



Tropentag, October 11-13, 2006, Bonn

“Prosperity and Poverty in a Globalised World—
Challenges for Agricultural Research”

Filling Knowledge Gap of Smallholder Cattle Keepers on Prevalence and Control of Bovine Trypanosomosis: an Example from Dano District, Western Ethiopia

SIMON RIEDEL^{1,2}, CLEMENS WOLLNY², TEMESGEN AYANA³, WORKNEH AYALEW²

¹Georg-August-University Göttingen, Biotechnology, Germany

²International Livestock Research Institute, (ILRI), Ethiopia

³Bako Agricultural Research Centre, Animal Production, Ethiopia

Abstract

Trypanosomosis is a major constraint to cattle farmers in parts of Sub Saharan Africa, including Ethiopia. ILRI in collaboration with national partners in Benin, Kenya and Ethiopia is implementing a project on “Improving Livelihood of the poor through Community based Management of Indigenous Animal Genetic Resources”. This project seeks to develop participatory processes in sustainable improvement of cattle production. In Ethiopia, the project works with smallholder cattle keepers in Dano District in the south-west of the country. Diseases, and particularly Trypanosomosis, were identified by farmers to be the most important constraint to cattle production, followed by seasonal scarcity of feed and water. As part of designing a development framework for sustainable utilization of local cattle, this study explored the cattle keepers’ knowledge on the prevalence and control of Trypanosomosis. Semi-structured interviews were used to document farmers’ perception about the disease and their control measures. Laboratory diagnosis was used to record disease prevalence in cattle which were identified by farmers to be sick with Trypanosomosis. The results showed that farmers are not aware of the nature of disease transmission, correct disease symptoms and their control measures. Blood examinations on 84 sample animals, suspected to be infected showed that 27.4% of the cattle indeed were infected with Trypanosomosis. 83 animals were infected with *Trypanosoma congolense*, and one with *Trypanosoma vivax*. Infected animals had significantly less Packed Cell Volume PCV than non-infected animals (22.0 vs. 24.3). Farmers mainly recognized the disease by the following symptoms: Diarrhoea, hair loss, weight loss, coughing and change in skin colour. About 94% of the farmers mentioned other ways than Tsetse fly as transmitter for the disease. These results were reported and discussed with the farmers. The project is undertaking further efforts to fill the knowledge gap and introduce sustainable disease control measures in the next two years.

Keywords: Farmers’ perceptions, *Trypanosoma congolense*, *Trypanosoma vivax*