### **Deutscher Tropentag 2004**

International Research on Food Security, Natural Resource Management and Rural Development

# Rural Poverty Reduction through Research for Development and Transformation

#### **Book of Abstracts**

#### **Editors:**

K. J. Peters, D. Kirschke, W. Manig, A. Bürkert,R. Schultze-Kraft, L. Bharati, C. Bonte-Friedheim,A. Deininger, N. Bhandari, H. Weitkamp

Humboldt-Universität zu Berlin October 5-7, 2004

## **Keeping Cattle in the Brazilian Eastern Amazon — Constraints** on Improving Smallholder Management

MARIANNA SIEGMUND-SCHULTZE<sup>1,2</sup>, BARBARA RISCHKOWSKY<sup>2</sup>, JONAS BASTOS DA VEIGA<sup>3</sup>, JOHN M. KING<sup>2</sup>

Exotic large ruminants have been kept on flood plains and riversides of the Brazilian rain forest since the 17<sup>th</sup> century. Their incursion onto the non-flooded areas is recent. New settlers to the Amazon region were encouraged with financial incentives, particularly during the 1970s, for politico-strategic reasons. Initially, large ranchers were the main beneficiaries of official settlement programmes. Then the droughts in the Northeast and land shortages in the South triggered the migration of poorer people who became smallholders in the North. The new environment was very different from the places they had left. Some of these small farmers started to adopt the cattle keeping activities of the large-scale neighbours. Credit lines were launched supporting the purchase of cattle and the building of fences. In the development agenda, no differentiation was made between smallholders and ranchers. The non-flooded areas were covered by rainforest, which had to be slashed before any cultivation of pastures could start. The re-growth of the secondary vegetation competed with the introduced pasture plants for space and scarce soil nutrients. This paper examines the specific limitations for improvement of cattle production imposed by the smallholders' overall farming system. For 15 months thirty-seven smallholdings with cattle were visited monthly in order to draw a realistic picture of the whole farm system. Smallholders in the Bragantina study region kept an average of 14 head mostly for beef production, but their main enterprise was cropping: two competing land uses within one system. Whereas ranchers had at their disposal surplus funds to modify the environment, smallholder pastures were established with family labour in competition with economically more important cropping activities. Problems of adequate pasture establishment and maintenance were aggravated by the smallholders' lack of capital and specialised knowledge. Furthermore, their cattle served mainly as a means of financing, rather than production. Consequently, husbandry was hardly ever being based on long-term planning or on continuous keeping. Sales and purchases of complete herds were observed in a quarter of the farms studied. Therefore, farm advisers need to consider the low-input character of cattle keeping and focus on the prevention of ecological degradation of pasture.

Keywords: Brazilian Amazon, cattle, production conditions, smallholder, systems approach

<sup>&</sup>lt;sup>1</sup>University of Hohenheim, Institute of Animal Production in the Tropics and Subtropics, Germany

<sup>&</sup>lt;sup>2</sup>Georg-August-Universität Göttingen, Animal Husbandry and Breeding in the Tropics and Subtropics, Germany

<sup>&</sup>lt;sup>3</sup>Brazilian Agricultural Research Corporation (EMBRAPA), Brazil

Contact Address: Marianna Siegmund-Schultze, University of Hohenheim, Institute of Animal Production in the Tropics and Subtropics, Garbenstraße 17, 70599 Stuttgart, Germany, e-mail: <a href="massch@uni-hohenheim.de">mssch@uni-hohenheim.de</a>