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“Development on the margin”

Importance of Guinea Pig Husbandry for the Livelihood of Rural People in Tanzania: A Case Study in Iringa Region

THEDA MATTHIESEN¹, FRIDA NYAMETE², JOHN M. MSUYA², BRIGITTE L. MAASS³

¹Georg-August-Universität Göttingen, Dept. of Animal Sciences, Germany

²Sokoine University of Agriculture, Dept. of Food Science and Technology, Tanzania

³International Center for Tropical Agriculture (CIAT), TSBF, Kenya

Abstract

Little is known about guinea pig husbandry in eastern Africa, where smallholder farmers have discovered the small rodent as a useful source of meat, manure and cash income for several generations. This study aims to investigate the importance of guinea pig husbandry for the livelihood of rural people in southwestern Tanzania, where the Iringa Region has been on the margin of development due to limited market access and inadequate road infrastructure. The investigation targets potential improvements of guinea pig husbandry in order to be able to enhance productivity and thus upgrade people's nutritional and economic status. In individual interviews, carried out during February and March 2011, 165 households from Njombe and Makete Districts in Iringa Region provided survey data on their socio-economic status, nutritional habits, preferences in livestock keeping and meat consumption as well as guinea pig husbandry methods.

In order to evaluate the importance of guinea pig meat, respondents were asked to rank meat-types consumed in their households according to quantity. Guinea pig meat was ranked second after beef, together with pork and chicken. Goat meat was ranked last. Guinea pig keepers ranked guinea pigmeat first, together with beef. Second rank was shared by pork and chicken. Consumption of goat meat was lowest. During the time of the survey more than half of the households kept guinea pigs, while another third used to keep them previously. Mean stock size in guinea pig keeping households was ten. Compared to chicken, guinea pig was particularly valued for its flexibility in terms of forage acceptance, disease resistance, manure quality, and low maintenance and acquisition costs. Productivity was constrained by bad hygienic conditions, low feeding quality and quantity as well as uncoordinated mating, resulting in inbreeding and indirect selection for small size. Under the conditions of southwestern Tanzania, Guinea pigs increase meat variety with little demand for resources or effort, but farmers lack awareness of obstacles and potentials. They consequently require training and information, which is – up to now – not provided by any of the agricultural or livestock extension services in both study areas.

Keywords: *Cavia porcellus*, Guinea pig, nutrition security, unconventional livestock