

Tropentag, September 18-21, 2016, Vienna, Austria

"Solidarity in a competing world fair use of resources"

## Community-Based Goat Breeding Programs in Malawi: Set-Up and First Experiences

Wilson Nandolo<sup>1</sup>, Maria Wurzinger<sup>2</sup>, Gábor Mészáros<sup>2</sup>, Curt van Tassell<sup>3</sup>, Timothy Gondwe<sup>4</sup>, Henry Mulindwa<sup>5</sup>, Doreen Lamuno<sup>2</sup>, Johann Sölkner<sup>2</sup>

<sup>1</sup>Lilongwe University of Agriculture and Natural Resources, Animal Science, Malawi

<sup>2</sup>University of Natural Resources and Life Sciences (BOKU), Dept. of Sustainable Agricultural Systems, Austria

<sup>3</sup>USDA, United States of America

<sup>4</sup> University of Malawi, Bunda College of Agriculture, Animal Science, Malawi

<sup>5</sup>National Agricultural Research Organisation (NARO), Uganda

## Abstract

Goats are a very important animal genetic resource in Malawi, and their improvement has been identified as one of the available sustainable ways of improving the livelihoods of farmers. Traditionally, the approach of improvement of goat genetic resources in Malawi has been through the introduction of exotic goat breeds for crossbreeding or complete breed replacement. Most of these improvement programmes have not produced the expected positive results, mostly due to problems with genotype and environment interactions as well as lack of organised recording schemes. Recently, animal breeders have resorted to use of within-breed selection as a tool for sustainable breed improvement. However, Malawian goat farmers have small flock sizes, so that goat selection by individual farmers is not easy. Most farmers allow their flocks to graze together on communal grazing areas, leading to larger virtual flocks in a mixed crop-livestock production system. Community-based goat breeding programmes have been identified as a possible avenue for improvement in such production systems, and this presentation explains how such breeding programs have been set up in two regions of Malawi. We outline the conceptualisation of the breeding programme; stress the role of the linkages and collaborations between the implementing partners and local stakeholders in all stages of implementation; and highlight the philosophy of the current approach in the implementation of community-based breeding programmes: simplicity and sustainability. The design and implementation timeline is outlined, and preliminary results of the initial selection activities are discussed. Challenges that have been encountered in the implementation of the programs, and the lessons learnt from the management of these challenges are explained. For successful implementation, there is need to pay close attention to the specific circumstances of the community and the local environment.

Keywords: Breeding programme, community, goats, Malawi, sustainability

Contact Address: Maria Wurzinger, University of Natural Resources and Life Sciences (BOKU), Dept. of Sustainable Agricultural Systems, Gregor Mendel Straße 33, 1180 Vienna, Austria, e-mail: maria.wurzinger@boku.ac.at