

Animal traction development and gender: experiences from Western Province, Zambia

by

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Abstract

The use of oxen in Western Province has been dominated traditionally by men. Between 1989 and 1995 the Western Province Animal Draft Power Programme ran training courses targeting women farmers to increase their awareness, confidence and stimulate their interest in animal draft power technology. These were followed by credit schemes to increase access to oxen and implements. It was found that the initial inability of women to handle oxen and implements was due to traditions and cultural biases which had often excluded them from such tasks, believing that they were a 'man's job'. As a result of courses and demonstrations women farmers developed the confidence to approach oxen and use them for draft operations. After several courses and demonstrations, some women farmers are benefiting from the technology through reduced drudgery and increased independence from men. The paper describes the programme's methods and experiences and makes recommendations for future programmes, stressing the need to take into account the existing cultural aspects of animal use in the target area.

Introduction

The Western Province Animal Draught Power Programme was initiated in 1989 with the objective of contributing to the development of sustainable farming practices by increasing, intensifying and diversifying the use of animal draft power by the community in priority areas. The main objective was divided into seven immediate objectives, one of which was: "Introduction and implementation of proposals to ensure wider access to animal draft power considering the needs and abilities of various target groups and the existing inequality between male and female farmers" (Department of Agriculture, 1992).

The programme was implemented in two phases. The first phase began in 1989 and ended in 1992. During this period data collection and training of farmers and field workers were carried out throughout the province. Phase II began in January 1993 and ended in December 1995. During this phase the programme targeted areas with high potential for adoption of animal draft power technology.

Although Western Province has the second largest cattle population in Zambia, with about 541,000 head of cattle (Livestock census, 1994) the use of oxen and animal draft power technology has been limited. In the southern and central provinces of Zambia women use animal draft power technology, but in Western Province the technology has been confined mainly to men (personal observation). It has been recorded that women's fields are usually plowed late during the rainy season, mainly due to women's limited access to animal draft power (Vijfhuizen, 1992). Since women do most of the work even in male-owned fields the Western Province Animal Draught Power Programme deliberately targeted women with the intention of contributing to a reduction of farm drudgery, especially for weeding and harvesting.

To involve women, the programme first trained female farmers, to increase their awareness of the benefits of the technology, and second aimed to increase their access to oxen and implements. The extension and training activities during the first phase of the programme included both male and female farmers in the priority areas. In addition, mobile courses and demonstrations specifically for female farmers were carried out. These included courses on ox-plowing, weeding, ridging, groundnut lifting and animal management. The courses and demonstrations were popular; for

example in Kaoma District 753 women attended. During Phase II of the programme extra attention was given to resource-poor female-headed households through oxenisation loans for female farmers.

Increasing access to oxen and implements

Early in the programme it was realised that lack of access to oxen and implements was a major constraint to adoption of draft animal power by women. In Western Province cattle have been kept traditionally by men, and women have no 'business' with cattle even if they own some (Beerling, 1986). It is impractical to maintain a kraal for only two oxen so even if a woman had a pair of oxen she would keep them with relatives, who are often men. In this case the men would often give her second priority on the use of the oxen and would ensure that they plowed their own fields first.

To make it possible for women farmers to own oxen and implements the programme introduced barter loans (Leeuwen & Siyambango, 1993). Farmers were given cash loans to buy oxen and implements, and repayments were made in kind, using maize. Nineteen loans were made, including ten to female farmers. Repayment in general was good and by women farmers was 100%. However, it is not known whether the good repayment was a result of benefits accruing through the use of oxen and implements or from other sources of income.

Since adoption of animal draft power technology was expensive for farmers the programme introduced an Agricultural Step-Up Programme as a way of increasing the adoption of draft animal technology among women (Department of Agriculture, 1994). In this programme female farmers were brought together, wealth ranked and assisted to come to a common decision of investment by a female 'Animal Draft Power Promoter'. From their savings, which were topped-up by the programme by 50%, the farmers were allowed to buy some fertiliser and seed for maize. It was hoped that timely maize planting followed by good rains would result in better yields, resulting in income that would enable farmers to invest in animal power technology if they wished. This programme was tried for the 1994/95 season and involved 250 women farmers, mainly from resource-poor female-headed

households. Unfortunately, it did not yield the results expected because of drought.

Gender experiences in animal traction development

The following are some of the experiences of the Western Province Animal Draught Power programme relating to the training of women.

It was found that the initial inability of women to handle oxen and implements was due only to traditions and cultural biases which had often excluded them from such tasks, believing that they were a 'man's job'. As a result of courses and demonstrations women farmers developed the confidence to approach oxen, span them, and guide them into the furrow to start plowing. However, after training they had little opportunity to practise on their own fields because of lack of access to oxen and implements.

Men did not want women to learn to plow because they thought that by doing so the status of men would be diminished. Traditionally, very few women are involved in ox-handling; they are therefore unfamiliar with oxen and tend to fear them. This makes it difficult for them to plow. Draft animals are regarded traditionally as wild animals which should be approached by men who seem to be stronger than women. However, it was observed that women who have plowed before are confident and more ready to use the skills. It is important to educate men about the benefits of women's involvement in animal draft power activities.

Few female farmers use their skills after training because of help from husbands or relatives. Women from female-headed households are more likely to utilise the skills acquired from the courses and demonstrations than those who are married or live with male relatives.

During plowing courses, women expressed their desire to learn how to yoke oxen, proper plow handling, guiding oxen into the furrow and at headlands, plow adjustments, function of plow parts and maintenance. Most women preferred these topics, as they contributed to making them more independent from their male counterparts (Hocking, 1991). Training in ox-management and health care was requested. Some women felt that since the opportunities for women to use oxen had been advanced by the courses and demonstrations,

it was important that women should be aware of how they can best keep oxen. The farmers considered that diseases were contributing to the loss of productivity among oxen and as such their control or treatment would be of paramount significance to women farmers involved in animal traction development.

Most of the women who attended animal draft power courses were divorced, widowed or single.

Women tend to have greater freedom of expression and ability to respond positively when they are trained separately from male farmers. Mixed groups resulted in women letting men to do the heavier tasks.

Some women mentioned that they already had many activities to perform and did not have enough time to plow as this would increase their workload.

Besides being responsible for household tasks, women are involved in labour-intensive production tasks including field clearing, plowing, harrowing planting, weeding, ridging and harvesting. Weeding is believed traditionally to be a task for women and becomes a major labour burden to women farmers, especially in the absence of animal draft power.

Another reason is that women, especially, female-headed households have less access to oxenisation loan facilities due to lack of collateral. As a result this leads to limited animal draft power ownership and access. The barter loans to a large extent under-played the need for collateral.

In general, women complained that the courses were too short (eg one-week plowing course) for them to master the skills of plowing and ox handling (Simwinji, 1994). In addition lack of practice after training was perceived to be a problem (Simwinji, 1994). It was generally accepted that a refresher course just before the rainy season started would be helpful.

Benefits to women involved in animal traction technology

The benefits of animal power mentioned by women farmers included:

women farmers acknowledged that yoking and plowing on their own helped them to become independent and enabled them to increase their crop production

the demonstrations of reduced labour requirement through the use of animal draft power weeding and harvesting implements resulted in an increase in area cultivated and generally reduced farm labour demand for farmers using animal power

women who mastered the skills did not need to hire someone to plow or handle oxen for them since they could do it themselves

the skills taught could increase the income of women farmers through hiring by other farmers in the community. However, observations show that this is rare.

Conclusions and recommendations for future programmes

Animal draft power technology programmes should target women to provide the opportunity for both women and men to benefit from the technology. This is important because whilst the majority of men already have cattle-related skills, women do not.

Teaching women how to plow provides an opportunity for more effective use of animal draft power technology and increases the total input of plowing power into farming systems. With animal draft power, the potential for commercialisation can be better exploited. Increased production and the potential for cash crops could then lead to an increase in the standard of living of the households involved.

Marital status influenced the impact of the courses and demonstrations. Single women made use of the opportunities to apply their skills more than married women, though married women seemed to have more access to oxen than single women.

Women who have already used oxen are more likely to realise the advantages of improving their skills and thus are more likely to attend a course than women who have not used oxen before.

Since labour-intensive operations such as weeding and groundnut growing are performed mainly by women, increased use of animal traction technology for these

operations would reduce the labour production burden which they currently experience.

Prior to training courses it should be made clear that participation is open so that farmers do not feel that they have to be selected before they are able to attend.

Although specific courses should be targeted at women, men (particularly husbands) should also be involved during the sessions or meetings. By so doing more women are likely to attend, as the social stigma would have been removed.

Course time and duration should be adjusted to suit the needs and the farming situation in an area (eg plowing course should be set at the time of plowing operations and this could enable participants to correlate theory to practice of plowing).

Female-headed households are in a worse situation than women from male-headed households in terms of need to plow on their own. Special attention could be given to them as a priority group requiring the knowledge. Access to credit and other agricultural inputs could improve their standards of living.

Field officers associated with animal draft power programmes need to be receptive to female farmers. Cultural barriers can be overcome by adequately educating or informing men about the benefits of women's use of animal draft power.

It is advisable to select a few women (head-of-households) from target groups to attend an intensive animal draft power course who could become trainers of other women in animal draft power gender programmes.

Plans for introduction of use of draft animals by women should take into consideration the

existing cultural aspects of animal use in the target area.

Follow-up of training courses could be conducted shortly after the initial course programme to assess the results.

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