these data, the data of one international certifier were added.

#### Contact

Maheswar Ghimire, Kathmandu, Nepal

# **Netherlands**

#### Sources

- Land use details/crops: Eurostat (2012): Organic crop area (2011). Netherlands. Last Update: August 18, 2012. The Eurostat homepage, Eurostat, Luxemburg
- Operators: Eurostat (2012): Number of registered organic operators (2011). Last update October 6, 2012. The Eurostat homepage, Eurostat, Luxemburg
- Market data: LEI, provided in: Bionext (2012) Monitor Duurzaam Voedsel 2011, Utrecht
- International trade data (from 2007) Bakker, J and Bunte, F. (2009) Biologische international handel. WUR, Wageningen.

# Contact

- Dr. Johan Bakker, LEI Wageningen UR, Den Haag, The Netherlands
- Marian Blom, Biologica, Utrecht, The Netherlands

# New Zealand

# Source

The AgriBusiness Group, Christchurch, New Zealand, www.agribusinessgroup.com

#### Contact

Jon Manhire, The AgriBusiness Group, Christchurch, New Zealand., www.agribusinessgroup.com

# Nicaragua

The data are from 2009.

#### Source

Ministerio Agropecuario y Forestal MAGFOR, Managua. Nicaragua, www.magfor.gob.ni,

# 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. From one of the certifiers the number of producers is from 2008, no newer figures were available.

# Niue

# Source

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int;

#### Contact

Data provided by Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

# Norway

# Sources

- Land area, land use and animals: Norwegian Agricultural Authority (SLF) (2012): Produksjon og omsetning av økologiske landbruksvarer. Rapport for 2011. Norwegian Agricultural Authority (SLF), Oslo
- Operators: Eurostat (2012): Number of certified registered organic operators. The Eurostat website. Last Update July 10, 2012
- Market data: AC Nielsen Norway, published in Norwegian Agricultural Authority (SLF) (2012): Produksjon og omsetning av økologiske landbruksvarer. Rapport for 2011. Norwegian Agricultural Authority (SLF), Oslo

#### Contact

Elin Røsnes, Norwegian 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

Data were provided by two international certifiers. Only one provided updated data for 2010

# Palestine, Occupied Territories

Mediterranean Organic Agriculture Network MOAN, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it. The data are from 2010.

#### 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

There was no separate figure for the number of producers, the number presented here refers to all operators in the country.

### **Panama**

### Source

Ministerio de Desarrollo Agropecuario, Dirección Nacional de Sanidad Vegetal, Panama.

# Contact

Loli Edeso, RUTA, San José, Costa Rica

# Papua New Guinea

# Source

Source: Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.intTo these data, recent data from one international certifier were added.

# Contact

Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

# **Paraguay**

# Source

MAG/ALTERVIDA/IICA (March 2008): Estrategia Nacional para la Promoción de la Producción Orgánica. Provided by Genaro Coronel, SENVE; Paraguay, Available at www.mag.gov.py/ESTRATEGIA%20NACIONAL.p df.

The data are from 2007.

# Peru

# Source

- SENASA. Producción Orgánica. Lima, Perú
- Market and Trade data: PromPeru, San Isidro - Lima 27 Perú,

www.promperu.gob.pe. The total value of domestic market is an estimate, based the data from Promperu that the market must be between 13.1 and 23.2 million US dollars (2010).

# Contact

Dr. Jorge Leonardo Jave Nakayo, Director de Producción Orgánica, Ministerio de Agricultura, SENASA, Peru

# **Philippines**

#### Sources

The data were compiled by FiBL from a number of certifiers, but there are more certifiers active than those listed below. A direct year-to-year comparison over the years is not possible.

Certifiers who provided data

- BCS, Nürnberg, Germany, www.bcs-oeko.de;
- Ceres, Happburg, Germany (2010 data), www.ceres-cert.com;
- Control Union, Zwolle, The Netherlands, www.controlunion.org;
- Ecocert, L'Isle Jourdain, France, www.ecocert.com;
- Naturland, Gräfelfing (2010 data),
   Germany, www.naturland.de;
- Organic Certification Center of the Philippines OCCP (2009 data), 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;
- Lani Katimbang-Limpin, OCCP, Quezon City, Philippines, www.occpphils.org
- Camille Godard, Area Manager, Ecocert, L'Isle Jourdain, France, www.ecocert.com;
- Manfred Fürst, Naturland, Gräfelfing, Germany, www.naturland.de.

# Note

Not all certifiers provided data on the number of producers, which therefore must be higher than communicated here. Not all certifiers provided data for 2011

# **Poland**

#### Source

- Land area and land use, livestock and production: Eurostat (2012): Certified organic area/ operators/livestock/crop production and yields from fully converted areas. Last update 11./12.7.2012; The Eurostat Website
- Market data: Andrzej Szeremeta, IFOAM EU Group, Brussels, based on national data sources

#### Contact

Andrzej Szeremeta, IFOAM EU Group, Brussels, www.ifoam-eu.org

# **Portugal**

# Source

- Land use and operators (2010): Ministério da Agricultura, do Desenvolvimento Rural e das Pescas
- Market data: INTERBIO, http://www.interbio.pt

#### Contact

Caterina Cristosomo, Portugal/University of Milan, Italy

# Réunion

# Source

Agence BIO: The Agence Bio website, 93100 Montreuil sous Bois, France. Available at http://www.agencebio.org/pageEdito.asp?IDPAG E=196&n1=6

### Contact

Nathalie Rison, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

# Romania

# Sources

- Organic area; land use, livestock and production: Eurostat (2012): Certified organic area/ operators/livestock/crop production and yields from fully converted areas.Last update 11./12.7.2012; The Eurostat Website
- Wild collection: Ministry of Agriculture MADR, Bucarest, Romania, seehttp://www.madr.ro/pages/page.php?sel f=01&sub=0107&tz=010710.
- Market data: BCG-Global Advisors(2013) Romanian Organic Sector – Business Insight Booklet. Global Advisors, Bio-Romania Association, The University of Bucharest. Bucharest 2012

# Contact

Iulia Grosulescu, Counsellor Organic
 Farming Office, Ministry of Agriculture and

- Rural Development, 24,Blvd Carol I,Bucharest Romania
- Marian Cioceanu, Asociatia Bio Romania, Str.Mihai Eminescu, nr.254, parter, sector 2, Bucureşti, Romania, http://www.bioromania.org/contact/

### 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

# Rwanda

#### Source

Ecocert S.A., Villa Arimanantsoa, Madagascar., www.ecocert.com

#### Contact

Sandra Randrianarisoa, Ecocert S.A., Villa Arimanantsoa, Madagascar., www.ecocert.com.

### Samoa

#### Source

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

#### Contact

Data provided by Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

### San Marino

For San Marino one processor had been reported previously, but it was not reported for the current survey.

# Sao Tome and Prince

# Source

Ecocert West Africa, Ougadougou, Burkina Faso **Contact** 

Data provided by Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso, 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 Internationale Zusammenarbeit (GIZ) 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.giz.de and www.moa.gov.sa/organic

# Senegal

#### Source

Survey among the certifiers in the country by the National Federation for Organic Agriculture, AGRECOL BP. 347 Thiès, Sénégal

#### Contact

Famara Diedhioe, National Federation for Organic Agriculture, AGRECOL, BP. 347 Thiès, Sénégal.

# Serbia

#### Source

Ministry of Agriculture, Forestry and Water, Belgrade, Republic of Serbia. Data provided by Dr. Guido Haas

#### Contact

- Dr. Guido Haas, agrarExpertise, Am Weiher 78, 53604 Bad Honnef, Germany. www.agrarhaas.de. See also article by Guido Haas in this volume.
- Marija Kalentic German International Cooperation GIZ. Novi Sad, Serbia

#### Note

The data published here include the data from those certifiers that are registered with the Ministry of Agriculture, Forestry and Water. A direct year-to-year comparison with the data provided for 2009 and 2010 by GiZ is therefore not possible.

### Sierra Leone

Data had been available previously from one international certifier, but the projects are not involved in organic farming any longer.

# Singapore

Two international certifiers reported a number of processors.

# Slovakia

# Sources

Eurostat (2012): Certified organic area/ operators/livestock/crop production and yields from fully converted areas.Last update 11./12.7.2012; The Eurostat Website Market data (2010): Ecozept, market research and marketing consulting agency. Freising, Germany.

# Slovenia

#### Sources

Eurostat (2012): Certified organic area/ operators/livestock/crop production and yields from fully converted areas.Last update 11./12.7.2012; The Eurostat Website Market data: Institute for Sustainable Development, Ljubljana, Slovenia

#### Contact

Anamarija Slabe, Institute for Sustainable Development, Ljubljana

# **Solomon Islands**

#### Source

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

#### Contact

Data provided by Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

### Somalia

No new data were reported for Somalia.

# South Africa

#### Source

The data were compiled by FiBL and IFOAM based on the data of the following international certifiers.

- Afrisco, Lynnwood, South Africa, www.afrisco.net (data 2010)
- BCS, Nürnberg, Source, BCS
- Control Union, Zwolle, The Netherlands, www.controlunion.org
- Ecocert Southern Africa, Gardens Cape Town, www.ecocert.com (data 2010)
- ) 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
- Diana Callear, Afrisco, Lynnwood, South Africa, www.afrisco.net
- Tobias Fischer, BCS, Nürnberg, Source, BCS
- Ines Hensler, IMO, Weinfelden, Switzerland
- Clifyn Mckenzie, Ecocert Southern Africa, Gardens Cape Town
- Fabienne Verzeletti, LACON GmbH, www.lacon-institut.com

# **Spain**

#### Sources

- Land use, operators, livestock, production: Questionniare for Eurostat from the Spanish Ministry of Agriculture, Food and Environment MAGRAMA, supplied by MOAN
- Market data Ministerio de Agricultura, Alimentación y Medio Ambiente (MAGRAMA), Subdirección General de Calidad Diferenciada y Agricultura Ecológica (2012) Caracterización del sector de la producción ecológica española. MAGRAM, Madrid.

http://www.magrama.gob.es/es/alimentacio n/temas/la-agricultura-ecologica/Actualizaci%C3%B3on\_Caracteriz aci%C3%B3n\_Sector\_P.\_Ecol%C3%B3gica-Sept.2012-Informe\_Final\_definitivo\_-Web.20.11.12\_tcm7-232360.pdf\_tcm7-232360.pdf

#### Contact

- Gonzálvez Pérez, Spanish Society of Organic Agriculture SEAE, Catarroja (Valencia), Spain, www.agroecologia.net
- › Joan Picazos, Biocop Productos Biológicos, S.A. (BIOCOP), Puigmal, 3 08185 Lliçà de vall (Barcelona), Spain, www.biocop.es

# Sri Lanka

The data were compiled by FiBL from two international certifiers. Only one of the certifiers provided data on the number of producers, whereas the other only provided the number of operators. The number of producers must therefore be higher than communicated in this book

# Sudan (former)

# Sources

Federal Ministry of Agriculture & Irrigation Export Development& Quality Control Unit, Republic of the Sudan. To these the data of two international certifiers were added.

# Contact

Data provided by Dr./Mrs.Afaf Abdelrahim Elgzouly, Federal Ministry of Agriculture & Irrigation Export Development& Quality Control Unit, Sudan

# Suriname

The certifier who had provided data previously, did not report any activities anymore.

# Swaziland

Data source: Certifier data.

### Sweden

#### Sources

Land area/land use/livestock: Eurostat (2012): Certified organic area/ operators/livestock/crop production and yields from fully converted areas.Last update 11./12.7.2012; The Eurostat Website

Market data: Source: Central Statistical Office SCB, Stockholm, Sweden

#### Contact

- Carla Larsson, Statistics Sweden, Örebro.,
   Sweden
- Katerina Wolf, KRAV, Uppsala, Sweden

# Switzerland

### Sources

Land area, land use data and producer data compiled by FiBL; based on the data of the certifiers.

Market data: Bio Suisse, Basel, Switzerland, www.biosuisse.ch/de/bioinzahlen.php.

#### Contact

Helga Willer, FiBL, Frick, Switzerland

# Syria

#### Source

Mediterranean Organic Agriculture Network MOAN c/o C.I.H.E.A.M; Bari; Italy.

#### Contact

Dr. Marie Reine Bteich, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it

#### Notes

No separate figure for the number of producers was available, the figure communicated is that for all operators in the country. The latest data are from 2010.

# Taiwan

# Source

 $\label{thm:continuous} Taiwan\ Organic\ Agriculture\ Information\ Centre.$   $Statistics\ 1996\mbox{-}2009\ at$ 

http://info.organic.org.tw/supergood/front/bin/ptlist.phtml?Category=104854, Download of August 24, 2009. Original Source: Agricultural and Food Agency, Council of Agriculture, Taiwan

# Tajikistan

# Source

SAS - SUGDAGROSERV, 2 Baraka Boboeva, Khujand 735700, Tajikistan. (Data 2010). To these data, the data of one international certifier were added

# Contact

Javohir Eshmatov, SAS - SUGDAGROSERV, 2 Baraka Boboeva, Khujand 735700, Tajikistan.

#### Tanzania

#### Source

Tanzania Organic Agriculture Movement (TOAM), PO Box 70089, Dar es Salaam, Tanzania, www.kilimohai.net. Survey among the organic operators in the country.

#### 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

# Contact

Data provided by Vitoon Panyakul, Green Net, 10330 Bangkok, Thailand, www.greennet.or.th.

#### Timor-Leste

The data are based on the information of one international certifier.

# Togo

### Sources

The data were compiled by FiBL based on the data of the following international certifiers.

- Ecocert, Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com
- > IMO, Weinfelden, Switzerland, www.imo.ch
- LACON GmbH, Brünnlesweg 19, 77654
   Offenburg, Germany

#### Contact

- Ines Hensler, IMO, Weinfelden, Switzerland
- Aziz Yanogo, Ecocert West Africa,
   Ougadougou, Burkina Faso
- › Fabienne Verzeletti, LACON GmbH,

# Tunisia

General Direction of Organic Agriculture, Tunis, Tunisia; provided at the Homepage of CTAB at http://www.ctab.nat.tn/ang/d\_bio\_ang.pdf

# Contact

- Prof. Dr. Mohamed Ben Kheder, B.P 54, Chatt Meriem, Sousse, Tunesia
- Samia Maamer Belkhiria, Ministry of Agriculture and Hydraulic Resources APIA, Tunis, Tunisia

# Turkey

# Source

Ministry of Agriculture MARA, Ankara, Turkey, www.tarim.gov.tr.

Market data (2009): Estimate by Erdal Süngü, Ministry of Agriculture MARA, Ankara, Turkey, www.tarim.gov.tr.

#### 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. A correction value was used in order to calculate the correct total

Data on the organic domestic market value are roughly estimated (2010 data).

# Uganda

#### Source

National Organic Agricultural Movement of Uganda (NOGAMU), PO Box 70071, Clock Tower, Kampala, Uganda, www.nogamu.org.ug. 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

Ministry of Environment and Water, United Arab Emirates

# Contact

- Eng. Saif Mohamed Alshara, Ministry of Environment and Water, United Arab Emirates
- Mohammad Al-Oun (PhD). Director, Water and Food Research Food Programme, Jordan National Centre for Research and Development

# United Kingdom

# Sources

 Land use details/crops: Eurostat (2012): Certified organic area/ operators/livestock/rop production and

- yields from fully converted areas.Last update 11./12.7.2012; The Eurostat website
- Operators: Defra and National Statistics: Organic Statistics 2011 United Kingdom. Revision published 2 July 2012. The Defra website at statistics.defra.gov.uk/esg/statnot/organics %20uk.pdf
- Market data: Soil Association 2013: Organic Market Report 2012. Bristol, United Kingdom

# **Contacts**

Dr. Catherine Gerrard and Dr. Susanne Padel, The Organic Research Centre Elm Farm, Newbury, UK, www.organicresearchcentre.com

# Uruguay

#### Source

Ministerio de Ganadería, Agricultura y Pesca (MGAP), Montevideo, Uruguay, www.mgap.gub.uy. The data are from 2006

#### 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

# **Contacts**

- Catherine Greene, United States Department of Agriculture, Washington, USA, www.ers.usda.gov/briefing/organic/.
- Barbara Haumann, OTA, Brattleboro VT 05301, www.ota.com

# Uzbekistan

# Source

Certifier data, compiled by FiBL.

# Vanuatu

# Source

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

# Contact

Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

# Venezuela

#### Note

The data were collected among two international certifiers. As the source has changed over the years, a direct-year-to-year comparison is not possible.

The data are from 2009.

# **Viet Nam**

#### Source

Survey of Agricultural Development Denmark-Asia (ADDA Vietnam), Hanoi, Vietnam

#### Contac

Nhung Tu Thi Tuyet, ADDA Vietnam, Hanoi, Vietnam

#### Note

The area data includes 22 ha of PGS data.

# Zambia

#### Source

OPPAZ, Lusaka, Zambia

As the data source has changed over the years, a direct-year to year comparison is not possible. The data are from 2009.

#### Contact

Munshimbwe Chitalu, OPPAZ, Lusaka, Zambia

### Zimbabwe

#### Source

Ecocert Southern Africa, Gardens Cape Town

#### Contact

Clifyn Mckenzie, Ecocert Southern Africa, Gardens Cape Town