Cattle Marketing in Malawi

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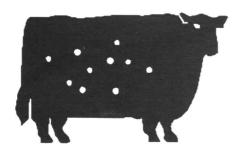
The Problem

One of the features of African pastoral systems is that livestock sales fluctuate widely among seasons and across years (Sandford 1983). It appears that during the dry season after harvest Malawian farmers have sufficient food and cash from crop sales so it is unnecessary to sell livestock. Thus dry season livestock prices rise because few animals are offered for sale. However, most livestock are sold during the growing season prior to crop harvest to raise cash for food and other necessities. This larger supply of sale animals during the growing season, combined with reduced demand due to cash earned from crop sales having already been exhausted, cause growing season livestock prices to fall. Thus stockmen generally receive low prices for their livestock because most are sold during the growing season when prices are low.

Livestock producers in Kasungu Agricultural Development Division (KADD), Malawi have two options for selling their cattle during both the growing and dry seasons of the year: a free-market auction and a fixed-price government market. Range cattle graze on native riparian pastures, forest, and mountain rangelands as well as on uncultivated fields and crop residues. Cattle are herded at all times during the growing (wet) season and are corralled at night. After harvest, during the dry season livestock graze freely without a herder and spend some nights uncorralled.

Range livestock are produced in Malawi as a supplemental enterprise to crop production and play a small but important role in the livelihood of Malawians. Annual per capita meat and milk consumption is estimated at 6.6 lb and 9.7 lb, respectively (Kumwenda and Kunkwezu 1987), compared to 124.6 lb and 238.6 lb, respectively, in the U.S. (Putnam and Allhouse 1994). Additionally, meat and live animals are sold as cash crops and hides are exported for foreign exchange. Cattle producers also earn cash by renting out draft oxen.

Cattle are sold to cattle dealers, cold storage companies, and at local produce markets. Sales to cattle dealers are often made at the homestead at low prices when producers



are desperate to raise cash. In contrast to crop sales which occur only once a year, livestock sales provide cash receipts throughout the year. Cattle are commonly held by producers as an investment and are sold only when cash is needed for items such as school fees or medical expenses.

Although economists expect a positive relationship between livestock price and numbers offered for sale, Simpson (1988) explained that social anthropologists instead use the concept of "target income". Once a pastoralist achieves target income, he or she sees no reason to surpass it. Instead, if higher prices enable fewer animal sales to achieve target income, the number of animals sold will be reduced, giving rise to the so-called "inverse" supply curve.

If cattle owners sold excess animals during the dry season, two benefits would result: (1) stockmen would receive higher prices for their animals and (2) fewer livestock would be present to compete for limited grazing during the growing season. Not only are cattle prices per lb higher during the dry season but cattle are in good condition during the first month or two after harvest because they are grazing riparian areas and crop residues. Thus, livestock revenues could be greatly increased and growing season forages protected if owners sold their animals as soon as dry season crop residues are depleted.

The Study

The objectives of the study were to (1) determine the effects on cattle prices of market type (free or fixed) and season of sale (growing or dry) and (2) determine the effects of prices on numbers of cattle sold.

Data were obtained through 450 livestock producer interviews and questionnaires in Kasungu Agricultural Development Division (KADD) during 1995 and 1996. KADD consists of five rural development projects (RDPs): Kasungu, Mchinji, Dowa East, Dowa West and Ntchisi (Fig. 1). All five RDPs were included in the study. Analysis of variance (ANOVA) was used to test differences in prices received and numbers of animals sold due to market type and season of sale and to test differences in cattle numbers sold due to price.

Results

Market type

Cattle prices at free-market auctions were generally higher than at fixed-price government produce markets regardless of season of sale. Cattle prices at government markets are set at the beginning of the year and remain constant

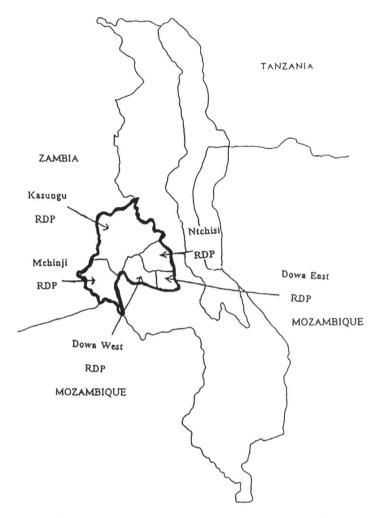


Fig. 1. Map of Malawi showing the boundaries of Kasungu Agricultural Development Division and five Rural Development Projects.

throughout the year while auction market prices are free to move with cattle supply and demand.

Season

As expected, prices at free-market auctions were generally lower during the growing season than during the dry season (Fig. 2) but the difference was not significant at standard testing levels (P = 0.06). Auction market cattle prices increased after harvest during the dry season from March to September and decreased during the growing season from October to February.

Cattle numbers sold

Households sold more cattle during the growing season when prices were low than during the dry season when prices were high (Fig. 2). In fact, the highest numbers of cattle were sold between November and March (the harvest month) and the least cattle were sold during the month of June. Thus season had a significant effect (P < 0.001) on number of cattle sold but cattle price did not.

Reason for cattle sales

A significant (P < 0.001) majority of households (63%) sold their cattle during the growing season, at low prices, to meet immediate demands for cash. A significant (P < 0.001) majority of households (54%) also chose free-market auctions over fixed-price government markets. Advantages of auctions listed by respondents included higher prices than at government markets, the opportunity to sell entire animals rather than carcass parts, and receiving the full price of animals all at one time. In fact, 90% of households responding stated that they preferred auctions over produce markets because of the higher prices. Still, a large portion of these respondents (46%) sold cattle at the lower priced produce markets. It seems, then, that although Malawian cattle owners are aware of price differences and respond positively to higher prices, these responses are overshadowed by the convenience of nearby produce markets and the almost universal need for cash during the growing season.

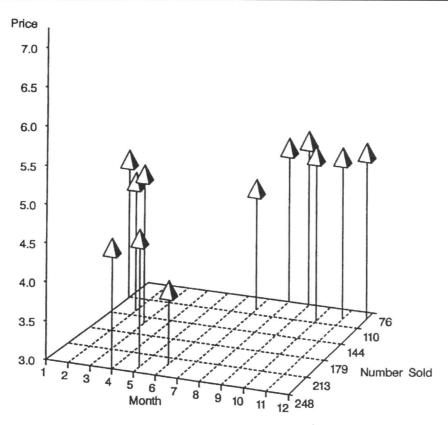


Fig. 2. Average auction market price (Malawi kwacha) by month and average number of cattle sold, 1991–93. Months are numbered from October = 1 to September = 12.

Summary

Livestock producers in Kasungu, Malawi sell cattle at both free-market auctions and fixed-price government markets during both the dry and wet seasons of the year. The objectives of the study were to (1) determine the effects on cattle prices of market type (free or fixed) and season of sale (dry or wet) and (2) determine the effects of prices on the numbers of cattle sold during the dry and wet seasons. Data were obtained through producer questionnaires and interviews and analyzed by ANOVA. As expected, cattle prices were generally higher at free-market auctions than at fixed-price government markets. There was no significant difference (P = 0.06) between cattle prices per lb after harvest and during the wet season. Significantly more cattle (P < 0.001) were sold during the wet season, when prices were generally lower, than after harvest. The driving force behind wet season cattle sales was not market price, but instead was the need by producers for cash to purchase food and farm inputs and to pay school fees and medical bills.

Literature Cited

Kumwenda, W.F. and E. Kunkwezu. 1987. Research on the use of draft animal power and mechanization in Malawi. Government Printer. Zomba, Malawi.

Putnam, J.J. and J.E. Allhouse. 1994. Food consumption prices and expenditures, 1970–93. USDA Economic Research Service. Statistical Bul. 915. Washington, D.C.

Sanford, S. 1983. Management of pastoral development in the third world. Chechester, New York, N.Y.

Simpson, J.R. 1988. The economics of livestock systems in developing countries, Farm and project level analysis. Westview special studies in agricultural science and policy. Westview Pre?s, Inc., Boulder, Colo.

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