Federal Ministry
of Food
and Agriculture

CALL „NIPS“

„Innovative Sustainable Production Systems“

SUSCAMI*: *Sustainable camel milk production through improved husbandry practices and milk value chain

country/countries	Ethiopia
funding agency	Federal Ministry of Food and Agriculture - BMEL
project management	Federal Office for Agriculture and Food – BLE
project coordinator	University of Kassel, Animal Husbandry in the Tropics and Subtropics
project partner(s)	Addis Ababa University, Borana University
project budget	502.568,28 €
project duration	01.04.2024 – 31.03.2027
key words	animal feeding, animal healthcare, animal husbandry, camels, food safety, milk, regional value addition, value chains
background	Camels are indispensable for the nutrition and income generation of pastoral communities in arid environments because they are resilient to the increasing frequency and duration of drought episodes under climate change. They produce milk year-round and sustain pastoralists' livelihoods and income security under harsh environmental conditions and high disease challenges.

	Despite the increasing interest by the scientific community in assessing factors that affect camel milk production, milk hygiene and marketing in Ethiopia and especially in the Borana zone in the last two decades, there is a lack of a systematic and comprehensive analysis on how to improve the interconnected aspects of feeding, reproduction and health care for sustainable development of camel milk production. There is also lack of studies on concrete solutions to improve milk hygiene along the value chain. For the East Shewa zone, studies on camel milk production and marketing and their influencing factors are completely lacking.
objective	SUSCAMI aims to fill these knowledge gaps by (1) a systematic analysis on how to improve husbandry, especially feeding and breeding management, calf and camel health management as well as milk hygiene along the whole milk value chain in Borana and East Shewa zone of Oromia region in Ethiopia, (2) the integration of indigenous knowledge on camel husbandry, health care and milk hygiene practices with scientific knowledge to improve camel milk production and marketing, and (3) participatory identification, implementation and evaluation of suitable measures with camel-keeping communities and actors along the milk value chain, as an effective strategy for the sustainable development of the camel milk value chain in the studied areas and beyond.
short description	A trans- and interdisciplinary approach is used to systematically assess potential managerial factors (feeding, breeding, husbandry, calf management, health care) and related knowledge gaps that affect camels' milk production and reproduction performances. Focus group discussions, semi-structured interviews, direct observation of camels' browsing behavior, as well as seasonal monitoring of lactating camels and their calves are used for data collection. Furthermore, knowledge (gaps) of hygienic milking practices are identified using structured interviews and direct observation among actors along the whole milk value chain, and combined with insights of an in-depth and SWOT analysis of the organizational structure of the milk value chains in Borana and East Shewa zone. We also investigate how milk marketing contributes to the incomes of camel rearing households as well as camel milk retailers and distributors through structured questionnaires. The generated data supports the identification and selection of most relevant intervention measures related to camel feeding, breeding and husbandry management, calf management, milk handling and hygiene practices by integrating herders' and value chain actors' indigenous knowledge and scientific evidence. Suitable intervention measures are then test-implemented by selected camel herders and other actors along the milk value chain to assess their practicability and effectiveness, and to develop outreach material such as policy briefs, booklets, radio broadcasts and newspaper articles. These aim at raising awareness among herders, consumers and political decision-makers about safe handling and storage of camel milk and the related positive impact on human and camel health.