



Netherlands East Africa
Dairy Partnership

Livestock Sustainability Assessment Tool

An online tool to assess and
discuss integral sustainability
in livestock systems





PHOTO: JAN VAN DER LEE

Ankole cattle play an important role in biodiversity and culture in south Western Uganda.

The Livestock Sustainability Assessment Tool (LSAT) has been developed to help companies, cooperatives, organizations and other groups of stakeholders discuss the sustainability of their livestock system at national, regional or farm level. The tool was first developed and piloted by NEADAP for assessment of the dairy sector, and further developed by Wageningen Livestock Research (WLR) to also include other livestock sectors

such as beef and agropastoralism. LSAT not only offers a comprehensive scorecard for evaluating the current sustainability challenges but also serves as a dynamic platform for stakeholder engagement and dialogue. Using a stepwise approach, the tool assesses the social, environmental and economic aspects of sustainability of these livestock systems.



PHOTO: MARTIN DE JONG

On-farm experience is an important prerequisite for discussions on sustainability of dairy production.

“A down-to-earth approach for supporting farmers that highlights their most limiting needs.”
– Cooperative staff

What is integral sustainability and how can it be measured?

Sustainability is most often defined as meeting the needs of the present without compromising the ability of future generations to meet theirs. To achieve this, we need to focus on integral sustainability of the production system by looking at the different sustainability aspects and understanding their interconnections. It means examining the social, environmental and economic dimensions of sustainability, also known as the people, planet and profit aspects.

“A fantastic tool for developing loan packages for farmers.”
– Credit institution staff

It is impossible to achieve excellent performance in all dimensions at the same time; therefore, we also need to consider the need to balance trade-offs.

LSAT tries to measure sustainability aspects within the three dimensions, as well as the balance between them, based on subjective scoring of relevant indicators. The tool provides (a) a scorecard to assess the current sustainability situation of a particular livestock production system, and (b) a format for a stakeholder dialogue on improving sustainability of this system.

LSAT is currently available in English, French and Spanish, and provides the option for both individual and group assessments. The tool has already been used for various workshops and training sessions for the dairy sectors in Uganda, Kenya and Ethiopia, with a view to pursuing further uptake in livestock system assessments in other parts of the world.



PHOTO: TADESSE GETU

Farmer in Tiyo, Ethiopia, who is very satisfied with the quality of his oats-vetch silage.

LSAT can guide your livestock sustainability workshop

Actors in livestock development that plan to address sustainability issues through their activities can receive support in using LSAT. In East Africa, NEADAP partner WLR has a network of local facilitators who can guide organizations on how to use LSAT, and also support the subsequent dialogue or action planning workshop. A workshop using this tool would typically last one or two days and include the following elements:

Participants

Around 20 representatives of all stakeholders relevant for the assessment, such as farmers and farmer organizations, processors, input and service providers, knowledge institutes and government agencies. Two experts will facilitate the workshop.

Step 1

The stakeholders agree on the system to be assessed (dairy, beef or agropastoralism), as well as on its boundaries in terms of geography, farming systems and assessment level (national, regional or farm level).

Step 2

The stakeholders individually select about seven aspects, reflecting the main bottlenecks to sustainable development of the system. Based on the combined selection, the facilitator chooses the final aspects to be scored.

Step 3

The stakeholders individually score each of the indicators belonging to the selected aspects. Individual scores are combined in an average score per aspect. These are displayed in a spiderweb (polygon chart) as shown on the next page.

Step 4

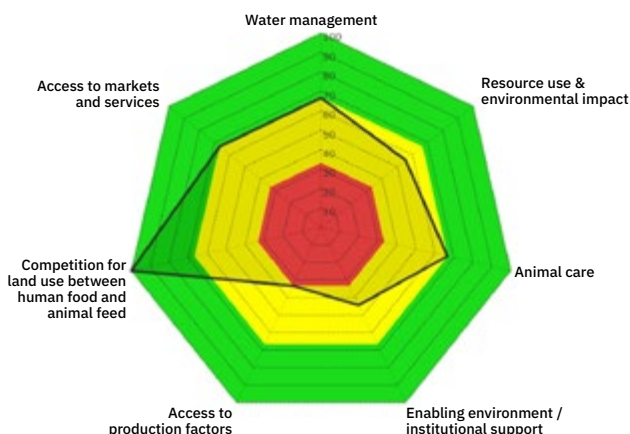
The stakeholders discuss the total scores per aspect and indicator, to see whether they agree on the outcome. Typically, this step generates most discussion and offers rich joint learning.

What aspects of sustainability does LSAT measure?

LSAT distinguishes a wide range of sustainability aspects, from human health and nutrition to (agro)biodiversity and profitability. Each aspect comes with two to five indicators. For example, the (agro)biodiversity aspect has three indicators:

- Agrobiodiversity: Is the diversity of livestock, crop and tree species high?
- Genetic diversity: Is the genetic diversity of livestock sufficient to maintain and increase productivity across generations?
- Landscape diversity: Is there a decrease of natural habitat around livestock farms?

LSAT allows the selection of aspects and indicators relevant for a given setting (which can be a single farm, a district, province or a country). Together these cover the three dimensions of sustainable dairy production: people, planet, profit.



Scores for Regional assessment of Sidama milkshed, Ethiopia

LSAT was tested in a milkshed in Ethiopia, where participants were asked to assess seven aspects of sustainability. The spiderweb shows that in this test case, “competition for land use” is not a concern, as dairy animals are fed with by-products. The poor score on “access to production factors” shows that participants see this as the biggest threat to sustainable dairy in their milkshed.

“Good material to expose students to a more practical approach in sustainability thinking.”
– University staff

Use the LSAT tool

Watch the video ‘How to use the LSAT tool’

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