# Women's participation in weed control with draft animals in Mbeya, Tanzania

by

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# **Abstract**

Delayed or poor weeding is known to result in reduced crop yields. Hand-hoe weeding is both inefficient and laborious, but is still practised in preference to alternative technologies, including animal-drawn weeding. One of the reasons why the adoption of seemingly reasonable alternative technologies is hindered is that they are promoted to a gender group rather than to a household.

This paper discusses the experiences of the Mbeya Oxenisation Project in promoting animal-drawn technologies for weeding and transport, with emphasis on difficulties in reaching both male and female farmers.

#### Introduction

In tropical agriculture weeds cause more crop yield losses than other pests and diseases combined. Efficient weeding would therefore seem to be a high priority for tropical farmers.

A survey of 511 farmers in 18 villages of Mbeya Region, in the Southern Highlands of Tanzania, suggested that nearly 70% of the work force for hand-hoe weeding is female. Efforts by extension agents to promote alternative weeding technologies using herbicides and animal-drawn weeders have been targeted mainly towards male farmers. Ox-training centres, the main sources of animal-draft training, favoured men and discriminated against women by taking them away from their family responsibilities. Introducing a technology to only half of its potential users limits its adoption.

One of the reasons why animal weeding technology might not be adopted for maize is that, although it is a 'men's crop', hand weeding is 'women's work' and driving oxen is 'men's work'. Because of the workload in agriculture all members of the family have to be involved, so an advantage will be gained when the contribution of women is recognised.

Both genders should be involved in learning about animal-powered weeding technology.

If the workload of women is reduced by removing the drudgery of the hand hoe, both men and women should have more time for other socioeconomic activities, and to improve living standards.

In general, the extension service does not address the farmers as farming families, but tends to direct most of the effort towards male farmers. The few agricultural extension workers trained in animal traction technology seldom pass on information to women farmers.

The Mbeya Oxenisation Project (MOP) started in 1987 as a joint venture between the Government of Tanzania and the Canadian International Development Agency (CIDA). It had a mandate to assist smallholder farmers to use animal traction in order to increase their agricultural production. Emphasis was placed on the development and promotion of appropriate weeding technologies, and using animal power for transport. The project began with four components: administration, extension, marketing and engineering.

Quite early it became clear that, within the areas where MOP was working, weeding and transport were mainly the responsibility of female farmers; but the project staff seemed to be talking mostly to men. The project designers had assumed that women would be involved, and would not be adversely affected by the project, but gave no guidelines as to how to ensure this. Therefore, in 1988, a Gender Issues Section was initiated in MOP. It is now called the MOP Women's Section.

This paper presents the experiences of the MOP in designing strategies to ensure that women were effective participants and beneficiaries in the project. This meant not only initiating activities with women in the rural areas, but also starting a gender sensitisation process with

all MOP staff to promote integration of gender concerns in all sections.

# Approaches to female participation

Animal traction has been, and continues to be, a male technology. This is evident in the literature and MOP reports, often merely by failing to mention the role that female farmers play in the development and use of animal draft technologies. This exclusion translates into research and development activities and agricultural extension services being directed to men, and the opportunities and constraints perceived by men. One could almost forget that women are farmers. This perception is supported in Mbeya Region by the fact that men are the owners, and the main users, of oxen and animal draft technology.

However, it became clear that women were interested in using animal power, were capable of controlling oxen, and could definitely benefit from being able to use animal traction for various activities. This realisation highlighted another major issue to be faced: that the traditional extension approach being used was not effective in reaching female farmers, and that women were being left out of the development process. The lack of awareness and self-confidence of women prevented them from demanding the assistance which they needed in order to increase their agricultural production, and lessen their workload.

Three main strategies were pursued to try to change this situation, with MOP working at household level, with women's groups and with gender-neutral groups.

#### The contact household approach

The extension section of MOP was already working with contact farmers in target villages, but these farmers were all men. Efforts were therefore made to adopt a contact household approach: extension staff would insist on meeting both male and female members of the family. They would try to understand the perceptions and needs of both, as related to agriculture in general, and the use of animal traction in particular.

This was often difficult, as the men would not see the reason to include their wives in the discussions, and the women were often very shy of meeting outsiders. An activity which had a big impact was taking both the man and one wife to seminars where they were trained in

various aspects of using animal draft technology. It was discovered that the women usually felt uncomfortable using oxen because they had no skills. When they were given the chance to learn in an encouraging environment, they were eager students.

The contact household approach proved to be very useful in testing appropriate implements and extending technology to neighbouring households. Thirty-five contact households in 15 villages were reached, resulting in 174 farmers (including 56 women), and 56 neighbouring farmers who were non-oxen owners, adopting the weeding technology. This approach was, however, very time-consuming, and required consistent and frequent follow-up.

# Women's groups

The idea of women working together for common goals is well known and well accepted in the Mbeya area. Many villages already have women's groups. A major advantage of this approach is that many women can be trained at one time. This strategy is also useful for developing skills in technical areas, and for creating an environment in which women develop self-confidence as they manage and control resources and activities.

To ensure that women were in control, groups were provided with loans to purchase oxen and equipment, and were given land from the village government. The groups were then assisted to manage an agricultural production project based on animal traction. The purpose of this project was two-fold:

- to enable each woman to develop skills in using the oxen so that she could also use the group oxen in her own private fields, or so that she could use her husband's oxen
- for the group to generate income to be used for other projects.

MOP has worked with 14 women's groups, each with an average of 15 active members. These groups have developed through three levels, as follows.

#### First level: new groups

Groups at the first level have had one year working with the project. Regular follow-up and assistance are still needed. Many group members have limited knowledge and skills in the use of animal draft technology and the various animal-drawn implements.

#### Second level: mid-groups

Groups are considered as second level after two years' support by the Project, when about 50–70% of the group members are able to use animal draft implements for various field operations. Competitions are held within the groups to increase efficiency. Regular follow-up is needed to update them with the technology.

# Third level: mature/old groups

Groups which have been supported by the Project for more than three years are qualified in the use of animal draft implements: 80–95% of group members are able to work with such implements for various field activities. Third level groups can demonstrate the technology to others.

The experience of working with women' groups has been generally encouraging. Some of these groups have their own pair of animals and equipment, and others are using household resources. MOP has recorded an ever-increasing number of women from the groups developing skills and confidence to use oxen for various activities. The organisation and management level of the groups has also increased substantially.

# **Gender-neutral groups**

MOP is also trying to assist women by working with mixed gender farming groups (gender-neutral farmer groups). This is an effective way to encourage men and women to work together, for women to gain confidence, and to change men's perceptions of women. More than 300 women have adopted weeding technology through 50 existing groups. They are able to weed in their own fields using oxen.

# Extension of animal draft technology to women

In order to address gender issues, animal traction technology was used as a point of intervention. It was necessary to provide study visits and training in ox handling; use, care and maintenance of implements; yoke making; animal health; and feeding regimes for draft animals. Besides the training, however, requirements for women's groups were more diversified, and included regular instructional visits and, for motivation, group competitions on animal-draft use. Also credit in the form of animals and implements was provided to qualified groups to enable more access to, and control of, the technology.

Training in the form of seminars/workshops also centred on book-keeping, group management and small-business development skills.

Demonstrations on the use of animal draft implements are usually carried out for all groups during the first year, then followed by regular visits. Group competitions are carried out to increase women's self-confidence in using the various implements, and have proved to be the best method of learning at all stages from plowing to transportation of crops from the fields.

Group exchange programmes help women to learn from one another. These are done within MOP groups and with groups in other projects such as the Kimani Irrigation Project, the Women in Irrigated Agriculture and the Agricultural Development Programme.

A major benefit that women derived from animal draft technology was a reduction in the time they had to work on the fields. For example, one hectare can be plowed with oxen in 2.5–5 days, whereas cultivating the same area with a hand hoe takes 2.5–5 weeks. Weeding one hectare takes 7.5–10 hours with oxen and 5-7.5 weeks with a hand hoe. Women can use the time saved to attend to other household activities such as taking care of children or working on income-generating projects (brewing local beer, mat-making, gardening, etc). Animal draft technology can also reduce women's drudgery in other ways: for example, instead of transporting harvested crops on the head they now use ox carts.

# **Institutional linkages**

As well as the village-based activities, MOP Women's Programme (formerly the Gender Issues Section) has also directed energy to other challenges. One of these is the facilitation and support of a Regional Women's Steering Committee, which has representatives from five projects working with rural women in the region. The purpose of the committee is to encourage sharing of information and resources, and to try to ensure that a common 'development approach' is being followed with rural women in the area. Representatives from government ministries are also included.

MOP Women's Programme staff also organise gender sensitisation training for MOP staff. The objective is to assist everyone to develop his/her skills in gender sensitive project planning and implementation. In this way, everyone is responsible for ensuring that their activities effectively involve women, and that women benefit. This is seen as an ongoing process of understanding our own perceptions of gender issues, and our role as promoters of change.

#### **Constraints**

# Failure of Ujamaa groups: a bad example

In the past, community-based groups were organised by the Government of Tanzania to work on communal fields (Ujamaa). The purpose of these groups was income-generation for self-reliance. However, nearly all these groups failed, as not enough support was given in the areas of financial and managerial skills. Therefore working in groups for common gain is viewed with suspicion by most farmers. Women's groups were also organised by the government to start income-generating projects, but these also failed due to lack of necessary support. Women lost confidence that they could succeed in group activities. Women were also generally outside the mainstream of development, were used to being left out of new initiatives, decision-making bodies, etc, and therefore have had no chance to develop skills in these areas.

# Control of resources

Men generally control access to, and use of, oxen and equipment, as well access to the skills or training needed to use animal traction.

#### Concerns other than animal draft technology

Women's concerns are all interrelated, so it is important to recognise their priorities and address them first. It is difficult to separate out the use of animal draft technology, without also addressing other issues.

#### Traditions inhibit gender awareness

Women could be interested to learn about and use animal traction, but often lack the self-confidence to try; using animal traction is usually considered the work of men.

# **Conclusions**

'Gender awareness' is the responsibility of all people working in development.

Women have been assumed to be passive beneficiaries from the increased use of animal draft technology. Little recognition has been made of the division of labour by gender in Mbeya Region. Also, access to and control of resources by men and women has not been explicitly mentioned or addressed. It is not surprising, therefore, that the MOP found itself talking only to men about the agricultural problems of men.

Rural women are very busy with their production and reproductive activities, and see lack of time as a major problem. Their concerns are all interrelated, so it is important to address what they define as priorities. Promoting a new 'role' for women will necessarily take a long time, and will need a lot of support.

Women often feel uncomfortable learning animal draft skills if men are around: working in groups allows them to gain self-confidence while also gaining new technical skills. The group approach also challenges the 'status quo' by allowing women to own and control oxen and equipment.

If specific attention is not given to the inclusion of women, they will not benefit from animal draft technology, and in many cases their work load will be increased.