**Impact of livestock production on rural poverty and income inequality: Evidence from Vietnam**

Truong Lam Doa,b,\*, Trung Thanh Nguyena, Ulrike Grotea

a Institute for Environmental Economics and World Trade, Leibniz University Hannover, Königsworther Platz 1, 30167 Hannover, Germany

b Department of Planning and Investment, Faculty of Economics and Rural Development, Vietnam National University of Agriculture, Hanoi, Vietnam

\* Corresponding author, Tel: +49 511-762-4087, Fax: +49 511-762-2667, Email: [lam@iuw.uni-hannover.de](mailto:lam@iuw.uni-hannover.de).

**Abstract**

Livestock production has been an important source of income and a means of livelihoods of rural households in developing countries. The study assesses the roles of livestock production in reducing rural poverty and income inequality in Vietnam. The data used in this paper are obtained from surveys conducted in three provinces of Vietnam, Ha Tinh, Thua Thien Hue, and Dak Lak in four years, 2007, 2008, 2010 and 2013 under the Project “Impact of shocks on the vulnerability to poverty: consequences for development emerging Southeast Asian economies”. 2200 households in 220 villages of these provinces were randomly selected and interviewed. The study uses the difference-in-differences method and the propensity score matching to estimate the Average Treatment Effect on the Treated that measures the impact of livestock production on poverty and income inequality reduction, and a dynamic econometric model to examine the response of livestock assets to shocks. The findings show that livestock production reduces the income poverty by about 13% to 20% and income inequality by 3%. Livestock assets are negatively impacted by the number of shocks that households have faced during the last three years, though the impacts are different for different types of livestock. Large animals are mostly affected by demography shocks while climatic shocks mostly impact small animals. Other factors affecting livestock assets include access to credits, farmland size, labor, number of owned motorbikes, education of household head, and membership of a social or political group. The study suggests that promoting rural credits and education as well as capacitating rural households to cope with shocks could contribute to improve the welfare of rural households.

**Keywords:** Livestock, poverty, inequality income, shocks, Vietnam.