

Gender issues in animal traction and rural transport in Uganda

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Abstract

The paper gives a brief historical background to the use of animal traction in Uganda. Recent developments in terms of research and dissemination of the technology are highlighted. It is argued that the adoption process of draught animal power technology is slow and most programmes have not been able to address the gender concerns adequately.

The paper discusses the various ways in which gender issues can be addressed in empowering farmers especially women. These include: culture barriers regarding the use of animal traction; suitability of equipment (weight, ergonomic issues etc.), access to and ownership of technology. It is emphasised that research and development in draught animal technology should be geared towards gender considerations to cover the silent needs of the women farmers. Technology development should aim at equal opportunities for both men and women to participate and benefit.

Introduction

Some 400 million beasts of burden throughout the world still work for man today. They contribute more than half the energy the Third World uses for agriculture and provide some developing countries, especially the semi-arid and highlands zones, with as much as 90% of their agricultural power (FAO, 1990). In Uganda, the use of animal traction started as early as 1909 in the then Bukedi (Tororo) district, east of the country (Akou, 1972). A year later, a ploughing school was opened in the area and in 1920 the current Serere Agricultural Research Institute was started among others, as a centre for training in animal traction.

The rapid increase in the use of draught animal power (DAP) was closely associated with the expansion in area for cotton with relatively light soils and a culture where livestock were well integrated into the farming system. As might be expected, the use of DAP developed in areas of short grass and light bush, and where there were large herds of cattle. Obviously, the technology could not be attempted in areas where cattle could not be kept because of tsetse fly.

To this day, the grass savanna districts of Soroti, Kumi and the northern parts of Tororo and Pallisa districts remain the main centres of DAP technology. It should be noted that there has been considerable extension of the technology in the wooded savanna districts of Lira, Gulu, Kitgum and into parts of the Kapchorwa and Iganga districts.

Developments in DAP technology

The initial efforts of DAP technology concentrated on ploughing, with very little efforts on its use for weeding. This has remained so to date, leaving much to be done in extension regarding the use of DAP for weeding. The use of animals for rural transport is quite a new phenomenon, it only being practised in a few districts of the country that are characterised by an extremely hilly and rugged terrain.

Use of DAP for ploughing

Since its initiation, the use of ox-cultivation in Uganda, even in areas where the technology has now widely been adopted, has not gone beyond opening up of land. The adoption process of the old DAP technology was quite slow as a result of its failure to address the gender concerns of the users, especially the women, and hence hindered the equal participation of both men and women.

Size and weight of the equipment

The first ploughs were wooden, made locally from an Indian pattern, but these were soon discarded in favour of the European steel ploughs. Some of this early importation apparently included equipment that had been designed for use by horses, mules, camels and buffaloes and had with time, become obsolete in the countries of origin. Such equipment was often unsuitable for local conditions and animal breeds.

The Buffalo plough imported from France and Italy in the 1950s for instance weighed up to 120 kg. Even up to the late 1960s ploughs commonly used in Uganda still weighed well over 70 kg. All these ploughs were too heavy for the women folk.

Nevertheless, in the east and northern parts of the countrywomen still heavily participated in animal traction activities, mainly ploughing but, as drivers, with men usually controlling the heavy ploughs.

Culture

In the east and northern parts of the country, the issue of cultural bias regarding women using DAP technology had already been overcome by the 1970s. Women's participation in ploughing tremendously increased with the importation of lighter ox-ploughs from India and later from South Africa and Zimbabwe. These ploughs weighed 35 – 40 kg and were sufficiently light for women to control. In the central and western parts of the country, cultural barriers regarding the use of DAP are still strong, even concerning the men using DAP, let alone the women.

Access and ownership

Decision making on whether to acquire farm implements and tools for the household heavily depended on the men (husbands). However, effective application of agricultural technologies in production has strategic gender implications. The productivity of labour will be altered, depending on the accessibility of the technology to both men and women. On many smallholder farms, DAP technology is mostly at the disposal of men, whereas women contribute more than 70% of the agricultural production.

The prices of the implements are generally high for the average smallholder farmers. Most women cannot invest in the technology. In both these situations, the men dominate and that is why the situation has remained much the same in most parts of the country.

In spite of these shortfalls, DAP use for ploughing has registered some success in the east and northern parts of the country. There are a number of DAP projects in these areas that have directly targeted women users. One such successful project is the Bukedea Women Strugglers Association (BUWOSA).

BUWOSA is a women's group in the Bukedea County of Kumi district. The group owns 200 oxen, engaged in the commercial production of mainly oil crops. The group also owns a commercial oil mill and they process cooking oil for the surrounding market and beyond. The group has undergone formal training in the use and care of work animals at Serere Agricultural and Animal Research Institute (SAARI). They conduct training of the animals and of animal operators and actually do all the DAP operations themselves, though with some participation from their husbands.

Regarding the weight problem of older ploughs, the Agricultural Engineering and Appropriate Technology Research Institute (AEATRI) is developing small model ploughs for use mainly by women. The plough has been tested in several districts in the eastern part of the country with some modifications already having been incorporated. The proto-type has also been taken to Zimbabwe for testing and development under their conditions.

Use of DAP for weeding

During the period between the two world wars and after, attempts were made to introduce ox-drawn weeders. The ox-weeders then, were complicated in design, unsuitable for local conditions and since farmers had not adopted the system of row cropping, the implements could not be used for crops manually broadcasted.

Generally very little has been done since then in Uganda regarding the use of DAP for weeding. Currently, some weeding and planting equipment is under development by AEATRI with strong gender considerations since these are women dominated roles in agricultural production.

Use of DAP for rural transport

In Uganda, the district of Kapchorwa currently leads in the use of work animals, mainly donkeys, for on-farm transport. They are mainly used as pack animals, but also to some extent as draught animals for hauling produce, inputs etc., using carts. Worth noting is the fact that the part of district lies on the Mt. Elgon which has an altitudes between 2 000 – 3 000 meters above sea level. It is extremely hilly and rugged area. Transport by any mechanical means is almost impossible since formal road systems only exist joining major towns and trading centres.

The only means of transport available to farmers (mainly women) is either on their heads or back-carrying with a forehead trap. Donkeys are almost indispensable as a means of transport. The animals are particularly useful for:

Transporting inputs to the farm, produce from the fields to the homesteads, from their homes to the market and to milling areas; Transporting construction and building materials (poles, grass, sand, stones); Accessing water and fire wood. Water is a major problem in the district due to the hilly terrain and without donkeys this activity, by women, would almost be unthinkable. According to most women in Kapchorwa, without a donkey there would be no life for them; Transporting human beings either directly on the back of the beast or using carts.

Women's involvement in the use of donkeys in Kapchorwa ranges from 80 to 90%. Other districts e.g. Kotido and Moroto in the extreme northeastern part of the country also use donkeys for the above functions, but not to the same extent as that of Kapchorwa.

In the district of Bundibugyo on the Mt. Rwenzori ranges to the west of Uganda, similar terrain to that of Kapchorwa prevails. A number of projects were initiated, targeting donkey for use by women, with various degrees of success. Worth noting is the project at Kasese at the foot of the Rwenzori range which was implemented by the Kawanda Agricultural Research Institute (KARI). Donkeys were introduced in the area to assist women transport their produce.

In Bushenyi and Ntungamo districts to the southern and western parts of the country, there is some use of donkeys for transport, mainly by women. Use of oxen as a means of transport is only practiced in the east and northern parts of the country, but with limited participation by women. The animals are mainly used to transport construction and building materials and farm produce. It has been noted that oxen are normally more aggressive (bad-tempered) and not as easily managed by women as donkeys.

References

Akou, A. 1972. Oxen can never be forgotten, Ministry of Agriculture Special Bulletin, Entebbe.

Conclusion

For a long time, the use of DAP has been confined to primary cultivation with a mouldboard plough. All other farm operations such as planting, weeding and harvesting of crops have been done manually by women. Perhaps the major hindrance to the further development of ox-cultivation has been the lack of a simple, robust, cheap and reasonably efficient hand- or ox-drawn seeder. To be able to mechanize, it is imperative that crops are planted in rows to enhance animal powered mechanization of subsequent operations.

The use of DAP technology in Uganda has registered greater success in the short grass and light bush areas of the east and northern parts of the country than most other parts. Attempts to introduce DAP technology among the Bantu people to the central and southern parts of the country and in the tall grass areas have mainly been unsuccessful. Recently there have been vigorous efforts by the Ministry of Agriculture to popularize DAP technology in the central, western and south western parts of the country targeting women in particular.

Finally, in areas where the adoption rate has been low, research in DAP technology should take into account the gender needs to ensure that the silent needs of the women farmers are addressed. Technology development should aim at equal opportunities for both men and women to participate and benefit.

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