

Tropentag, October 5-7, 2011, Bonn

"Development on the margin"

## Perceived Feed and Water Constraints for Livestock Production in Lume and Siraro Districts, Ethiopia

Kebede Amenu, André Markemann, Regina Rössler, Marianna Siegmund-Schultze, Anne Valle Zárate

University of Hohenheim, Department of Animal Production in the Tropics and Subtropics, Germany

## Abstract

Livestock are kept in different agro-ecological zones and play a significant role for the household/national economy in Ethiopia. For possible interventions it is indispensable to understand the constraints perceived by livestock keepers. The present study aimed at assessing farmers' perceptions of feed and water constraints in Lume and Siraro districts, in the Ethiopian Rift Valley. A total of 320 randomly selected households (160 per district) were interviewed between July and August 2010, using a structured questionnaire. Key-informant interviews, focus group discussions with farmers and personal observations complemented the questionnaire survey. Ranked-orded logit model (ROLM) was used to analyse the rankings of the constraints by farmers.

Cattle, sheep, goats and donkeys were the most common livestock species kept in both districts. Tef and maize were the main cereal crops produced in Lume and Siraro, respectively. The results of ROLM showed that shortage of feed, shortage of water and livestock diseases were the top ranked constraints for livestock production in Lume, whereas the respective ranking in Siraro was shortage of water, shortage of feed and livestock diseases. Different water sources, namely rivers, lakes, hand-dug wells, stand pipes, springs and ponds were used by people and livestock in Lume, whereas the Bilate River was the only permanent surface water in Siraro, making the extreme south-western border of the district. Therefore, motorized boreholes and ponds were the common water sources for people and animals during all seasons. In most cases, uncontrolled use of water sources by livestock was practised in both districts. Straw and stover were the most important feed resources in both districts. According to farmers, grazing land is nowadays restricted to waste land, roadsides, edges of cropping fields and river banks, as well as fallow land during the wet season and crop residues during the dry season associated with land competition for cropping. Intervention measures towards an increase in alternative feed resources, better water management and an improvement of existing indigenous methods of rain water harvesting are recommended.

Keywords: Ethiopia, feed shortage, mixed farming systems, water sources

Contact Address: Kebede Amenu, University of Hohenheim, Department of Animal Production in the Tropics and Subtropics, Garbenstrasse 17, 70599 Stuttgart, Germany, e-mail: kamenu@gmail.com