ORGANICDATA NETWORK

Data Network for better European organic market information

Joint OrganicDataNetwork project database to collate organic market data

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Contents

- ✓ The process
- ✓ The data collection and processing tools
- ✓ The online database
- ✓ The challenges
- ✓ Conclusions

Two market data surveys

- ✓ The partners of the OrganicDataNetwork carried out two surveys on organic market data in Europe.
- ✓ The surveys covered the data per 31.12.2011 and 31.12.2012.
- ✓ Currently, as an additional effort, we are collecting the 2013 data.
- ✓ For the first time, all European market data (retail sales, exports, imports) were entered into one database.

(Eurostat provides area, livestock numbers and production data but no market data in its organic database).

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Indicators used

- Animals numbers
- Area; area fully converted and under conversion: total and by crop
- Operators: Exporters, importers, processors, producers
- Production volume and value: total and by crop/product
- Retail sales volume and value: total and by product
- Export volume and value: total and by product
- Import volume and value: total and by product
- Related (calculated) indicators:
  - Share of overall totals,
  - growth rates,
  - Per capita consumption

Questionnaire

- ✓ For standardized market data input, the OrganicDataNetwork partners designed a questionnaire.
- ✓ The questionnaire is an excel file with a number of data sheets – one sheet per indicator or indicator group.
- ✓ The data are entered from the questionnaire into the database.

Market and international trade data

- ✓ Total retail sales by product in the local currency and or euros and in metric tons
- ✓ Organic share (%) of the retail sales by product
- ✓ Retail sales by product and by marketing channel (in local currency/euros and in mt)
- ✓ Exports and imports (value and volumes)

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Domestic Market & International Trade (Sales per product group and per sales channel)	Total organic market: Domestic organic market VOLUME [t] [all channels]	Domestic organic market volume [hectolitres] [all channels]	Domestic organic market value, all channels [Mio EUR]	Organic share VOLUME [%]	Organic and conventional VOLUME [t]	Domestic organic market VALUE all channels [Mio EUR]	Organic share VALUE [%]	Organic and conventional VALUE [EUR]	By sales channel: General retail sales = supermarkets, hypermarkets, drugstores: General retail sales [t]	General retail sales value [Mio EUR]	By sales channel: Specialized organic retail = Stores with more than 90% organic products: Specialized organic retail sales [t]	Specialized organic retail value [Mio EUR]	By sales channel: Direct sales = On farm sales, farmer's markets: Direct sales volume [t]	Direct sales value [Mio EUR]	channels = box schemes, bakeries, butchers, health food shops, online-shops, filling stations, others: Other sales channels volume [t]	Other sales channels value [Mio EUR]
Food and beverages	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Food and beverages, no details																
Cereals	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cereals, no details																
Wheat																
Grain maize and corn cob mix																
Barley																
Rye																
Oats																
Triticale																
Buckwheat																
Rice																
<important new product, please enter>																
Other cereals																
Protein crops (dried pulses)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Protein crops (dried pulses), no details																
Horse beans																
Peas																
Lupine																
<important new product, please enter>																
Other protein crops																
Oilseeds	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oilseeds, no details																
Sunflower seed																
Soy																
Linseed/Flax																
Rape and turnip rape																
<important new product, please enter>																
Other oilseeds																
Root crops (excluding potatoes)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Root crops, no details																
Sugar beet																
<important new product, please enter>																
Other root crops																
Fresh vegetables and potatoes	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vegetables	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vegetables, no details																
Carrots																

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Different classifcations are used

- ✓ Different national data collectors have developed different classifications for their needs; e.g. household or retail panels use other classifications than statistical offices.
- ✓ For the OrganicDataNetwork questionnaire and database, we used the European classifications in order to facilitate a country-to-country comparison.

Classifications used

- ✓ For organic agricultural land and crops: **Eurostat Handbook for Annual Crop Statistics** (Regulation 543/2009) (Revision 2013 – Presented in the WPM of the 12 and 13 March 2013, finalised in July 2013
- ✓ For products: Eurostat (2008): **CPA 2008 - Statistical Classification of Products by Activity**. Eurostat, Luxembourg

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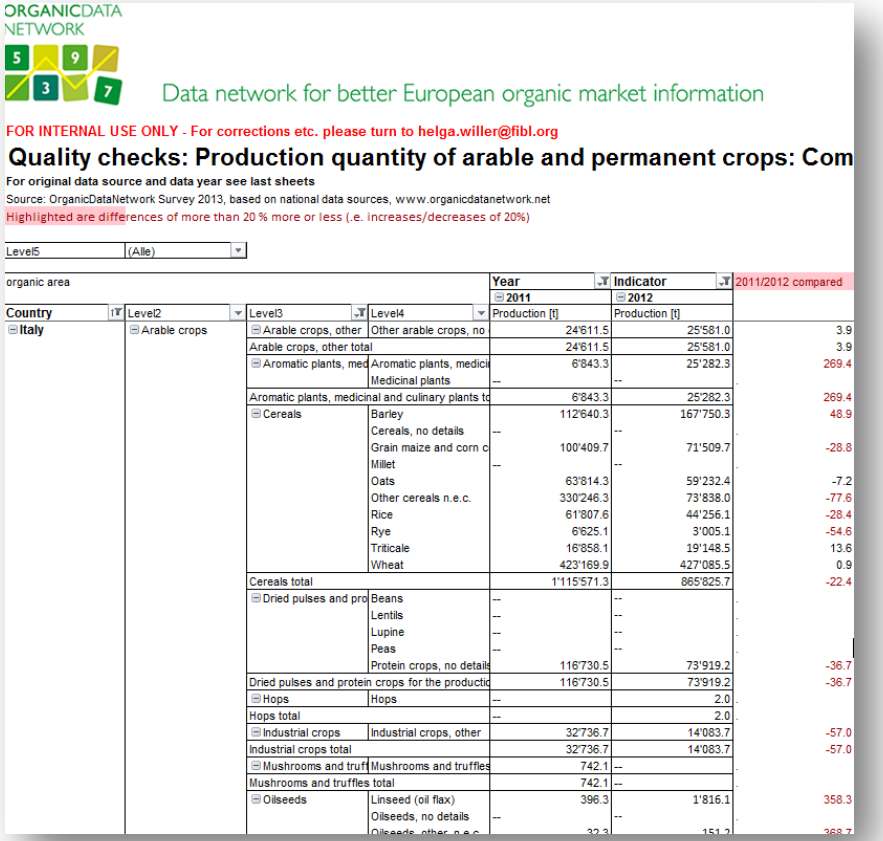
Quality checks via pivot tables

- ✓ For the quality checks of the OrganicDataNetwork data we used Pivot tables as a basic tool.
- ✓ We programmed a number of tables for data checking and
- ✓ We used the “conditional formatting” function to highlight potentially inconsistent data.
- ✓ When data were inconsistent, partners tried to provide better data or an explanation as not every figure that is inconsistent to these checks is necessarily wrong.
- ✓ Explanations are entered into the database.



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Quality checks: Production quantity of arable and permanent crops: Com

For original data source and data year see last sheets

Source: OrganicDataNetwork Survey 2013, based on national data sources, www.organicdatanetwork.net

Highlighted are differences of more than 20 % more or less (.e. increases/decreases of 20%)

Level5 (Alle)

organic area				Year	Indicator	2011/2012 compared
				2011	2012	
Country	Level2	Level3	Level4	Production [t]	Production [t]	
Italy	Arable crops	Arable crops, other	Other arable crops, no	24'611.5	25'581.0	3.9
		Arable crops, other total		24'611.5	25'581.0	3.9
		Aromatic plants, med	Aromatic plants, medici	6'843.3	25'282.3	269.4
			Medicinal plants	--	--	
		Aromatic plants, medicinal and culinary plants tc		6'843.3	25'282.3	269.4
		Cereals	Barley	112'640.3	167'750.3	48.9
			Cereals, no details	--	--	
			Grain maize and corn c	100'409.7	71'509.7	-28.8
			Millet	--	--	
			Oats	63'814.3	59'232.4	-7.2
			Other cereals n.e.c.	330'246.3	73'838.0	-77.6
			Rice	61'807.6	44'256.1	-28.4
			Rye	6'625.1	3'005.1	-54.6
			Triticale	16'858.1	19'148.5	13.6
			Wheat	423'169.9	427'085.5	0.9
		Cereals total		1'115'571.3	865'825.7	-22.4
		Dried pulses and pro	Beans	--	--	
			Lentils	--	--	
			Lupine	--	--	
			Peas	--	--	
			Protein crops, no details	116'730.5	73'919.2	-36.7
		Dried pulses and protein crops for the productic		116'730.5	73'919.2	-36.7
		Hops	Hops	--	2.0	
		Hops total		--	2.0	
		Industrial crops	Industrial crops, other	32'736.7	14'083.7	-57.0
		Industrial crops total		32'736.7	14'083.7	-57.0
		Mushrooms and truff	Mushrooms and truffles	742.1	--	
		Mushrooms and truffles total		742.1	--	
		Oilseeds	Linseed (oil flax)	396.3	1'816.1	358.3
			Oilseeds, no details	--	--	
			Oilseeds, other, n.e.c.	32.3	151.2	368.7

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The online database

The OrganicDataNetwork makes the data collected available at its website.

- ✓ All data collected by indicator as **MS Excel Table**
- ✓ **Interactive easy to use datatables** for selected indicators and crops
  - ✓ Key indicators (total organic area, total retail sales, total operators etc.)
  - ✓ Organic area and production by crop
  - ✓ Organic retail sales by product
  - ✓ Shares of total retail sales
  - ✓ Exports and imports

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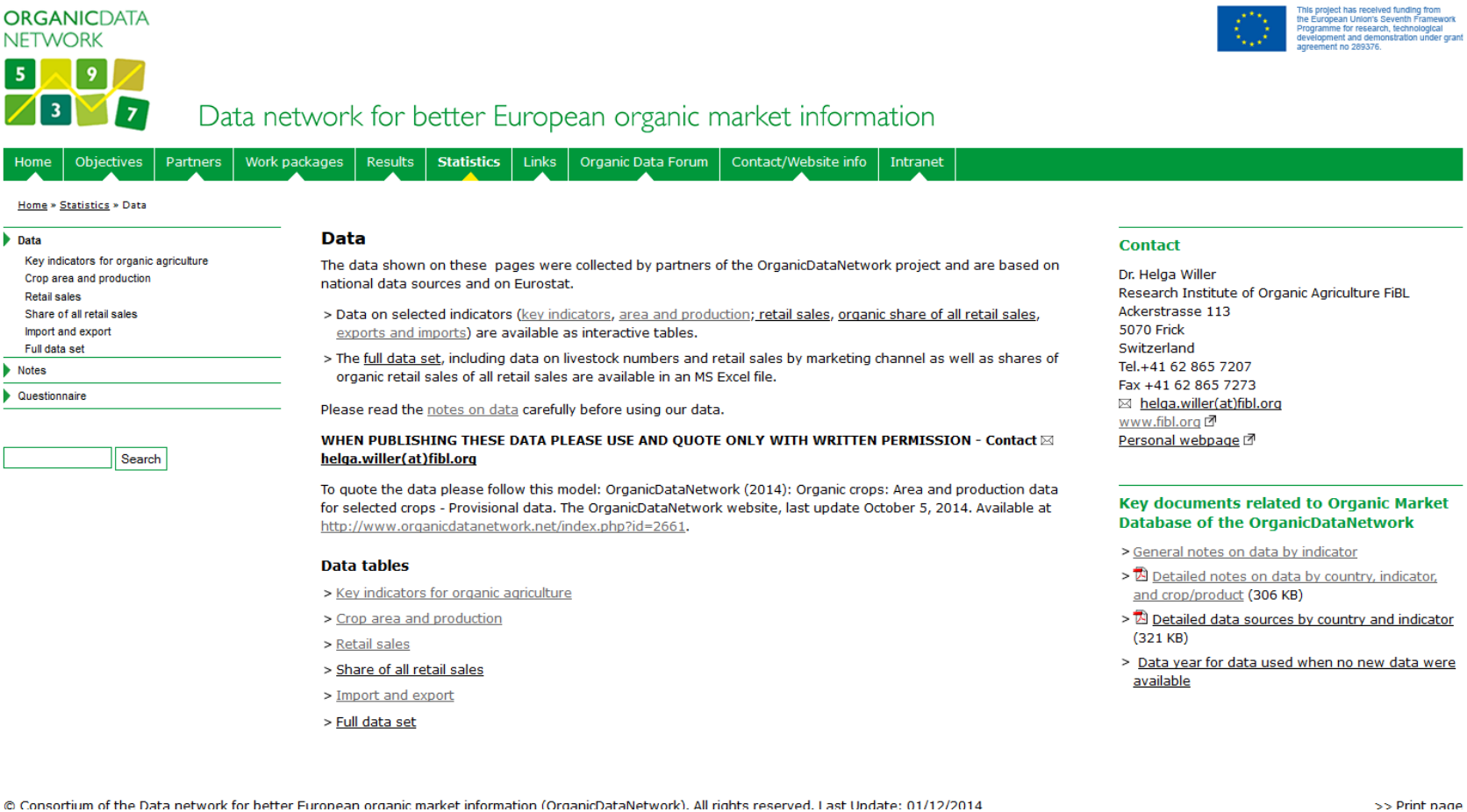
The online database



http://www.organicdatanetwork.net/odn-statistics.html

Key data

Key indicators for organic agriculture - Provisional data

The data shown in these tables were collected by partners of the OrganicDataNetwork project and are base
national data sources and on Eurostat.

PLease read our notes on data before you use the data.

Flagged data (*) are explained in the document Notes on data (306 KB).

For detailed explanations of (potentially inconsistent) data, detailed data sources, actual year of the data se
and Excel files on right margin.

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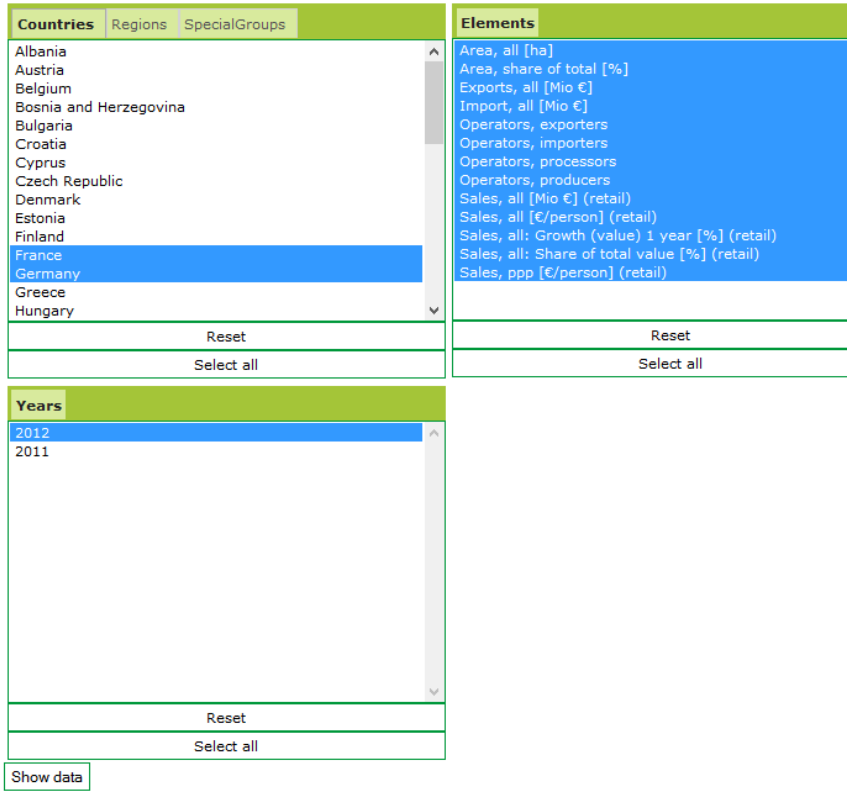

Key data for organic agriculture 2012

Item | Element

Country | Year

Item / Element		No details								
Country	Year	Area, all [ha]	Import, all [Mio €]	Operators, importers	Operators, processors	Operators, producers	Sales, all [Mio €] (retail)	Sales, all [€/person] (retail)	Sales, all: Share of total value [%] (retail)	Sales, ppp [€/person] (retail)
France	2012	1'032'941.00	670.00	137.00	8'957.00	24'425.00	4'004.00	61.00	2.40	55.75
Germany	2012	1'034'355.00		308.00	8'293.00	23'032.00	7'040.00	86.02	3.70	85.56

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Retail sales of eggs 2012

Item ▾ Element ▾

Country ▾ Year ▾

		Item	Eggs for consumption
		Element	Sales [Mio €] (retail)
Country	Year		
Austria	2012		23.67*
Denmark	2012		48.10
Finland	2012		16.30*
France	2012		237.00
Germany	2012		191.00
Netherlands	2012		30.70*
Norway	2012		13.96*
Spain	2012		40.00
Switzerland	2012		44.72
United Kingdom	2012		27.75

Item ▾ Element ▾

Country ▾ Year ▾

		Item	Eggs for consumption
		Element	Sales [Mio €]: Share [%]
Country	Year		
Austria	2012		18.30
Finland	2012		10.00*
France	2012		14.90
Germany	2012		14.10
Netherlands	2012		9.50
Switzerland	2012		20.50

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Flagged data*

- ✓ Data are marked with an asterisk if an explanation is provided, e.g.
- ✓ Area data
  - ✓ Comparison data with the overall total may use different classifications or may not be complete
- ✓ Livestock data
  - ✓ Different definitions (e.g. numbers of animal might mean different things)
- ✓ Production volume
  - ✓ Production volume is usually reported for the fully converted land. This has to be taken into account when comparing the organic area and production with the total area and production.
- ✓ Retail sales volumes and values
  - ✓ Not all countries provide data on all products or complete data by product (coverage gap), hence a country to country comparison is not possible
  - ✓ Fluctuating exchange rates: Growth rates for one country and the comparison with others may be distorted

Notes on data (example of Germany)

		Grain maize and corn	For Germany, the data on import volumes do not cover all imports
		Lentils	For Germany, the data on import volumes do not cover all imports
		Linseed (oil flax)	For Germany, the data on import volumes do not cover all imports
		Lupine	For Germany, the data on import volumes do not cover all imports
		Oats	For Germany, the data on import volumes do not cover all imports
		Onions	For Germany, the data on import volumes do not cover all imports
		Peas, field	For Germany, the data on import volumes do not cover all imports
		Pork	For Germany, the data on import volumes do not cover all imports
		Rice	For Germany, the data on import volumes do not cover all imports
		Rye, no details	For Germany, the data on import volumes do not cover all imports
		Sesame	For Germany, the data on import volumes do not cover all imports
		Soybeans	For Germany, the data on import volumes do not cover all imports
		Spelt	For Germany, the data on import volumes do not cover all imports
		Strawberries	For Germany, the data on import volumes do not cover all imports
		Sunflower seed	For Germany, the data on import volumes do not cover all imports
		Sweet peppers	For Germany, the data on import volumes do not cover all imports
		Tomatoes	For Germany, the data on import volumes do not cover all imports
		Wheat, no details	For Germany, the data on import volumes do not cover all imports
		Milk	For Germany, the data on import volumes do not cover all imports
		Rape and turnip rape	For Germany, the data on import volumes do not cover all imports
		Potatoes	For Germany, the data on import volumes do not cover all imports
		Bananas	For Germany, the data on import volumes do not cover all imports
		Sugar	For Germany, the data on import volumes do not cover all imports
Production [t]	2011	Beef and veal	Sales are only about ten percent of production due to processing, coverage of household panel data, exports, and difference between carcass weight and marketable meat.
		Pork	Sales are only about ten percent of production due to processing, coverage of household panel data, exports, and difference between carcass weight and marketable meat.
		Potatoes, no details	Production seems low für the area.
	2012	Beef and veal	Sales are only about ten percent of production due to processing, coverage of household panel data, exports, and difference between carcass weight and marketable meat.
Sales [Mio €]	2011	Alcoholic beverages,	For Germany the data on retail sales by product do not cover the whole market
		Apples	For Germany the data on retail sales by product do not cover the whole market
		Asparagus	For Germany the data on retail sales by product do not cover the whole market
		Baby food	For Germany the data on retail sales by product do not cover the whole market
		Bakery products, oth	For Germany the data on retail sales by product do not cover the whole market
		Bananas, no details	For Germany the data on retail sales by product do not cover the whole market
		Beef and veal	For Germany the data on retail sales by product do not cover the whole market

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Data sources

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Data sources for all indicators used in the OrganicDataNetwork database

Source: OrganicDataNetwork Surveys 2012-2014, based on national data sources and Eurostat; www.organicdatanetwork.net

Last update: 02 December 2014

Anzahl

Country	Indicator	year	Source	Source description
Czech Repub	Animals [heads]	2011	IEAI	Source: Institute of Agricultural Economics and Information (IAEI), Agri-environmental policy, Kotlarska 53, 602 00 Brno, Czech Republic. Data provided by Andrea Hrabalová, Institute of Agricultural Economics and Information (IAEI)
		2012	UZEI	Source: UZEI, Institute of Agricultural Economics and Information, Agri-environmental policy, Kotlarska 53, 602 00 Brno, Czech Republic. Data provided by Andrea Hrabalová, UZEI, Brno, Czech Republic and Ing. Jakub Husák, Ph.D., CULS, Prague
		2013	UZEI	Source: UZEI, Institute of Agricultural Economics and Information, Agri-environmental policy, Kotlarska 53, 602 00 Brno, Czech Republic. Data provided by Hana Šejnohová, UZEI, Brno, Czech Republic. Data 2013
	Area [ha]	2011	IEAI	Source: Institute of Agricultural Economics and Information (IAEI), Agri-environmental policy, Kotlarska 53, 602 00 Brno, Czech Republic. Data provided by Andrea Hrabalová, Institute of Agricultural Economics and Information (IAEI)
		2012	UZEI	Source: UZEI, Institute of Agricultural Economics and Information, Agri-environmental policy, Kotlarska 53, 602 00 Brno, Czech Republic. Data provided by Andrea Hrabalová, UZEI, Brno, Czech Republic and Ing. Jakub Husák, Ph.D., CULS, Prague
		2013	UZEI	Source: UZEI, Institute of Agricultural Economics and Information, Agri-environmental policy, Kotlarska 53, 602 00 Brno, Czech Republic. Data provided by Hana Šejnohová, UZEI, Brno, Czech Republic. Data 2013
	Area fully converted [ha]	2011	IEAI	Source: Institute of Agricultural Economics and Information (IAEI), Agri-environmental policy, Kotlarska 53, 602 00 Brno, Czech Republic. Data provided by Andrea Hrabalová, Institute of Agricultural Economics and Information (IAEI)

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Weblinks

- ✓ http://www.organicdatanetwork.net/odn-statistics.html
- ✓ http://www.organicdatanetwork.net/odn-statistics-data.html
- ✓ http://www.organicdatanetwork.net/odn-statistics-data-key-data.html
- ✓ http://www.organicdatanetwork.net/odn-statistics-data-crops.html
- ✓ http://www.organicdatanetwork.net/odn-statistics-data-retail.html
- ✓ http://www.organicdatanetwork.net/odn-statistics-data-retail-share.html
- ✓ http://www.organicdatanetwork.net/odn-statistics-data-full-set.html

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Challenges of the European database

The surveys on European published market data have shown that a number of challenges are associated with the these data. They include

- ✓ **Lack of data and incomplete data (coverage gap);**
- ✓ **Different classifications for market data;**
- ✓ **Differences in definitions;**
- ✓ **Quality issues.**

Entering these data into one European database is therefore not easy.

The current data situation makes country-to-country comparisons very difficult and the calculation of e.g. a total European/EU value for any product is impossible.

Lack of data and incomplete data

- Due to different methodologies of data collection it is tricky to store the market data from the various countries in one database.
- An easy country–to-country comparison, in particular for retail sales, is often not possible.
  - For many countries, publically available data are incomplete and do not cover the whole product range but only selected products (e.g. Austria).
  - Also for the products reported, the reported value or volume may be incomplete for some countries (e.g. Austria, Germany) but not for others (Italy, France).
- Therefore, conclusions can only be drawn with care.

Different classifications for market data

- ✓ Data classifications and aggregations can differ from country to country, making data storage and comparisons difficult, e.g.
  - ✓ Switzerland has a (European-wide unique) group for breakfast cereals and pet food, with no further breakdown.
  - ✓ Estonia has only a total figure for bread and bakery products & grain mill products together without further breakdown.
- ✓ Most other countries (including CPA) separate the mentioned groups – so where to put these country-specific groups? Make new group in the database or group them as „food (?) products, no details”?

Definitions of indicators

- Definitions can vary from country to country, for instance:
  - the indicator “livestock numbers” may refer to the animals slaughtered in a year or the number of places.
  - The indicator “area” usually refers to the agricultural land but can, in some cases, include wild collection areas.
  - For some countries, the data on the domestic market may include the catering sales, for others not.

Quality issues

- ✓ When processing the data of the OrganicDataNetwork surveys, it became obvious that many quality issues arise.
- ✓ The plausibility checks showed a lot of potentially inconsistent data, some of which could be explained by the partners or better data were found.
- ✓ However, not in all cases questions were solved, and there were figures that were clearly implausible if compared with a country's total, with the data from the previous year or from neighbouring countries.

Conclusions

- ✓ Close data and coverage gaps (e.g. by integrating organic market data collection into national, official collection systems).
- ✓ Harmonize crop and product classifications by using European classifications.
- ✓ Provide and harmonize definitions for indicators.
- ✓ Carry out quality checks (and revise data or provide explanations).

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The opinions expressed in this contribution are those of the author and do not necessarily represent the views of the European Commission.

Thanks for listening

Any questions?

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