Household-level Impacts of Dairy Cow Ownership in Coastal Kenya

(Abstract)

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This study uses heteroskedastic Tobit and Censored Least Absolute Deviations models to examine the impacts of dairy cow ownership on selected outcomes for a sample of 184 households in coastal Kenya. The outcomes examined include gross household cash income, gross non-agricultural income, consumption of dairy products, time allocated to cattle-related tasks, number of labourers hired and total wage payments to hired labourers. The number of dairy cows owned has a large and statistically significant impact on household cash income; each cow owned increased income by at least 53% of the mean total income of households without dairy cows. Dairy cow ownership also increases consumption of dairy products by 1.0 litre per week, even though most of the increase in milk production is sold. The number of dairy cows has no significant effect on total labour for cattle-related tasks. However, in contrast to previous studies, labour allocation to cattle by household members decreases and labour requirements for dairy cows are met primarily by an increase in hired labour. Dairy cow ownership results in relatively modest increases in payments to hired labourers and the number of hired labourers employed. The large positive impacts on income and the substitution of hired for household labour in cattle care suggest that intensification of smallholder dairying can be beneficial as a development strategy in the region if disease and feed constraints are addressed.

Descriptors: Kenya, Household, Cows, Ownership, Farms, Production

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