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Context & Objectives



The French Agricultural LCA Platform was created in 2009 under the impetus of the French technological network on Livestock and Environment* and aims to distribute **management tools** for **animal production systems** to improve their environmental performance.

The platform's purpose is to **share knowledge, data and methodological positions** with a **common database** and **thematic workshops**.

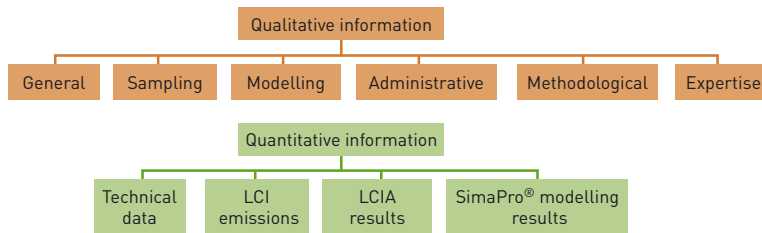
Data are evaluated and rated with an **expertise matrix** we developed, to prepare them for modelling with SimaPro® LCA software.

We aim to determine the **best references** for users depending on their goals and to provide a database for agricultural data.

1 Presentation of the common database

103 criteria:
46 qualitative
and 57 quantitative

We aim to be exhaustive in the criteria in order to model the data with LCA software



Amino acid: 3 data
Animal production: 9 data
Crop rotation: 59 data
Feed: 103 data
Mineral fertiliser: 9 data
Organic fertiliser: 8 data
Plant production: 128 data
Processing: 16 data
Seed production: 12 data

2 Data-quality expertise matrix and quality indicator

2 matrices:

Matrix 1 for all types of data, Matrix 2 for environmental assessment results

We aim to develop a simple, systematic, and easily applicable method

Matrix 1: technical criteria (Score M1)

Score	Major data sources	Data reproducibility	Geographical representativeness	Technological & temporal representativeness		Number of emissions flows (n)
1	Data collected on site	Data reproducible by a third person with the study only	Data mainly representative of the region or the case study	Representative	< 5 years	n > 10
2	Published data	Data reproducible by a third person with work		Representative	< 10 years	4 < n ≤ 10
3	Statistical data	Data reproducible by a third person, but need to exchange with the data creator	Data poorly representative of the region or the case study	Representative	< 15 years	
4	Data based on hypothesis / expert communication	Barely reproducible data		Representative	< 20 years	1 < n ≤ 4
5	Unknown or unclear source of data	Non reproducible data	Non representative data or unknown origin	Unrepresentative	Unknown or > 20 years	n = 1 or unknown

Matrix 2: environmental criteria (Score M2)

Score	Environmental assessment method	GWP values	Data transparency
1	Multicriteria: 5 criteria or more	IPCC 2007	Unit
2	3 or 4 criteria		System
3	2 criteria		Midpoint
4	Monocriteria	IPCC 2001	Endpoint
5		Unknown	Single value

Average (Score M1 ; Score M2)	Data qualification
1 ≤ Average < 2	☹️
2 ≤ Average < 4	😐
Average ≥ 4	☺️

3 Thematic workshops and data modelling in SimaPro®

Thematic workshops

3 topics studied: allocation within crop rotations and imported and tropical products; allocation between products and co-products

We aim to deal with burning issues and methodological choices in LCA by exchanging experiences

Main points

Crop rotations: complex and controversial depending on environmental aspects and study goals

Imported products: data collection, carbon storage, diversity of tropical systems

Allocation: types and consequences, and waste

We aim to adopt common guidelines, in phase with ISO standards and relevant for the French agricultural context

Data modelled in SimaPro®

Amino acid: 3 data
Feed: 67 data
Fertiliser: 16 data
Plant production: 28 data
Processing & Transport: 47 data
Seed production: 12 data

We aim to model data with collected information and to be as transparent as possible

*www.rmtelevagesenvironnement.org

Conclusion & Perspectives

- We initiated a **sharing** of **livestock input data**. The database currently contains 347 data. The goal is to continue to **provide new data**.
- We created a **new assessment method** to allow new users to assess their data and share them in order to create a **common database**.
- Burning topics have been discussed and some **common positions** have emerged. It would be advantageous to take this opportunity to **adopt some common guidelines**.