



## The Oxen vs. Donkey Debate

In all the countries covered by the study except Senegal, cattle and draught oxen are seen as belonging to the men. Women use draught oxen only when their men are not available – very often nowadays – and where there are no taboos against

“We push ourselves to finish weeding a big field in a few days.

Most women lose weight during the weeding season.”

Women’s group, Zambia

“We really overwork ourselves when we are weeding.”

Women’s group, Zimbabwe

“Without weeding do not expect any harvest. The back has to ache to conquer the weeds!”

Women’s group, Zimbabwe

“Oh, weeding is the most taxing job, both in energy and time, because you have to bend down and work carefully not to damage the crop, pull out the weeds and shake them. At the same time, you want to finish the operation before the weeds outgrow the crop.”

Women’s group, Zimbabwe

“It is weeding that almost kills women!”

Men’s discussion group, Uganda

women handling bovines. Women’s use of draught oxen is thus really a case of ‘necessity being the mother of invention’ because it is not part of their cultural tradition. Senegal is an exception, because the horse provides the main source of draught power in that country; and horses are as equally the preserve of men in Senegal as oxen are elsewhere.

Donkeys have certain advantages and disadvantages. On the positive side, they are much cheaper to buy than oxen or horses; they are easier to train than oxen; they are hardy and survive droughts much better than oxen; they mainly fend for themselves, browsing on any sort of shrub or plant even in the dry season; and there are no taboos against working with them – women, children and men all doing so with equal ease.

Some development specialists, however, argue against using donkeys (see the Zimbabwe country report). The disadvantage of donkeys is that there is no prestige attached to them: you cannot buy a wife with them; you cannot give one away as a wedding present; you cannot eat them; and, when they die, you have to bury them like a human being. Their only use, therefore, is as a source of power; but as they are lighter than oxen, they do not even develop

much of that. Donkeys are for the poor and, even if you own 40 of them, you are still considered poor. In short, it is better, or so the argument goes, to concentrate on improving cattle because they have a social and economic value in rural life that goes far beyond merely providing draught power.

The authors of this report do not share this negative view of the donkey. It is precisely because they have no prestige, are cheap and hardy, require little looking after, and have no taboos governing their use, that they are a *priori* more accessible to poor women.

### Women's Hardest Job

Almost unanimously, the feeling among rural people was that hoeing is the hardest and most time-consuming job that women do on the land. In Uganda, some groups considered land clearing and preparation to be the hardest task, while others in Zimbabwe felt that planting and harvesting were harder because there was greater pressure to get these tasks completed. However, weeding was never ranked lower than the second-hardest job and, overall, there can be no doubt that it is enormously taxing on women's energy and time. It was only in Senegal, where inter-row cultivation with animal-draught traction is the norm, that weeding was given less prominence in the discussions, possibly because long-handled push-pull hoes are used for this task.

In every country reviewed, weeding took up more days in the field than any other operation. Minimum estimates of the days spent weeding were 60, even in Senegal. In Uganda, this figure increased to as much as 120 because of the country's two cropping seasons. In Zambia, with a single cropping season, the estimated time spent weeding was in the 90-120 day range. Land preparation, when done by hand in Uganda and Zambia, was not far behind in terms of numbers of work days, but nowhere did any operation take longer than weeding.

The most significant findings were in Zimbabwe, because the research team in that country found it easier to discuss how long was spent **per acre** on the different farm operations, rather than the total days spent per year. The groups immediately differentiated between the days spent hoeing an acre, with or without passing an animal-drawn cultivator down the inter-row space. The difference was truly staggering: for maize, it was two-to-four **days** of weeding per acre after animal-draught inter-row weeding, compared with two-to-four weeks if the entire job had to be done by hand. Randomly-planted groundnuts required three-to-four **weeks** of hand-weeding per acre, while broadcast millet called for one-to-two **months** of thinning and weeding per acre.

The importance of this finding and of the fact that most women see weeding as their hardest and most time-consuming task, is that weeding naturally emerges as a priority area for trying to bring about improvements in production technology.

## Differences in the Tools Used by Men and Women

The traditional gender connotations attached to tools – for example, that axes, ploughs and cultivators belong to the men while hoes, sickles and other harvesting tools belong to women – have largely disappeared. While, of necessity, women have been

Tool or Implement	Prices in US \$	Remarks
Traditional hoes made by blacksmiths	1.00-4.25	Cheapest hoes in West Africa, most expensive in Zambia.
Imported/industrial hoes	2.50-8.00	Normally \$3-4. Most expensive: hoes from South Africa and Zimbabwean hoes imported into Zambia.
Animal draught cultivators/ ploughs built by blacksmiths – Burkina Faso and Senegal	38-40	Mainly for donkey or horse draught traction.
Rigid three-tine cultivator built by factory in Senegal	65	For donkey or horse draught traction.
As above, but spring tine cultivator	108	
Ox-ploughs industrially-built in Uganda and Zimbabwe	65-105	
Five-tine ox-cultivator	85-110	
Zimbabwean plough in Zambia	145	
Zimbabwean cultivator imported into Zambia	240	
Single row planter	165-208	Lowest price is for Zimbabwe, the highest for Senegal.

forced to use all available implements and tools, they still tend to use lighter hand tools. This is often achieved by a man passing his hoe to a women once much of its original weight has been lost through wear.

## Replacement of Tools

In Burkina Faso and Senegal, hoes need to be replaced every year because the blacksmiths use poor-quality scrap steel. In Uganda, Zambia and Zimbabwe, where there are more supplies of industrially-produced hoes, or of hoes made by blacksmiths using high-quality steel from worn-out ploughshares or tractor-drawn implements, the life of a hoe was calculated to be anything from two to 15 years. Pangas or machetes were said to last four to six years on average. Ploughshares were changed at least once a year, and the landside and land wheels on ploughs were said to wear out almost as quickly. In Zambia, breakage, theft and loss, rather than wear, were often mentioned as the reasons for replacing tools.

## Blacksmith – vs. Industrially-Made Tools and Implements

A choice between these two classes of tools and implements was not always available in the countries reviewed. However, the general consensus of the discussion groups was that the industrially-produced tools were much more expensive. In some countries, the industrially-produced tools were considered to be of better quality and to last longer, except in Zimbabwe, where blacksmiths provide excellent tools.

In Uganda, where the Cock brand hoes from China dominate the market, rural groups – and key informants – stated that fakes or copies of the original Chinese hoe were being imported, some from India. However, none were as good as the original.

In countries where there was a choice between industrially-produced tools and/or animal-traction implements and those made by blacksmiths, most groups expressed a strong preference for the latter. Lower prices were a major consideration: for example, animal-draught implements produced by blacksmiths in Senegal and Burkina Faso cost about half those produced on an industrial scale, and the hand tools produced by blacksmiths in Zambia and Zimbabwe are about 30% cheaper than those made in the factories. However, apart from the price, people said they could negotiate credit and discounts with blacksmiths; that they could barter farm produce for tools; and that it was easier to get them repaired. There was also a sense of community solidarity when buying from local blacksmiths, as already mentioned in connection with the caste system in West Africa.

“As long as hand hoes are used by human power, there can be no increase in production.”

“Improving hoes will not increase production. The only solution is replacing them with ox-drawn tools.”

Women’s and men’s groups in Zambia

“Animal traction makes the difference between night and day!”

Women’s group in Burkina Faso

“We don’t use the cultivator. We just watch it lying there.”

Women’s group, Zambia

“Some marriages have broken down because women failed trying to work with the existing and heavy animal drawn implements.”

Men’s group, Zambia

## Prices

The prices of tools and implements in the table below provide a general picture of the situation. The highest prices cited were in Zambia, and the lowest in Burkina Faso and Senegal.

## Who Decides Which Tools to Buy?

In the countries of eastern and southern Africa covered by the study, most people said that although a husband and wife may discuss the matter, it was usually the man, or the head of the household (man or woman), who took the final decision.

Although the responses which emerged during group discussions in West Africa were quite different, everyone stated that it was the men who took the decisions. It is likely that this response was given for socio-cultural reasons, because in some societies it is not acceptable for women to state openly that they share with their men in making decisions.

Caution must be exercised, however, regarding the idea that men are responsible for all decision-making. This could lead development staff to concentrate their efforts on men despite the fact that women are just as important, even if less obviously so, in any process of change under discussion.

Most groups felt that, while little could be done about the basic design of their hoes, there was great scope for improving their quality and durability. In Uganda, there was much praise for the so-called 'Finland hoe' imported by an early IFAD project. Its lightweight and sharp edge, even over long use, are characteristics that all women required of their tools, quite apart from effectiveness and durability. In Uganda, where the Cock and Chillington hoes are most widespread, most women were using the 3 lb. version and knew nothing about lighter models.

Many women's and men's groups directly or indirectly expressed the view that the

"If they are easy to discuss with we are willing to work with them."  
Comment about working with researchers and designers to improve implements during women's discussion in Zimbabwe

"Good things sell themselves."  
Men's group in Burkina Faso

hand-hoe, however good, could never significantly increase production. Several interviews with specialists confirmed that it was impossible for any woman to keep more than about 1 ha free of weeds in a typical cropping season. This fact alone pointed-up the limitations of the hand-hoe. In this connection, it should be borne in mind that there is an ever-increasing shortage of labour in many rural areas of Africa.

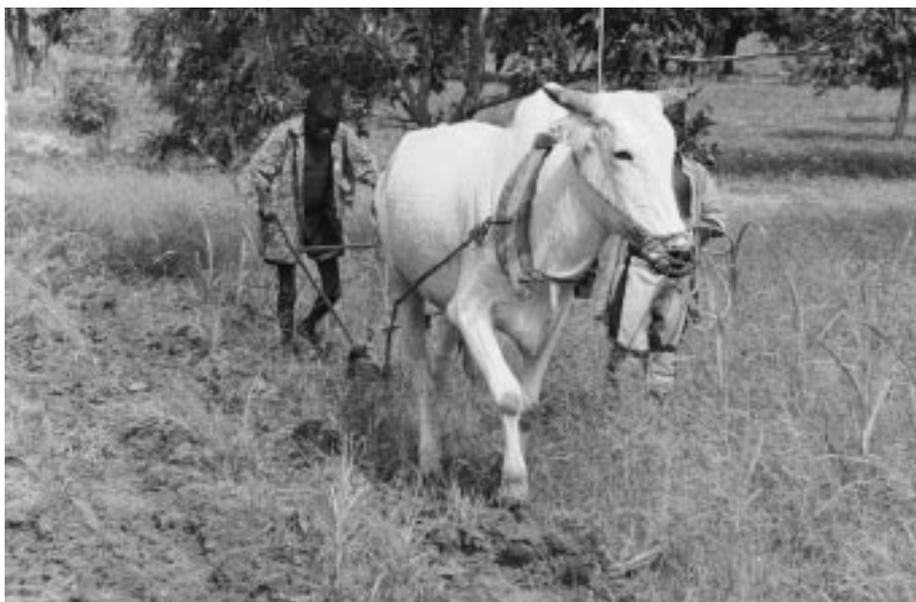
In short, even when other outputs such as fertilizer and improved seeds are available, it will be difficult to raise agricultural output much above subsistence level as long as the hand-hoe remains the primary means of tillage and weeding.

In countries where women's use of animal traction was very limited – Burkina Faso and Senegal – the women's groups generally felt that their problems would be solved if they could only have access to this technology and be trained to use it. They also believed that donkey-powered traction would be the most suitable for



**Zimbabwe**

Women harrowing with donkeys. Harrows were not seen in other countries of the study. There are no taboos anywhere on women working with donkeys.



**Senegal**

Inter-row cultivation with a single ducksfoot tine in a very poor crop. Working with cattle is traditionally a man's task, though where no taboos exist against it, women are increasingly taking over. Women in all the countries of the study want more access to animal traction.



**Zimbabwe**

Women harvesting vegetables. The baby they frequently carry on their back while in the fields hardly makes their work any easier.



**Burkina Faso**

Women considering their tools during a Focus Group Discussion.