

Developing extension programmes for transfer of animal traction technology in Uganda

by

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Abstract

The transfer of animal traction technology in Uganda has had varying degrees of success. The process is more advanced in the east and the north than in other parts of the country. This may have been due to differences in the availability of zebu cattle, soil and vegetation types and the attitudes and taboos of ethnic groups, but it is mainly due to differences in the success rates of ox cultivation extension programmes.

The success of extension programmes depends to a large extent on the planning effort that guides extension workers to establish objectives for measuring and evaluating progress. Successful programmes are characterised by a clear mission and philosophy, which is the driving force towards long-term development. They also have simple, flat and fluid administrative structures which allow for quick, independent decisions. Many successful programmes consider that situational analysis and motivation of staff and farmers are prerequisites for sustainable development of animal traction. In addition, involvement of clientele, extensionists, researchers and other groups enhances holistic development of farming systems where animal traction technology plays a major role.

Introduction

Ox cultivation, as an intermediate technology, was introduced to Uganda at the turn of this century. Its transfer was linked with the development of cotton growing, which followed the establishment of a road network and the extension northward of the railway system. The technology is now well accepted and adopted in eastern Uganda, particularly in Kumi, Pallisa and Soroti Districts, and moderately well adopted in northern Uganda, but its spread to other parts of the country has been slow. The variation in the degree of adoption of ox cultivation can be attributed to differences in availability of zebu cattle, soil and vegetation types and attitudes and taboos of the ethnic groups, as well as to the different approaches used to extend the technology.

The approaches used in Uganda to extend innovations, including animal traction, to farmers have included the use of traditional chiefs and rulers to implement extension programmes, colonial extension services, donor sponsored commodity

extension services, holistic rural development, training and visits, farming systems support programmes and decentralised non-governmental efforts. The success of these approaches in transferring animal traction technology has varied considerably. For example, chiefs and rulers sometimes used coercion to implement the programmes, in order to please their masters, which probably accounted for unsustainable adoption of ox cultivation in some areas.

Technical and extension professionals can learn from one another's experiences and, through discussion, can get new ideas which can be applied in their own organisations. This paper features some personal experiences of developing extension programmes for animal traction technology in Uganda.

The need to develop extension for animal traction

Any transfer of knowledge, skill, technology or change involves the training of recipients and beneficiaries. The success of any training programme depends on planning for it to be progressive and forward looking. At all stages of animal traction technology transfer there is need to formulate a system of planning which encourages the transferring organisation to anticipate emerging issues and to develop responsive programmes.

Some basic reasons for planning extension programmes for technology transfer are to:

- ensure careful consideration of what is to be done, and why
- have a written statement for public use
- provide a guide against which to judge new proposals
- establish objectives for measuring and evaluating progress
- facilitate choosing between important and incidental problems, and between permanent and temporary changes
- prevent mistaking the means for the end

- develop both felt and unfelt needs
- aid in developing leadership
- promote efficiency and avoid waste of time and money
- help justify public budget appropriations.

Ingredients for an animal traction transfer programme

One of the reasons why some areas of Uganda have lagged behind others in adopting ox cultivation is that some extension programmes were more effective than others. What were the common characteristics of the successful programmes that the others lacked? Which types of programmes had the most positive effects in the community? The following are some characteristics of successful programmes for the transfer of animal traction technology in Uganda.

Philosophy and general mission

Ox cultivation programmes in Kumi, Pallisa and Soroti Districts at the turn of the century had a long-term commitment (by the British)—to produce cotton for the UK textile industry. The development of railways and a road network was fuelled by the same mission. Post-independence programmes have often lacked clear values, visions or long-range policies.

Similarly, the philosophy of programmes, especially regarding beliefs and attitudes towards clientele development, is often not clearly stated. A recent report on extension in Uganda sponsored by the World Bank (Bank of Uganda, 1990) states the philosophy that the only purpose of the extension service is to deliver educational programmes which “help people to solve problems for themselves”. Boyle (1985) further states that programmes should improve the “health of the people and the community”, by which he means improving the condition and situation of clientele. Euro-Action Acord, a non-governmental organisation (NGO), has emphasised overall economic development of farmers as its mission and philosophy in its programmes in Nebbi District in northern Uganda.

Organisation structure

Some organisations have a formal hierarchy with limited freedom to make independent decisions. These structures are a hangover from the colonial era: they may appear stable, complex and multipurpose, but they inhibit change. Simple, flat and fluid structures can respond quickly to changing conditions and opportunities. Government departments in Uganda often have structures which inhibit quick decision making. On the other hand,

organisations such as Acord and Action Aid, operating in Mityana Catholic Diocese, and the Lutheran World Federation, working in Moyo and Karamoja, have fairly simple structures, which accounts for their success in promoting ox cultivation in the areas where they operate, even though these areas are regarded as non-traditional with “hard soil” by the Department of Agriculture.

Situational analysis

The role of extension agents is to help effect desirable changes, such as increased knowledge, understanding, attitudes and skills in animal traction technology. Before animal traction technology is introduced the needs of the farmers should be identified and translated into goals and objectives. A need should be “felt”. The need is a condition between what *is* and what *should be*, or between what *is* and what is *more desirable*. Needs should be determined systematically by collecting data and analysing them to discover priorities. Situational analysis encompasses the improvement of subject matter specialists, extension workers and the farmers themselves.

Motivation

Farmers and extension staff are motivated through fulfilling some of their needs. Many ox cultivation programmes run by NGOs attracted civil servants as staff or consultants. In some cases these people work for both the government and an NGO.

Staff and farmer training

Staff involved in animal traction work should be familiar with local farming and rural conditions. They should have training in the general type of agriculture needed in the community, and they should be familiar with, and able to use, the most effective teaching methods and equipment in an informal community setting. The type of staff is also important. Are they empathetic (in the shoes of farmers)? Are they highly motivated, or unrewarded and therefore apathetic? Do they participate regularly in staff development and training? The effectiveness of training farmers in animal traction is highly dependent on how staff themselves are trained.

Involvement

Clientele involvement in the programme development process was a major strength in the transfer of animal traction technology in eastern Uganda. Learning is most likely to change behaviour substantially when people try to improve situations that are relevant and important to them (Prawl, Medlin and Gross, 1984). Perhaps the success of programmes depends on a combined

involvement of research specialists, teaching specialists, clientele with real felt needs, administrators and other stake holders.

Staff with different specialisations can complement one another when they work as a team. Communication and collaboration between different parties involved in transfer of animal traction technology might appear difficult at the beginning due to differing allegiances and interests, but later they enhance progress through the sharing of experiences and brain storming in solving common problems.

Many successful programmes have also used contact and contract farmers, unpaid professionals, volunteers and other local leaders.

However, programmes which are well integrated into the local political and social community network have a greater impact.

Decision making and judgement

Once data have been analysed and interpreted, decisions on programme priorities, goals and methods are normally made by top administrators in the hierarchy, without involving other staff and clientele. Such programmes tend to lack commitment from farmers and staff. The programmes are not theirs. Decentralisation of decision making stimulates the development of staff, who can then make their own judgements with confidence. Another consideration is whether judgements are made formally or informally. Rigidity in the organisation has often delayed the development of animal traction.

Research

Successful programmes have their directions, goals and methods based on up-to-date research, knowledge and technology. Research on the feasibility of carrying out the animal traction programme is very often ignored. Research, extension and close links with farmers are the prerequisites for successful transfer of animal traction technology. Research should be practical and adaptive (on-farm research), with work on experimental stations where necessary.

Objectives indicating the general direction towards which all the efforts in animal traction development are to be focused should be clearly and formally stated or written and then communicated to stake holders.

Planning of animal traction programmes can be divided into two parts:

- the long-range plan, sometimes called a programme of work or a strategic plan, is

normally broad in scope. It consists of a goal statement, a situation statement and long-range objectives which indicate the desired direction for the programme

- the annual plan of work sets out the objectives for the year, within the direction of the long-range plan. It must therefore be related to the long-range objectives and relevant to the situation statement.

The annual plan contains a list of activities to be carried out, for example:

- demonstrations to be given (numbers and types)
- meetings to be held (with dates)
- articles or leaflets to be prepared
- individuals to be met
- materials to be obtained.

The annual plan also has a provision for evaluating progress, achievements and failures.

Implementation

In Uganda NGOs carry out animal traction programmes according to set objectives: subject matter, teaching and learning principles, teaching strategies, audiences and levels of learning are all blended to achieve the desired outcomes. The Ministry of Agriculture, Animal Industries and Fisheries organises competitions in animal husbandry and ox cultivation techniques: attractive prizes arouse keen participation. Lack of finance often hinders the sustainability of these efforts. The most important component in the implementation plan is a monitoring system and feedback procedure at the completion of the programme so that appropriate revisions can be made to the plan of action.

Evaluation

Evaluating the programme is always a challenge. There are differing opinions on whether outsiders or people within the programmes, including farmers, should carry out this important exercise.

Evaluation is a scientific process to determine if objectives were, or are being, met, and if the animal traction programmes are suitable, effective and of high quality. It involves comparing evidence of the impact of the programme with criteria of "what the situation should be". Because it is an integral part of the planning process, evaluation is carried out continuously from the onset to the conclusion of the programme.

The evaluation plan should include details on how the indicators of impact should be collected, and who would collect them. Many animal traction programmes in Uganda have not been evaluated

because care was not taken to collect the type of information needed at the time it could have been collected.

Budget and financing

The loss of some staff from government departments to NGOs may be due to inadequate budgets and problems with how they are determined and used. They may not provide for the necessary equipment, office work, travel and supplies needed to bring about change in rural community. Sometimes not enough staff are hired or retained.

Conclusion

Animal traction technology has not been transferred effectively to some parts of Uganda because the right programmes have not been used, or because there were not any viable programmes at all. This

paper has attempted to outline some criteria, ideas or concepts for use in comparing and improving animal traction technology transfer programmes. They can be used to guide analyses of different programmes. The analyses, in turn, should help technicians and field workers identify shortcomings for further corrective action.

References

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