

Donkey traction in Tanzania: some critical issues

by

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Abstract

Donkeys are associated with poor people and their status in areas where they are used is often low. However, donkeys are disease resistant, have survived where other animals could have perished and are regarded as docile and friendly. They are suitable for women to use. Oxen and horses demand much attention from their owners. Oxen are edible, susceptible to diseases, and have social value as symbols of wealth and influence. The monetary value of oxen appreciates over time.

Due to lack of appropriate harnesses, plows and carts, institutional weaknesses and financial limitations, our ability to use donkeys efficiently is limited. Apparent 'myths' in donkey traction are a function of our inability to understand donkeys and their potential. False perceptions about donkeys can be removed through interventions such as awareness campaigns, appropriate technological, financial, extension and training initiatives.

Introduction

Animal traction in Tanzania is progressing at a slow speed. Development policies in general and agricultural development policies and strategies in particular play a decisive role in shaping the development of animal traction in Tanzania (Sosovele, 1999). Currently, the government pays only lip service to the development of the agricultural sector.

On the positive side, there is a gradual expansion of animal traction use in the predominantly pastoral communities of Maasai and Barabaig in Arusha Region, and in Korogwe District, Tanga Region. In the former areas, this expansion resulted from changes such as a decline in pasture land, recurrent droughts and increased animal diseases which have forced pastoralists to focus more on crop production as a coping strategy in their increasingly stressed conditions. Animal traction in these areas is supported by local NGOs (eg, Bulgalda in the case of Barabaig pastoralists in Hanang District, Arusha Region).

On the negative side, the development of animal traction in the traditionally strong animal traction areas such as Shinyanga, Mwanza, Mara, Rukwa, Iringa and Mbeya has stagnated. Animal traction in these areas has not gone beyond the use of plows. Carts and weeders are used by only a few farmers. In the same areas, some farmers are abandoning animal traction due to the increasing costs of managing the implements and animals (Bagachwa et al, 1995). Currently, a plow costs over Tsh 95,000 (over US\$ 150).

Farmers who abandon animal traction, revert to the use of hand hoes in all farming activities. For example, in Isimani, Iringa Rural District, abandoned ox-plows and carts can be seen outside the farmers' huts, reflecting the inability of the farmers to maintain the implements. In the same area, one can also see dilapidated tractors left many years ago after the failure of the tractorisation programme. This sorry picture adds more confusion to the mechanisation efforts and leaves many questions unanswered.

Donkey use in Tanzania

Information on the use and spread of donkeys for traction purposes is scarce. There is no reliable and up-to-date data on working donkeys. A few years ago, it was estimated that there were about 250,000 working donkeys in Tanzania (Starkey and Mutagubya, 1992). The number of donkeys today is probably nearer to half a million.

Donkeys have been used as pack animals in Tanzania since pre-colonial times. Donkeys are used for fetching water, collecting firewood, transporting people and goods. In Hanang District for example, donkeys have reduced Barabaig women's drudgery and workload as the women use them to ferry water, firewood and grains to the mills, salt to the markets and other heavy loads. Men in Hanang District use donkeys to transport grains. Donkeys are also used in cultivation, weeding and for transport.



Photo 1: Women with their donkey cart transporting forage in Tanga, Tanzania

Photo: Paul Starkey

There has not been a major programme to promote donkey traction in Tanzania. Early attempts to promote the use of donkeys were initiated by the German colonial government in the then Tanganyika. These efforts were directed at transport, and the results were discouraging (Koponen, 1994).

In the early 1990s, attempts to promote donkey traction were made in Tanga Region, through the Tanga Animal Draft Power Project with support from the government of Germany. In this project, the initial focus was to use oxen for traction. Due to the prevalence of East Coast fever, anaplasmosis and trypanosomiasis, donkeys become an alternative to cattle, especially for farmers who did not have cattle or experience in cattle keeping and, where animal draft was mainly used for transport (Fischer, 1994). Donkey traction became especially popular amongst women in Tanga (see Photo 1).

In Mbozi District, Mbeya Region, the Agricultural Development Project (ADP-Mbozi) and Oxenisation Extension Training Services (OXETS) promoted the use of donkeys. OXETS is a local private animal traction promotion organisation

which offers training programmes to farmers and trainers. OXETS is the first private local company in Tanzania to promote animal traction through research, production, marketing and training.

In Singida, Shinyanga and Tabora Regions, it is common to see pairs of donkeys and pairs of oxen attached to the same cart or plow (Starkey and Mutagubya, 1992). Usually, donkeys are placed in front so as to maintain walking pace and decrease pace on descents (Photo 2). Due to technical problems, donkeys are often used to pull the same plows and carts designed for oxen and are harnessed with cattle yokes, leading to bruises and sores on the donkeys.

Advantages of donkeys

The low adoption of donkeys for traction purposes reflects our inability to appreciate the benefits of donkeys compared to oxen or horses. Although, as Mpande (1994) reported, about 67% of all equids kept in Africa are donkeys, and more than 30% of the world donkey population is found in Africa, our understanding of this animal and its power contribution is very low.

This paper is published in: Starkey P and Fielding D (eds), *Donkeys, people and development*. A resource book of the Animal Traction Network for Eastern and Southern Africa (ATNESA). ACP-EU Technical Centre for Agricultural and Rural Cooperation (CTA), Wageningen, The Netherlands, 244p. ISBN 92-9081-219-2. This publication was supported by CTA and Neda, The Netherlands. For details of ATNESA and its resource publications see <http://www.atnesa.org>

Jones (1991, 1997) is a researcher who has studied the donkey in detail over many years and maintains that donkeys are:

- friendly towards humans
- willing to work
- easy to train
- able to turn in a small space
- able to utilise poor food well
- not affected much by external parasites
- able to survive with little water
- able to survive in tsetse infested areas
- comparatively cheap to buy
- strong relative to size
- able to live and work for more years in good care than other animals

producers of milk that is good for humans. Adding to the above list of advantages, Mpande (1994) noted that:

- donkeys can work for up to four hours a day exerting forces of about 250 N
- well trained donkeys need only one person to work with them, they like to walk in straight lines and can recognise furrows easily.

Where oxen cannot cope with conditions such as drought, donkeys are known to excel. Women have found donkeys easier to work with than oxen. It is also believed that donkeys are clever animals. Donkeys can learn quickly from other donkeys and humans, and have a fantastic memory especially for paths and routes (Mpande, 1994).

In the early 1990s, it was widely reported in local papers that donkeys were being used to smuggle crates of beer and other scarce goods from neighbouring countries into Tanzania, through the so-called '*panya routes*' (ie, bush paths). The stories said donkeys were packed with the goods and ordered to take them to specific destinations across the border where people were waiting to offload them. It took some time for customs and police officers to curb this type of smuggling because donkeys were passing through bushes where police or customs officers never thought to establish check points. Such stories emphasise the point that donkeys are reliable animals which can remember routes and do their tasks diligently without human supervision.

Donkeys are less likely to be stolen as often as cattle because of their low economic and social value. Cattle theft is a major problem which has

affected animal traction in Tanzania (Sosovele, 1991).

Disadvantages of donkeys

According to Jones (1991, 1997) donkeys also have disadvantages. These include:

- suffering from loneliness: donkey friends cannot be easily separated
- donkeys need shelter from cold and damp
- donkey meat is not a delicacy
- donkeys mature and breed comparatively slowly
- donkeys are small in size
- donkey's manure is fibrous.

Socio-cultural and policy issues

Inadequate policy support

Generally, policy makers regard animal traction as the technology of the past. While animal traction (with oxen) is perceived as an antiquated technology, donkey traction is viewed suspiciously by policy makers. There has not been a consistent government policy which has aimed at the promotion of donkey traction. Promotion of animal traction with oxen has been initiated by external donors as projects. Once the donors left or changed their focus, the projects ceased to operate.

Nowadays we hear so much talk from the Government about the 21st Century as the age of science and technology. Whatever they are saying however, does not include the use of animal traction as a springboard for the farmers to 'leapfrog' to the 'promised new age'. Currently, Tanzania is implementing broad policy reforms. However, the reforms are not explicit about the place and role of the agricultural sector and the development of animal traction.

Before trade liberalisation was introduced in Tanzania, the state was responsible for the distribution of farm implements. This is not the case any more. The market is expected to regulate supply and demand for the implements. For technologies which still demand a lot of publicity, market forces will not make much change. Market forces are unlikely to stir the development of donkey traction when the technology itself is still viewed with scepticism by policy makers, when the agricultural sector is not given sufficient support by the Government and private investors, and when the infrastructure that supports animal traction is at its lowest level. The market cannot allocate resources in favour of donkey traction



Photo: Paul Starkey

Photo 2: A pair of yoked donkeys helping to pull an ox cart in Mwanza Region, Tanzania

unless the Government takes deliberate measures to ensure that conditions for the development of this technology are created and maintained.

Institutional ineptitude

Inadequate political support for the development of animal traction is reflected in institutional ineptitude as regards donkey traction. Agricultural institutions involved in research and training do not have plans for the development of animal traction. They are quite ignorant about the use of donkeys. Starkey (1995) reported that in South Africa, agricultural institutions perpetuated negative myths about donkey use which systematically affected the use of donkeys. Perpetuation of such myths is because of ignorance of the technology and as a result of a blind pursuit of the so called modernisation path.

Many governments in sub-Saharan Africa pursued the modernisation of their agricultural production systems with imported tractors and other capital intensive equipment. In Tanzania, such technologies were not supported by locally based engineering and financial infrastructure. Instead of opening the way forward for agricultural mechanisation, such modernisation led to deep technological dependence which drained much of the resources and stifled local initiatives.

Although the Government appears to be interested in animal traction, this interest has not been translated into meaningful change because the

infrastructure for the development of animal traction has collapsed. Financial problems coupled with civil service reform programmes have affected agricultural extension, research and development, training, veterinary services, manufacturing and supply of draft animal equipment. Consequently, little support is provided to animal traction. Local private initiatives (such as OXETS in Mbeya) are few, isolated and young.

Social limitations

Donkey use and animal traction generally is associated with poor and small scale farmers. This is a social group which is marginalised through various government trade relations, local politics and cultures as well as individual greed. For example, trade liberalisation policies favour the importation of tractors as opposed to equipment for donkey traction. Imported tractors benefit rich farmers and the state (Bagachwa et al, 1995) more than small scale farmers and polarise the rural communities.

Economic reform programmes which favour mining, tourism, trade liberalisation and the reform of financial institutions benefit some individuals in urban areas who can invest in these sectors. Small scale farmers wanting to use donkey traction cannot benefit much from such reforms.

Use of donkeys by women

Donkey use for routine household functions is generally associated with women. Women are also involved increasingly in production activities using donkeys. The socio-economic and cultural conditions in which production and household work take place can negatively affect the use of donkeys by women farmers. For example, certain cultures and religions tend to discourage women's access to training institutions which, if they attended, could help raise their knowledge of animal traction.

Land tenure

Social problems associated with land tenure can also affect the use of donkeys. Increasing competition for land and the apparent unequal access to it by various social groups will continue to pose serious obstacles to development initiatives in Tanzania. Social groups such as women, poor farmers and pastoralists have unequal access to land. The literature on land use in Tanzania indicates that pastoralists are involved in crop production alongside livestock keeping (Ndagala 1996; Sosovele and Kulindwa, 1997). Crop production among livestock keepers has now become a necessary survival coping strategy.

Chaos in the veterinary services, expansion of farm land and decline of grazing land have increased the competition for land. As livestock services crumble and more pasture land is put under crop production, livestock keepers are forced to migrate or to reduce their stock. Donkeys, having low status among livestock keepers are likely to be discarded more rapidly than oxen.

Another issue relates to women and their rights to own land. A large proportion of the literature on land matters in Tanzania has dealt with this issue. The main thesis is that women's rights to own land in Tanzania are restricted as compared to those of men. What is often missing in this body of literature is an analysis of the entire social structure in which men and women find themselves. The literature is often generalised and suggests that the main problem is between men and women, which is not actually the case. The majority of both men and women in rural Tanzania are affected by an ambiguous land policy which does not allow them to own land but only gives them usufruct rights. Thus as far as donkey traction is concerned, farmers can only invest in it if the security of their farms is

guaranteed. It is widely believed that women's access to land is limited due to a combination of social, policy, cultural and economic factors operating both at the micro and macro levels.

Farmers' knowledge and financial limitation

The use of donkeys for traction purposes is further limited by lack of knowledge of how to use donkeys for traction work. Ignorance of how to use donkeys for traction is also a limiting factor in areas of animal traction use because farmers are used to oxen and have no knowledge or technology compatible with donkeys. Farmers' financial inability to obtain farm implements suitable for donkey traction is another limiting factor.

Conclusions

Prospects for donkey traction in Tanzania

Whilst oxen are likely to remain the main draft animals in the years to come, donkeys will be the only alternative in certain areas and for some groups of people (Starkey and Mutagubya, 1992). The poor and women are likely to opt for donkeys much more than oxen because of their availability. Donkeys are cheap and easy to handle. Also, where animal disease is likely to limit the use of oxen, donkeys will fill the gap as they do not normally require much veterinary attention.

Although there are prospects for expanding the utilisation of donkeys for traction, unfavourable policy decisions and technological backwardness will impose serious limitations to this prospect. It is not enough to issue policy statements and directives which appear to support animal traction. These must be translated into concrete actions with the participation of the farmers concerned.

Prospects for the development of donkeys for traction purposes are great in Tanzania. However, policy, social, institutional and economic problems limit the full realisation of this potential. When farmers, policy makers and planners fail to see beyond these limitations, they become victims of the myths created by themselves about donkeys. Such myths become reasons for the lack of use of donkeys. Whilst such constraints are serious now, they will change with time, as animal traction technology develops, and as farmers gain more knowledge on how to use donkeys, and as farming becomes more profitable and attractive to the farmers.

Role of the Government

Although the Government is withdrawing from direct production activities, it cannot leave the development of animal traction in the invisible hands of market forces. The Government must continue to support the development of animal traction. For example, some farmers' low opinion about donkey traction can be overcome through vigorous education campaigns as well as actual utilisation of donkeys as draft animals.

No amount of economic reform measures will succeed if the issue of agricultural development is not properly addressed. For many years to come, Tanzania will continue to rely on small scale farmers for food and cash crop production. These farmers cannot meet growing demands for agricultural produce if they continue to rely on hand hoes. Deliberate efforts are needed to improve donkey traction.

Areas which have high potential for donkey traction must be developed. Appropriate implements for donkeys, eg, breast harnesses, lightweight plows and carts must be provided to the farmers. Above all, training in donkey traction must be provided to extension staff and farmers. Many of these services must be provided by the Government at least until the private sector is able to take over.

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