

A note on the development of animal traction in Tanzania

by

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Introduction

There are an estimated 12 million cattle in Tanzania, of which about 10% are used as draft animals. It is thought that cultivation using draft animals was introduced into the country about 100 years ago by settlers from South Africa along with the use of single-furrow steel mouldboard plows.

In 1970, the Ministry of Agriculture initiated the establishment of about 12 animal traction training centres in ten regions of the Tanzanian mainland. By the end of 1990, 80 training centres had been established. Although these centres were used mostly for training oxen, those with full board and lodging facilities enabled both farmers and their animals to be trained at the centres. Farmers were able to exchange their untrained animals for trained animals at the centres. However, this approach had limited success: familiarisation with the animals at work requires that farmers are trained with their animals. Because of financial problems affecting both farmers and government, training is now preferably carried out on the trainees' farms.

The two prominent Tanzanian factories for the production of agricultural implements and hand tools are Ubungo Farm Implements Limited and Zana za Kilimo Limited Mbeya. Ubungo Farm Implements, which started in 1970, reached maximum hand-hoe production in 1984 when it produced about 2,175,000 hand hoes, well above the installation capability of 195,000 hand hoes. The same year the production of animal-drawn plows peaked at 24,600, also above the installation capacity of 20,000.

The Zana za Kilimo Ltd Mbeya factory produces only hand tools. These two large factories do not satisfy the national demand for hand hoes or animal-drawn implements.

Animal power projects

Between 1990 and 1995, two famous projects were underway: the Mbeya Oxenisation Project

and the Tanga Draught Animal Project. Both projects, in different environmental conditions, have been very successful. External finance for both projects has come to an end. Much experience has been gained from the projects.

Since the availability of implements and spare parts is a major problem for farmers, the Mbeya Oxenisation Project tried to facilitate this by developing a marketing system. The system had the following objectives:

- to distribute relevant and appropriate implements to farmers
- in co-operation with the project engineering section, to promote the use of village workshops where farmers could obtain spare parts, have repairs done or even purchase complete implements
- to establish a reliable and permanent distribution system for draft implements.

However, it was very difficult for the Mbeya Oxenisation Project to achieve these objectives. Two distribution systems were used:

Direct selling to farmers in the villages by the project. This was a short-term strategy aimed at making farmers aware of the project and the type of implements available.

Selling to farmers through village-based sales agents. Most of the agents were government employees, cooperative societies, trading companies and private businessmen.

However, these approaches proved inefficient: the implements were not in the right place at the right time. The marketing system needs to be strengthened to benefit farmers, perhaps by a mobile sales system.

The Tanga Draught Animal Project aimed to improve the utilisation of draft animals by farmers in selected areas of the region for agricultural and transport activities. This project was faced with working in a difficult rural environment with weak infrastructure and lack of determination by all

parties to overcome the organisational and human constraints associated with the project. Project activities proved unsustainable when the donors finished their contract. The Ministry of Agriculture is trying to find ways in which the project team can resume technical advisory services. This was supposed to be considered before the external finance stopped.

Another project which came to the end of external funding was the Usangu Village Project. In its terminal report it recorded that 70 farmers participated in draft animal power training courses in 1992 and 1993. The response was quoted to be good and demand for plows and carts increased.

Current projects

Sasakawa Kilimo

The Kilimo SG 2000 oxenisation programme is being implemented in seven regions of Tanzania. The main objective of the programme is to train farmers in the use of draft animal technology. The aim is to train farmers to be efficient in using the implements and to observe improved timeliness by using the animal-drawn implements. This will in turn reduce drudgery and raise their productivity. Presently, groups of 10 farmers are trained in each centre by village extension officers.

IFAD

The International Fund for Agricultural Development (IFAD) oxenisation programme covers the Southern Highland regions of Tanzania. The approach used is different from that of Kilimo SG 2000. IFAD has selected one animal traction training centre in each region. The centre will be strengthened with implements, equipment and animals. Farmers are trained at the centres.

The problem of this approach is whether farmers will come to the centres at their own expense, which is difficult for them. The other alternative of the project, to provide full board and lodging, can only be done when there is external finance, otherwise it will be difficult in the future.

FAO

The Special Programme for Food Production of FAO has pilot phases in Morogoro and Dodoma Regions. It is aiming at increasing production of rice and maize. The project aims to facilitate the availability of agricultural and mechanisation inputs such as animal-drawn implements.

Several interest groups, for example an oxenisation interest group, will be formed to avoid dependence of farmers on central government and the project. Project staff will then act as advisors to the groups. Some of these will help farmers purchase various animal-drawn implements through a bank or credit societies.

Netherlands assistance

In the lake zones The Netherlands Government is carrying out a feasibility study on how agricultural development can be improved. In Kagera Region, the project will concentrate on the improvement of the use of animal power.

Government policies

In the past, the Ministry of Agriculture tried to do too much through the public sector, assigning tasks to institutions which were ill-fitted for the task. Some activities like distribution of agricultural inputs, research and extension still remain in public hands although conditions and resources no longer justify this. The government ought to limit itself to critical services for which it has a comparative advantage in delivering and should leave the rest to the private sector.

Due to inadequate financial support from the government there is a need to reduce the number of animal traction training centres. The Ministry of Agriculture will advertise to run the centres jointly with NGO's or other associations which have an interest in developing draft animal technology. Some will be sold directly to interested groups or associations, but the Ministry of Agriculture will retain one training centre in each region. They will be strengthened in terms of the package of implements and animals available. Several approaches to contact farmers will be applied to make farmers familiar with the full package of draft animal technology. Farmers near the training centres will be visited easily, while the mobile unit approach should be used for distant farmers.

Through extension, the Ministry of Agriculture will continue to advise farmers to form various associations which in turn will raise the productivity of land and labour. Formation of draft animal farmers' associations will help the technical personnel explain their ideas. As a group, farmers will discuss ideas given to them before implementation. The associations are expected to run commercially.