

## **Land, Food and Health: The Long-term Decline in Nutritional Levels under Zimbabwe's Land Reform Programme**

B. H. Kinsey<sup>1</sup>

<sup>1</sup>Ruzivo Trust, Harare, Zimbabwe

bkinsey@mango.zw

In 1980, recently independent Zimbabwe began a programme of land reform that was well-planned and implemented (in contrast to the experience since 2000). This original land reform was intended to do many things, among them increase agricultural productivity, enhance food security, and improve rural welfare.

Since 1982, the author has conducted the longest panel study ever undertaken in Africa, with 550 households, including both beneficiaries and non-beneficiaries of land reform. A key component of this study has been the use of multiple measures of the welfare of these rural households, among which were anthropometric measures of the nutritional well-being of both children and their parents. Some 12,000 observations on children have been collected to date.

An unexpected finding from this research is that the nutritional status of children included in the study for nearly 20 years—from 1983 to 2001—declined by an average of 1.4 percent per year over this entire period. In other words, children whose families benefited from land reform had nutritional levels 20 years later that were worse by more than 25 percent than when land reform began. This empirical paper explores the reasons for this decline.

The paper first identifies in general terms important correlates between children's nutritional status and the setting of rural households in the research areas in Zimbabwe. For example, every measure indicative of the extent of cash-cropping is negatively correlated with child nutritional status, while the opposite is true for every measure relating to possession of livestock. Other indicators present a more complex picture.

In an effort to unravel the relationships between children's nutritional state and the world in which they live, the paper uses a series of logit and probit models to investigate the determinants of child undernutrition. The list of factors scrutinized includes the following: cropping patterns and livestock assets; levels of maternal education; birthweight; number of siblings; patterns of disease within the family; nutritional status of the parents; use of public and private health facilities; ecology (particularly rainfall patterns); duration of breast-feeding; and the use of "wild" foods.