

A note on improving the supply and distribution of animal-drawn implements in Zambia

by

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Abstract

Animal draft implements are manufactured in considerable numbers in Zambia, but their actual use in rural areas is limited. Lack of availability of implements in rural areas, poor quality and high cost of the implements, and the lack of credit facilities for farmers to buy equipment, are some of the reasons why animal traction is not more widespread. This paper discusses these factors, and offers some solutions.

Introduction

Zambia has a number of companies producing a wide range of animal-drawn agricultural implements. Despite this, the demand for these implements by Zambian farmers is not being met.

Farmers cite several reasons for their low level of use of animal draft implements:

- poor availability of implements in rural areas
- poor quality of implements
- high cost of implements
- lack of credit facilities.

Availability

Although manufacturers' warehouses are full of implements, spot-checks in the countryside show few implements being used in the fields in many areas. The problem is mainly one of a lack of aggressive marketing by the manufacturers: there seems to be no organised infrastructure for marketing—no networks of distribution or sales agents catering for the needs of the rural areas.

One solution would be for manufacturers to open sales outlets in all parts of the country and to make their products available through local merchants, farmers' groups, cooperative unions, etc.

Another solution would be for the implements to be manufactured in the rural areas, by local artisans (blacksmiths) who would be able to obtain raw materials from central sources. Donor agencies could play an important role here, by facilitating technology transfer and by supporting training of local craftsmen.

Quality

Poor quality of implements is largely a result of appropriate raw materials not being available on the local market. The Steel Board is the major importer of steel, and so this organisation should be encouraged to import the right quality and quantity of steel, and to make it available to manufacturers and local artisans. The government also needs to play its part in this process, by making foreign exchange available to the Steel Board.

Another problem is lack of quality control on the manufacture of implements. Some implements have been sold in the country without proper certification, largely because not all manufacturers can afford to carry out their own research, development and testing programmes. However, Magoye Research Station has the capacity and the equipment to carry out implement testing, and it is proposed that implement manufacturing companies should not be allowed to market any implements without certification from Magoye Research Station.

Price

One reason that prices of implements are high is that manufacturers are not able to sell sufficient of their products to enjoy the benefits of economies of scale. This, in turn, is largely due to the lack of an organised marketing infrastructure; even though the quality of the implements manufactured in Zambia is poor, farmers would still buy them if they were readily available.

Once an adequate marketing system is in place, several steps could be taken to increase the demand even further (which might, possibly, lead to further price reductions). For example, extension services could be encouraged to promote the use of animal traction technology by giving demonstrations, providing training and organising plowing competitions.

Credit facilities

Even if implements are readily available, at a reasonable price, many farmers may not have the resources to buy them. The provision of credit facilities is therefore an important factor in the increased use of animal traction. But providing financial assistance to farmers for the purchase of agricultural equipment is not always straightforward. For example, small-scale farmers are not always enthusiastic about taking out loans from the credit institutions because of past experience and because of the conditions that underline the loan facilities: many farmers get loans without fully understanding the terms and the consequences of failure to repay them. Also, loan officers are often not able to reach people in the countryside because of their own logistical problems. Furthermore, loans may not easily be utilised by farmers in remote rural areas if farm equipment outlets are located only in the towns.

Some suggested ways of overcoming these problems are for:

- loan officers to explain fully the terms of the loans to the farmers, including the method of paying back
- financial institutions to work through NGOs and local organisations in order to reach the farmers
- financial institutions and manufacturing companies to work together to facilitate the spread of farm mechanisation.

Other important considerations are that loan interest rates should be made favourable to the farmers, and that women farmers, who play such an important role in agricultural production, should be encouraged to use credit facilities.

Other observations

Two other factors are worth mentioning in the context of the spread of animal traction technology in Zambia.

First, even when credit facilities are available, farmers must be confident that they will be able to repay their loans, and hence must have a secure source of income. The present marketing system for agricultural produce in Zambia suffers from late payments to farmers, which obviously prevent farmers from being able to plan ahead financially. This system therefore needs to be reorganised.

Second, the successful use of animal-drawn implements depends on availability of well-trained and healthy work oxen. Efforts to spread animal traction technology therefore need to include such measures as making animals available to interested farmers, providing training facilities for farmers and animals, and supporting veterinary services.