Developing commonly-agreed environmental assessment guidelines as necessary stepping stone for a change in production practices

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Rationale

• **Proliferation of** environmental assessment **methods** is resulting in misleading claims and, thus, in confusion of decision makers, and in...distraction from focus on real improvement of environmental performance
Specificities of the sector require dedicated attention

- Environmental issues (GHG emissions, acidification, eutrophication, biodiversity, etc.)
- Natural processes are difficult to control and measure (e.g. accounting of nutrient flows)
- Diverse farming systems
- Long supply chains with many actors (multiple products and functions)
- Food security: demand for livestock products projected to grow 1.3% per annum until 2050
- Livelihoods to a large share of world’s people

Starting point

- Lack of collectively-agreed, sound assessment methods
- Challenging methodological questions (e.g. allocation)
- Low quality and scarce data
Need for reference data and methods

“You can manage what you can measure”
Livestock Environmental Assessment and Performance (LEAP) Partnership in a nutshell

International, Multi-stakeholder, Partnership on:
- Livestock supply chains
- Environmental sustainability, including eco-efficiency (=food security)
- Multi-criteria approach (GHG emissions, biodiversity, nutrient cycles, water, etc.)
- Life-cycle thinking and life cycle assessment (LCA)

LEAP “products”:
- Consensual environmental assessment guidelines
- Sound environmental assessment metrics
- Reference Data
- Performance Reporting
Structure and governance

- Steering Committee: equal say
- Secretariat hosted at FAO
- Participation is open and voluntary: members recognize the objective and principles of LEAP
Participants
Life Cycle Thinking

- Feed pre-production (e.g. feed ingredients)
- Feed production
- ... (not shown)
- Farming
- Livestock product processing (e.g. slaughtering, milk processing)
- Consumption
- Post-consumption activities
- Distribution
**LCA guidelines: our approach**

*Purpose:* To support the harmonization in calculating and monitoring the life cycle environmental performance of livestock supply chains and respective products

*Primary users:* LCA practitioners
Lead principle

Understanding and making real improvement in environmental performance requires science-based, fair, and broadly accepted measurement approaches
Key principles underpinning LEAP Guidelines development

- Global perspective
- Science-based approach
- Consensus
- Harmonization (starting from alignment with relevant international standards)
- Internal consistency
- Transparency
- Comprehensiveness
- Continuous improvement and adoption
Application contexts

Environmental assessment of business-as-usual scenarios of livestock supply chains

a) Pre-competitive basis for B2B environmental reporting and for B2C environmental communication…

b) Support to cross-sectorial hot spot analyses for policy making and business strategy

c) …
Environmental performance tracking: from business-as-usual scenarios to environmental improvements (including GHG emissions mitigation options)

a) Monitoring environmental improvement at business level (benchmarking)
b) Reviewing policy priorities and measures
c) …
LEAP Guidelines available so far

• 3 draft LCA guidelines
  - Poultry
  - Small ruminants
  - Animal feed
Scope: selected impact categories

- Climate change
  - Ozone depletion
  - Human toxicity
  - Respiratory inorganics
  - Ionizing radiation
  - Noise
  - Photochemical ozone formation
- Acidification
- Eutrophication (terrestrial and aquatic)
- Ecotoxicity
- Land occupation
- Water consumption
- Fossil energy demand

- Human health
- Ecosystem quality
- Natural resources

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Midpoint impact category covered in these guidelines

Additional midpoint impact category covered in the LEAP Animal Feed Guidelines
Process of development

• Remote working (teleconferences, email, video-conferences, etc.)

• Face-to-face meeting of TAGs (Rome)

• Consultation meetings
  – Animal feeds, consultation meeting hosted by CAAS in China
  – Small ruminants and animal feeds, Annual Global Pastoralist Gathering in Kenya

• Interactions within and between the TAGs, and between TAGs and Secretariat
Process of development

- Critical review by experts (Carbon Trust, WRI, SIK)
- Public Review: 6 March-31 July 2014 (330 comments on feed, 268 on poultry and 128 on small ruminant)
- Webinar: 4 June 2014
- Revision of draft guidelines Release of Version 1: coming months
- Road testing: to provide feedback on practicability and usability (EC’s PEF pilots, etc.)
- Release of Version 2 (?)
LCA guidelines under development

Large ruminants TAG

Co-chairs: Alexandre Berndt (Embrapa), Yin Wang (Dairy Inc. Co)
Other LEAP guidelines

Biodiversity TAG

Co-chairs: Mohammed Said (ILRI) and John Finn (Teagasc)
Other LEAP activities:

Database on GHG emissions from feed

First version of database coming soon for:

- Maize
- Soybean
- Wheat
- Barley
- Cassava
**Other LEAP activities:**

**Possible work for 2015+**

- Pig supply chains
- Water footprint
- Nutrient cycles (accounting and assessment of eutrophication and acidification)
- Expanding the scope of current guidelines (*more impact categories + harmonization*)
- Extension of the LEAP database on feed
- Communication and outreach

* to be discussed in the next SC meeting
THANK YOU

www.fao.org/partnerships/leap/

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