



**European Data Network for Improved Transparency of Organic Markets** 

# **Building an Organic Market Database OrganicDataNetwork Training**

Helga Willer, FiBL, Frick, Switzerland, <a href="mailto:helga.willer@fibl.org">helga.willer@fibl.org</a> Diana Schaack, AMI, Bonn, Germany, diana.schaack@ami-informiert.de OrganicDataNetwork Workshop, Bari, July 10 & 11, 2014

### **About this training**

- The OrganicDataNetwork manual shows how a a database and the necessary tools for data processing of organic market data can be built.
- The target group are collectors of organic market data.
- The manual is a product of the OrganicDataNetwork project, which aims to improve European organic market data.
- Further details are available in the manual in the OrganicDataNetwork website at www.organicdatanetwork.net.







#### **Contents**

- Database structure
- Look-up tables
- Classifications for crop and product data
- Extracting the data
- > Questionnaire for data collection
- > Quality checks







#### Introduction

- Example of the database of the OrganicDataNetwork; there may be other ways of storing and processing the data.
- For easy data exchange among the partners of the OrganicDataNetwork and future partners in the area of market data collection, we recommend that similar databases are built so that data can easily be exchanged or merged in a European organic market database.







#### **Basic considerations**

- If data collection is started it is important that you have the data in a database.
- We recommend that you use one database for all data, even if you collect data for different data types.
- This will make the comparison of data, e.g. for quality checks, a lot easier.
- As a first step, a simple MS Excel sheet might be sufficient.
- In the long-run it is clear that a proper database, for instance based on MS Access, is needed.









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#### **Database structure**

#### **Structure**

- When you start your database or data sheet, please make sure all information is organised in columns.
  - > ID of dataset
  - Date dataset was inserted
  - Date a dataset was modified
  - Country or region: If you collect the data for a number of countries or if you have a regional breakdown of your data
  - Data source
  - Year
  - > Crop/Product
  - Indicator (hectares, tonnes, sales value etc.)
  - Label (organic, total, other)
  - > Value
  - > Remark







## Possible structure of main table

Modified	ld	Link to full source	Year	Country	CPA-Product0	CPA- Product1	CPA- Product2	CPA- Product3	CPA- Product5	Indicator	Label	Value
03.04.2013	770722	AMI f013	2012		Products of agriculture, forestry and fishing	Products of agriculture, hunting, related services	Non- perennial crops	Vegetables and melons, roots and tubers	Potatoes, no details	Sales [t]	organic	79'240.00
18.09.2013	654130	AMI f018	2012	Germany	Products of agriculture, forestry and fishing	Products of agriculture, hunting, related services	Non- perennial crops	Vegetables and melons, roots and tubers	Potatoes, no details	Area [ha]	organic	8'300.00
21.09.2013	600188	AMI f018	2012		Products of agriculture, forestry and fishing	Products of agriculture, hunting, related services	Non- perennial crops	Vegetables and melons, roots and tubers		Sales [Mio €]	Total	977.10
20.09.2013	654920	AMI f018	2012		Products of agriculture, forestry and fishing	Products of agriculture, hunting, related services	Non- perennial crops	Vegetables and melons, roots and tubers	Potatoes, no details	-	organic	93.72
20.09.2013	655012	AMI f014	2012		Products of agriculture, forestry and fishing	Products of agriculture, hunting, related services	Non- perennial crops	Vegetables and melons, roots and tubers	•	Sales [Mio €]: Share [%]	organic	9.597







#### **Cross tables**

- We strongly recommend that you do not build cross tables to store the data, as this will make data analysis, export and import very inflexible.
- > Do not use columns for individual indicators (or years, or countries or regions).
- Cross tables are, however, very useful for data analysis, for instance via Pivot tables, or for data presentation.







## **Cross table: Example**

	Area [ha]	Retail	Retail	Produc-
		sales	sales	tion
		[Mio €	[mt]	[Mio €
Germany	8'300.0	95.5	79'240.0	54.6
Potatoes, no details	8'300.0	93.7	79'240.0	54.6
Processed/preserved		1.8		
potatoes				







#### ID – Data set identifier

- Each data set needs an ID.
- Usually MS Access generates the ID automatically.
- > In order to trace a certain dataset it is useful to have a unique identifier for each dataset.







## Date inserted, date modified

- Date inserted: This is the date on which a dataset was inserted. Usually it is generated automatically in the database.
- Date modified: If you modify a dataset it is useful if you document the change.







#### Data source

- In the column data source, you can specify the data source.
- However, it is not enough to simply enter the name of the source.
- > We recommend that you document the source with a lot more detail.
  - Name of data collector
  - > Exact name/title of the publication/source
  - > Internal link to original document and web address of the publication if available online.





#### Year

- > This field is needed to enter the calendar year of the data.
- Most organic data collection systems use the calendar year (i.e. January to December) and not the business year.







## **Country**

If your data have a regional dimension, this column should be used to indicate the country, region etc.







## Crop/product

- > Use this column to enter the crop/product. If you do not only want to store the crop or product, but also information on the crop/product groups, you need to create several columns (see slide "Possible structure of main table»).
- > E.g. in the case of **potatoes**, you would specify that a
  - > potato is a root crop, that a
  - root crop is an arable crop (as opposed to permanent crops),
  - and that arable crops are part of agricultural land (as opposed to wild collection)
  - > and that the **Eurostat code** for potatoes is C\_031.







### **Indicator**

- It is important that you have a clear idea of the indicators that you need for your data collection.
- > For instance area, imports, exports, retail sales etc.
- You do not only need to specify the indicator as such, but also the unit (hectares or acres?, Euros or British Pounds?, metric tons or kilos?)







### Label

- In this column you can specify if a figure relates to organic (label "organic") or to overall agriculture (label "total").
- This is important if you want to compare your organic data with your country's overall totals.
- You can also use these columns for further labels like for instance Fairtrade.







## Further possible columns

- > Further possible columns could be for example
  - on marketing channels,
  - > export and import destinations,
  - for the original crop name,
  - > or the method used for the data collection.









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Look up tables

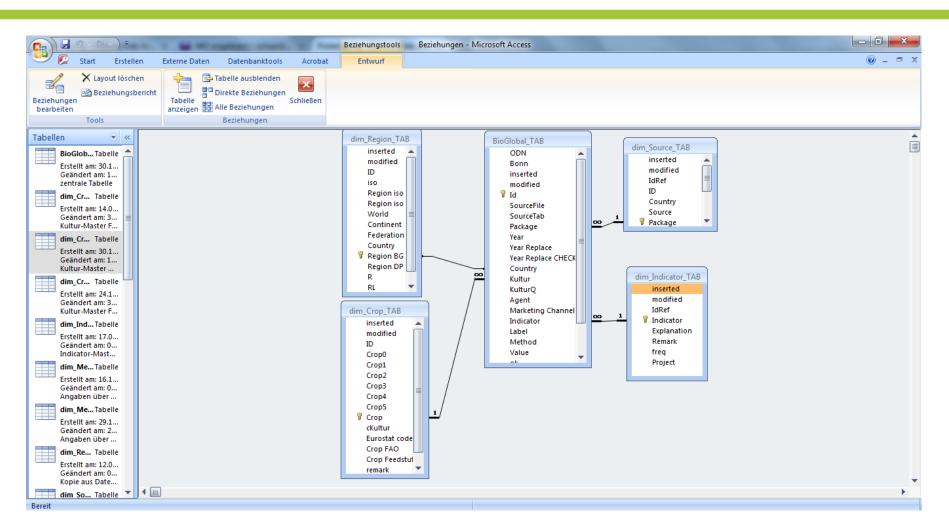
## Look-up / dimension tables

- Depending on how you build you database you can either store all information in one sheet,
- or you can store only the key information in the main sheet then add supplementary information in look up tables that are linked to the main data table.
- Look-up tables serve several functions. They can:
  - > Standardize repeated information;
  - > Supply additional information;
  - > Help to keep main table neat and compact;
  - Connect various data sets;
  - > Put data into a hierarchic order;
  - > Show data according to different classifications.















## Look-up/dimension tables

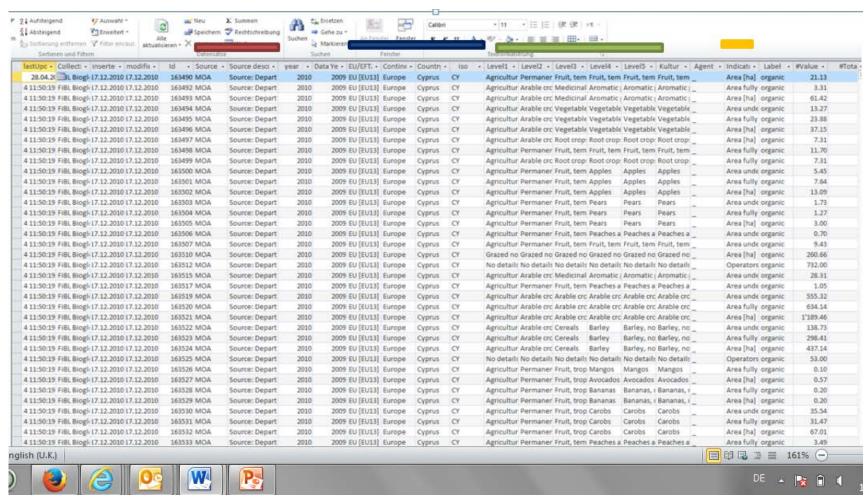
- > In the example on the next page, we show a table that has all relevant information in one data sheet.
- > The coloured bars show what information could be transferred into a look up/dimension table.
- If you transfer some of the information into look-up/dimension tables, in all cases you need a unique key to connect information with the data in the database.
  - Red bar: Additional source information could be potentially clustered (and expanded, e.g. with links to original documents) in a look-up table "Source"
  - > Blue bar: Regional, additional information could potentially be stored in a look-up table "Region"
  - > Green bar: Additional crop information could be potentially stored in a look-up table "Crops"
  - > Yellow bar: Look-up table for indicators should be included in order to ensure consistent writing and to provide definitions.







## **Clustering information in columns**

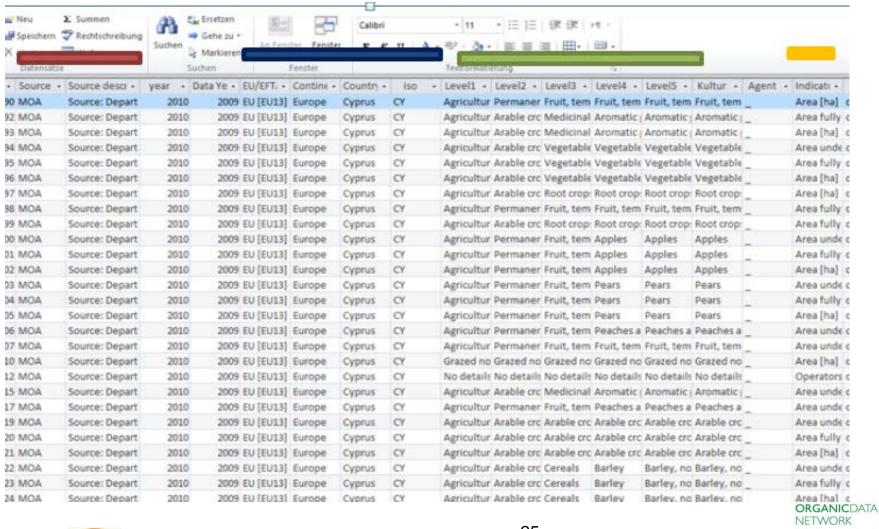








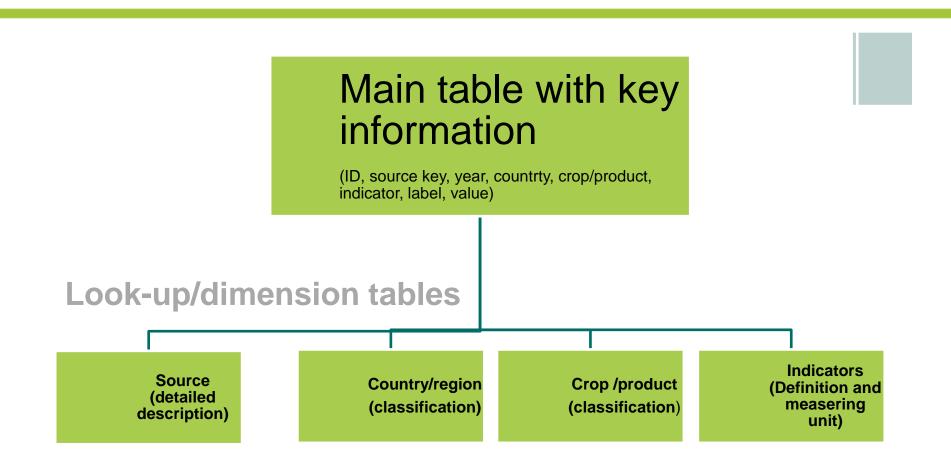
## **Clustering information in columns**







#### **Database structure**

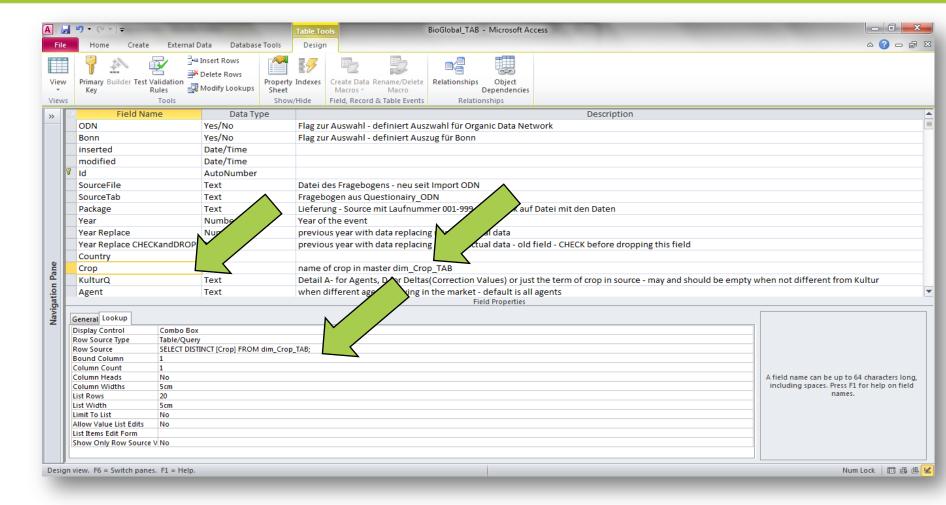








# Connecting the look-up table with the main table in MS Access









# Connecting look-up/dimension tables with the main table

- In the design view in MS Access, you can connect the main table with the look up table.
- Look-up table "Data source"
- Look-up table "Country or region"
- Look-up table "Crops/products"
- > Look-up table "Indicator"







## Look-up table datasource

	ID →	inserted 🕶	modified -	Country	Package +	Source -	Author -	Source description -	Link →	Public Link
+	2212	01.11.2010	01.11.2010	Austria	Arge Bioumsätze Österreich f001	ARGE Bioumsätze: Bio Austria, FiBL	Ralph Liebing	ARGE Bioumsätze: Bio Austria, FiBL Austria and Agricultura: Bio-Umsatz in Österreich wuchs 2009 um 5%.	\Source\austria\austria-2009-market-arge-biolumsaetze-2010.htm	
+	2214	01.11.2010	01.11.2010	Europe	Eurostat f260	Eurostat		Eurostat 2010: Total population - [tps00001]: Eurostat, Luxemburg, http://epp.eurostat.ec.europa.eu/tgm/ta	\Source\eurostat\eurostat-population-2000-2010.htm	
+	2215	01.11.2010	01.11.2010	Europe	FiBL f021	FiBL	Helga Willer	Calcualtion of the per Capita consumption by combining of turnover with organic products with the total		
+	2216	01.11.2010	01.11.2010	Czech Republic	Green Marketing f013	Green Marketing		Source: Green Marketing, Moravské Knínice, Czech Republic; Provided by Tom Vaclavik, Green Marketing, Moravské	\Source\czechrepublic\czech-republic-2009-market-data- greenmarketing.txt	
+	2217	01.11.2010	01.11.2010	Montenegro	MARD f006	MARD	Radana Damjanov ić	Source/Data provided by: Radana Damjanović, Ministry of Agriculture and Rural Development (MARD). Podgorica,	\Source\montenegro\montenegro-2009-landuse-ministry-agr- 2010.xls	
+	2218	03.11.2010	03.11.2010	Sweden	SOS f001	SOS		Sveriges Officiella Statistik: Livsmedelsförsäljningsstatistik 2009. Livsmedelsförsäljningen inom	\Source\sweden\sweden-2009-market-data-scb.pdf	
+	2219	05.11.2010	05.11.2010	Ireland	DAFF f003	DAFF	Eddie Mc Auliffe	Source: Department of Agriculture Fisheries and Food, Dublin, Ireland; Data provided by Eddie Mc Auliffe, Organic	\Source\ireland\ireland-2009-landuse-producers-daff.xls	
+	2220	05.11.2010	05.11.2010	Finland	AC Nielsen Finland f001	AC Nielsen/Organic Food Finland	Sampsa Heinonen	Source: AC Nielsen; Data provided by Sampsa Heinonen, Organic Food Finland. Espo, Finland, www.organic-finland.com	\Source\finland\finland-2009-market-data-organic-finland.txt	
+	2221	05.11.2010	05.11.2010	Norway	SLF f004	SLF	Elin Røsnes	Source: SLF, Olso, Norway; Data on the development of the domestic market for organic products provided by Elin Røsnes,	\Source\norway\norway-2009-domesticmarketing-inclduing-non- food-slf.xlsx	
+	2222	05.11.2010	05.11.2010	Ukraine	OFU f008	OFU	Eugene Milovano v	Source: Organic Federation of Ukraine, Kiev, Ukraine; Data provided by Eugene Milovanov, Organic Federation of	\Source\ukraine\ukraine-2009-landuse-operators-2009-ofu- ukraine.xls	
+	2223	05.11.2010	05.11.2010	Netherlands	LEI f001	LEI	Mariann Blom	Source: Bakker, J and Bunte, F. (2009) Biologische internationale handel. WUR, Wageningen. Provided by Marian Blom,	\Source\netherlands\netherland-2007-internationaltrade-data- bakker-blom.htm	
+	2224	06.11.2010	06.11.2010	Haiti	Ecocert f016	FiBL-IFOAM survey	Vincent Morel	Ecocert, Lisle Jourdain, France, www.ecocert.com; Data provided by Vincent Morel, Area Manager, Ecocert,	\Source\haiti\haiti-2009-landuse-ecocert-2010.xls	
+	2225	06.11.2010	06.11.2010	Guyana	Ecocert f015	FiBL-IFOAM survey	Vincent Morel	Ecocert, Lisle Jourdain, France, www.ecocert.com; Data provided by Vincent Morel, Area Manager, Ecocert,	\Source\guyana\guyana-2009-landuse-ecocert-2010.xls	
+	2226	06.11.2010	06.11.2010	Macedonia	Probio f010	Probio	Gordana Pecelj	Source: Certifier data compiled by Probio, Skopje, Macedonia; data provided by Gordana Pecelj, PROBIO, Skopje,	X:\BioGlobal\Source\macedonia\macedonia-2009-landuse-producers- probio-2010.rtf	
+	2227	06.11.2010	06.11.2010	Belgium	LV f001	Departement Landbouw en Visserij, Belium		Samborski V. & Van Bellegem L. (2010) De biologische landbouw in 2009, Departement Landbouw en Visserij,	\Source\belgium\belgium-2009-biologische-landbouw-jaarrapport- lv-2010.pdf	
+	2228	06 11 2010 2220 von 3211	06 11 2010		Furnstat f261	Furnetat		Furnstat (2010): Number of registered	\Source\eurostat\eurostat-2009-onerators-download-2010-11-06 vls	







## Look-up table datasource

*	Package -	Source -	Author -	Source description -	Link
	Arge Bioumsätze Österreich f001	ARGE Bioumsätze: Bio Austria, FiBL	Ralph Liebing	ARGE Bioumsätze: Bio Austria, FiBL Austria and Agricultura: Bio-Umsatz in Österreich wuchs 2009 um 5%.	\Source\austria\austria-2009-marke
	Eurostat f260	Eurostat		Eurostat 2010: Total population - [tps00001]: Eurostat, Luxemburg, http://epp.eurostat.ec.europa.eu/tgm/ta	\Source\eurostat\eurostat-populati
	FiBL f021	FiBL	Helga Willer	Calcualtion of the per Capita consumption by combining of turnover with organic products with the total	
	Green Marketing f013	Green Marketing		Source: Green Marketing, Moravské Knínice, Czech Republic; Provided by Tom Vaclavik, Green Marketing, Moravské	\Source\czechrepublic\czech-repub greenmarketing.txt
)	MARD f006	MARD	Radana Damjanov ić	Source/Data provided by: Radana Damjanović, Ministry of Agriculture and Rural Development (MARD). Podgorica,	\Source\montenegro\montenegro-2 2010.xls
	SOS f001	SOS		Sveriges Officiella Statistik: Livsmedelsförsäljningsstatistik 2009. Livsmedelsförsäljningen inom	\Source\sweden\sweden-2009-mar
	DAFF f003	DAFF	Eddie Mc Auliffe	Source: Department of Agriculture Fisheries and Food, Dublin, Ireland; Data provided by Eddie Mc Auliffe, Organic	\Source\ireland\ireland-2009-landu
	AC Nielsen Finland f001	AC Nielsen/Organic Food Finland	Sampsa Heinonen	Source: AC Nielsen; Data provided by Sampsa Heinonen, Organic Food Finland. Espo, Finland, www.organic-finland.com	\Source\finland\finland-2009-marke







## Look-up table data source

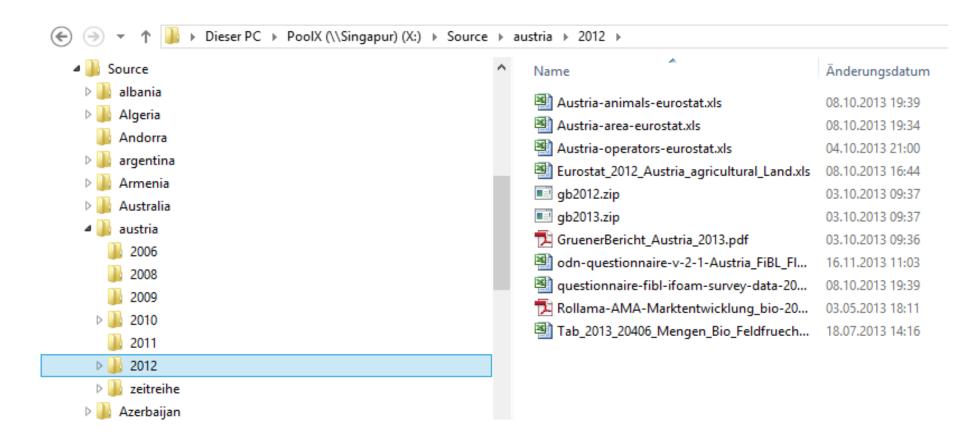
- > The **identifier** for the exact data source number (e.g. AMI 001 for data that AMI provided for the organic area for the year 2010)
- > The author or contact person if deemed relevant
- > The acronym of the source (e.g. AMI instead of Agrarmarkt Informations-Gesellschaft)
- > The correct description of the source, e.g.
  - AMI (2014): Data on organic agricultural land. AMI, Bonn, Germany. Data provided by Diana Schaack, AMI, Bonn, Germany, e-mail of May 2, 2014.
    - For published sources: quote by general citation standards (also for web products).
  - > Eurostat (2014) Certified organic crop area by crops products [food\_in\_porg1]. Last update 03.03.14; Extracted on 02.05.14. Source of data: Eurostat. The Eurostat website, Eurostat Luxembourg. Data available at http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\_database
- > Internal link; i.e. link to the full document of the data on your own server including the mail with which it was sent
- > Link to public version of data.







## Example of storage of data source files









## Look-up table "country or region"

- In order to avoid spelling errors
- In order to allocate regions or countries to a special group
  - > The main table would then only contain the information "Haut-Rhin",
  - but the look-up table would specify that this is part of the region of Alsace,
  - > that Alsace is part of France
  - and that France is part of the EU
  - and that the EU belongs to Europe.
- This way you will be able to extract the data not only at the Departement level, but also at the regional etc. level.







#### **Indicators**

It is also important that you have fixed rule/spelling for your indicators. In the OrganicDataNetwork we use the indicators as shown in the following table.







### Indicators used in the OrganicDataNetwork

- Animals, average stock [heads]
- Area [ha]
- Area fully converted [ha]
- Area under conversion [ha]
- > Beehives [no]
- > Export [Mio €]
- > Export [Mio €], share [%]
- Export [t]
- > Import [Mio €]
- > Import [Mio €], share [%]
- > Import [t]
- > Import [t], share [%]

- Operators, exporters
- > Operators, importers
- > Operators, processors
- > Operators, producers
- > Production [Mio €]
- > Production [t]
- > Production [t]: Share [%]
- > Sales [Mio €]
- > Sales [Mio €]: Share [%] Sales [t]
- Sales [t]: Share [%]
- > Sales [€/person]







## Look-up table for crops and products

- Also crops/products should be listed in a lookup/dimension table.
- For this you will not only need to think of how to spell things and what terms to use (nomenclature) but also, more than for the other look-up tables, of how to group or classify them.
- This will allow you to extract or filter the data not only at the lowest level but also at a group level (all arable crops together, all vegetables or cereals).







# Choosing a nomenclature/classification

- It is very tempting to "invent" a classification of one's own.
- Use your national system if one is available or an international classification.
- However, for international comparisons, it is more useful to use an international classification.
- We recommend that you use the classification of the OrganicDataNetwork, which is based on a European classification (next chapter).









### **European Data Network for Improved Transparency of Organic Markets**

### **Classifications**

# Classifications used by the OrganicDataNetwork

- 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 (Adaptation of the OrganicDataNetwork database is in progress) http://epp.eurostat.ec.europa.eu/cache/ITY\_SDDS/Annex es/apro\_cpp\_esms\_an2.pdf
- > For products: Eurostat (2008): CPA 2008 Statistical Classification of Products by Activity. Eurostat, Luxembourg http://epp.eurostat.ec.europa.eu/portal/page/portal/cpa\_2008/introduction







# **Excerpt from the : Eurostat Handbook for Annual Crop Statistics**

					Harve	ested productio
Old code	New code	NOMENCLATURE (Reg. 543/2009)	Comment.	Table	31Mar N+1	31Mar N+1
	C1601	Vegetables, melons and strawberries (including kitchen gardens)			Op	Op
	C2007	Permanent crops		Tab. 3	Х	Ор
C2090	C2090	Apples		Tab. 3	Х	Х
C2110	C2110	Apples for fresh consumption		Tab. 3	Ор	Х
C2112	C2112	Golden Delicious			Ор	Ор
C2113	C2113	Other apples for fresh consumption			Ор	Op
C2095	C2095	Pears		Tab. 3	Х	Х
C2130	C2130	Pears for fresh consumption			Op	Ор
C2170	C2170	Stone fruits			Ор	Ор
C2180	C2180	Peaches		Tab. 3	Х	Х
C2221	C2221	Nectarines		Tab. 3	Х	Х
C2190	C2190	Apricots		Tab. 3	Х	Х
C2200	C2200	Cherries		Tab. 3	Х	Х
	C2201	Sour cherries		Tab. 3	Х	Х
C2210	C2210	Plums		Tab. 3	Х	Х
C2229	C2229	Other stone fruits n.e.c.			Ор	Ор
C2270	C2270	Berries (excluding strawberries)			Op	Op







# **CPA 2008: Classification for products of agriculture**









# **CPA 2008: Classification for manufactured products**









# Different hierarchies make data difficult to compare

- Different data collectors have developped different hierarchies for their needs
  - E.g. household or trade panels use other hierarchies than statistical offices
- To make them comparable, it is the best to have as many details as possible
- If you build up new data collection system we recommend to use the relevant Eurostat codes











### **European Data Network for Improved Transparency of Organic Markets**

# **Extracting the data**

# **Extracting data**

- If you have all data in one MS Excel sheet or in one table in an MS Access database, then it is possible to extract the basic data (e.g. for one year or one crop) via filters in MS Excel or MS Access.
- E.g. Example of Denmark: Data on permanent crops for the year 2012
- If you need to make sums or subtotals then we recommend the use of Pivot tables.







# **Example: Permanent crops from Denmark 2012** (Excerpt from database)

Country	Level2	Level3	Level4	Level5	Indicator	Label	#Value
Denmark	Permanent crops	Berries	Berries, no details/n.e.c.	Berries, no details	Area [ha]	organic	73.00
Denmark	Permanent crops	Fruit, temperate	Apples	Apples	Area [ha]	organic	302.00
Denmark	Permanent crops	Fruit, temperate	Cherries	Cherries	Area [ha]	organic	8.00
Denmark	Permanent crops	Fruit, temperate	Pears	Pears	Area [ha]	organic	20.00
Denmark	Permanent crops	Fruit, temperate	Plums	Plums	Area [ha]	organic	5.00
Denmark	Permanent crops	Grapes	Grapes, no details	Grapes, no details	Area [ha]	organic	12.00
Denmark	Permanent crops	Nuts	Nuts, no details	Nuts, no details	Area [ha]	organic	7.00
		Permanent crops,	Other permanent crops, no	Other permanent			
Denmark	Permanent crops	other	details	crops, no details	Area [ha]	organic	76.00







# Pivot extract of the same data (with subtotals)

Country	Level2	Level3	Level4	Area [ha]
Denmark	Permanent crops	Berries	Berries, no details/n.e.c.	73
		Berries total		73
		Fruit, temperate	Apples	302
			Cherries	8
			Pears	20
			Plums	5
		Fruit, temperate total		335
		Grapes	Grapes, no details	12
		Grapes total		12
		Nuts	Nuts, no details	7
		Nuts total		7
		Permanent crops, other	Other permanent crops, no details	76
		Permanent crops, other total	al	76
	Permanent crops to	otal		503
Denmark tota	al			503







# Using queries to link data from look-up tables

- If you do not have all necessary data in the main data table, you need to extract the additional information stored in the look-up tables as well.
- Use queries in order to extract the full data; i.e. the data from the main table combined with those from the look-up tables.
- If you use Pivot tables for data analysis:
- Link the Pivot table to the query in question and not to the main table.











### **European Data Network for Improved Transparency of Organic Markets**

### **Data collection**

# Questionnaire

- > We recommend to use a questionnaire for your data providers for standardized data input.
- Depending on the type of data you are looking for you will probably need different sheets, which are ideally all in one Excel table.
- The OrganicDataNetwork's questionnaire as well as further sample questionnaires are available at the OrganicDataNetwork website. http://www.organicdatanetwork.net/index.php?id=2 649







### **Sheet 1: About**

- Purpose of your data collection;
- > Benefits for the data suppliers;
- Explanation of the various sheets of the questionnaire;
- Your contact details.



Data network for better European organic market informat

### Survey on Organic Market Data in Europe: Data per 31.12.2011

#### Abou

The survey about organic market data in Europe is carried out in the framework of the European-funded project "Data network for better European organic market information (Organic DataNetwork)".

The project OrganicDataNetwork aims to meet the needs of policy makers and actors involved in organic markets by increasing the transparency of the European organic food market through better availability of market intelligence about the sector.

This OrganicDataNetwork survey starts in July 2012 and will be finalized in September 2012. The results will be available in early 2013 in the form of data tables and a publication with key results and graphs.

More information is available at the OrganicDataNetwork website www.organicdatanetwork.net.

#### Data providers will receive

> A PDF copy of the data compilation, to be ready in early 2013.

> Data excerpts (excel).

> Data providers will be named in the data publication

#### How to fill in the forms

> Data processing is a lot easier for us if you fill in the forms provided, so we would like to ask you to use our forms.

> Please note: Coloured fields cannot be filled in; these cells are protected

> Please do not worry if you do not have all information - please fill in what you have

#### Contact

The survey is being led by Helga Willer of the Research Institute of Organic Agriculture (FiBL), Switzerland, and by Diana Schaack of the Agricultural Market Information Company (AMI), Germany.

In addition, for each country we have designated country contacts from the project consortium to who you can also turn if you have questions.

> Helga Willer, FiBL, Tel. + 41 62 865 72 07, helga.willer@fibl.org

> Diana Schaack, AMI, Tel. +49 228 33805-270, diana.schaack@ami-informiert.de

#### List of Tables

#### Table 1: Key data on organic agriculture

This form covers the key data on the organic sector in your country (area, production, market, export, import, operators).

Table 2: Information on registered organic operators

This form covers the number of organic operators by different types.

Table 3: Information on organic area and crop products

This form covers information on organic areas (in hectares) occupied by each crop and production volume (in tonnes) of each crop as well as further indicators (export, import, domestic market volumes (in tonnes) and values.

#### Table 4: Information on organic livestock and organic livestock products; organic aquaculture

This form covers information on livestock by species (in heads). A summary of some relevant livestock products is also asked as optional information.

#### Table 5: Information on organic processed products

This form covers processed products. The list of possible products is still not complete, we therefore encourage you to use the cells at the end of the questionnaire for additional information.

Table 6: Domestic market data (products and marketing channels)
This form covers products sold on the domestic market.

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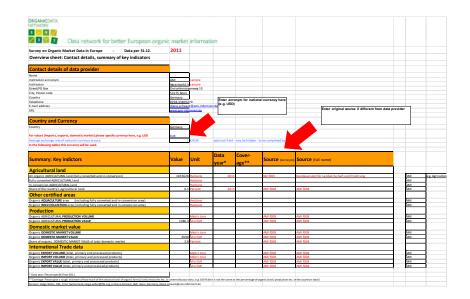






### **Sheet 2: Cover sheet**

- Information on the data supplier (contact information)
- Information on the data source. (Not in all cases, the data suppliers are the same as the data source)
- Xey indicators: Data and sources









## **Sheet 3: Operators**

- The number of organic operators should be collected in a separate sheet:
- Agricultural producers
- Aquaculture animal production units
- > Processors
- > Importers
- > Exporters
- Other operators

Secretario	ire below is from Eurostat, and is used by Eurostat for ist ann	an annual and a same an argume agricultur	a are an openin amoun			
Eurostat Code	Registered operators <sup>4</sup>	Number of operators End of 2011	Comments: e.g. deviation fro proposed definitions; additional information etc.			
RO 01	Agricultural producers	22506				
RO 011	of which, Producers that are also Processors	3137				
RO 012	of which, Producers that are also Importers	20				
RO 019	of which, other mixed producers n.e.c. (please specify)					
RO 02	Aquaculture animal production units 1					
RO 03	Processors 2	12062				
RO 031	of which, Processors that are also Importers	856				
RO_032	of which, other mixed Processors n.e.c. (please specify)					
RO 04	Importers <sup>3</sup>	297				
RO 05	Exporters					
RO 09	Other operators 5					
RO 091	Traders	2038				
RO 0911	Wholesalers					
RO_0912	Retailers					
RO_099	Other operators n.e.c. (forage production)	159				
	l nic agricultural and aquaculture farms (incl. processing packaging and in					
	erator who preserves and/or processes or ganic agricultural products (incl	si aughtering and butchering) and aquaculture pro	ducts			
	labeling as organic is also considered as processing					
	ator who imports from a third country organic products with a view to the perators might also include mixed operators, i.e. operators involved in m					
	perators might also include mixed operators, i.e. operators involved in in should be certified as well and, consequently, they should be included in					
- n.e.c: not elsew		and a special				
	included in the other groups					







## **Sheet 4: Area and primary production**

- It is advisable to have a separate data sheet for
  - > the area in ha
  - and the production in metric tons,
- and to use a standard nomenclature and classification for these data.

ORGANICIDATA NETWORK  5 9  2 3 27  Data network for better European organic ma	rket informa	tion		
Crops/Land use	In conversion area [ha]	Fully converted area [ha]	Total organic area [ha]	Production volume [t]
Agricultural land and crops	0.0	0.0		1'181'500.
Agricultural land for which no details are available			0.0	
Arable land crops	0.0	0.0	411'830.0	1'076'500.
Arable land crops, no details			0.0	
Cereals for the production of grain (incl. seeds and rice)	0.0	0.0	204'000.0	648'000.
Cereals for the production of grain (incl. seeds and rice)  Cereals for the production of grain (incl. seeds and rice), no details	0.0	0.0	0.0	1'000.
Cereals, excluding rice	0.0	0.0	204'000.0	648'000.
Wheat	0.0	0.0	76'500.0	267'000
Wheat no details	0.0	0.0	0.0	0.
Durum wheat			0.0	
Common wheat and spelt	0.0	0.0	76'500.0	267'000.
Common wheat and spelt, no details			0.0	
Soft wheat, human consumption			0.0	
Soft wheat, animal feed			0.0	
Grain maize and corn cob mix			4'000.0	
Barley	0.0	0.0	22'500.0	77'000
Barley, no details			0.0	77'000
Rye and meslin	0.0	0.0	53'000.0	141'000
Rye and meslin, no details			0.0	141'000
Oats			23'000.0	74'000
Triticale			24'000.0	88'000
Buckwheat			0.0	
Millet	0.0	0.0	0.0	0
Millet, no details			0.0	
Sorghum			0.0	
<important crop="" new=""></important>			0.0	
Other millet			0.0	
Quinoa			0.0	
Amaranto			0.0	
<important crop="" new=""></important>			0.0	
Other cereals, n.e.c.			1'000.0	
Rice			0.0	
Dried pulses and protein crops for the production of grain (including see		0.0	25'500.0	0
Dried pulses and protein crops for the production of grain (including seed and mixtures of	cereals and pulses	), no details	0.0	
Horse beans			8'600.0	
Beans			0.0	
Chick peas			6'000.0	







### **Sheet 5: Livestock**

- Sheet for livestock numbers (average animial stock per year or slaughtered animals)
- > Production of livestock products (meat, milk, eggs etc.)

NETWORK			
5 9			
Data network for better E			
Livestock numbers	Animals (heads)	Production valume (t)	Production value (Mio
Live animals (average annual stock)			
Bovine animals	0		
Bovine animals, no details			
Bovine animals for slaughter			
Dairy cows			
Other bovine animals			
Pigs	C		
Pigs, no details			
Fattening pigs Breeding sows			
Other pigs			
Sheep	(		
•			
Sheep, no details Sheep, breeding females			
Sheep, for fattening			
Other sheep			
Goats	C		
Goats, no details			
Goats, breeding females			
Other goats			
Poultry	C		
Poultry, no details			
Broilers			
Laying hens Breeding poultry			
Other poultry			
Other poultry, no details			
Turkeys			
Ducks			
Geese Others			
Equidae	0		
•	,		
Equidae, no details			
Rabbits	C		
Rabbits, no details			
Breeding females			
Bees, in number of hives	1		
Bees, in number of hives, no details	1		
Other livestock	C		
Other livestock, no details			
Deer			
Terrestial snails			
Others, e.g. frogs			







### **Sheet 6: 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 quantities)

ORGANICDATA				By sales channel: General By sales channel: Specialize					By sales	channel:	By sales channel: Other sales channels = box schemes							
NETWORK				retail	retail sales =		tail = Stores with	Direct s	ales = On		,							
5 📈 9 🔀			Total organic	market			1	narkets.		in 90 % organic	farm sale			ers, health food	1			
Data network for better European organ	nic market infor	mation						ts, drugstores		roducts		rkets		-shops, filling				
Domestic Market & International Trade			Organic and	Domestic organic		Organic and		General retail	Specialized	Specialized organic	Direct	Direct	Other sales	Other sales				
(Sales per product group and per sales	organic market	Organic snare	conventional	market VALUE all	Organic share	conventional	General retail	sales value	organic retail	retail value	sales		channels volume		Export volume		Import	Import valu
	VOLUME [t] (all channels)	VOLUME [%]	VOLUME (t)	channels [Mio EUR]	VALUE [%]	VALUE [EUR]	sales [t]	[Mio EUR]	sales [t]	[Mio EUR]		[Mio EUR]		[Mio EUR]	[t]	[Mio EUR]	volume [t]	[Mio EUR]
channel)	(all clialilleis)			[WIO EUK]														
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	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	0.0	0.0	)
Cereals, no details														ĺ				
Wheat											t		<del></del>	1				
Grain maize and corn cob mix	1								l									
Barley						1			<b>i</b>									
Rye																		
Oats																		
Triticale	1																	1
Buckwheat																		
Rice																		
<important enter="" new="" please="" product,=""></important>																		
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	0.0	)
Protein crops (dried pulses), no details																		
Horse beans																		
Peas																		
Lupine																		
<important enter="" new="" please="" product,=""></important>																		
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	0.0	
Oilseeds, no details																		
Sunflower seed	1								1									
Soy																		
Linseed/Flax																		
Rape and turnip rape																		
<important enter="" new="" please="" product,=""></important>																		
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	0.0	)
Root crops, no details																		
Sugar beet																		
<important enter="" new="" please="" product,=""></important>																		
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	
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				
Venetables no details	1																	









### **European Data Network for Improved Transparency of Organic Markets**

# **Quality checks**

# **Quality checks**

A number of quality checks were used in the OrganicDataNetwork project and implemented via Pivot Tables:

- Comparison between two years (for all indicators)
- > Comparison with overall country total (e.g. comparing organic area with total area)
- Organic production (share in %) < organic area (share in %)</li>
- > Organic yield < conventional yield</p>
- Organic area < total area</li>
- Imports < retail sales</p>
- Domestic organic consumption = organic sales, sold as organic
   + organic imports organic exports







# **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.
- > used the "conditional formatting" function to highlight inconsistent data.

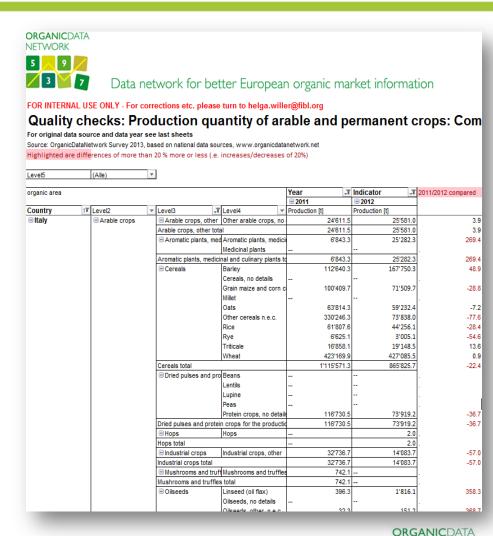






## **Check No 1: Comparison with the previous year**

- Comparison of the organic production for the years 2011 and 2012.
- On the column on the right we are highlighting 2012 data that are
  - either 20 percent higher or
  - > lower than the 2011 data.
- If the differences are more than 20 percent or even higher, it might be a good idea to double check the data or find an explanation.
- We recommend to do this check for all indicators.









# **Check no 2: Comparison with overall total**

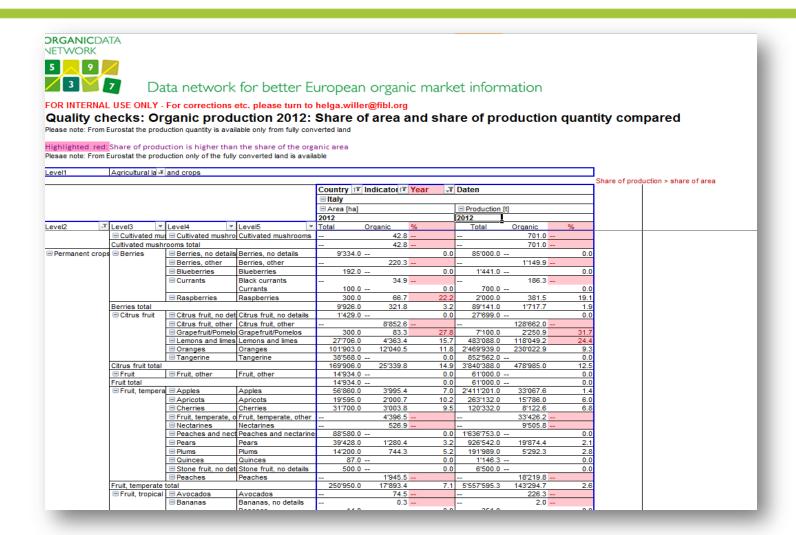
- Another very important quality check is the comparison with the overall total for a crop or a product.
- Ideally, you will enter not only the organic data but also the total/conventional data in your database in order to be able to programme the corresponding Pivot table.
- Depending on the country/crop/product one can assume that an organic share of more than 20 percent may be a hint for inconsistent data.







# **Check no 2: Comparison with overall total**



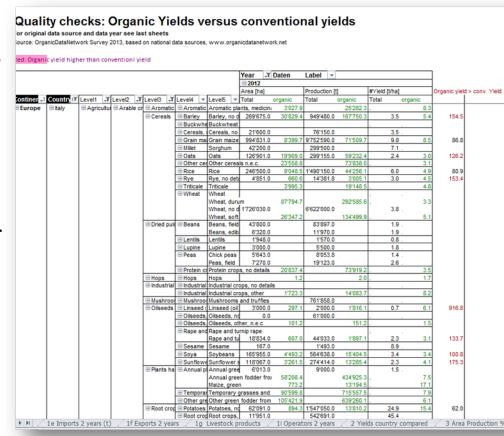






## **Check no 3: Comparison of yields**

- The comparison of organic yields with conventional yields (e.g. based on FAO data or national data) can provide interesting information.
- If the conventional/overall yield is lower than the organic yield, this could be the hint for a potential inconsistency, and it might be worth to check on the data.
- Another interesting check is the comparison of the yield data with neighbouring countries or regions.









## Check no 4: Share of area vs. share of production

- Share of the organic area compared to the conventional area should be a higher than the share of organic production of the total production.
- If the share of production is higher than the share of the area or, if the share of production is far lower than the share of the area, this might be hint for inconsistent data.
- > For this check it should be born in mind that the production data as provided by Eurostat refer to the production from the fully converted area, i.e. for the comparison of the share of production/area, the fully converted area should be used.







# Check no 4: Share of area vs. share of production

				Indicator ,1	year	Ţ.T	Daten				
				∃ Area [ha]				■ Production [f	<u>:]</u>		
				2011				2011			
ountry	† <b>™</b>	Level3 ▼	Level5 ▼	Total	Organic		%	Total	Organic	%	
Bulgaria		■ Berries	Berries, no details	188.0			0.0	212.0 -	-	0.0	
			Berries, other		1	152.7		-	240.6	ľ	
			Black currants			21.7			34.6	ľ	
			Blueberries	14.0			0.0	96.0 -	-	0.0	
			Cranberries	72.0			0.0	96.0 -	-	0.0	
			Currants	0.0				0.0 -	-	r	
			Raspberries	1'634.0	) 3	333.0	20.4	7'650.0	950.9	12.4	61.0
		Berries total		1'908.0	) 5	507.3	26.6	8'054.0	1'226.0	15.2	57.3
		□ Cereals	Barley, no details	178'993.0	) 5	78.5	0.3	707'022.0	418.0	0.1	18.3
			Buckwheat			61.8		-	0.6	r	
			Cereals, no details	208.0			0.0	679.0 -	-	0.0	
			Grain maize and corn c	399'400.0	) {	305.0	0.2	2'209'200.0	509.2	0.0	11.4
			Millet, no details	3'160.0			0.0	4'400.0 -	-	0.0	
			Oats	14'794.0	) 1	189.4	1.3	29'230.0	204.3	0.7	54.6
			Rice	11'791.0			0.0	59'619.0 -	-	0.0	
			Rye, no details	10'298.0	) 4	169.4	4.6	19'840.0	77.8	0.4	8.6
			Sorghum	2'843.0			0.0	5'554.0 -	-	0.0	
			Triticale	8'590.0	) 1	111.1	1.3	26'522.0	14.0	0.1	4.1
			Wheat, durum		6	552.2			1'048.2	r	
			Wheat, no details	1'137'642.0			0.0	4'458'492.0 -	-	0.0	
			Wheat, soft		3'6	353.3		-	885.7	r	
		Cereals total		1'767'719.0	6'5	520.8	0.4	7'520'558.0	3'157.6	0.0	11.4
		☐ Dried pulses and	Beans, field	4.0			0.0	5.0 -	-	0.0	
			Chick peas	1'677.0			0.0	1'717.0 -	-	0.0	
			Lentils	1'686.0			0.0	1'872.0 -	-	0.0	
			Peas, field	1'082.0			0.0	1'985.0 -	-	0.0	
			Protein crops, no details	83.0	) 1	105.8	127.4	180.0	137.2	76.2	59.8
			Beans, dry	954.0			0.0	1'011.0 -	-	0.0	
		Dried pulses and pro	otein crops for the produc	5'486.0	) 1	105.8	1.9	6'770.0	137.2	2.0	105.1

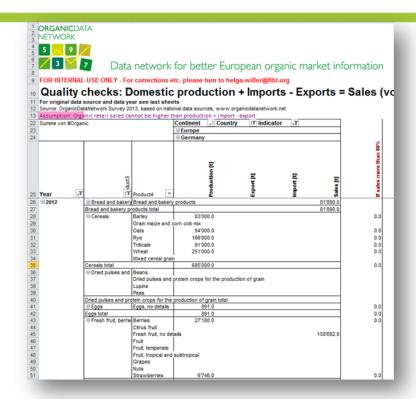






## **Check no 5: Equation models**

- If the organic data are available for the full supply chain (organic production, retail sales, exports and imports)
- the equation production + imports – exports = retail sales could be set up to find out inconsistencies.
- Another, simpler equation model could be that organic imports should not be higher than organic retail sales.









### **Data analysis**

The quality checks give a lot of information about the data. Data that are conspicuous may be a hint for mistakes, but also for interesting developments. For the data analysis we recommend again the use of Pivot tables as well as that of graphs to highlight certain developments or statements.

In your data analysis you could:

- Analyse the (historical) development for the indicators by showing growth in absolute and relative terms
- > Compare, within one indicator, various countries/regions for one year.
- Compare, for one product various indicators for one year
- Compare, within one indicator, the organic performance compared to the overall total
- > Extrapolate trends of the organic sector





