

Sasakawa Global 2000 and household-located animal traction centres in Tanzania

by

Mark Lyimo

Ministry of Agriculture and Co-operatives, Box 9071, Dar-es-Salaam, Tanzania

Abstract

Sasakawa Global 2000 has been assisting in agricultural technology transfer in Tanzania. It has been demonstrating at village level the potential to raise productivity through use of improved seeds, fertiliser application and improved timeliness. Using participatory methods, it initiated village-based animal traction centres in the compounds of group leaders. The lack of suitable animal-drawn implements remains a key constraint in Tanzania. The programme started recommending oxen, but now recognises the potential for cheaper donkeys.

Introduction

Despite high agricultural potential, Tanzania remains dependent on food imports. There are areas of chronic food shortage due to low adoption of good agronomic practices, lack of capital, poor communications and erratic rainfall.

Sasakawa Global 2000 (SG 2000) is an international non-government organisation that started its Tanzanian programme in 1989. It aims to assist in agricultural technology transfer through demonstration schemes for participating farmers. Management Training Plots were established and appropriate agronomic practices demonstrated (appropriate seeds, fertilisers, timeliness and plant populations). Farmers were impressed with the yields but there were problems, including poor input availability and lack of mechanisation.

Village-based animal traction training

Among other initiatives it was decided to introduce household-located animal traction centres. This programme was initiated by SG 2000 with the aim of intensifying the use of animal traction through the application of improved and more appropriate implements than those that were currently being used. The programme used participatory approaches, involving, diagnostic survey, focus groups, field days, formation of credit groups and links with manufacturers and suppliers.

Following the diagnostic surveys in seven areas, ten farmers were selected to form a group in each of 50 locations. The group chose a leader, and the 'household-located animal traction centre' was established at the compound of this group leader. The members of the group built a shed using their own resources and materials such as cement and roofing materials provided by the programme.

The program then identified and acquired suitable implements including the Rumpstaad Multipurpose Toolbar (with plow, weeder and ridger) and a cart. As farmers were already using animals for plowing, emphasis was placed on use of draft animals for secondary cultivations such as weeding and ridging.

Village Extension Officers were given a short training course on the use of draft animals. These trainers then taught the group members how to train animals using the members' own animals, and how to use the various implements. During the growing season members take turns in using the various implements on their own land. Group leaders maintained records.

General demonstration field days are usually organised by subject matter specialists in collaboration with village extension officers at the beginning of each operation, eg, planting, weeding, yoke making etc. All group members and any other interested farmers are also invited to participate and learn from the demonstration. Stockists or their representatives are invited to attend so as to learn about farmers' needs. This becomes a business opportunity for them to meet farmers' orders.

At the end of the season group members contribute grain as a contribution to implement repairs and servicing. Another group of farmers is selected to train in the same shed for the next season. The implements are passed to the next group. Members of the old group are expected to buy their own implements. Due to their low purchasing power, farmers are encouraged to form

saving and credit co-operatives so they can buy implements and other inputs for group use.

In this manner it is anticipated that the knowledge will diffuse to all those who are interested. Currently about 1500 farmers have been trained in the programme areas.

Working with donkeys

The programme provides training in the use of both oxen and donkeys. Until recently donkeys were only used for pack transport, but they are becoming increasingly popular for traction purposes. This is due to the fact that the price of draft bulls has gone up greatly in many areas due to the high meat prices. The price of donkeys has remained relatively low and they are easier to maintain than cattle. Hence, the programme is encouraging the training of donkeys for group members who do not have oxen.

Implement availability

The implements introduced by the programme have been well liked by farmers for their lightness and ease of handling. Thus a demand for new implements has been created. The programme saw

the need to link farmers with stockists who could satisfy the demand by obtaining implements from manufacturers/importers. The programme therefore added another crucial component by acquiring implements at the start of the programme and giving them to stockists on special arrangements—a 50% down payment and the rest repaid after selling the implements.

Conclusions

The Sasakawa Global 2000 programme has established that it is possible to raise production per unit area if all agronomic practices are correctly observed. Timeliness and reduction of drudgery can be achieved for small scale farmers if they adopt cheap and sustainable technologies such as animal traction. The approach of involving farmers in the whole process of implementation should enhance the sustainability of the activities. One major problem identified is the poor availability in Tanzania of affordable and appropriate animal-drawn implements. Donkeys offer a cheaper alternative to oxen for cultivation and transport.