



Deutscher Tropentag, October 9-11, 2002, Witzenhausen
“Challenges to Organic Farming and Sustainable Land Use
in the Tropics and Subtropics”

**Characterisation of Smallholder Pig Production Systems in
Mountainous Areas of North Vietnam**

UTE LEMKE¹, LE THI THUY², ANNE VALLE ZÁRATE¹, BRIGITTE KAUFMANN¹, NGUYEN DANG
VANG²

¹*University of Hohenheim, Institute of Animal Production in the Tropics and Subtropics, Germany*

²*National Institute of Animal Husbandry (NIAH), Viet Nam*

Abstract

Situation of farmers in Vietnam's mountainous areas is hampered by low and unsteady resource availability and less developed infrastructure. Smallholders seek to improve their livelihood by extending livestock husbandry with main focus on pig keeping. Local pig breeds are progressively replaced by genotypes with higher production potential. Keeping high-yielding genotypes may generate higher revenues from pig production but also mean an economic risk for farmers due to higher input required. This study assesses the suitability of local pig breeds/ introduced genotypes for smallholders in different production systems. Pig production intensity, farmers' production aims and management strategies are described. Reproductive/ productive performances of genotypes are recorded. Output from pig production is determined and production efficiency is calculated under different input scenarios. Data collection is carried out in two research periods (1/2001 to 7/2001; 1/2002 to 8/2002) in North Vietnam, Son La province. Four selected villages of ethnic Black Thai cover a gradient from semi-intensive pig production in the mountain valley, near-town to extensive pig production at the hillside, far from town. Research methods include structured household interviews, communication tools (from RRA methodology), recording production/ reproduction data and weighing pigs. Preliminary results show that near town farmers keep the introduced Mong Cai pig with relatively high performance (11.2 ± 2.7 piglets/litter, 1.8 ± 0.7 litters/year; ADG of crossbred piglets 190 ± 80 g/day). The more market-oriented pig production returns a high cash revenue (6.0 ± 4.3 million VND/year = 402 USD), but requires higher production costs. Far from town, pig production fulfils mainly social functions. Farmers keep the local Ban pig with low performance (7.3 ± 1.5 piglets/litter, 1.2 ± 0.3 litters/year; ADG of purebred piglets 70 ± 60 g/day) and yield a low cash revenue (1.6 ± 1.1 million VND/year = 104 USD), however, have lower production costs. Data analysis yielded factors influencing production efficiency and variation of productive/ reproductive performances on-farm. The results are prerequisites for the setup of on-farm performance testing and thereby for the determination of production efficiency of different pig genotypes in the production systems investigated.

Keywords: Local breed, on-farm, pig, productive performance, small holder farming