DELIVERY OF LIVESTOCK SERVICES THROUGH PARAPROFESSIONALS IN TANZANIA
I. N. F. Mwakaliile¹,
SHDDP,
P. O. Box 252,
IRINGA, TANZANIA

1. Introduction
Extension services in the livestock sub-sector in Tanzania are in most cases part of the general agricultural sector. The agricultural extension service in Tanzania has for many years been entirely financed by the public sector (MAC 2000). Over the years, there has been too much direct government involvement in the management of the sector with declining resources, while coordination with the private sector, church based organisations and other non-governmental organisations (NGO) has been minimal. Of recent, extension services are also provided by the private sector, as farmer led initiatives and private agribusinesses have started to supplement public extension services.

In the late nineties, veterinary services were privatised, while the responsibility for the agriculture and livestock extension services were transferred to the districts under the new decentralisation policy. In the course of this process the Ministry of Agriculture downsized its staffing, retrenching auxiliaries and para-technicians who mostly were based in rural remote areas since pre-independence (MAC 2000). As a result of this privatisation, the provision of veterinary services in remote villages and scarcely populated extensive production areas by and large collapsed, as veterinarians saw practicing in these areas as unattractive, say unviable. On the other hand, the demand for veterinary services continued to be there.

As in these extensive production areas, conventional private practice is not likely to be a viable option, possible alternatives would include allowing government veterinarians to take a part-time commercial veterinary practice. Alternatively, self-financing para-veterinarians or, in the case of pastoralists, trained workers from the community, could be developed (World Bank 1994).

Mounting experience indicates that auxiliaries and community-based animal health care workers are more suited and reliable in delivering veterinary services in marginal, low potential areas than are the public veterinary services or private sector veterinarians. Veterinary auxiliaries or community-based animal health care workers offer an affordable alternative to deliver selected services, even on a commercialised basis. Lay veterinary personnel are often highly motivated and in many countries (Bangladesh) women are the primary providers of basic animal health services in communities (FAO 1997b).

2. Paraprofessionals
According to Cambridge (1995) dictionary, para- is equal to similar or helping to do a similar job. Paraprofessionals in livestock services are either first aid workers (para-veterinarians or community based animal health workers) or para-extensionists meant to increase the outreach of the dissemination of improved livestock technologies and its related fields. By definition farmers’ (community) based paraprofessionals are indigenous to their communities and have often received only limited training. Under the Tanzania Veterinary Act of 2003, paraprofessionals are certificate and diploma holders in animal sciences, while farmers’ based paraprofessionals are paraprofessional assistants. For a matter of consistency,

¹ Is the the Project Coordinator of the Southern Highlands Dairy Development Project in Tanzania.
paraprofessionals referred to in this paper belong in fact to the second category of paraprofessional assistants.

In the following chapters, experiences of working with both, public and private, sectors in the provision of livestock services through paraprofessionals in the Southern Highlands of Tanzania is revisited in the context of the Southern Highlands Dairy Development Project, a project supported by the Government of Tanzania and Swiss Agency for Development and Cooperation and executed by Intercooperation.

3. Service delivery by paraprofessionals in SHDDP
The Southern Highlands Dairy Development Project (SHDDP) was conceived in 1978/79 aiming at improving the nutritional status of the rural population through increased availability of milk. The Ministry of Agriculture and Co-operatives implemented the project through its Livestock Department until June 2000. In its last phase before its closure end of 2003, the project has been implemented outside the government structure. SHDDP has worked with more than 100 dairy farmer organisations in 10 out of 12 administrative districts of Mbeya and Iringa Regions, thereby reaching more than 6000 households, which took up dairy husbandry with improved dairy animals.

The concept of training and working with community-based persons as subject matter specialists emerged in the project in the early 1990s. During this period the project was using a top-down approach (called Training and Visit System) seeking systematic use of diffusion processes with regular extension visits to designated “contact farmers” (Roling 1988). It was during this period that the project chose a farmer in each dairy group to use his/her infrastructure for demonstration to fellow farmers and visitors. Later, some farmer trainees termed as “contact farmers” received more training than others with the aim of going back to train their colleagues and support government extension agents.

The identification of potential contact farmers by the project created a misunderstanding. On one hand it was feared that the project was creating a parallel extension service to that one of the government. On the other hand, the new contact farmers expected that they could be considered for employment by the project. The situation was even further aggravated by the fact that the monitoring unit of the project used them to collect data and paid them for this task.

It was in view of this confusion that the project decided to take an alternative channel, “the user oriented approach”, in working with paraprofessionals. Two categories of paraprofessionals were proposed, Farmer Motivators and Community-based Animal Health Workers (CBAHW). The main roles of these paraprofessionals were to sensitize their fellow farmers in their respective groups to adopt good cattle management practices and perform primary animal health practices. It was proposed during the planning of SHDDP Exit Phase that trainings for CBAHW and Farmer Motivators should be combined in order to allow one person to perform both functions (Tenga et al. 1999).

3.1. Community-based animal health workers
SHDDP started the CBAHW programme with the aim to build an affordable but also viable and self-sustaining basic animal health service delivery system managed by the communities themselves (SHDDP 2000) and can be seen as the initiator of this approach in Tanzania. Moreover, it aimed at encouraging the use of local knowledge on animal health through sharing experiences, for instance documentation and research. CBAHW are local people, who have been selected by their fellow farmers in their respective dairy farmers groups and received training under the facilitation of SHDDP on various aspects of basic disease diagnosis and treatment. Generally, CBAHW provide extension services on animal husbandry as well as diagnosis and treatment of common and locally specific diseases, they
perform minor surgical procedures like wound treatment, bloodless castration and they dispense veterinary medicines.

Up to now 115 CBAHW have been trained. 109 are practicing as paraprofessionals, while 6 persons dropped out. During the performance assessment in 2002, the profile of a CBAHW emerged as follows\(^2\):

- Male (about 90 %)
- 30 – 40 years old (46 %)
- Married (92 %)
- Primary school completed - Standard VII (70 %)
- Crop-livestock farmer with main income from crops (82 %)

The selected CBAHW candidates underwent different types of training:

- Basic course (residential, 2 weeks, at the Ministry of Agriculture Training Institute (MATI) Uyole)
- On-job training by a veterinarian over a certain period
- Refresher course (residential, 2 weeks, at MATI Uyole)
- Course on pregnancy diagnosis in cattle (practical, residential, 3 days)

To further strengthen the position of CBAHW, the project conducted review workshops by involving CBAHW and other stakeholders and it conducted Newcastle disease vaccination campaigns under the supervision of respective District Veterinary Officers (DVO), the main objective being to assess the broadened service delivery. While CBAHW originally confined their work to the cattle of dairy farmer group members, they later expanded their work to livestock species other than cattle and extended their outreach to all livestock keepers in their respective village area.

The work of the CBAHW necessitated the development of a memorandum of understanding (MOU) with government authorities with regard to job description, ethics of conduct, remuneration, drug channels, disease control schedule including indigenous knowledge and supervision. District Veterinary Office relied on two legislations, namely the Veterinary Surgeons Act No. 369 and Animal Disease Ordinance Cap. 156 while issuing letters of recognition to these veterinary paraprofessionals, though there was no clear format for such a recognition letter. It is only recently that the Tanzania Government enacted a new law that provides statutory recognition of paraprofessionals other than veterinary surgeons (URT 2003). Furthermore, a regional initiative issued policy guidelines for the regulation of CBAHW. The project played a key role in facilitating the elaboration of the MOUs between the CBAHW and the government authorities. In addition, SHDDP’s Project Coordinator, as a member of the task force, was able to contribute significantly to the elaboration of the new law with extensive field experience from the project.

3.2. Group-based Dairy Technologists

Over the past two years, SHDDP specifically addressed persons in charge of milk processing and running of milk kiosks to provide them with better and more systematic training, in order to increase quality of milk and milk products, but also to improve the management of dairy processing units. The basic training consisted of a 2-weeks residential course at MATI Uyole with dairy technologists from this institute and private dairy entrepreneurs as trainers. As a result of this effort, a cadre of 90 paraprofessional dairy technologists was created.

Some of these dairy technologists are member of a dairy farmers group, while others are employees of a group. The link with the group, however, is close and strong, as dairy

\(^2\) The performance assessment of CBAHW (Mwakalile and Meramba 2002) based on information from 95 CBAHW. Figures (%) mentioned here refer to this sample.
technologists rely on the farmers’ milk brought to the processing unit or the milk kiosk in order to do their job. Going private and start her/his own business is an option for these trained dairy technologists, which may in future grow and become an interesting alternative for some of them.

4. Lessons learnt and challenges
Lessons learnt from the paraprofessional initiative relate to the ownership, coordination and sustainability of the programme, as well as to training, networking, supervision and recognition of paraprofessionals.

4.1. Ownership of paraprofessional programme
The nomination of CBAHW was done by the dairy groups, which considered education, cooperation, permanent residence, gender and innovativeness as criteria for selection. The groups supported their selected members in their efforts to acquire the required skills for the job and contributed with money to their training and to the procurement of material needed by these paraprofessionals to do the job and render the services expected from them. As a result, the CBAHW programme was first of all owned by the group. Communication concerning the programme and the group’s CBAHW run via the dairy group. The paraprofessionals remained dependent of the group with no real identity of their own and a rather low self-confidence. These close links and the resulting dependency might not be too conducive for a further development of the programme. The tripartite agreement (MOU) involving CBAHW, the dairy group and the Village Government has been drafted from the point of view of the community, as it mainly addresses the paraprofessional's obligations in serving the community. The spirit of such an agreement differs from an agreement, wherein a paraprofessional would offer her/his services to the group based on her/his own terms and conditions. Nevertheless, the specialisation gives the paraprofessional a special status within the group.

4.2. Financing service delivery by paraprofessionals
Remuneration for services and work delivered has to become an integrated aspect in any paraprofessional scheme. In the MOU between CBAHW, group and village government remuneration was categorized into two types, namely honorarium and payment of drug costs.

Concerning honorarium for CBAHW under the SHDDP set-up, information from 71 groups revealed that in 32 cases the group pays the CBAHW, while in 22 groups the farmers pay the health worker directly (Mwakalile and Meramba 2002). Yet 17 groups did not specify how payment of services is organised, which is an obvious weak spot in the MoU. Mode of payment, but also amounts mentioned indicate that payment for services is seen by many groups in the first instance as a cash incentive to the CBAHW. Where the animal health worker can secure TSH 1000/- (~ 1 USD or 1.3 CHF) per treated animal, things look a bit different, and the job could become attractive provided sufficient work is available.

---

3 Of the 32 DFO, which planned to pay honoraria to their CBAHW, only 24 defined the way, how the honoraria will be effected:
- Fixed wages paid monthly (between TSH 200/- and 1000/-) 5 DFO
- Annual ‘development levy” 1 DFO
- Fixed rate paid per treated animal (between TSH 500/- and 1000/-) 13 DFO
- Percentage of total revenue during treatments (range: 10% to 30%) 5 DFO

4 “From discussions with various actors a general agreement evolved that a viable private vet practice would need at least 500 regular ‘client’ animals whose owners are prepared to pay full rates. Veterinary Extension Officers claimed that they would need at least 200 animal clients as a minimum threshold for successful private operation. These figures have to be seen in the context of an average of only 20 cows per group in Iringa and 39 in Mbeya (Tarnutzer et al. 1999).”
Purchasing and storage of drugs was indicated in several MOU. 38 groups (53%) out of 71 buy drugs and hand them over to the CBAHW, who has to return the sales revenue from the drugs to the group. The groups set margins between 10% and 50%, so as to build up a drug revolving fund. But on the other hand 19 groups (27%) agreed that the CBAHW should buy drugs at their own costs and sell them at a profit margin. Drug channels and cost recovery are areas needing further clarity among dairy farmer groups. As service delivery is a private good in the hands of CBAHW, these paraprofessionals should buy and sell drugs on their own without involvement of the group.

Working tools, protective gears and transport means are important to the CBAHW for their work performance due to the nature of the job and distances involved. Some groups indicated that tools and prospective gears would be “cost-shared” between the CBAHW and the group. Other groups bought the working tools and protection gears and leased them to the CBAHW against a deposit (caution money). The project also procured a portable first aid kit according to the needs of the CBAHW. The group owns the kit, while the CBAHW is its custodian. Groups contributed 32.5% to the cost of the kit, while the remaining part was subsidised by the project.

In some communities members are very much scattered, and CBAHW find it difficult to do their job satisfactory. Some few groups mentioned that they would find transport facilities for their CBAHW, while other groups indicated that the CBAHW will have to find their own transport facilities, but only two groups indicated that clients should bear cost of transport for the CBAHW on call. The majority of the groups didn’t indicate who would bear transport cost. Prospects that the work of paraprofessionals will pay off in viable (self-) employment opportunities in the near future are still low, although some persons may already get some financial returns from their new technical skills (Bachmann, 2003). Many paraprofessionals see their job as part-time, and for many there is a large element of voluntarism included. These are characteristics, which may be seen as the difference between the paraprofessionals and the professionals, but these are also the elements, which so far contributed most to the successful establishment of paraprofessionals. On the other hand, working part-time and largely on a voluntary base are elements, which might weaken the scheme in the long run.

Contrary to CBAHW, dairy technologists mainly work as employees of a group with a fixed salary, which may range from TSH 10’000/- to 25’000/- per month. There is quite some potential for dairy technologists to secure with their technical know-how a job and a reasonable income, once the dairy groups have become aware about the value of these persons and their quality work.

4.3. Continued training for paraprofessionals
Paraprofessionals and their communities know the importance and the value of training. Many groups indicated their intention towards meeting some of the costs for the CBAHW training sessions, and in some few cases CBAHW were ready to pay for attending a certificate course. Nevertheless, neither the majority of CBAHW nor of the groups can pay on their own the high costs for training and they may seek funding from different sources such as government agencies and donor funded projects. The fact that paraprofessional programmes are often not integrated in national and local government systems makes things even more difficult and threatens their sustainability. Multi-partnership between the respective communities, local and central governments supported by donors and NGOs is required in development and sustenance of the programmes.

4.4. Recognition
The importance of the recognition of paraprofessionals by local government authorities should not be underestimated (Bachmann 2003). Although many CBAHW perform their tasks within the ‘protected’ environment of a village government with a recognition letter from
District Veterinary Officer, the CBAHW scheme operated for most of its time outside the legislation, although a new law has now secured the CBAHW a legally recognised place in the national animal health delivery system. Until recently, a number of veterinarians saw these paraprofessionals as their competitors, overseeing the fact that this group of people only emerged as a reaction to the veterinarians' inability to be present and render services in remote areas. However, it is clear that the ultimate success of the programme builds on the active participation and support of all: the livestock keepers, community-based organisations, Local Government Authorities, veterinarians and CBAHW.

4.5. Integration in the local context
Key features of paraprofessionals are their low overhead costs and their willingness to live as member of the local community in remote areas. Livestock keepers appreciate this system of service delivery through paraprofessionals, in particular the availability of and easy access to CBAHW - more or less around the clock in cases of emergency. Living in the same village or area, CBAHW are integrated into the local community. They charge low rates for services and drugs and they have much lower overhead costs (transport, equipment, infrastructure) than veterinarians. On the other hand, CBAHW know their limitations in terms of training and knowledge and refer difficult cases to veterinarians in nearby rural centres. In short, CBAHW are able to provide services to livestock keepers in areas that could and would otherwise not be served by a private veterinarian. Although these veterinary paraprofessionals cannot fully substitute for veterinarians, CBAHW are able to provide a cheap, locally available basic health care service that can lead to quite dramatic improvements in animal health.

5. The way forward
Paraprofessionals have the potential to become an alternative for doing skilled work in rural areas, be it as demand driven ‘self-employed’ provider of services or as ‘employee’ of a community. SHDDP sponsored investment into training of paraprofessionals paid off with returns at community level. There is scope for more direct contribution of communities in the capacity building of their paraprofessionals to ensure that a minimum level of service delivery can be maintained in an area, where these services would simply not be available. If affordable services are accessible and available for groups and their individual members, the services and work of paraprofessionals contribute to increased income at group and individual household level. Service delivery and work go beyond a pure economic client–customer relation, as paraprofessionals have high degree of identification with their respective communities and its members. However, as sustainability is linked with viability, financial aspects and income opportunities for paraprofessionals will become in future even more important.

It is undisputed that the government and other development agencies should give special consideration to remote and low potential areas that are not attractive to the profit oriented private sector. The government should clearly define tasks division between the various actors in the delivery of animal health services bearing in mind that in remote and low potential areas some flexibility may be required in the privatisation exercise.

The concept of using paraprofessionals in rural areas should be further pursued. There where paraprofessionals complement governmental services, the concerned authorities have to be integrated into any proposed concept. The idea of paraprofessionals should be spread amongst community-based organisations, which should be encouraged to invest directly into the training of group members as paraprofessionals.

REFERENCES


