



Technical Advisory Group (TAG) on Biodiversity

Terms of reference for TAG members

BACKGROUND

Livestock production is an important user of natural resources (land, water) and is responsible for a range of environmental pressures such as greenhouse gas emissions and nutrient pollution. These pressures have in turn significant impacts on biodiversity, which is at the endpoint of environmental cause-effect chains. On the contrary, livestock plays central role in certain agroecosystem, enhancing vegetation diversity and biomass production, and maintaining crucial habitats for a wide range of wild species. Despite its strong relationship – both positive and negative – with livestock, biodiversity has often been overlooked in environmental assessments of livestock production, mainly because of its intrinsic complexity.

During the first phase of LEAP, a first step was taken towards the inclusion of biodiversity in livestock environmental assessment, with the formation of a dedicated TAG on biodiversity and the development of Principles for the assessment of livestock impacts on biodiversity. These principles cover different types of assessment methods, they are relevant to a variety of stakeholders and their objective is to guarantee a minimum level of soundness, transparency, scientific relevance and completeness in biodiversity assessments of livestock supply chain. However, for biodiversity to be fully integrated along with other criteria (e.g. greenhouse gas emissions, nutrients, water) in environmental assessments of livestock, there is a need to move from principles to quantitative and operational biodiversity assessments. Comprehensive assessments of biodiversity alongside other environmental criteria are needed to unravel potential trade-offs to prevent the adoption of responses targeting one criterion while being detrimental to another.

The inclusion of biodiversity in environmental assessment is an emerging but growingly important area of work, addressed by several recent initiatives. Within the UNEP-SETAC life cycle initiative, a specific task force worked on the inclusion of land use impacts on biodiversity in LCA, and a new task force will address impacts on ecosystem services. Other initiatives on biodiversity assessment exist at the international (CBD biodiversity indicators for commodity production, FAO-UNEP 10 Year Framework Programme core initiative on biodiversity), regional (UE PEF) and sector (Coolfarm tool, Sustainable Agriculture Initiative platform, IDF) levels. There is a need to ensure that the livestock sector and the specificities of its relationship with biodiversity (e.g. positive impacts) are not left behind in the active recent developments on biodiversity assessment.

AIMS OF THE ACTIVITY

LEAP members called for capitalizing on the important work achieved in LEAP1 on biodiversity and to move from principles to quantitative assessment. The previous biodiversity TAG identified the development of Key Biodiversity Indicators (KBIs) as a priority to accomplish such quantitative biodiversity assessments. Building on indicators

from literature and a range of initiatives, the activity will focus on building global consensus on a set of indicators and guidelines for their computations.

Activities that will be carried out by the TAG include the following:

- Complete the review of existing KBIs prepared by the LEAP secretariat by identifying gaps or redundancies, proposing additional KBIs, describing KBI features, application contexts, strengths and limitation.
- Develop a toolbox for the quantitative assessment of livestock impacts on biodiversity using KBIs, including a final set of KBIs regrouped in categories and providing detailed guidelines for their selection, calculation and application.
- Ensure that the toolbox fulfil three key criteria: (i) covers the range of positive and negative links between livestock production and biodiversity, (ii) adopts a life cycle perspective and includes possible multiple and spatially dispersed impacts along livestock supply chains and (iii) addresses the three main levels of biodiversity and possible synergies between them – genetic diversity (for food and agriculture), wild biodiversity and ecosystem services.
- Ensure that the toolbox is relevant to a range of assessment objective, user, scales, geographical regions, livestock species and production systems.
- Maintain links with the UNEP-SETAC LCI tasks forces on biodiversity and ecosystem services by providing feedback on their outputs (with the support of the LEAP secretariat) and assessing the applicability of KBIs in the context of LCA.

DELIVERABLES

- LEAP guidelines for assessing biodiversity impacts on biodiversity using Key Biodiversity Indicators
- Peer-reviewed paper for publication in scientific journal

TIMEFRAME

An indicative timeline for the work programme of the biodiversity TAG is provided below:

Activities	2017												2018						
	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7		
TAG formation																			
Call for nominations	■																		
Final nominations		■																	
Selection of TAG co-chairs and members		■																	
TAG work timeline																			
Preparation of the 1 st face-to-face meeting			■	■															
1 st face-to-face mtg*					■														
Online discussion					■	■	■	■											
First draft of the general guidelines								■											
2 nd face-to-face mtg								■	■										
Development of cases studies and writing of journal paper							■	■	■	■	■								
Online discussion										■	■	■							
First draft to LEAP Steering Committee												■	■						
Peer-review												■	■						
Public review/revision														■	■	■			
Final publication																	■		

* Ideally, the first meeting will take place in late April-May. The availability of TAG members will be checked through a doodle poll.

ENGAGEMENT

TAG members are warmly invited to participate in-person and actively contribute to the two face-to-face meetings on the way to be scheduled this year. Each meeting will last two-three days.

Besides participation in the two meetings¹, TAG members are requested to continue to work on TAG deliverables under the overall guidance of the TAG co-chairs in order to deliver quality technical products on schedule.

Without active participation in TAG activities, no co-authorship of the LEAP technical products is granted.

TAG members report to TAG co-chairs.

LEAP will not grant any honorarium to TAG members, who are also expected to arrange their own trips autonomously. Trips will be pre-arranged by FAO only in specific circumstances (e.g. ensuring balanced participation of regional experts from developing countries).

QUALIFICATIONS

TAG members are technical experts having a strong background in one or more of the following subjects: ecology, biodiversity indicators, biodiversity LCA, biodiversity modelling, ecosystem services, animal science, agriculture science.

Ideally, TAG members have a proven track record in research and/or have built technical expertise by conducting biodiversity assessments.

Minimum requirements include:

- Working knowledge of English
- Skilled in team working and hence in sharing views and knowledge in a constructive manner
- Highly-motivated and committed to develop sound tools enabling to support transparent decision making at various scales and in all regions worldwide
- Respect of cultural and scientific diversity of TAG members

APPLICATION

Candidates are kindly requested to submit their CVs to the LEAP Secretariat (Livestock-Partnership@fao.org) **by 30th April 2017** (*deadline extended*). CVs must include an updated list of publications and work experiences.

All applications will be reviewed by the LEAP Secretariat and LEAP Steering Committee. Merit, balanced regional representation of participants and gender balance are three key selection criteria.

¹ While the first face-to-face meeting will be held at the FAO HQ in Rome, Italy, the second one is likely to be arranged outside Europe.