Gender issues in animal draft power weeding technology in Zambia

by

E A Sakala

Head of Department of Agricultural Engineering, Natural Resources Development College PO Box 310099, Lusaka, Zambia

Abstract

Draft animal technology is becoming increasingly widespread as an effective alternative source of power for smallholder farmers. Increased power availability has led to an increase in area cultivated, and hence to a need for more labour for weeding.

Most weeding is done by women, usually by hand. The burden of weeding could be lessened if animal weeding technology available to men could be extended to women.

For weeding methods to improve, availability of tools and equipment, family size and socioeconomic aspects of households should be considered. Female-headed households need to be introduced to, and encouraged to use, animal draft power weeding technology. There is need for gender disaggregated data relating to weeding technology.

Introduction

Animal traction has been used in farming in Zambia for a long time, but men have dominated its application. Women provide much of the labour for agricultural production, especially for weeding.

Gender roles have had a negative impact on women. The ideal is that men and women should work together happily to increase agricultural production. Gender roles are changeable and the roles that hinder economic progress should be discarded. It is important that such roles are identified and studied for possible improvements.

Animal draft power technology should be available to improve the socioeconomic status of all households regardless of gender. The use of animal draft power can reduce drudgery and the time spent in the field. Animal draft power weeding technology is the most appropriate way to improve further on the utilisation of work oxen.

Since women produce most of the food consumed both in rural and urban areas, it is important that they are given special attention in improving their labour productivity.

Gender roles

Members of either gender have specific roles dictated to them by the traditional culture of that particular society. Many African countries have similar gender roles. Typical gender roles for Zambia are shown in Table 1; some roles are interchangeable and others are stereotyped based on upbringing.

Both men and women are heavily involved in farming activities. The gender provision of farm labour can be interchangeable. With the promotion of draft animal power, more land is being utilised for increased production.

Very few women in rural areas own land compared with men. Women are also disadvantaged in obtaining loans and other credit facilities. A deliberate policy is required and presentations have been made in the Fourth National Development Plan in Zambia (Women in Agriculture).

Table 1: Typical gender roles in Zambia

Feminine	Masculine
Home	
Household chores	General repair work
Traditional	
Mud smearing when building	Hunting House building
Work	
Secretarial work Cooking/sweeping	Managerial/ administration
General	
Nursing Farm labour	Engineering Farm labour/staff

Women, weeding and extension

In addition to performing household chores women are also required to participate fully in crop production. In Zambia women contribute 80% of the required farm labour.

Women do much of the weeding in Zambia. Weeding has been described as one of the most demanding jobs in farming. It is claimed that women have the virtue of patience, with the result that they can withstand long hours of doing the same thing better than men.

Traditionally, a woman is expected to give priority to working in fields belonging to the man as head of the household. These may be fields of cash crops. Later she may attend to her small field of groundnuts. Groundnuts are said to be a feminine crop and are grown in such a way that draft animals can only be used for plowing. If both genders are to be given the same opportunities 'female' crops should be planted in rows at a spacing sufficient for passage of animal-drawn weeding equipment.

Most weeding on farms is carried out by women using hoes; this is a tiring occupation. Where animal draft power has been introduced for plowing, large areas of land have been opened up. Since animal draft power weeding technology is not widely used, the work of women in weeding has increased. The most appropriate solution would appear to be the introduction of animal daft power technology for women.

Traditionally, most draft animals are owned and used by men and women are not expected to own animals. Since gender roles are changeable, both men and women should be accorded equal opportunities to acquire and own animal draft power technology.

Although it is not a custom in most regions of Africa, evidence exists that women can handle oxen as well as men. Women can also learn to use weeding equipment in the same way as men. The Mbeya Oxenisation Project in Tanzania provides a good example of women excelling with draft animals at the level of men (Marshall and Sizya, 1994).

Extension messages should be geared to both male and female farmers. Invitations and courses should so structured as to encourage both genders to attend. Employment of female extension workers may benefit female farmers.

Animal-drawn weeding equipment

Equipment currently available for animal draft weeding consists of cultivators, plows and ridgers. The successful use of these depends on the skill and experience of the operator.

Cultivators cut the weeds between rows and thus the crops should be planted in rows. Adjustments include inter-row spacing and changing tines and sweeps. Sweeps work smoothly compared with tines and may be preferred by women.

Ridgers can be successfully used for weeding. The soil needs to be in a friable state, otherwise more draft will be required which will exhaust both oxen and operator.

Plows, though not popular for weeding, can do a job similar to that done by a ridger. Plows can be used for weeding crops like potatoes grown on ridges.

As women are generally smaller than men, the weight of the equipment is import. The operational height as well as adjustments available on the equipment should be assessed.

Conclusion

Women and men need to work together in harmony. They are interdependent on each other. Men have generally done better in the use of animal draft power technologies for plowing, while women have been left to work hard at weeding time. Current projects should emphasise the participation of women in the farming activities at the same level as men.

Weeding is time consuming and where possible should be carried out using animal draft power technology. Women should be organised and trained to handle oxen. There is a need for them to own cattle either through purchase or inheritance. Extension programmes should give special emphasis to women farmers. They should collect gender disaggregated data relating to weeding technology.

Reference

Marshall K and Sizya M, 1994. Women and animal traction in Mbeya Region of Tanzania: a gender and development approach. pp. 266–271 in: Starkey P, Mwenya E and Stares J (eds), *Improving animal traction technology*. Proceedings of the first workshop of the Animal Traction Network for Eastern and Southern Africa (ATNESA) held 18–23 January 1992, Lusaka, Zambia. Technical Centre for Agricultural and Rural Cooperation (CTA), Wageningen, The Netherlands. 490p. ISBN 92-9081-127-7