

MARKETING OF FOOD CROPS AND PURCHASE OF INDUSTRIAL
COMMODITIES BY NYANZA SMALLHOLDERS, 1970-1971.

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ABSTRACT

We consider the allocation problem of a rural household whose income is available in the form of $q+r$ inventories of farm produce and an amount of cash income from non-farm activity. The inventories available may be sold to earn cash at a price of τ . The inventories may be supplemented by purchase at market prices w . The budgeting problem of the household is the problem of optimizing both sales of inventories and the consumption of commodities. The level of purchases are structurally related to inventories through the level of sales and cash income.

The optimum sales - consumption allocation depends heavily on the demographic composition of the household. An household with few members needs to reserve less of the inventory for subsistence than a household with many members. The analysis emphasizes the effect of changing household composition on the allocative choices made.

The model set forth is a combination of a system of purchase equations used to explain allocation of consumption and a multi-variate logit model used to explain the proportion of inventories sold. The novel features of the model include:

- (a) Conditioning the behavior of the household on its initial stocks;
- (b) The use of transactions cost to define discrete differences between sellers and buyers of foodstuffs;
- (c) Testing for interrelationships between the structure of income sources and the willingness to sell foodstuffs; and
- (d) Structuring the model to make the consequences of demographic change clearly evident, even when the existing population is restructured into more or fewer households.