

E3015. AN ASSESSMENT OF LIVESTOCK PRODUCTIVITY IN THE NILE BASIN COUNTRIES: A MALMQUIST APPROACH

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Abstract

As the global demand for livestock products continues to rise, questions arise as to whether the productivity of the existing stock will match the growing demand. Although the Nile basin countries hold the single largest livestock population in the world, the productivity of these livestock has not been documented. This study documented the state of livestock productivity in five Nile basin countries (Ethiopia, Kenya, Sudan, Tanzania and Uganda) using a non-parametric Malmquist approach. Secondary data were obtained from FAOSTAT spanning the 1985-2004 period. The focus was on cattle (beef and dairy) and poultry products (meat and eggs). The results indicate that the productivity of beef and veal in the five Nile basin countries increased by 1.5% annually over the study period due to changes in innovation and technical efficiency. At 5.1%, Ethiopia had the highest productivity change for beef and veal most of which was due to increased efficiency. A 3.3% increase in productivity of cow milk arose mainly from technological change. Kenyan hens had the highest productivity in the region producing an average of 4kg of eggs per hen annually followed by Tanzania (3.3kg/hen) and Ethiopia (2.9kg/hen). Although the results indicate some real growth in particular sectors of the livestock industry, the rate of growth is lower than that of the human population in the region. Therefore, governments and other stakeholders in the livestock sector in the region should invest in innovations and strategies that will improve livestock productivity to meet the growing demand.

Keywords: Livestock productivity, Malmquist index, Nile basin, TFP