Experiences of an editor in agricultural datasets

Assumpció Antón

Outline

- **Why?** Reasons to review
- **How?** Process to perform a review
- **What?** General and core revisions
- **Quality?** Main concerns

Why?

Enough and clear datasets

Confidence with the data

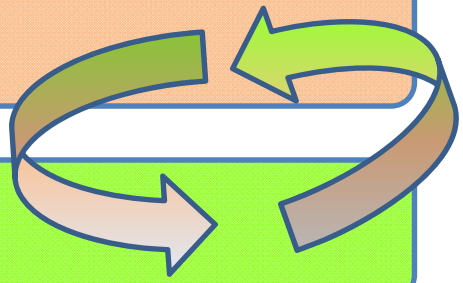
When and how apply this data

WARNING

Users have ultimate responsibility for good practice

How?

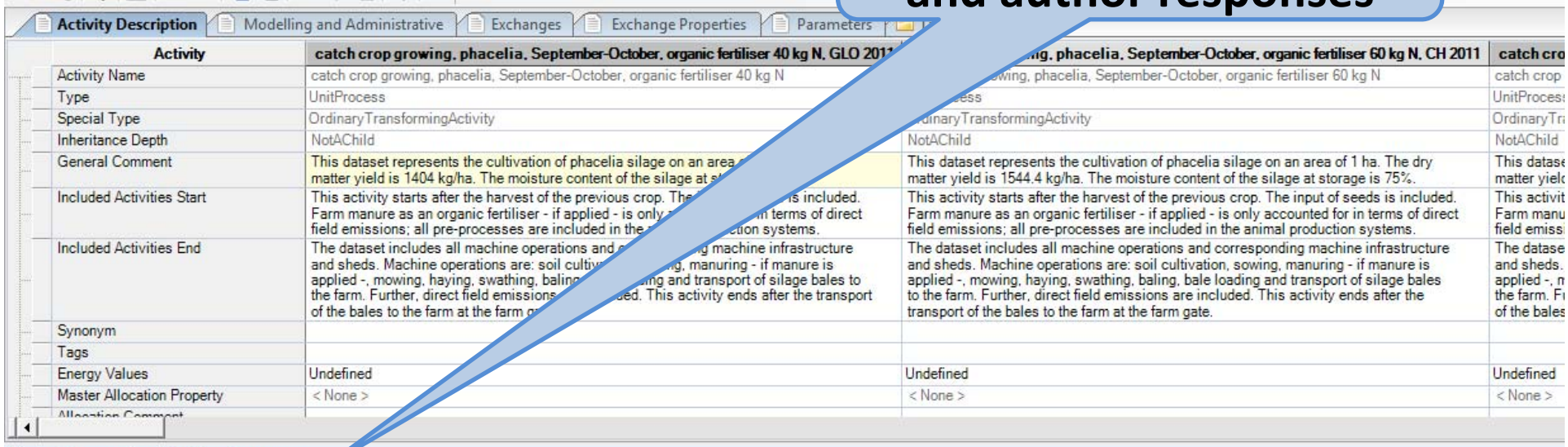
- Author: • Submit dataset
- Editor: • Revision & Submit comments
- Author: • Response/comment/correct



- Editor: • Accept
- Cross-cutting: • Review
- Editor: • Final acceptance /final review comments

How?

To add review comments and author responses



Activity Description | Modelling and Administrative | Exchanges | Exchange Properties | Parameters

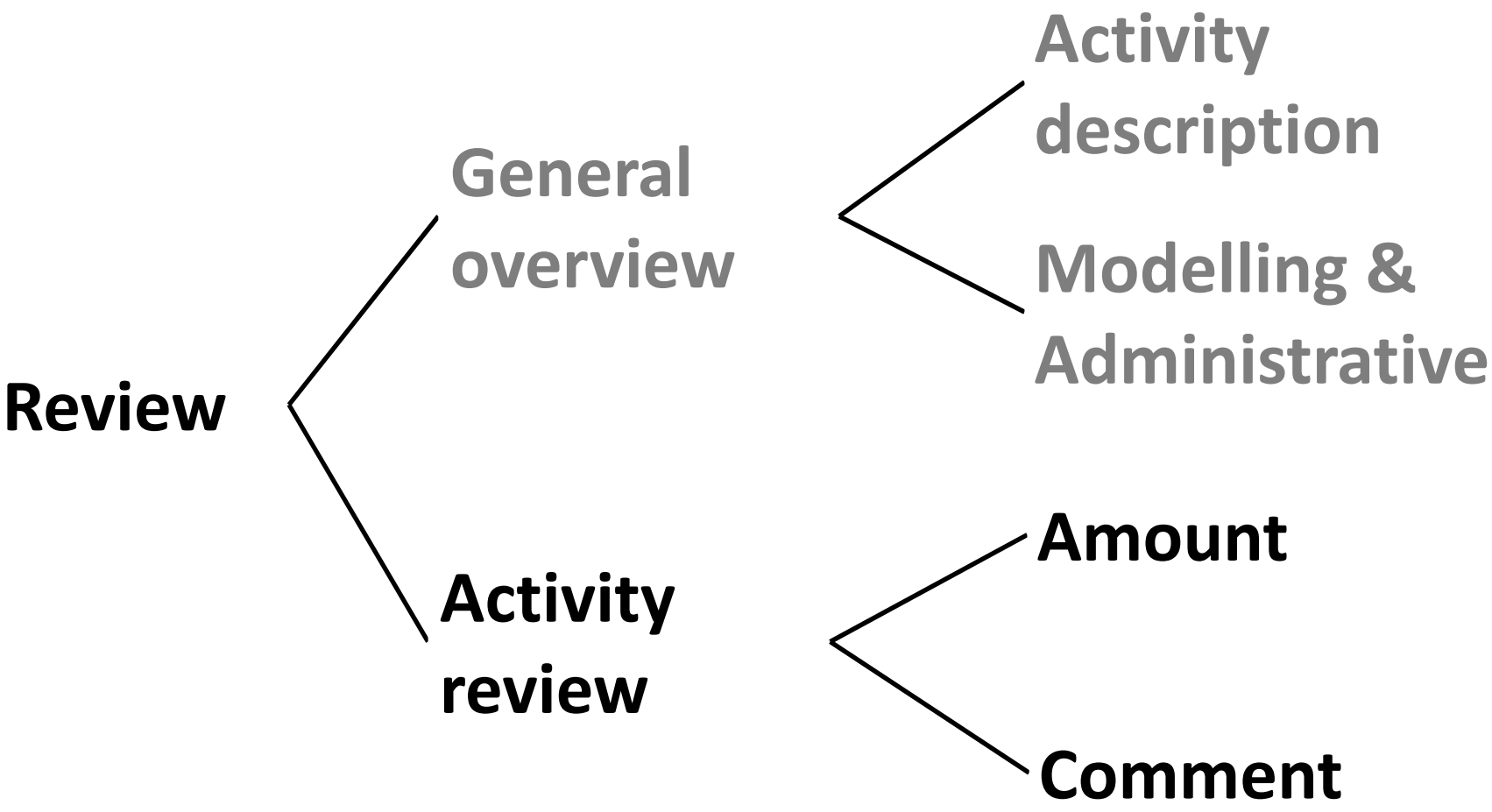
Activity	catch crop growing, phacelia, September-October, organic fertiliser 40 kg N, GLO 2011	...g, phacelia, September-October, organic fertiliser 60 kg N, CH 2011	catch cro
Activity Name	catch crop growing, phacelia, September-October, organic fertiliser 40 kg N	...owing, phacelia, September-October, organic fertiliser 60 kg N	catch crop
Type	UnitProcess	...ess	UnitProces
Special Type	OrdinaryTransformingActivity	...dinaryTransformingActivity	OrdinaryTra
Inheritance Depth	NotAChild	NotAChild	NotAChild
General Comment	This dataset represents the cultivation of phacelia silage on an area ... matter yield is 1404 kg/ha. The moisture content of the silage at s...	This dataset represents the cultivation of phacelia silage on an area of 1 ha. The dry matter yield is 1544.4 kg/ha. The moisture content of the silage at storage is 75%.	This datase matter yield
Included Activities Start	This activity starts after the harvest of the previous crop. The ... s included. Farm manure as an organic fertiliser - if applied - is only ... n terms of direct field emissions; all pre-processes are included in the ... ction systems.	This activity starts after the harvest of the previous crop. The input of seeds is included. Farm manure as an organic fertiliser - if applied - is only accounted for in terms of direct field emissions; all pre-processes are included in the animal production systems.	This activit Farm manu field emiss
Included Activities End	The dataset includes all machine operations and ... g machine infrastructure and sheds. Machine operations are: soil cultiv... g, manuring - if manure is applied -, mowing, haying, swathing, balin... ing and transport of silage bales to the farm. Further, direct field emissions ... ed. This activity ends after the transport of the bales to the farm at the farm g...	The dataset includes all machine operations and corresponding machine infrastructure and sheds. Machine operations are: soil cultivation, sowing, manuring - if manure is applied -, mowing, haying, swathing, baling, bale loading and transport of silage bales to the farm. Further, direct field emissions are included. This activity ends after the transport of the bales to the farm at the farm gate.	The datase and sheds. applied -, m the farm. Fu of the bales
Synonym			
Tags			
Energy Values	Undefined	Undefined	Undefined
Master Allocation Property	< None >	< None >	< None >
Allocation Comment			

Review Comments and Authors Responses

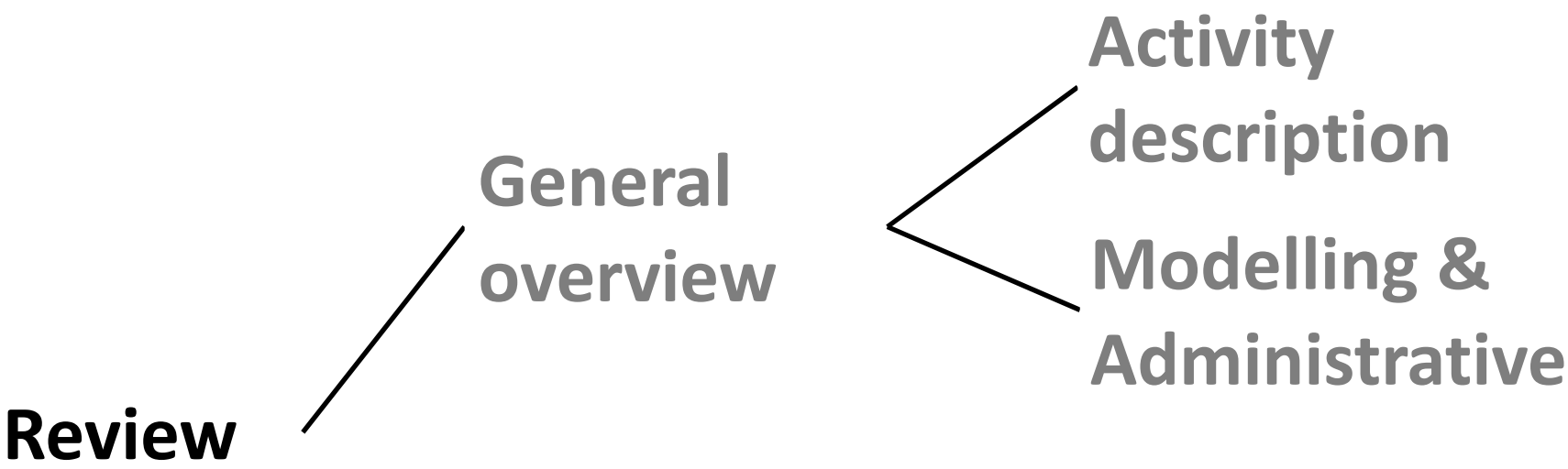
Add | Remove

Field	Item	Comment	Date	Activity Dataset	
Exchange, Amount	Exchange: Occupation, annual crop	Check this value, this is for 76 days, it doesn't correspond for a period from August to October.	04/03/2012	catch crop growing, ryegrass-Egyptian&Persian clover-mixture, August-October, organic fertiliser 30 kg N, one cut, C...	Assumpció
Exchange, Amount	Exchange: Ammonia	This NH3 emission means a high value of c_season. is it OK?. You could consider to add c_season considered for all datasets as an exchange property	04/03/2012	catch crop growing, ryegrass-Egyptian&Persian clover-mixture, August-October, organic fertiliser 30 kg N, one cut, C...	Assumpció
Exchange, Amount	Exchange: Occupation, annual crop	Check this value, this is for 76 days, it doesn't correspond for a period from August to October.	04/03/2012	catch crop growing, ryegrass-Egyptian&Persian clover-mixture, August-October, organic fertiliser 30 kg N, one cut, G...	Assumpció
Activity, General Comment		you are right, the missing dataset was added	23/04/2012	catch crop growing, phacelia, September-October, organic fertiliser 40 kg N, GLO, 2011	Thomas Ne
Activity, General Comment		the sentence was deleted	23/04/2012	catch crop growing, ryegrass-red&Egyptian clover-mixture, September-April, organic fertiliser 40 kg N, one cut, GLO, 2011 - 2011	Thomas Ne
Exchange, Amount	Exchange: Nitrate	The data is part of a report that is not yet accpeted internally for publication. We will try to deliver this chart as soon as the report becomes publicly	23/04/2012	catch crop growing, ryegrass, August-April, organic fertiliser 60 kg N, three cuts, CH, 2011 -	Thomas Ne

What?


Review
General overview
Activity description
Modelling & Administrative
Activity review
Amount
Comment

What?


Review
General overview
Activity description
Modelling & Administrative

What?

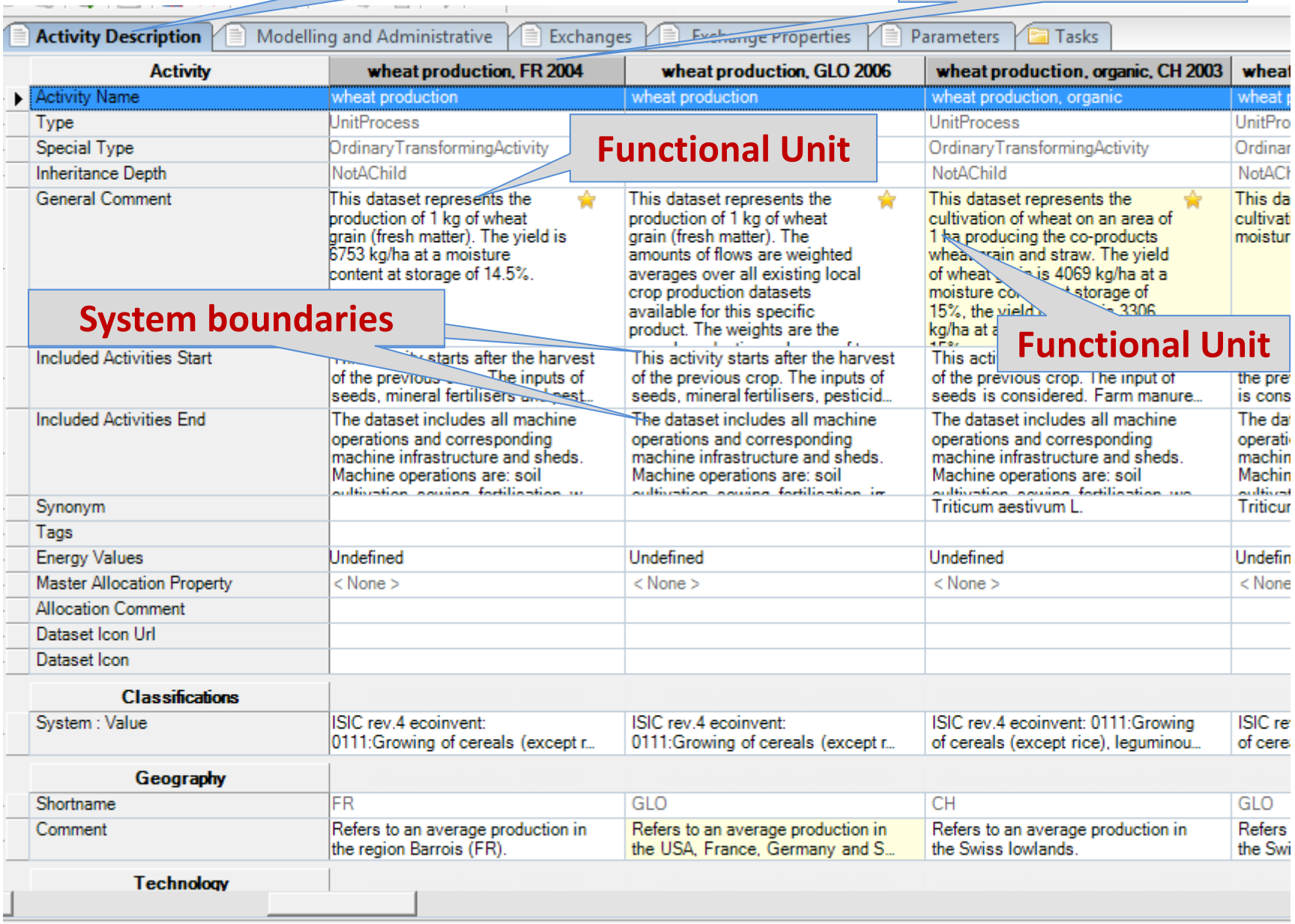
Activity Description

Geography, time

Functional Unit

System boundaries

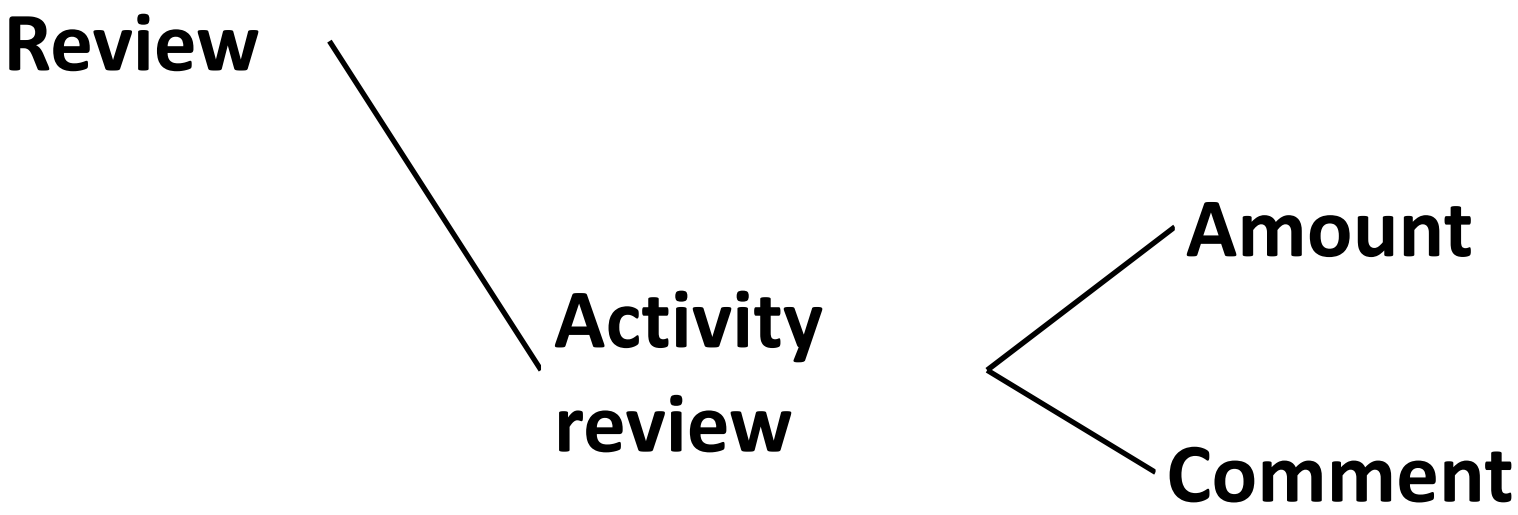
Functional Unit



Activity Description | Modelling and Administrative | Exchanges | Exchange Properties | Parameters | Tasks

Activity	wheat production, FR 2004	wheat production, GLO 2006	wheat production, organic, CH 2003	wheat
Activity Name	wheat production	wheat production	wheat production, organic	wheat p
Type	UnitProcess		UnitProcess	UnitPro
Special Type	OrdinaryTransformingActivity		OrdinaryTransformingActivity	Ordinar
Inheritance Depth	NotAChild		NotAChild	NotACh
General Comment	This dataset represents the production of 1 kg of wheat grain (fresh matter). The yield is 6753 kg/ha at a moisture content at storage of 14.5%.	This dataset represents the production of 1 kg of wheat grain (fresh matter). The amounts of flows are weighted averages over all existing local crop production datasets available for this specific product. The weights are the	This dataset represents the cultivation of wheat on an area of 1 ha producing the co-products wheat grain and straw. The yield of wheat grain is 4069 kg/ha at a moisture content at storage of 15%, the yield is 3306 kg/ha at a	This da cultivat moistur
Included Activities Start	starts after the harvest of the previous The inputs of seeds, mineral fertilisers and pest...	This activity starts after the harvest of the previous crop. The inputs of seeds, mineral fertilisers, pesticid...	This acti of the previous crop. The input of seeds is considered. Farm manure...	the pre is cons
Included Activities End	The dataset includes all machine operations and corresponding machine infrastructure and sheds. Machine operations are: soil cultivation, sowing, fertilization, w...	The dataset includes all machine operations and corresponding machine infrastructure and sheds. Machine operations are: soil cultivation, sowing, fertilization, ir...	The dataset includes all machine operations and corresponding machine infrastructure and sheds. Machine operations are: soil cultivation, sowing, fertilization, wa...	The da operati machin Machin cultivat
Synonym			Triticum aestivum L.	Triticur
Tags				
Energy Values	Undefined	Undefined	Undefined	Undefin
Master Allocation Property	< None >	< None >	< None >	< None
Allocation Comment				
Dataset Icon Url				
Dataset Icon				
Classifications				
System : Value	ISIC rev.4 ecoinvent: 0111:Growing of cereals (except r...	ISIC rev.4 ecoinvent: 0111:Growing of cereals (except r...	ISIC rev.4 ecoinvent: 0111:Growing of cereals (except rice), leguminou...	ISIC re of cere
Geography				
Shortname	FR	GLO	CH	GLO
Comment	Refers to an average production in the region Barrois (FR).	Refers to an average production in the USA, France, Germany and S...	Refers to an average production in the Swiss lowlands.	Refers the Swi
Technology				

What?



What?

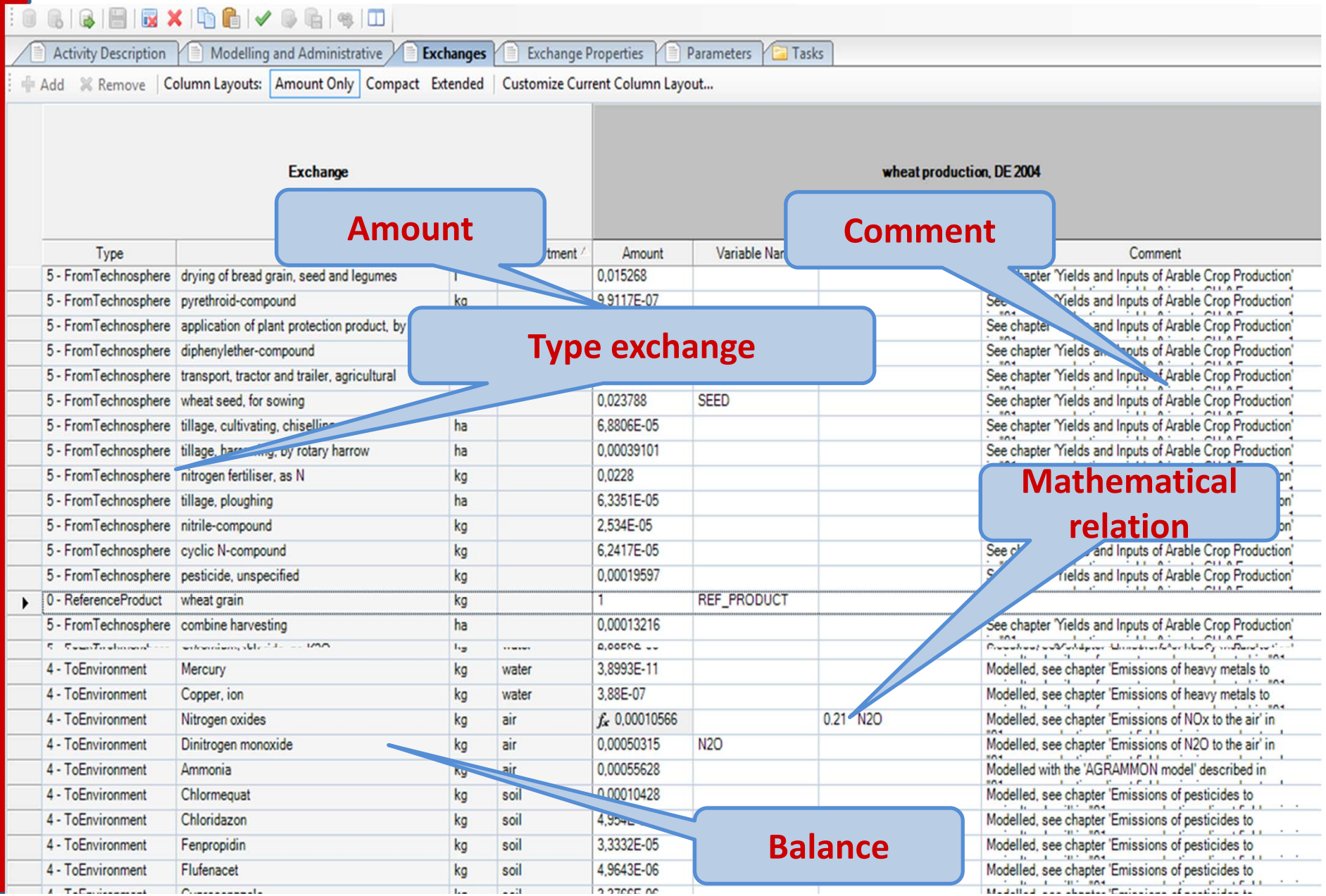
From environment

To environment

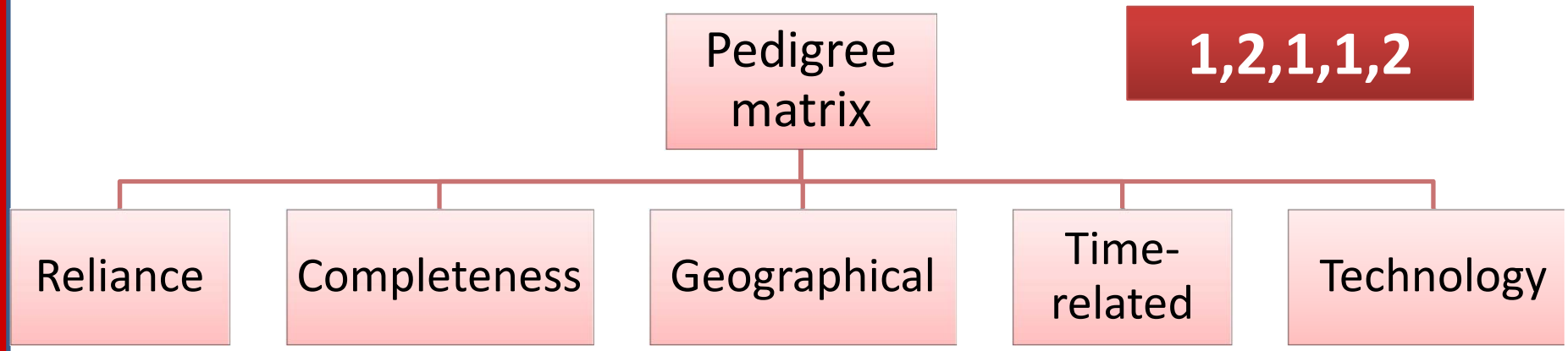
From Technosphere

To Technosphere

What?


Activity Description
Modelling and Administrative
Exchanges
Exchange Properties
Parameters
Tasks
Add
Remove
Column Layouts:
Amount Only
Compact
Extended
Customize Current Column Layout...
Exchange
wheat production, DE 2004
Type
Amount
Variable Nar
Comment
5 - FromTechnosphere drying of bread grain, seed and legumes 0,015268
5 - FromTechnosphere pyrethroid-compound kg 9,9117E-07
5 - FromTechnosphere application of plant protection product, by
5 - FromTechnosphere diphenylether-compound
5 - FromTechnosphere transport, tractor and trailer, agricultural
5 - FromTechnosphere wheat seed, for sowing 0,023788 SEED
5 - FromTechnosphere tillage, cultivating, chiselling ha 6,8806E-05
5 - FromTechnosphere tillage, harrowing, by rotary harrow ha 0,00039101
5 - FromTechnosphere nitrogen fertiliser, as N kg 0,0228
5 - FromTechnosphere tillage, ploughing ha 6,3351E-05
5 - FromTechnosphere nitrile-compound kg 2,534E-05
5 - FromTechnosphere cyclic N-compound kg 6,2417E-05
5 - FromTechnosphere pesticide, unspecified kg 0,00019597
0 - ReferenceProduct wheat grain kg 1 REF_PRODUCT
5 - FromTechnosphere combine harvesting ha 0,00013216
4 - ToEnvironment Mercury kg water 3,8993E-11
4 - ToEnvironment Copper, ion kg water 3,88E-07
4 - ToEnvironment Nitrogen oxides kg air 0,00010566 0.21 N2O
4 - ToEnvironment Dinitrogen monoxide kg air 0,00050315 N2O
4 - ToEnvironment Ammonia kg air 0,00055628
4 - ToEnvironment Chlormequat kg soil 0,00010428
4 - ToEnvironment Chloridazon kg soil
4 - ToEnvironment Fenpropidin kg soil 3,3332E-05
4 - ToEnvironment Flufenacet kg soil 4,9643E-06
Amount
Type exchange
Comment
Mathematical relation
Balance

Quality?


Pedigree matrix
1,2,1,1,2
Reliance
Completeness
Geographical
Time-related
Technology

Indicator score	1	2	3	4	5 (default)
Reliability	Verified[5] data based on measurements[6]	Verified data partly based on assumptions ***or*** non-verified data based on measurements	Non-verified data partly based on qualified estimates	Qualified estimate (e.g. by industrial expert)	Non-qualified estimat
Completeness	Representative data from all sites relevant for the market considered, over an adequate period to even out normal fluctuations	Representative data from >50% of the sites relevant for the market considered, over an adequate period to even out normal fluctuations	Representative data from only some sites (<<50%) relevant for the market considered ***or*** >50% of sites but from shorter periods	Representative data from only one site relevant for the market considered ***or*** some sites but from shorter periods	Representativeness unknown or data fron a small number of sites ***and*** from shorte periods
Temporal correlation	Less than 3 years of difference to the time period of the dataset	Less than 6 years of difference to the time period of the dataset	Less than 10 years of difference to the time period of the dataset	Less than 15 years of difference to the time period of the dataset	Age of data unknown or more than 15 year of difference to the time period of the dataset
Geographical correlation	Data from area under study	Average data from larger area in which the area under study is included	Data from area with similar production conditions	Data from area with slightly similar production conditions	Data from unknown distinctly different are (North America instead of Middle East, OECD-Europe instea of Russia)
Further technological correlation	Data from enterprises, processes and materials under study	Data from processes and materials under study (i.e. identical technology) but from different enterprises	Data from processes and materials under study but from different technology	Data on related processes or materials	Data on related processes on laboratory scale ***or*** from differer technology

Quality?

Global dataset

- Site-dependent emissions
- Pesticides not allowed
- Quality: double counting in Completeness, Geography, Technology

Conclusions

- **Why?** To give confidence in the dataset
- **How?** Ecoeditor is a friendly tool
- **What?** Importance of documentation
- **Quality?** Agreement

Thank you for your attention
Comments?

assumpcio.anton@irta.cat