

## Tropentag, September 17-19, 2018, Ghent

"Global food security and food safety: The role of universities"

## Animal Husbandry as a Strategy for Income Diversification of Small Vanilla Producers in the Sava Region of Madagascar

STEFANIE KUNZ, EVA SCHLECHT

University of Kassel / Georg-August-Universität Göttingen, Animal Husbandry in the Tropics and Subtropics, Germany

## **Abstract**

This study, conducted in the main vanilla-growing Sava region in northeastern Madagascar, investigated the role of animal husbandry for income diversification of small-scale vanilla producers. The Sava region covers four districts with different characteristics regarding agriculture and animal husbandry practices. Individual interviews of 300 household heads were conducted between May and August 2017 to collect data on livestock ownership, management and marketing.

Across the study region, 84.4% of the households practice animal husbandry. Median stock sizes were quite homogenous, with 3.5 zebus per zebu-keeping household, 2 pigs per pig-keeping household, 22 chicken per chicken-keeping household and 5.5 ducks per duck-keeping household. Throughout the four districts, the frequencies of vanilla-producing households (83%), zebu-keeping (42%), pig-keeping (13%) and chicken-keeping (72%) households as well as households keeping other poultry (22%) were quite similar. There was a moderate correlation between vanilla production and animal husbandry in general (Pearson correlation, r=0.356; p < 0.01), chicken keeping (r=0.324; p < 0.05) and keeping of other poultry (r=0.331; p < 0.01), whereas no correlation existed between vanilla production and zebu-keeping as well as pig-keeping.

Animal products were sold at 0.90 € per liter of zebu milk, 4.70 € per kilogram of zebu meat, 2.90 € per kg of pork and 0.30 € per duck egg. Buying, fattening and reselling an animal yielded a plus of 9% relative to the purchasing price in the case of zebu cattle, and of 275% for a pig. For chicken and ducks, the respective values were 33% and 267%. By relating the gross margin to the average annual income of a vanilla-producing household, a potential income contribution of 1.3% for a purchased and resold zebu and of 18.4% for a zebu sold from own offspring was calculated. In the case of pigs, the potential income contribution was 3.3% (purchased) and 4.5% (offspring), and in the case of chicken and ducks the respective values were all lower than 0.5%. In conclusion, the widespread small-scale livestock keeping of vanilla producing households seems to serve as an income buffering and diversification strategy, especially if the currently very high vanilla prices are decreasing again.

**Keywords:** Income diversification, northeastern Madagascar, small-scale livestock keeping, vanilla farming