

Dairy Sustainability Assessment Tool



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

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NEADAP, the Netherlands East Africa Dairy Partnership, consists of dairy partners dedicated to sustainable dairy development. NEADAP is funded via the Netherlands embassy in Addis Ababa.

A dialogue tool to inform integral sustainability in dairy development

What aspects of sustainability does DSAT measure?

DSAT distinguishes 14 sustainability aspects, ranging 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 dairy cattle sufficient to maintain and increase productivity across cattle generations?
- Landscape diversity: Is there a decrease of natural habitat around dairy farms?

PHOTO: JAN VAN DER LEE



Ethiopian farmer in Sagure who is raising heifers for sale.

“DSAT helps in prioritizing and selecting extension material for farmers.” – Extension worker



Traders form a critical link to the milk market for many farmers in Kenya

DSAT 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.

DSAT 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.



NEADAP is developing and piloting the Dairy Sustainability Assessment Tool (DSAT), which enables farmers, cooperatives, companies, organizations and other stakeholders to discuss sustainability in the dairy sector. DSAT helps people identify the main threats to sustainability and score them by using a selection of indicators. This assessment of people, planet and profit dimensions informs the dialogue between stakeholders about integral sustainability. NEADAP partner Wageningen Livestock Research has a network of local facilitators in East Africa who can guide dairy organizations in using DSAT and support the subsequent dialogue or action planning process.



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

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

What is integral sustainability and how can it be measured?

Integral sustainability means integrating sustainability concepts into other processes. It means examining social, environmental and economic dimensions: people, planet and profit. It also considers the need to balance trade-offs, as it is impossible to achieve excellent performance in all dimensions at the same time.

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

DSAT was developed to facilitate dialogue on integral sustainability of dairy production in East Africa. The tool provides (a) a scorecard to assess the current sustainability situation of a particular dairy production system, and (b) a format for a stakeholder dialogue on improving sustainability of this system. The tool was tested in various workshops and training sessions in Uganda, Kenya and Ethiopia, and is now ready for use. A web-based version of DSAT, along with manuals, is expected in the second half of 2022.



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

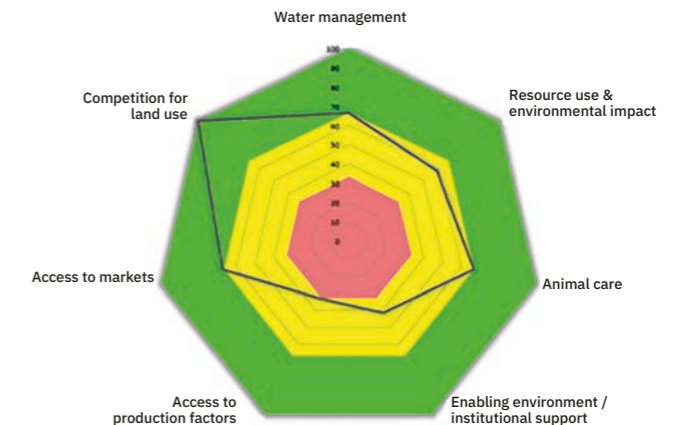
DSAT can guide your dairy sustainability workshop

Dairy organizations in East Africa that plan to address sustainability issues in their activities can get support in using DSAT. NEADAP partner Wageningen Livestock Research has a network in East Africa of local facilitators who can guide in how to use DSAT and support the subsequent dialogue or action planning workshop. NEADAP will supply the DSAT-led facilitation, and the dairy organization caters for the other workshop costs.

A dairy sustainability workshop using this tool would typically last 1 to 1.5 days and include the following elements:

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

- Step 1** The stakeholders agree on the system they will assess, as well as on its boundaries in terms of geography, farming systems, and scope.
- Step 2** The stakeholders jointly select 5 to 7 of the 14 aspects, based on them being key bottlenecks to sustainable development of dairy.
- Step 3** The stakeholders individually score each of the indicators belonging to the selected aspects. Individual scores are combined in total scores per aspect. These are displayed in a spiderweb (polygon chart) as shown below.
- 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.



Scores for Regional assessment of Sidama milkshed, Ethiopia