

ANIMAL HEALTH SERVICE DELIVERY IN PASTORALIST AREAS



**A Workshop Held in Eneku Training Village
Soroti, Uganda, 4TH – 6TH September 2001**

**By
DEPARTMENT OF VETERINARY MEDICINE
MAKERERE UNIVERSITY**

SPONSORED BY CAPE, PACE, OAU-IBAR

CONTENTS

<i>Abbreviations</i>	2
<i>Acknowledgements</i>	3
<i>Executive Summary</i>	4
<i>Resolutions and Recommendations for CAH in Pastoral Areas</i>	5
<i>Guiding Principles for CAH Operation</i>	6
<i>Introduction to Workshop</i>	9
<i>Official Opening</i>	11
<i>Field Visit</i>	12
<i>Closing Session</i>	15
<i>Pan-African Programme for the Control of Epizootics (PACE)</i>	16
<i>Community-based Animal Health and Participatory Epidemiology (CAPE UNIT)</i>	17
<i>CAHWs in Pastoral Areas</i>	23
<i>Policy of MAAIF on Animal Health Service Delivery</i>	37
<i>Private Practice and CAHWs</i>	44
<i>CAHWs and Government Veterinary Service in Kotido and Moroto districts.</i>	47
<i>NGO Perspective on CAH - LEP</i>	48
<i>Private Livestock Health Service: Providers and Privatisation</i>	50
<i>Developments in the Training of Animal Health Providers</i>	53
<i>Community Animal Health Worker Programmes</i>	57
<i>Evaluating CAH Programmes - Literature Review</i>	61
<i>NGO Perspective on CAH - HCP</i>	67
<i>Appendix 1: Discussions</i>	68
<i>Appendix 2: Workshop assessment</i>	73
<i>Appendix 3: List of participants</i>	74

Abbreviations

AHO	Animal Husbandry Officer
AHT	Animal Health Technician
CAO	Chief Administrative Officer
CAR	Central African Republic
CAPE	Community-based Animal Health and Participatory Epidemiology.
CAHW	Community-based Animal Health Worker
CAH	Community-based animal health
CBO	Community-based organisation
CBPP	Contagious Bovine Pleuropneumonia
CHIPS	Christian International Peace Service
CVM/WC	Christian Veterinary Mission / World Concern
DVO	District Veterinary Officer
DRC	Democratic Republic of the Congo
EVK	Ethno- Veterinary Knowledge
FAP	Food and Agriculture Organisation
FVM	Faculty of Veterinary Medicine
GDP	Gross Domestic Product
HCP	Happy Cow Project
IMF	International Monetary Fund
ITK	Indigenous Technical Knowledge
KPIU	Karamoja Projects Implementation Unit
KVB	Kenya Veterinary Board
LC V	Local Councillor Five
LEP	Livestock Extension Project
LSD	Lumpy Skin Disease
LWF	Lutheran World Federation
MAAIF	Ministry for Agriculture, Animal Industries and Fisheries
NAADS	National Agricultural Advisory Services
NARO	National Agricultural Research Organisation
NDA	National Drug Authority
NGO	Non-Governmental Organisation
OAU/IBAR	Organisation of African Unity, Inter-African Bureau for Animal Resources
PACE	Pan-African Programme for the Control of Epizootics
PARC	Pan-African Rinderpest Campaign
PMA	Plan for the Modernisation of Agriculture
PRA	Participatory Rural Appraisal
PVP	Private veterinary practitioner
SVI	International Voluntary Services
VSF	Veterinaires sans Frontiers
UVA	Uganda Veterinary Association
UVB	Uganda Veterinary Board
VO	Veterinary Officer

Acknowledgements

I, on behalf of the participants, would like to thank CAPE, PACE - OAU/IBAR for having funded this workshop, which was a very educative experience to the participants.

The active and prompt communications of Dr. T. Leyland, Dr. A. Catley and Dr. D. Grace all of OAU/IBAR is especially appreciated; so is the contribution of Dr. D. Grace and Dr. W. Jura towards the workshop organisation.

My appreciation also goes to the field based veterinarians, Dr. Eyudu of Soroti, Dr. Ojala of Moroto who assisted in organising the field trip to Moroto.

Also appreciated were the participants' enthusiasm and concentration in all the workshop activities. I would like to give special thanks to the Minister of State for Karamoja Affairs, Hon. Peter Lokeris for gracefully opening this workshop with such challenging words to the profession; and for the additional security he organized for us while in Karamoja.

Similarly, I would like to thank the LC V Chairman Soroti, who hosted us and closed this workshop with words that encouraged us to work even harder to achieve our goal.

Last but not least, the staff of Eneku Training Village, Soroti, are acknowledged for the effort they took to host the workshop and accommodation of several participants.

May God help each and everyone to continue contributing to National Development and to Livestock Production in particular.

***Dr. Elizabeth K. Kyewalabye,
Workshop Organiser
Head, Department of Veterinary Medicine,
Makerere University***

Executive Summary

The Department of Veterinary Medicine, Faculty of Veterinary Medicine, Makerere University, Kampala, held a workshop on *'Animal Health Service Delivery in Pastoral Areas'* in Soroti, Uganda. Its focus was the role of Community-based Animal Health Workers in service delivery. The workshop was sponsored by CAPE, PACE, OAU/IBAR and included participants from the Faculty of Veterinary Medicine, Uganda Veterinary Association, Uganda Veterinary Board, Ministry of Agriculture Animal Industry and Fisheries, several NGOs, PACE OAU/IBAR, National Livestock Forum, Government and Private Veterinary Practitioners, as well as local leaders, CAHWs and livestock keepers.

The workshop objectives were *to review animal health service delivery in pastoralist areas* (p17-67), *to define principles of service delivery* (p 6-10), and *initiate action plans for continued improvement of animal health service delivery in pastoral areas*.

The FVM stated its commitment veterinary service delivery in pastoral areas. The PACE programme is involving CAHWs in vaccination campaigns in the Karamoja and will support curriculum standardisation and regulation of CAHWs. The CAPE unit is supporting appropriate CAH systems regionally. CAHWs have proven their ability to deliver low cost, high quality, and sustainable services in areas too poor, remote or insecure for conventional practice.

MAAIF has moved from service delivery to ensuring the enabling environment under which other actors can efficiently deliver goods and services. CAHWs can meet the demand for veterinary services in pastoral situations, however they should work under veterinary supervision. A private practitioner explained the important role that CAHWs played in his practice and also some of the challenges they face. NGOs explained how CAHWs have provided disease diagnosis, treatment, vaccination and livestock data collection.

The results of veterinary privatisation were described and some problems resulting from inadequate policy adoption and implementation. A historical review of the veterinary profession in Uganda revealed that CAHWs by other names have long played an important role in animal health services. Another paper described the most common challenges faced by CAHWs and strategies to overcome them. Papers were provided on establishing CAH programs and on impact assessment.

The field visit to Moroto district was a highlight of the workshop. Delegates (many for the first time) had the opportunity to see at first hand the difficulties faced by livestock keepers in the Karamoja, and the appropriateness of CAHWs.

Working groups produced guiding principles for monitoring and impact assessment of CAHWs, improving and supporting CAHW contributions to animal health service delivery, the necessary skills for veterinarians supervising CAHWs and improving veterinary linkages between pastoral areas and central veterinary departments.

As well as these guiding principles, overarching recommendations were formulated, debated, modified and approved.

Most important of these was the principle that:

"CAHWs are needed in Karamoja and other pastoralist areas"

Resolutions and Recommendations for CAH in Pastoral Areas

Box 1: Consensus Recommendations of Workshop Participants

1. CAHWs are needed in Karamoja and other pastoralist areas, subject to regular review. CAHWs should be under the supervision of veterinarians.
2. Training programmes for CAHWs should be standardised
3. Training of para-veterinarians (i.e. Animal Husbandry officers and veterinary assistants) should continue. They have an important role in the delivery of veterinary service.
4. Community Veterinary Medicine should be introduced in the Training Institutions.
5. Government and NGO reporting systems should be harmonised.
6. CAHWs require continuous appraisal and refresher training.
7. CAHW drug use (and abuse) should be periodically monitored.
8. Government should provide an enabling environment for CAHWs. This could be done by acknowledging their role through certification and by recruiting CAHWs for temporary paid work in vaccination campaigns etc
9. NGOs should seek to involve private practitioners and eventually hand over service delivery to the private sector so as to ensure sustainability.
10. Control of notifiable diseases should be re-centralised.
11. The UVB should be strengthened so it can effectively enforce the professional code of conduct.
12. Local administration should recruit para-veterinarians to improve livestock services.
13. Regular meetings and contacts should be encouraged between various stakeholders.
14. Standardised reporting of CAHW activities should be encouraged.
15. There is a need to improve follow up and supervision of CAHWs.

Guiding Principles for CAH Operation

Three working groups were tasked with developing guidelines on fundamental aspects of CAH operation.

It is agreed that CAHWs must be supervised by veterinarians, but as yet there is no consensus on what this supervision should comprise, or the implications for supervising veterinarians and training institutes, in terms of knowledge and competencies required. The first group, mainly comprising university educators, considered this important question.

Guiding Principles 1: The additional skills and knowledge veterinarians need in order to manage and supervise CAHWs effectively

Training Needs

Undergraduate students

- Practical experience of working with pastoral peoples. This could best be obtained by an internship in the Karamoja cluster

Veterinarians working in Karamoja cluster

- Veterinary extension
 - Communication skills
 - Mobilisation
 - Participatory methods (PRA)
 - Training skills
 - Report writing
 - Proposal writing
- Rural sociology
 - Sociology of animal production
 - Conflict resolution
 - Poverty alleviation
 - Attitudinal & behavioural change
- Business skills
 - Financial management
 - Household economies
 - Procurement & stores management
 - Book keeping
- Gender awareness
- ITKs – Ethnoveterinary practices
- Administration and management
- Epidemiological techniques
- Public health and farm hygiene
- Basic paramilitary skills.

Ugandan government policy is that government has withdrawn from provision of private goods, and will henceforth devote itself to public good services. One public good is the regulation of service providers, either directly or through an authorised authority. The second participant group made up mainly of public and private sector veterinarians addressed the issue of quality control and effective regulation of CAHWs.

A core government role is the formulation of policy. Decisions over the allocation of scarce resources require accurate information on the effects and impact of policy choices. Despite indisputable evidence of CAH effectiveness (see p39) there is still some concern over possible negative impacts of CAH. And indeed any innovation should be carefully assessed in terms of costs and benefits. For this reason impact the second group also considered assessment of CAH programmes.

Guiding Principles 2: Ensuring adequate monitoring and impact assessment of CAHWs

Solutions:

- Harmonise Government and NGO reporting system.
- Appraisal through retraining programmes.
- Carry out surveys in communities to assess improvement of livestock
- Record keeping.
- Periodic checks on drug use.
- NGOs should report monthly, especially on animal health.
- Government could give incentives to improve on retention.

Decentralisation can increase accountability, efficiency, equity and resources available for carrying out public sector activities. Since the 1997 Local Government Act a radical process of decentralisation has taken place in Uganda, and already some benefits are evident. However certain state functions can only be effectively and efficiently carried out with central co-ordination and a clear and unique line of command. Epizootic control is one of these, and the participants saw on the field trip how some aspects of this have been adversely affected by the decentralisation of veterinary services. The second group considered how communications could be better improved between Districts and MAAIF.

Guiding Principles 3: Ensuring communication linkages between the Districts and MAAIF

Solutions:

- Re-centralise control of *all* notifiable diseases.
- Strengthen UVB to enforce code of conduct among professionals.
- MAAIF organises monthly meeting with DVOs.
- MAAIF and professional associations carry out induction courses for service providers.
- Local administration recruits more para-veterinarians (Diploma and Certificate holders)

The last group consisted mainly of CAHWs and representatives of organisation working with CAHWs, and hence had in depth experience of the problems faced by CAHWs on the ground. They were asked to develop strategies and principles that would facilitate the work of CAHWs.

Guiding Principles 4: How CAHWs can contribute to Animal Health Service Delivery within their appropriate boundaries (geographical and technical).

Solutions:

- Standardise CAHWs so that they are not separate (train together, know each other).
- Meet regularly to review activities.
- Equal attention to the CAHWs by all NGOs (recognise CAHWs from all groups)
- Standardized veterinary kits –in terms of content and value.
- Improve range of drugs: e.g. include parvexon, long-acting forms of antibiotics
- Uniform monitoring forms
- Community sensitisation to help them understand CAH programme.
- Technical training on vaccination and new drugs (refreshers)
- Training CAHWs on business skills and accounts.
- CAHWs should be exemplary role models in communities.
- Similar identification for respect (uniform, badges, Identity cards)
- Regular follow ups
- Bicycles provided for transport at subsidised rate.
- Emphasis on disease control and prevention
- Training manuals to be given to CAHWs
- CAHWs to work in teams and help each other.
- Sustainability through private practice
- Out compete quacks
- All NGOs should report to the DVO and we recommend DVO to send to the Ministry.
- Regular visits of government veterinarians to CAHW sites, facilitated by NGOs.
- Formation of parish Animal Health Management Committees.
- Encourage NGOs and CAHWs to use laboratory facilities for examining samples, for refreshers
- And use equipment and supplies.
- Census of animals to be carried out by CAHW.

Introduction to Workshop:

By Dr. Elizabeth Kyewalabye

1.0 The Faculty of Veterinary Medicine

The Department of Veterinary Medicine, is one of the eight departments that comprise the Faculty of Veterinary Medicine. The Faculty, in its strategic plan for research (FVM Five Year Plan 1998) realised that the contribution of research to National Agricultural Development be Direct, Visible and Relevant to ensure the goals of food security and environmentally sustainable economic growth are attained

The goal of the Faculty is "*To see increased utilisation of appropriate technologies and skilled manpower for sustainable development.*"

The Faculty members engage in activities involving and/or aiming at serving the community e.g.

- training veterinarians
- operating an ambulatory clinic operating in Kampala and peri urban areas
- providing artificial insemination services to farmers
- carrying out research, which sometimes involves the communities by way of identifying problems of either the animals or the services

The faculty has good collaboration with other Institutions and Organisations, both research partners and donors. There is willingness to learn from others.

For University communities, holding workshops is a common activity, but holding them in upcountry areas, to involve and to learn from the concerned communities is not as common. This workshop is intended as a learning experience that would enable the Faculty of Veterinary Medicine, as an Institution of higher learning in livestock health, the Uganda Veterinary Association and the Uganda Veterinary Board, to play their rightful roles in trying to map the way forward regarding delivery of livestock health services in pastoral areas.

1.1 Workshop Background

The idea of this workshop arose during the Community Based Animal Health and Participatory Epidemiology (CAPE) inception workshop in Nairobi, March 2001. Points from this workshop which prompted the idea of a workshop were: –

- (a) One of the objectives of that workshop was to identify specific CAPE activities and outline opportunities for partnerships with target institutions and organisations.

After noting that two of the 5 main outputs of the CAPE Unit stated as below:

- (b) Establishing (or supporting the establishment of innovative self sustaining animal health care systems in pastoral areas capable of controlling epizootic diseases and providing surveillance information for epizootic disease control.
- (c) Promoting policy changes and legislation to create an enabling environment for community-based animal health workers.

In consideration of (a), (b) and (c) above, a need was felt to review and share with a wider range of stakeholders and policy makers, the developments in the delivery of animal health services, especially

in pastoral areas, that have led to the emergence of the Community-based Animal Health Workers with a view of coming up with collaborative ventures in solving the problems.

The Faculty has benefited from various donors from time to time, in terms of research and educational grants.

This time, the Faculty and participants were grateful to CAPE-PACE - OAU/IBAR for having accepted to fund this workshop. OAU/IBAR is well recognised for its active participation especially in the direction of control of epizootic diseases, and in more recent times, also known for its efforts in availing animal health services to livestock owners in the pastoral areas.

1.2 Workshop Target Groups

The target groups for this workshop included the following;

- Members of Faculty of Veterinary Medicine and several Heads of Departments
- Uganda Veterinary Board
- Uganda Veterinary Association
- Paraveterinary Association
- Community Based Animal Health Workers
- Non-Governmental Organisations
- Farmers Representatives
- Ministry of Agriculture and Animal Industry and Fisheries
- Government and Private Practicing Veterinarians

1.3 Workshop Objectives

To review the training trends and practice of various livestock and service providers.

To learn from farmers and various service providers in pastoral areas of the North Eastern Uganda.

To discuss and plan a way forward in line with Plan for Modernisation of Agriculture.

1.4 Workshop Programme

The workshop lasted three days; paper presentations were made on the first day, for the 2nd day a field trip to Moroto livestock keepers was arranged with addition security en route previously organised through Hon. P. Lokeris.

1.5 Expected Workshop Outputs

At the end of the workshop the participants have expected to be more informed about the problems related to service delivery in pastoral areas, and a plan of action will be outlined based upon resolutions.

Official Opening:

By the Hon. Peter Lokeris, Hon. Minister of State for Karamoja Affairs

The Minister of state for Karamoja Affairs, Hon. Peter Lokeris officially opened the workshop.

He said he was delighted to open the workshop, which concerned him, firstly as a Minister of state for the region, and secondly as a pastoralist himself, who values animal health delivery services.

He knew the workshop was addressing an important issue for pastoralists, and emphasized the need to train more animal health service providers so as to improve the health and productivity of livestock.

He said that community based animal health workers have been useful. They can go where veterinarians cannot. In addition, such CAHWs are in the best of positions to sensitise pastoralists caring for sick animals, what to do when epidemics break out.

CAHWs and other innovations are essential so as to keep pace with the farmer's needs for the services. He challenged veterinarians to widen their horizon of concern, for example consider issues related to the wellbeing of the livestock like water. It is pastoralists' search for water and pastures in various areas which makes livestock disease control complicated. Likewise indigenous knowledge concerning medications should also be encouraged in addition to the western drugs.

Finally he thanked the organisers of this workshop, Department of Veterinary Medicine, Faculty of Veterinary Medicine, Makerere University. Special thanks went to Dr. Elizabeth Kyewalabye who spear headed this workshop and the sponsors OAU-IBAR were highly appreciated. He thanked the participants for having come to this workshop. He declared the workshop opened, wishing the participants a fruitful stay and ensured them of additional security to Moroto. He trusted that useful practical solutions would be formulated during the course of the workshop.

Vote of Thanks: Prof. Katunguka – Dean Faculty of Veterinary Medicine

A vote of thanks was given by Prof. Katunguka, the Dean, FVM who thanked the Guest of Honour for accepting the invitation, for the challenging words to the professionals and for the additional security for the participants to Moroto.

Field Visit

"There is no way we can do without CAHWs"

Participant after field visit

A high-light of the workshop was the field visit organised by Dr Ojala and colleagues to Moroto in the Karamoja. Many of the participants had never been to the Karamoja before, and were understandably hesitant about going to a place about which they had heard so much bad and so little good. In the media the Karamoja is invariably portrayed as a backward and lawless frontier territory, where raids, robberies and rustling are the daily occupation of the dangerous and intransigent populace.



Cattle grazing in the Karamoja

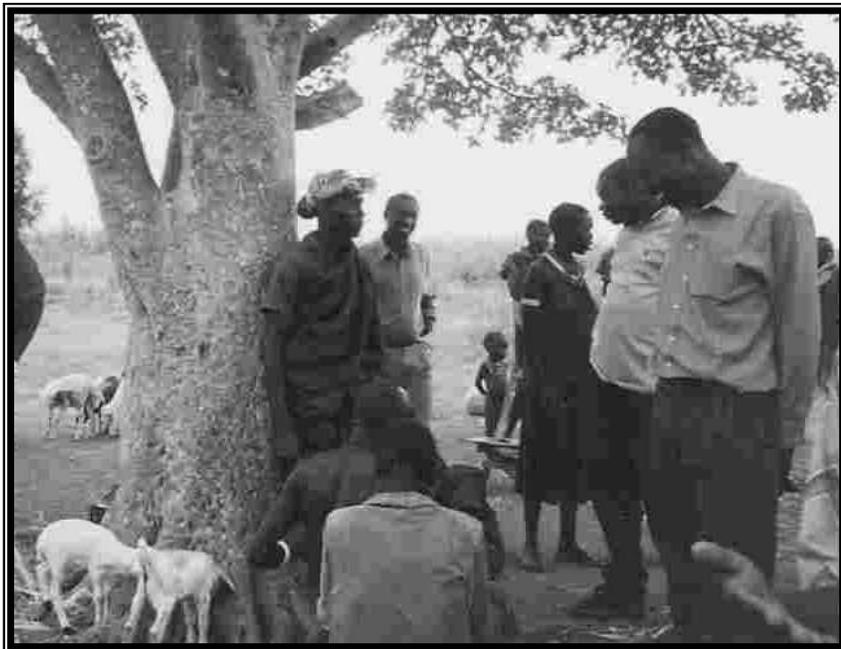
As always reality proved more complex, indeed for many the field visit proved a Damascene experience. The constraints of the area were vividly experienced – roads where only a four wheel drive can go, lack of basic services such as schools, shops and hospitals, long distances and harsh terrain, insecurity (nearly every man openly carried guns), and the grinding poverty in which many of the livestock keepers live.

Livestock from the Karamoja contribute millions of dollars each year to the Ugandan economy and yet few of the benefits of modern life are visible in the Karamoja. But the difficult conditions under which they live make the expertise, hard work and resilience of the livestock keepers all the more impressive. The Karamojong are cattle keepers par excellence, and their obvious dedication to their animals and keen interest in their animals' health and well-being, led to instant rapport with the visiting veterinarians. As Dr Akabwai remarked *"The vet is the best friend of the cattle keeper"*.

Two settlements were visited. At the first there were around 20 huts. The villagers warmly welcomed the participants and explained to them how they kept livestock, and the problems they faced. They practice transhumance. The young men take animals to distant grazing lands, far from towns, roads even houses, and spend several months in mobile camps or kraals, grazing and guarding the animals. Under these circumstances the impracticality of using conventional veterinary services was obvious. CAHWs on the other hand, being themselves herders have no difficulties in moving with the animals.



Workshop participants on field visit



The livestock keepers went on to describe the disease problems they faced. Although the herders have a rich tradition and much expertise in herbal medicines, they find that for many severe diseases western medicines are essential. However traditional treatments are still used, and for some conditions they are highly effective. The livestock owners described how the CAHWs introduced new medicines and therapeutic techniques, and the benefits this has had on the health of their livestock. Many more animals survive and they can now earn more money from livestock. At the same time the short supply of drugs and the lack of money to buy drugs are serious constraints.



Bovine with Lumpy Skin Disease and healing talisman around neck

CAHWs talked about their training and their daily activities. Their keenness and interest was striking as was the high esteem in which they are held by the livestock keepers.

At the second settlement, the villagers, with typical generosity, had constructed a shelter for the visiting participants. They brought an animal suffering from a strange and new disease that was decimating their herds, and for which they had no treatment. The participants quickly diagnosed this as Lumpy Skin Disease, a viral disease that affects cattle, sometimes fatally. This incident encapsulated many of the key lessons of the field trip – the dependence of people on livestock, their eagerness to learn more about livestock diseases, their willingness to collaborate, and the mutual benefits that can arise from closer relationships between the training institutes and the pastoral people.

The participants also visited NGO supported veterinary drug stores. They were taken to a very impressive field laboratory in Moroto, which is managed by an NGO consortium, and can provide a wide range of diagnostic services.

In summary the field visit was a revelatory experience. Several who went as sceptics returned as converts: convinced that CAH was the only feasible approach to deliver veterinary services in such areas.

Closing Session:

LC V Chairman

The Chairman thanked the Makerere University for having gone to the community to share ideas about the Livestock Health Service Providers. He encouraged Makerere to go on ground to find out what is relevant i.e. what does the district need in terms of Veterinary Services.

Comments on the Resolutions

- *Recruitment: – recruiting paravets is a good idea. The District has failed to fulfil its recruitment drive to get veterinary officers at sub-county level because of the insistence on graduates who are not available, not willing or not affordable.*
- *Misuse of drugs: – There has always been a problem of vet drugs being used on humans. The Chairman asked who is to control the CAHWs and who issues their licenses?*
- *There is a problem of Nagana (trypanosomiasis) in the District and there is lack of co-ordination between the local Departments in charge of this. He suggested that this it should be under veterinary control.*
- *This also applies to rabies, which is very prevalent in Soroti, Teso and the whole of North Uganda.*
Thus there is a whole problem in zoonotic diseases control in the district.

The LCV said he himself was a farmer and could speak with knowledge on the subject. He had noticed changes in livestock production in recent years. There was now a profitable market for milk, and in Soroti people were increasingly engaging in dairying, while the kraals that existed before are no longer seen. Low milk yields were a problem but people were reluctant to venture with improved cattle breeds because of inadequate extension services. One positive advance in recent years was the availability of improved goats.

He said that in the farming circumstances that predominate in Uganda, all veterinary services needed to be community-based. However, students all too often lacked understanding of sociology and client skills. He thought the idea of introducing Community Veterinary Medicine was an excellent one. The restocking going on in the Teso testified to the success of community oriented approaches

He thanked all the participants for having attended the workshop in such number and also thanked the sponsors CAPE, OAU-IBAR for sponsoring this workshop, and wished everyone safe journey back home.

Pan-African Programme for the Control of Epizootics (PACE)

by Dr. C.E. Rutabarika PACE, Uganda

The background, objectives and activities of PACE were outlined as follows.

Background

PACE stands for Pan African Programme for the Control of Epizootics. This programme is a follow on of PARC the Pan African Rinderpest Campaign, which was successful in eradicating rinderpest from most of Africa and for introducing veterinary privatisation to many countries. It is funded by the European Union, and implemented by the Inter-African Bureau for Animal Resources. This is an office of the Organisation of African Unity, which is currently in transition to the African Union. The PACE programme has a central co-ordinating office based in Nairobi, and a National PACE Programme in each of the member countries.

The objectives of PACE are:

- Enhancing the national capacities for disease surveillance
- Improved delivery of veterinary services and animal health care
- Rinderpest eradication
- Control of major epizootic diseases

PACE Uganda.

PACE Uganda is a four year programme with funding of 2 658 630 Euros. It has four central units (Co-ordination, Epidemiology & Diagnostics, Communication and Animal Health Economics) and District Co-ordinators to spearhead the field activities. The programme is working in 34 Districts, which can be divided into three categories:

- Zone A: districts contiguous to Turkana and Sudan, at high risk for Rinderpest resurgence
- Zone B1: districts north and east of the river Nile but south of Zone A.
- Districts sharing borders with Tanzania and Uganda

PACE Activities

The first imprest has already paid to PACE account, and several activities are already in the process of implementation. PACE has recruited technical personal, PACE technical Committees are in place and PACE co-ordinators have been posted. Uganda hosted the Mbale Four Country workshop on conflict resolution, and the 2001 East African Regional PACE meeting.

At the moment the last Rinderpest vaccination campaigns are underway in the North and NorthEast. PACE is maintaining surveillance for rinderpest, CBPP and other epizootics. It is supporting the establishment of Private Practitioners, training staff, and sensitising stakeholders.

PACE and CAHWs

PACE involves CAHWs in Karamoja, using the thermostable vaccine, which does not require a cold chain. It will also be involved in the harmonisation of curricula for Community Animal Health Workers, strengthen regulations and guidelines, arranging refresher courses and encouraging collaboration among politicians and other stakeholders.

CAPE and CAHWs

By Dr D Grace, CAPE, PACE OAU-IBAR

CAPE

The Community Based Animal Health Participatory Epidemiology (CAPE) Unit is part of the PACE programme implemented by OAU-IBAR. It works in nine countries of the Greater Horn of Africa (CAR, Chad, Ethiopia, Eritrea, Kenya, Somalia, Sudan, Tanzania and Uganda). CAPE started in January 2001, and is a four-year project.

The objectives of CAPE are:

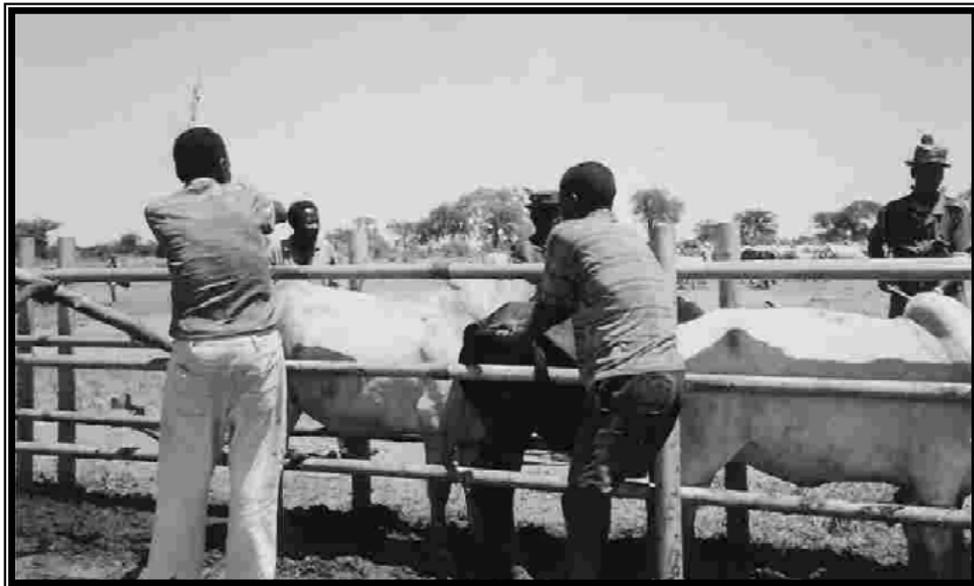
- Supporting CAH delivery systems
- Helping institutional strengthening of OAU-IBAR
- Knowledge sharing on CAH and animal health service
- Advancement of CAH-enabling policy and legislation

The activities of CAPE are summarised in table 1.

What CAHWs are:

Community-based animal health workers (CAHWs) are community members with basic training in animal health, who treat animal diseases within their communities. Their selection, activities, education level, supervision and remuneration vary with circumstances but the following are typical:

- CAHWs identify diseases and provide prophylaxis and treatment.
- Training is short (<3 months), inexpensive and often informal and local.
- There is veterinary support and supervision.
- The community is fully involved in selection and activities of CAHWs.
- The community pays for their services either directly or through a community-managed fund.



CAHWs at work treating animals

What CAHWs are not:

In practice there is a broad spectrum of CAHW knowledge, skills, activities, remuneration and interaction with other stakeholders. However, especially for the purposes of regulation and legislation, it is useful to distinguish clearly between CAHWs and other development agents and providers of animal health services.

- Livestock owners trained in husbandry – (model farmers, master farmers, contact farmers, progressive farmers). These may be trained to give health care of their own animals but are not intended to provide treatment services for other farmers.
- Development workers. Salaried employees of government or NGO/CBO or private sector. Main role is provision of information, sensitisation or inputs, rather than clinical services. Veterinary professionals / para-professionals are often employed in animal health programmes, and may provide clinical services.
- Extension workers. Usually employed by government, NGO/CBO or private sector. Their role is to provide information and encourage improvements in farming system.
- Traditional practitioners – herbalists, witch-doctors. Use traditional methods (ethno-veterinary medicine, indigenous technical knowledge) and without recognised training or license.
- Informal practitioners – Quacks, injectionists, 'doctors'. Untrained and unlicensed providers of clinical animal health services who operate in the informal sector.
- Medicine sellers – traders who sell veterinary pharmaceuticals, without qualification or official recognition. They may sell from shops, market stalls or as itinerant traders, and may sell exclusively vet products or a mixture of vet drugs and groceries.
- Pharmacists – professional qualifications and officially recognised, but often little knowledge on veterinary pharmaceuticals.
- Veterinarians – degree in veterinary medicine, extensive training in veterinary pharmacy
- Para-professionals – certificate/diploma or other tertiary level qualification in animal health.
- Sub para-professionals – 'on-the-job' or other non-formally recognised training in animal health, many were former state veterinary service employees 'scouts' or 'auxiliaries'. With retrenchment of government staff many have started to provide veterinary drugs and services.

What CAHWs do:

The activities of community animal health workers should reflect the context in which they work.

- Accessibility – where areas are very remote or insecure the CAHW may need more skills.
- Availability of veterinary services – where professional services are available CAHW should work under their supervision.
- Activities of informal sector – the knowledge and skills of CAHWs must be greater than those of informal providers.
- Animal health problems – different areas will have different types of problems. CAHWs skills need to be locally relevant.
- Farming system – where farmers are very knowledgeable about animal disease (e.g. pastoralists) CAHWs will need more skills.
- Policy – CAHW activities should comply with regulations and guidelines of the relevant authorities.

In Kenya several stakeholders have come together with the Kenyan Veterinary Board, to define and agree the roles of CAHWs. The agreed roles of CAHWs are set out in the KVB approved guidelines for the training of CAHWs. These specify the minimum criteria that CAHW training curricula must meet. CAHWs who successfully complete an approved training course, taught by an approved veterinarian, and whose work will be veterinary supervised will be issued with a KVB certificate that licenses them to carry out their activities as specified in the Guidelines.

The Guidelines will be issued this year as a working document, and the lessons learned from a six-month trial field implementation will be incorporated in the definitive version envisaged for next year.

Box 1: Roles of CAHWs in Kenya

The essential roles of CAHWs in Kenya

[compulsory]

1. Treat sick animals, record such treatments (the type and dosage of drug used) and carry out necessary follow up.
2. Refer difficult clinical or surgical cases to the supervising veterinarian or Animal Health Technician (AHT).
3. Advise livestock owners on marketing of livestock and livestock products.
4. Promote animal welfare.
5. Promote ethnoveterinary usage and conservation of biological sources of ethnoveterinary products.
6. Report occurrence of livestock diseases, including notifiable diseases, to the Department of Veterinary Services or the supervising veterinarian (surveillance).
7. Participate in disease control.
8. Promote good livestock management practices.
9. Collect samples from sick animals and submit them to the supervising veterinarian or AHT (when necessary).

The Optional Roles Of CAHWs in Kenya

[Suggested]

1. Provide extension messages on disease control and prevention.
2. Provide advice on breed improvement.
3. Advise communities on public health issues including meat and milk hygiene to avoid zoonotic diseases.
4. Promote sharing and conservation of natural resources and the environment.
5. Sensitise communities on policy and legislative issues relating to the livestock sector with particular emphasis on handling of veterinary drugs, quarantines and livestock movement and their relevance to disease control.
6. Monitor herd health and production

From Minimum Standards And Guidelines For Training Of Community-Based Animal Health Workers In Kenya, KVB, (draft)

In Uganda work has also started to establish the roles of CAHWs in veterinary service delivery. A national policy on Delivery of Veterinary Services has been formulated, and is now awaiting adoption. This contains several references to CAHWs (box 2)

Box 2: Ugandan Policy and CAHWs

Ugandan National Policy for the Delivery of Veterinary Services

The Policy Statement for Delivery of Veterinary Services is as follows:

The overall livestock sector goal is to ensure that the country achieves and maintains quantitative and qualitative self-sufficiency in animal protein, and contribute to the overall national development policy of poverty eradication, food security and surplus for export through the modernisation of the agricultural service.

There are 15 major strategy areas covered in the policy document, including clinical services, tick and tsetse control, veterinary pharmaceuticals and diagnosis, trade, veterinary public health and animal welfare. The roles of central government, local government and private sector are redefined. The private sector will be responsible for most service and input provision, the state sector for most regulation and policy formulation.

There is one specific reference to CAHW in section v. 'Clinical services and herd/flock health'.

3 Central government shall encourage NGOs and other organisations to support the establishment of private veterinary practices through the promotion of community based animal health programmes. (p 15)

The following clauses also have implications for CAHWs

Central government shall review legislation regulating service providers to include all categories of veterinary clinical service providers. (p 15)

The central government shall establish an institutional framework to regulate the ...use of veterinary drugs (p 20)

The training institutions in consultation with the stakeholders shall develop and review curricula for training the different cadres of service providers (p 31)

Table 1: Stakeholder Feedback on CAPE activities - their relevance and contribution to CAPE goal /purpose

Participants were divided into 3 groups (NGOs involved in CAH / government and private vets / university vets) and given cards listing activities started or planned by CAPE. Participants were given 5 stars to allocate to the activities they considered most important to attaining CAPE goal.

LFA	CAPE activities completed, commenced or in planning phase	NGO	VETS	UNI	Total
1 Direct support of & tools for doing CAH	Funding NGO implemented CAH projects in CAPE ecosystems	4			4
	Funding feasibility studies on setting up CAH systems in CAPE ecosystems.		1		1
	Providing technical support to CAH projects in pastoral areas.	2	3		5
	Promoting systems whereby CAHWs are linked to private practitioners in CAPE ecosystems.	5	3		8
	Funding feasibility study for private veterinary practice in NE Kenya and Somalia.				
	Support development of appropriate training courses for animal health in pastoral areas	7	6		13
	Funding NGO training of paraprofessional (Animal Health Technicians) in Sudan.				
	Funding NGO development of extension material on the change in RP control strategy.				
	Holding meeting to share with CAH projects in Sudan the new approach to RP control.				
	Carrying out a baseline study on CAH across the region, Who is doing What, Where, How well			2	2
	Developing simple, sustainable and standard ways for SVS to monitor and regulate CAHWs.		5	2	7
	Developing objective methodologies to measure animal health				
	Field testing of filter-paper tests for RP with world reference laboratory.			1	1
Developing of penside diagnostic tests for RP with world reference laboratory.		1		1	
2	Producing concept note for facilitating institutional analysis for OAU-IBAR.				
3.1 Spreading the message	Producing a 'how to do it' guide to running CAH.	1	2		3
	Publications supporting CAH in OIE review and Preventative Veterinary Medicine.			2	2
	Setting up a regional network for sharing and accessing information on animal health.	6	3	5	14
	Developing CAPE website.				
	Funding radio soaps to promote messages on CAH and RP control.				
3.2 Meetings of minds	Supporting a regional workshop on veterinary privatisation in pastoral areas.		5	7	12
	Funding University of Makerere workshop on CAH.		2	5	7
	Commenting and advising on papers and concept notes	1			1
	Attending and speaking at meetings and workshops				
	Holding workshop on participatory epidemiology in Kenya.				
	Workshop on feasibility and business plans for private veterinary practice in pastoral areas.		1	1	2

3.3 Deepening understanding	Funding review of RP control in southern Sudan to help develop new strategies for RP				
	Funding development of mathematical model of RP, using participatively collected information.				
	Funding consultancy to investigate rumours of RP in southern Sudan.				
	Studies comparing participatory methodologies for collecting an. health data with conventional				
	Carrying out review of CAH situation in Chad and lessons learned.	1			1
	Funding consultancies to assess CAH in west Africa and share experiences				
	Facilitating national teams (researchers, implementors) to do focused studies on CAH impact.		1		1
	Regional economic study on the different types of CAH (costs / benefits / effectiveness).		2		2
	Supporting veterinary MSC research in pastoral areas in Kenya.				
Funding study on different pharmaceutical distribution networks in the region.					
4 Policy and legislation	Facilitating formulation of veterinary drugs policy in Uganda.	1	6	6	13
	Supporting production of KVB approved guidelines for standardised CAHW curriculum.	4			4
	Regional analysis of veterinary policy and legislation, and implications for CAH	2			1
	Consultancy to review veterinary legislation in Eritrea.				
	Border harmonisation workshops for sharing information and harmonising livestock activities		2	2	4
	KVB review of livestock sector legislation, and simplification of livestock laws	2			2
	Stakeholder reviews to incorporate views into the process of legislative reform.		2		2
	Producing short policy briefs on livestock and pastoral issues.	1	2	1	4
	Support to proposed veterinary harmonisation within EAC				
5 Enabling environment peace & prosperity	Community level dialogue between different groups in the Karamoja.	3	1		4
	Peace crusades by Turkana and Karamoja women in Kenya and Sudan.			1	1
	Using home videos by Karamoja communities for strengthening peace initiatives.	3	1		4
	Commissioning short media campaign linked to conflict resolution workshops.				
	Workshop on conflict resolution in the Karamoja with pastoralists and policy makers.	3	1	1	5
	Strengthening of village elder committees to enhance their pro-peace impact in the Karamoja.			1	1
	Compiling lessons from conflict resolution work in the Karamoja		3		3
	Professional video on pastoral areas - problems & solutions as perceived by pastoralists		2	1	3
	Consultancy to develop strategies on livestock marketing in the region.		1	1	2
Study on livestock marketing in Sudan.					

CAHWS in Pastoral Areas

By Dr D Akabwai, CAPE, PACE OAU-IBAR

ABSTRACT:

The paper attempts to give an outline of the stages that are critical in the development of a sustainable Community-based animal health delivery System. These steps are described in detail so as to act as a guideline to stakeholders who have been taking short cuts in trying to develop such programs. And those steps include the following: Base-line Survey, the Community Dialogue to arrive at Community Action plan which in this case is the selection criteria for the candidates to be trained as CAHWs, the Intensive Training, the Field follow up and the Refresher Course. The Community animal health workers are defined with emphasis laid on the word "community" and areas with unique characteristics and peculiar constraints in which these people operate. The linkage to the government veterinary services through a private veterinarian is outlined and the need to change government policy and legal framework to incorporate these cadre of animal health providers into the delivery system is emphasized.

INTRODUCTION:

The question asked by most observers of the newly introduced strategy of **Community-based delivery of Animal Health Services** is that "*Is it really a viable option in improving primary veterinary services in pastoralists production systems?*" The answer to this question is a big Yes, and this can be illustrated by the following examples:

- It has been shown in Sudan that a well co-ordinated large-scale Community-based system can form the basis of improved service delivery in conflict zones.
- In dryland areas of Kenya Community-based projects demonstrated substantial cost-benefit through the treatment or the prevention of a few livestock diseases.
- In Afar region of Ethiopia, the Community-based delivery strategy has played an essential role in rinderpest eradication.
- And there are many other positive examples that are being implemented in the Karamoja and Turkana regions.

The new observers still ask '*who are the **Community-based workers?***'

The answer to this latter question can become more clearer by first examining the unique characteristics of the areas where these people operate in and the reasons why it became inevitable that they were the best option to work in these areas. These are outlined below:

THE UNIQUE CHARACTERISTICS OF THE PASTORALIST AREAS WHERE CAHWs OPERATE:

1. These are areas with a harsh climate and rugged topography all of which restrict the use of land to extensive grazing of natural pastures rather cultivated pastures and crops.
2. They are remote, largely inaccessible by road and distant from public-and private-sector centralized services.
3. The pastoralists rely very heavily on livestock for survival and key to their survival depends on the ability to move their herds sometimes over large distances to take advantage of pasture and water resource. The transhumant agro-pastoralists travel extensively with their animals in satellite camps (**Kraals at AWI**), but leave a portion of their families behind with milking herds at a home-site (**Ere**) to cultivate crops which supplement their livestock related activities.
4. The inhabitants have developed traditions based on acute observation and an extensive knowledge base passed down through generations, making them adverse and hesitant to embrace experimental technologies offered by the outsiders. That is why they are often branded "unwilling to change".

5. Their cultural fabric is maintained through traditional structures, for example, **Kokwo** in Pokot, **Adakar** in Turkana, **Alomar** in Karamoja. These are pillars of decision making which represent entry-points for interventions. Many efforts in the past by governments and donors have ignored such traditional structures.
6. They have complex decision making processes that take into account climate, economic considerations, (monetary, and non-monetary), social concerns, legal constraints, incentives and other ecosystem variables.(Prior,1994).
7. Until recently, these areas have had a history of isolation and neglect from both the colonial and post colonial governments services which accounts for their lack of formal education, and lack of exposure to commerce and trade. Although western animal health-care has been highly desirable for generations very few veterinarians have been trained among pastoralists tribes of sub-Saharan Africa. These factors have exacerbated the marginalization of the pastoralist societies.
8. Some government programs and donor assistance although well intentioned have frequently undermined the self-reliance of these people even further. Rarely have truly self-sustainable services been administered that are not dependent on outside subsidization or free services. Nor have many of these efforts promoted locally derived solutions which require local investment, responsibility and maintenance. The result in many pastoralists areas has been the creation of a dependent “hand-out” mentality where outsiders are seen as more as providers than as facilitators.
9. Civil conflict has been increasing resulting in insecurity, displacement of people and their animals, loss of assets and, to a varying degree, breaking down or severe stress to traditional economies and social fabrics of pastoralists communities. In some areas this has degraded into a cycle of violence whereby the inhabitants are entangled in deadly raids across their local and international borders causing perpetual insecurity.

It is unfortunate that the veterinarians and the para-veterinarians that are trained in our institutions of learning to-day cannot work successfully in the delivery of animal health services under these unique circumstances.

- One obvious reason is that most of them come from outside the pastoralists' areas and they therefore lack the ethno-veterinary knowledge base essential to successful pastoralist animal health care delivery.
- The other reason is that the veterinarians are trained to provide services to sedentary herds using conventional approach. They cannot accommodate the dynamics of pastoralists areas and lack the inherent flexibility required to work in such areas.(Stem,1996)
- Structural adjustment has reduced their number and the capacity to implement a conventional strategy to the delivery of animal health in these areas.(de Haan, et al,1985)
- Pharmaceutical importation has been liberalized and yet the veterinarian does not have any control over these drugs. He has therefore been easily out competed by the illegal black market traders in pastoralists areas.(Leyland,1997)

These factors have contributed to the poor performance of veterinary service delivery in these unique areas, thus exacerbating the marginalisation of pastoralists.

It is for this reason that it was found necessary to adopt the non-conventional approach of the **Community-based workers** to deliver animal health services to the pastoralists herds.

It should be noted that the development of the **Community-based Animal health Worker** is a slow process with definite implementation steps. The speed of program evolution is largely dictated by the community and is based on its discussions and the development of community consensus through true empowerment. The phases and components in the development of such a program are as follows:

- 1) A baseline (broad-based ethno-veterinary) survey using established Participatory Rural Appraisal (PRA) guidelines.
 - ⇒ Ethno-veterinary study identifying disease patterns, name, descriptions
 - ⇒ Production system survey identifying commonly accepted strategies and responses to various constraints
 - ⇒ The development of prioritized constraints, resources and needs of the community.

- 2) Development of consensus leading to a community-derived plan for the provision of sustainable pastoral animal health services.
 - ⇒ Community Dialogue with the target community for overworking the prioritized constraints that they identified during the survey.
 - ⇒ Development of a consensus of which needs can be addressed by the community.
 - ⇒ Development of a consensus on how the community will attempt to address animal health constraints.
 - This is only done if the community determines it as a priority need.*
 - ⇒ Development of a consensus on sustainability, cost recovery, profits and fee for service animal health care.
 - ⇒ Identification of the role of a CAHW and the skills and characteristics necessary for a CAHW to be successful
 - ⇒ Development of a consensus on community and individual action to address other needs and constraints e.g. marketing of livestock, cattle raiding and conflict resolution, community drought mitigation and coping strategies.

- 3) The identification, training and supervision of community-based animal health workers (CAHWs).
 - ⇒ The selection of candidates by the livestock owners for CAHW training
 - ⇒ Training and equipping of the CAHWs. (Community based Animal Health Workers)
 - ⇒ The supply of drugs and equipment kits
 - ⇒ Supervisory follow up and monitoring of the newly trained CAHWs.
 - ⇒ Post Training Community Dialogue Workshop (lessons learned, problem solving)
 - ⇒ The Refresher Training after 4–6 months of follow-up.

DEFINITION OF A COMMUNITY-BASED ANIMAL HEALTH WORKER:

In summary the Community-based Animal health Worker may be **“defined as a livestock owner or son/daughter/wife of a stockowner selected out of his/her willingness as well as appropriateness in the eyes of the stockowners to take care of the health of the community livestock. He or she should have had a basic animal health training of at least two running weeks and have a basic veterinary kit.”**(Mariner and Van’t Klooster 1994, Leyland,1997)

It should however be noted that the two weeks mentioned in this definition refers only to

- the **intensive phase of CAHW training.**
- This phase is ,however, followed by the **Intensive follow up or monitoring**
- And then the **Refresher training.**
- **This extended training on job takes one year.** For ease of reference these phases have been described in detail in the following boxes 1–3:

BOX 1a.**THE CONTENT OF THE INTENSIVE PHASE IN CAHW DEVELOPMENT**

Introduction and verification of the people selected.

Code of conduct,

Hopes and fears in the CAHW program.

External and Internal anatomy

Signs of health in an animal.

Signs of sickness in an animal

Animal restraint, Clinical examination of an animal, history taking.

Cause of disease in an animal.

Local knowledge and names of livestock diseases.

Specific livestock diseases in cattle, sheep, goats, poultry,

Existing treatments and vaccinations,

Different kinds of medicines:

How to identify these medicines,

What they are used for,

Dosage

Route of administration,

Care and storage.

Different kinds of Vaccines:

How it works

Reconstitution

Handling and storage.

Recording and ear notching

Use of equipment

Linking local knowledge with the modern knowledge

Disease control

Rinderpest surveillance and the reporting of the 3Ds

Important veterinary techniques,

Action required when a disease outbreak occurs.

Environment and livestock management,

Cost recovery and veterinary private practice,

Private veterinary practice and its role in improving sustainability of the CAHW Program

Monitoring and evaluation procedures

CAHW Kit content

Marketing and extension and other value added activities e.g. water for livestock, cattle raids etc

BOX 1b. Practical tips to the trainer of CAHWs during the intensive training phase:

This is a summary of what can contribute to the success of classroom training of CAHWs.

Strive to learn the names of each CAHW and take pride at calling him by his name. It works miracles in rallying student interest in the learning process.

Select a comfortable, roomy and well ventilated building for class room session. If this is not available opt for a shady tree. Organize regular breaks to avoid fatigue and drowsiness. Be sensitive to such development and prescribe stretching exercises to clear sleep (energizers).

Show interest in the people you are teaching and be interested in the act of teaching them.

Adjust the level of the technical detail to match these simple people.

In short, as a rule, be simple.

There is no advantage gained by using high sounding names. In fact traditional names like "NYAPEC"; "NAWONY"; "LOKIYO"; "MOLMOLEY" AND "DEGAHABIE" (Rinderpest in Nuer Lou; in Didinga, in Turkana, in Pokot and in Afar respectively) are very magnetic.

Be practical and put everything at finger tips, avoid the boring theory.

Be relaxed and open so as to encourage the trainees to interact with each other and with you as a trainer quite comfortably.

Encourage the trainees to listen attentively by striving to communicate well and show keen interest on what the trainees are labouring to communicate to you and the class.

Do not stand in front of a picture or poster you are trying to show - stand aside so as to allow a maximum number of trainees to see clearly.

Strive to be a good example in the eyes of the trainees and show respect for them.

Be organized in your presentation by drawing a consistent plan to follow like the one shown in the section on the lesson plan.

Be familiar with participative techniques to facilitate active trainee involvement and stimulate their interest in the learning process

Enable them to **hear** and **see** and then **practice with their own hands..**

CONDUCTION OF FOLLOW UP IN A CAHW DEVELOPMENT

Community Based Animal Health Workers usually come from very far grazing areas. It will be counter productive to train such a person and literally throw him at the remote village without any follow - up support. He badly needs this support especially at the initial stages of his operations.

In fact immediately the intensive training ends, the trainees should be carried back with their kits and introduced to their elders. During such introduction, emphasis should be made on the new skills and drug package their sons have acquired and the need for the stockowners to pay for the services the CAHWs will provide. This will give the new "village doctors" confidence and encourage their clients to welcome them. This introductory visit should be followed later by at least two to five days of individual supervision of each trainee at his place of work.

During the follow-up phase the monitors will note:-

Correct diseases diagnosis;

Correct drug choice, dosage and route of administration;

Proper vaccine mixing;
 Correct drug pricing;
 Insistence on payment of drugs on cash basis;
 Re-supply of drugs;
 Good approach to stock owners by CAHWs;
 Checking of veterinary equipment;
 Proper accounting and collection of revenue;
 Correct filing of monitoring forms;
 Community leaders in supervising 'their doctors'.

Hence, this follow-up phase requires ideally the permanent presence of the implementing veterinarian in the duty station so that he/she can oversee the supervisors/coordinators and make direct visits to individual CAHWs. This permanent presence is particularly important in the early stages of the supervisory period, this will enhance the impact of training CAHWs on the job.

How much time should be spent in supervision and follow-up of CAHWs?

The supervision is of necessity a continuous process and it must not be interrupted. It should be intensive during the most busy time of the year. This:

- Allows to correct mistakes early.
- Builds self confidence among the CAHWs and their supervisor, because the supervisor is a helping friend not the lecturer – during supervision time.
- Improves communication.
- Improves reporting
- Improves services delivered.
- Ensures the use of cost recovery money by the community.

The supervision program could be planned best every week for the first month. Then better to do it every second week for the 2nd month. Again every third week for the 3rd month and every week for the 4th for the month.

THE CONDUCTION OF REFRESHER COURSE IN THE DEVELOPMENT OF A CAHW.

Refresher courses are supposed to be conducted after allowing the CAHWs to operate for a period of 6 months during which they were being individually visited in the fields as a follow-up phase. The Community Based Animal Health Workers are supposed to spend about 5 days during which they will:

- Share their experiences
- Correct any errors still existing
- Learn new drugs and ideas
- Find whether they are failing or succeeding in their operations.
- Return with drug replenishment on cash basis
- Bring defective equipment for checking
- Bring any revenue collected for buying more inputs from the veterinarian.

Thereafter refresher courses can be organized on annual basis. These experienced CAHWs should be invited to participate during the training of new CAHWs in their area.

CONTENT FOR CAHW REFRESHER TRAINING

The refresher course should be organized for all the CAHWs at a 6 months interval and then annually. The training should be aimed to refresh their memories, correct any errors still surfacing, allows sharing of field experiences and introduction of new ideas. But it is not a repeat of the intensive phase of the training program.

The following contents are therefore recommended:

- Self-introduction and code of conduct;
- Expectations from the participants;
- Reports – CAHWs work done, share experience – Success and failures
- (Review Vaccination, disease diagnosis, treatment).
- Extension (relationship between CAHWs and Stock owners)
- Review monitoring, Reporting;
- Review Cost recovery, Incentive, Sustainability;
- New livestock diseases suggested by CAHWs.
- Other new topics – Such as hides and skins, blood samples, poultry diseases,
- Incorporate experiences encountered during implementation.
- Introduce new drugs/Vaccines/Equipment
- Proposals on improvement of the program
- Produce plan for the future.
- Retraining of RP Vaccination program.
- Train them on rinderpest surveillance.

It is equally important to note that a successful training program for the Community-based Animals Health Workers starts with the conduction of a baseline Survey. This is because the syllabus for training the CAHWs comes from this process. The details of conducting a baseline Survey are given for the benefit of the beginner.

THE BASELINE SURVEY

Objective of this survey are as follows:-

- I. To enable the target community to identify and describe the concepts of Animal health as they perceive these concepts and indicate any traditional remedies that they have for those disease entities.
- II. To study the indigenous strategies employed by the target community in managing their livestock and environmental resources.
- III. To utilize the above findings in designing a training syllabus for the pastoralists whom have been selected by the target community to deliver animal health services to their livestock.

The methodology of the survey

Interview sites are chosen by community leaders in potential target groups during preliminary dialogue between the participating NGO and occasionally in collaboration with local veterinary authorities. In the case of Southern Sudan interviews sites may be cattle camps, watering places, the *toic* (swampy grazing areas), or at the executive Chiefs centre. In the case of Turkana, Kenya this could be at the "tree of men"

for the specific Adakar preferably away from the trading centres. A popular watering point with a good canopy of acacia trees is also a possible site.

The people to be interviewed must include the institutional leaders like the *bain wut* (cattle camp leader) and the spear-master in the case of the Dinka in Southern Sudan; the *Adakar/Alomar* leaders in case of Turkana, Toposa of Sudan and Karamojong of Uganda; the chiefs of the Taureg and WodaBee communities of Niger; and the clan leader in the Afar of Ethiopia. Preliminary contact should encourage the involvement of ordinary herders and women in the baseline survey. Women and age groups are often met separately. Standard PRA tools allow these groups to participate and discuss animal health issues (Grandin. B, et. al, 1994). Services of competent translators are sometimes needed in each community in order to translate from local languages.

It is important to emphasize that it is not sufficient to talk to the chiefs or local councillors alone these are merely the link between the local authorities and the real livestock owners. It is unfortunate that frequently when an intervention is introduced in pastoral areas, chiefs and local councillors use it as an opportunity to profit or further their authority. In the case of livestock interventions, it is occasionally learned later that these individuals may not even own animals. If community animal health workers (CAHWs) are to be selected by the "community", it is important to ensure that traditional tribal institutions – and not only government-pastorals group interfaces–debate and decide upon this process. If traditional institutions are not involved from the early stages on, then the CAHWs trained will not be responsible to the communities they were intended to serve, nor will they be recognized by the livestock owners as being experts that they may call upon for service.

During the baseline survey, pastoralists discuss in detail management strategies and livestock production practices that they undertake including disease conditions including local names, pathogenesis, signs, and means of transmission. In addition, environments, season, soil and pasture types, water sources, and general landforms need to be described with accuracy and given appropriate names. It is important to recognize that this broader EVK that includes a keen understanding of environmental complexities which in turn explain the basis for coping and management strategies of marginal resources is critical to the development of sustainable programs (Oba Gufu, 1985).

Experience with the Taureg and WodaBee of Niger and the Samburu, Karamojong supports a general notion that both West and East African pastoralists are more willing to discuss traditional disease remedies. (Stem, 1994, Wanyama, 1998)

The pastoralists' perceptions on livestock diseases and environment should be used to design locale-specific syllabi for training the pastoralists selected by their communities to deliver livestock health services.

As result of the baseline survey it is possible to expect the following;

- A) The facilitators and later the CAHW trainers learn the real situation of the target community in their traditional setting.
- B) The target community will choose the subjects for discussion during CAHW training.
- C) The traditional knowledge system (EVK) that is embedded in the cultural matrix of the target community is understood to the extent that it can be used as a basis upon which the program can be built.

- D) The opportunity is made for inter-linking EVK with the modern knowledge systems.
- E) The trainers can learn the perceptions of the livestock owners and the way disease names are derived from the socio-cultural backgrounds.
- F) The trainers no longer have to use scientific terms to explain disease concepts because he/she can then use traditional names.
- G) Local livestock owners can actively participate since they are using local terminology for discussions.
- H) The actual time needed for CAHW training is reduced.

Livestock Disease Perception and Etymology among Pastoralists.

A few examples are given to illustrate the livestock disease perception and etymology as given by various pastoral groups.

Blackquarter

This is a livestock disease that is recognized and accurately described by most pastoralists and agro-pastoralists.

The Turkana pastoralists, call it "*Lokichuma*" which literally means "piercing pain" (from "*akicum*" meaning to "pierce"). The description was borrowed from human feelings as the Turkana pastoralist watched with imagined pain the limping of the sick cow. The Fulani of Cameroon call this disease *Labba* meaning the Devil's spear, the Fulani believe that the lesion which causes the sick animal to limp came as a result of the animal being pierced by the devil's spear which pierces the heavy muscles without physically cutting the hide. The black hole in the muscles of the forequarter was caused by the devil's spear--*labba*. Similarly the Afar of Ethiopia name this disease *Hrraymude* where *harra* means 'forequarter' and '*mude*' means to pierce or to spear.

Rinderpest.

Rinderpest is a livestock disease that can cause very high mortality. The disease is endemic in specific inaccessible pastoralist areas in the sub-Saharan Africa. The names given to rinderpest by the various cattle keeping communities tell very vivid stories that can for very effective tools for awareness creation.

The Turkana give the traditional name for rinderpest as "*lokiyo*" or *Loleeo*". The two names were derived by the Turkana pastoralists as follows: *Ngakiyo* in English means tears and *Lokiyo* denotes a livestock disease manifested by copious lacrimation and nasal discharges involving very many cattle in herd and easily spreads to other neighboring herds in an outburst fashion. It is the widespread lacrimation signaling a catastrophic episode or plague that stimulated the coinage of the name. The plague often involved not only cattle but even buffalo herds. In this case, when herders notice emaciated buffaloes they move their cattle away to avoid the disease. *Loleeo* is borrowed from their neighbors, the Karamojong, where that word means, "malicious". The Turkana use the word to describe a unique type of pipe stem diarrhea which is watery and greenish brown.

The Fulani of Cameroon call rinderpest "*Pettu*" which they like to a strong wind that destroys a lot of fruits when it passes through a laden mango or apple tree. The picture paints rinderpest as being capable of blowing through cattle herds, leaving them dead. The Afar of Ethiopia, call rinderpest "*Degahabe*" which to them means "Empty kraal" it comes from the expression "*geso foyas habe*" meaning the kraal of cattle is empty.

The Dinkier Reek and Dinkier Boor of S. Sudan call rinderpest *Awet* or *Nyan tek* respectively. AWET comes from *wet piny*, which in Dinka Rek means to scatter down like a hen that scatters the sorghum grain when it is fed in a container. The older Dinka compared this observation to a disease, which scatters down cattle. The Dinka Bor called it *NYAN TEK* meaning remain **one calf**; which indicates the manner in which rinderpest kills all the cattle, leaving only one or a few animals to become immune to the disease.

The *Latuko* of Southern Sudan give to rinderpest the name *Lopirit*. This comes from the word "*PIRIT*" referring to the speed at which a fluid is emitted. when the expression is used to describe a disease in cattle, it refers to that disease which is manifested by projectile emission of watery faeces.

All the above people are aware of the presence of modern vaccine, admit that they have no treatment of their own. They do have sophisticated quarantine procedures, which they put into effect during outbreaks.

Trypanosomiasis.

The disease is common in many pastoral and agro-pastoral areas. The main vector being the tsetse fly though biting flies contribute by mechanical transmission. This protozoan disease affects all domestic animals but the examples given here are mainly from cattle.

The Turkana of Kenya and the Toposa, of S. Sudan call trypanosomiasis in cattle *lokipi*. The name comes from *Ngakipi*, which means water. *Lokipi*. Describes that disease of cattle which is characterized by widespread oedema in the body of the affected animal. The widespread odema is the final stage in a wasting condition. The carcass literally quenches fire and releases a lot of smoke when roasted.

The Didinga and Latuko of Southern Sudan call trypanosomiasis *Lobi*. The word *lobi* in the two tribal groups describes gradual loss of body condition of the affected cow. It is spread by the Tsetse fly (*lolir* in *Latukol* and *Ikirongit* in *Didinga*).

The Nuer of S. Sudan call trypanosomiasis *Liey/Guaw* and they derive these two names from "liy" meaning stealing slowly, like something is secretly removing something from inside the animal which becomes "thin" Guaw is a cattle disease characterized by gradual loss of condition, periodic fever, sunken eyes, lacrimation and photophobia in the presence of light. Frequently these animals seek shade, and in addition have hair loss in their tails.

In nearly all cases the pastoralists have been exposed to modern trypanocidal drugs, such as Ethidium Bromide. They associate the effectiveness of these modern drugs with their local terms for trypanosomiasis, thus indicating they are correct in their diagnosis. There is some evidence that the local names, which describe wasting diseases, may in fact be a combination of several diseases, for example a combined infection of liver fluke with trypanosomiasis.

Disease Diagnosis and Use of Traditional remedies by Pastoralists.

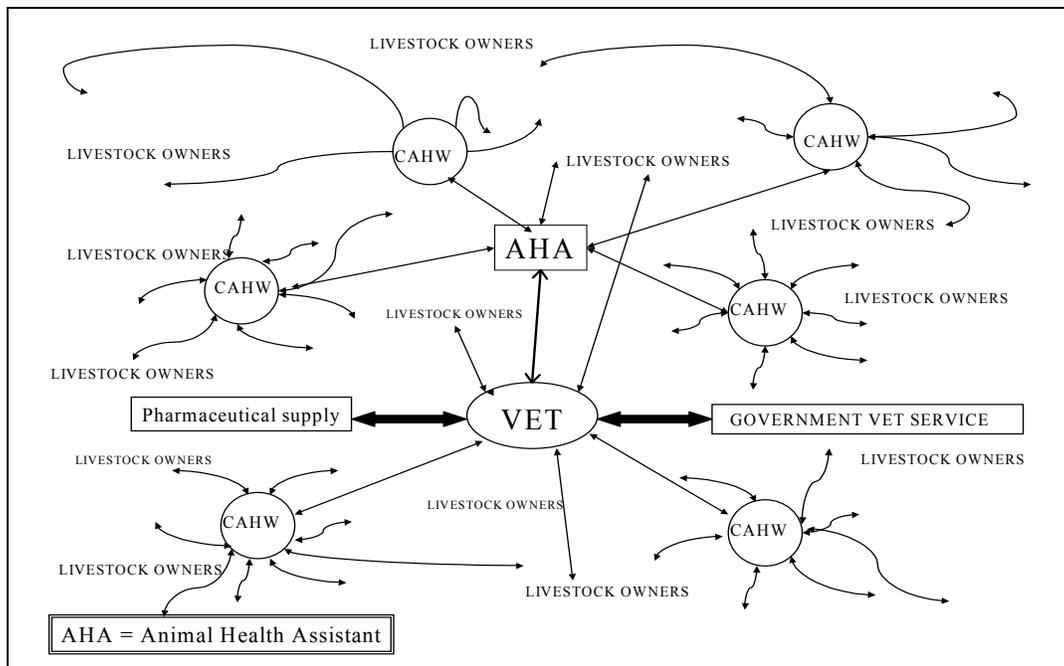
The few examples of livestock disease perceptions by the pastoralists show that pastoralists are very good in diagnosing livestock disease entities in their traditional way. In fact, while discussing the Turkana classification of livestock diseases stated that "*they classify the conspicuous uncommonness visible on the animal*". In other words the Turkana identify what they believe are pathognomic symptoms and name the disease accordingly. It is after diagnosing that they indicate traditional remedies for these disease entities. All pastoral groups in sub-saharan Africa express this ability with pride.

In both East and West Africa traditional medications are well known and discussed freely. For instance the Fulani known as the WodaBee in Niger and the Taureg in Niger are skillful in vaccinating their cattle against contagious bovine pleural pneumonia (CBPP) by placing a piece of infected lung from a cow that has died of CBPP into a fold of slit skin on the side of the nose of cattle to be vaccinated.(Stem,1996) Meanwhile for more details, traditional medicines are discussed elsewhere (Wanyama 1998).

Finally how does the CAHW link with the rest of the animal health delivery system?

The model shown in the diagram and Box 4 that describe the Terms of Reference of the CAHWs can adequately answer this question. This model can only operate if the government changes its policies to accommodate the CAHWs and the Para-veterinarians into animal health delivery systems in pastoralists areas (Leyland, 1997) The CAHWs should be permitted by law to carry out clinical treatments and vaccinations of livestock under the direct or indirect supervision of a veterinarian. The indirect supervision comes about if the para-veterinarian assist the veterinarian to follow up and monitor the CAHWs. The government veterinarian would play the role of regulation, keeping standards, general administration, management of serious disease out breaks, and epidemiological monitoring (Sollod and Stem,1991; Stem,1994).

A diagrammatic outline of a working model of a privatized pastoral veterinary practice is shown in figure 1(Leyland, 1997)



Outline of privatised pastoral veterinary practice

BOX 2: TERMS OF REFERENCE FOR COMMUNITY ANIMAL HEALTH WORKERS (CAHWs)

DEFINITION OF A CAHW: (AS DEFINED ABOVE)

Objectives:

1. Reduce the incidences of Rinderpest within their area of jurisdiction through scheduled, prompt

reporting of suspected cases and enhance dialogue with livestock owners on the importance of presenting all cattle for vaccination coverage.

2. Contribute towards the eradication of Rinderpest in Kenya and the region in general by doing a vaccination coverage to warrant an 80% immunity level.
3. Promote the production and productivity of livestock in the area of operation through dialogue and training of stock keepers on correct husbandry practices as well as provision of prompt essential animal health care where necessary.

REPORTING TO : Respective monitor (supervisor)

ANSWERABLE TO: Community from which he / she was appointed.

JOB DESCRIPTION:

1. Mobilize stock - owners to present all cattle for vaccination against Rinderpest for three years in a row.
2. Constantly, create awareness on the dangers of Rinderpest to specify herds and the general cattle population in his / her area of jurisdiction.
3. Remind stock-owners that they need to restrain all animals they present for proper vaccination (Ear-notching in the case of Rinderpest).
4. Impress upon cattle owners the importance of ear notching all cattle over eight months of age vaccinated against Rinderpest for identification of cattle vaccinated and how many times the cattle have been vaccinated out of the mandatory case.
5. Report promptly all suspected cases of Rinderpest to the team leader or the nearest authority and to ensure timely isolation of all such cases.
6. Ensure that Rinderpest vaccination is done in a technically acceptable manner i.e.
 - all equipment cleaned and sterilized before starting the vaccination;
 - keep all vaccines away from heat and direct sunlight;
 - reconstitute vaccine away from heat and direct sunlight;
 - use all reconstituted vaccine within one hour;
 - ensure vaccine is introduced subcutaneous;
 - ear-notch all vaccinated cattle if they are over eight months of age;
 - follow all usage introductions depending on the type, etc.
7. Present accurate information of all vaccination done to the supervisor using punch cards and vaccination report forms.
8. Start by organizing and undertaking extension trips through his or her area of jurisdiction to explain to the stock-men his or her new role as what is expected of the stock-owners for the program to succeed.
9. Be available to the stock keepers at all times and attend to their livestock problems promptly.
10. Take proper care of all medicine, equipment, materials and cash within his / her custody by virtue of his/ her work. He / she should keep all such material, equipment and cash safely.
11. Maintain a high sense of discipline and integrity with the stock-owners and the general public at all times.
12. Maintain dialogue with the stock owners and be conversant with livestock disease and management problems at all times there by offering prompt solutions and updating the supervisor (monitor) on the state of affairs.
13. Report in managing the six major diseases in his / her area viz. Rinderpest, Foot and mouth Disease, CBPP, Hemorrhage, Fascioliasis, Round worms, East coast fever,
15. Keep accurate records of all cases attended, drugs used per cases attached.
 - Using the pictorial monitoring forms;
 - Using punch cards and vaccination report forms;
 - Give all such records to the Monitor (supervisor) in this case this is the Animal Husbandry Officer for onward transmission to the Private Veterinarian who will pass the information to the District Veterinary officer, on a regular basis.
16. Insists on the cost-recovery program by creating awareness among the stock-owners on the significance of the cost recovery program;
 - Keeping accurate records of drugs used and revenue collected;

Ensuring the right revenue is collected for a given quantity of drugs at all times and that no farmer is issued with free drugs nor farmers cheated out of their money.

17. Promote goodwill and harmony.

18. Be a resource person for training community dialogue or surveys.

19. Willing to be trained.

CONCLUSION:

The development of privatized delivery of animal health services in pastoralist areas is becoming a reality by the involvement of the community themselves in the delivery system. The word community used to receive less attention from the veterinary profession. But the Medical counter parts treat Community issues and community strategies with the seriousness they deserve. For instance small pox was eradicated in the world by the strong involvement of the community nurses. Another example is the treatment of onchocerciasis which has succeeded in achieving the annual target coverage of 90% of the population eligible to take ivermectin, and to continue sustaining themselves for 10–15 years or more even after external donor funding ceased. The secret behind this success story in dealing with the River Blindness and the associated skin lesions was the replacement of the treatment strategy that had been imposed from outside by a community– directed strategy developed by the community members themselves. Further more the community–directed strategy made full use of the traditional social systems of patrilineal kinships and clans (Katarawa , et al,2000)

In the veterinary profession, Andy Catley and T.Leyland concluded that projects that encourage types of community participation such as interactive participation and self–mobilization are most likely to result in sustained benefits for livestock keepers. In veterinary profession again, if it were not for the CAHWs, rinderpest would still be a big threat in Southern Sudan and Ethiopia. Now Ethiopia has declared provisional freedom from the disease through the efforts put by the Afar CAHWs who were trained in 1993/4.

Due to the unique characteristics of pastoralist areas it is the CAHW who is the animal health provider of choice because he would help the private veterinarian to cut down on the overhead costs of transport in the vast territories. The Veterinarian only needs to set a net–work of CAHWs in the pastoral wilderness and his/her business would flourish. In other words, a CAHW is not a competitor, as the veterinary profession feared them earlier. They are grass–root business partners. But the Governments of the region should speed up policy changes to accommodate this cadre of animal health deliverers. It is one of the options of choice to improve animal health and food security in pastoralist regions.

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**Policy of the Ministry of Agriculture, Animal Industry and Fisheries,
on Animal Health Service Delivery and Privatisation of Veterinary Services in Uganda**

by

W. Olaho – Mukani, Director of Veterinary Services and J.P. Saamanya, Commissioner for Animal
Production & Marketing

1.0 Introduction:

1.1. The role of Livestock in Uganda's Economy

Uganda's economy is largely dependent on agriculture, most of which is peasant-based. The Agriculture Sector accounts for 43% of the GDP and 85% of the export earnings. The Livestock Industry in Uganda accounts for 17% of the Agricultural GDP and 9% of the National GDP. The main species of livestock are: Cattle, goats, sheep, pigs, poultry and rabbits and their populations are 5.6 million, 3.5 million, 1.3 million, 1.0 million, 23 million and 35,000–50,000 respectively.

The main products from livestock include: milk, meat, eggs, hides and skins. About 95% of the cattle and 100% of the small ruminants are owned by small-holder farmers and pastoralists, who produce the bulk of the milk and slaughter animals. Over 90% of the cattle are indigenous Zebu and Sanga kept by small-holder farmers or pastoralists. There are about 232,000 dairy cattle and 200,000 improved beef cattle. It is estimated that the annual production of milk for the year 2000 was 700 million litres of milk, 107,000 tonnes of beef and 17,000 tonnes of goat meat and mutton. The estimates for hides were 6,778,000 kg, while the goat and sheepskins were 927,000 kg and 206,600 kg respectively.

The *per capita* consumption of milk in Uganda is 22 litres, while meat is 5.6 kg. This is low compared to what is recommended by the FAO (200 litres and 50 kg respectively). The challenge, therefore, is to increase production and productivity of these enterprises to satisfy the national demand and the export market.

Uganda has a reliable and ample rainfall averaging 300–900 mm per annum in most parts, which, combined with the fertile soils, provides suitable conditions for crop and pasture production thus favouring livestock production.

1.2. Macro-Economic and Civil Service Reforms

Since 1987, the Government of Uganda has initiated macro-economic policies and structural reforms aimed at improving the economy and the standard of living of the people. These included Privatisation, Liberalisation, Decentralisation and Democratisation. In addition, Government has been carrying out Public Service Reforms aimed at improving the delivery of services to the population. The aim of the restructuring of government ministries and departments was to bring them in line with the provisions of the 1995 Constitution and the Local Government Act (1997).

2.0 Role of the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)

2.1. Mandate

Following the reforms mentioned above, the role, mandate and functions of MAAIF has changed. Its new mandate is: *“Support, promote and guide the production of crops, livestock and fisheries, so as to ensure*

improved quality and increased quantity of agricultural produce and products for domestic consumption, food security and export”.

MAAIF is no longer involved in direct service delivery to farmers. Its new role is to create an enabling environment for other service providers in the agricultural sector, by performing the following core functions:

- (i) Formulating and or reviewing of national policies, standards, legislation, regulations and plans for agricultural production, processing and marketing.
- (ii) Controlling of crop and animal epidemic diseases, pests and vectors.
- (iii) Monitoring, inspection, evaluation and co-ordination of agricultural programmes and projects.
- (iv) Regulation of agricultural activities including fishing, livestock marketing and others.
- (v) Surveillance and control of public health related agricultural activities.
- (vi) Provision of technical support, guidance and training to Local Governments.

2.2. Directorate of Animal Resources

The Ministry of Agriculture, Animal Industry and Fisheries is composed of two technical directorates, namely: Directorate of Animal Resources and Directorate of Crop Resources. The basic mandate of the Directorate of Animal Resources is ***“To support, promote and guide all livestock, fisheries, apiculture and sericulture production to enable the country to achieve and maintain quantitative self sufficiency in animal protein, animal by-products and honey, bee wax, propolis and silk products and for the export market”.***

The Directorate in particular is mandated to:

- (i) Formulate effective policies, plans and strategies for and provide technical support in:
 - Production of farm animals.
 - Production of meat, milk and other animal products and by-products.
 - Production of honey, bees wax, propolis and silk products.
 - Controlling major animal epidemic diseases, promotion and protection of animal health and protection of human population from zoonotic diseases.
 - Economic exploitation of fisheries resources.
 - Controlling obnoxious aquatic weeds and pests.
- (ii) Update and enforce appropriate laws and regulations in the livestock and related fields.

The Directorate’s vision is in line with that of the Plan for Modernisation of Agriculture (PMA). It states thus: ***“A profitable, competitive, sustainable and dynamic livestock sub-sector”.*** The mission is: ***“Transforming subsistence livestock production and processing, into a sustainable commercial sub-sector”.***

There are three Departments in the Directorate, namely:

- a) Department of Livestock Health and Entomology
- b) Department of Animal Production and Marketing
- c) Department of Fisheries Resource

The delivery of animal health services is carried out mainly by the Department of Livestock Health and Entomology.

2.2.1. Department of Livestock Health and Entomology

The department has three divisions, viz:

- a) National Disease Control

- b) Inspectorate and Regulation and
- c) Entomology

The functions of the respective divisions are as described below:

a) Disease Control Division

Key functions of this division are:

- (i) Formulating strategies for controlling the spread of endemic animal diseases and disease epidemics countrywide.
- (ii) Monitoring outbreaks and prevalence of diseases in the country in collaboration with other countries and organisations.
- (iii) Examining laboratory samples from field surveys and the districts as a back up for disease control programmes.
- (iv) Prompt collection, collation and dissemination of epidemiological data.
- (v) Advising the district authorities and the decision-makers on disease control matters.
- (vi) Ensuring availability vaccines of notifiable diseases and essential drugs.

b) Inspectorate and Regulation Division

Key functions of this division are:

- (i) Formulation and/or review and enforcement of regulations pertaining to animal health.
- (ii) Advising on importation, distribution and marketing of drugs, chemical and vaccines for veterinary use.
- (iii) Enforcement of laws and regulations to prevent spread of zoonotic diseases.
- (iv) Registration and supervision of veterinary practitioners in accordance with the Veterinary Surgeons Act.
- (v) Enforcement of laws and regulations pertaining to animal welfare.
- (vi) Monitoring and inspecting the importation and/or exportation of animals and animal products.
- (vii) Inspecting and monitoring the livestock health services of the Local Governments to ensure that they conform with national policies, standards, legislation and plans.
- (viii) Co-ordinating and harmonizing the livestock health control activities of the various local governments.
- (ix) Providing technical guidance, support supervision and training to the Local Governments.

c) Entomology Division

According to the Local Government Act (1997), the functions relating to entomological services, including vermin control were decentralised to Local Governments. However, the centre retains responsibility for policy formulation, monitoring and evaluation, technical guidance and national standards. Placing the entomology function within the Livestock Health Division provides for the supportive linkage and integration required between the entomology function and other animal disease control functions. This is necessary since most of the entomological activities concern the control of animal diseases, while vectors spread many of the animal diseases.

The functions of the division are:

- National Tsetse Control
- National Tick Survey and Monitoring
- National Apiculture and Sericulture

3.0 Decentralisation

The Local Government Act (1997) decentralised to the Local Governments (districts, urban authorities and sub-counties) the following functions relating to the Agricultural Sector:

- Crop, animal and fisheries extension services
- Entomological services
- Vermin control

Within the context of the Decentralisation Act, also spelt out the other aspects of the mandate of the Ministry of Agriculture Animal Industry and Fisheries as follows:

- Inspection and monitoring of animal health activities of Local Governments, and offering technical guidance, support, supervision and training to ensure implementation national veterinary policies and adherence to performance standards.
- Monitoring and co-ordination of government initiatives and policies as they apply to local government.

Within the content of Local Government Act, all staff in the districts are recruited, promoted or disciplined by the District Administration. The Government has carried out a nation-wide recruitment of veterinary officers at sub-country level.

It should be noted that there is no direct linkage between the Directorate of Animal Resources and the District Veterinary Services. All communication to the Districts is through the Chief Administration Officer, who is the Accounting Officer the District. Likewise, all reports must be routed through the Chief Administration Officer. This has, at times, affected the effectiveness and efficiency of veterinary service delivery in some districts.

4.0 Divested functions

Following the Post-Constitutional Restructuring of MAAIF (1998), the following functions relating to animal health services delivery were divested as indicated:

- Research in animal health and production was divested to National Agricultural Research Organisation (NARO).
- Training of Para-veterinary staff was to the National Agricultural colleges, which are semi-autonomous under the Ministry of Education and Sports. However, MAAFI and Makerere University are expected to provide technical guidance to these colleges.
- Extension services are decentralised. Following the enactment of the National Agricultural Advisory Services (NAADS) Act, these services will be contracted out to the private sector.

5.0 Privatisation /Liberalisation Policy

In line with the overall macro-economic policies, all commercially-related animal health functions were privatised.

(i) Drugs and Vaccines Supply

By 1989, it was noted that with the dwindling Government resources, supply of inputs required by the livestock sector could not be met by the Government. A Presidential Committee on Manufacture, Importation, Distribution and Marketing of Drugs recommended that Government should privatise the above with the exception of vaccines and trypanocides. This recommendation was further revisited in 1997 and a further policy was adopted that the Government is now only responsible for vaccines for the control of Rinderpest, Contagious Bovine Pleuro-Pneumonia, Foot and Mouth Disease and Rabies.

The National Drug Authority (NDA) on behalf of the government is mandated to regulate the manufacture, importation and registration of veterinary drugs and vaccines. Likewise, monitoring and surveillance of drugs and vaccines in the field is carried out by NDA, veterinary staff and farmers.

The distribution of drugs is done by the private sector under license from National Drug Authorities. MAAIF, however, monitors the availability of the drugs and vaccines with the aim of ensuring adequate supply at all times. It is the responsibility of the Government to encourage and support private veterinary practices and sale of drugs by private sector to improve distribution and provision of animal health delivery services. Dialogue has been initiated between NDA and the Uganda Veterinary Association (UVA) to revise the NDA statute to enable veterinarians import and distribute veterinary drugs and vaccines without undue restrictions.

(ii) Private Veterinary Practice

The issue of Private Veterinary Practice was already being addressed by the Veterinary Association as early as the 1980s. In 1989, the Presidential Committee on Manufacture, Importation, Marketing and Distribution of Veterinary Drugs observed that a lot of veterinary staff were spending most of their time selling drugs or on clinical services leaving little time for extension and regulatory services. In fact the Government employed veterinarians were *de facto private practitioners*.

The Government with the assistance from the European Union through PARC, and the World Bank through Livestock Services Project designed a scheme for financing the veterinarians into private practice. The Uganda Veterinary Association was mandated to manage the scheme. Due to the financial disbursement regulations of the World Bank through Commercial Banks which in turn have their own internal regulations including collateral and interest rates, the Livestock Services Project ended without putting a single veterinarian in private practice. It however had an influence on policy change and training of veterinarians in business skills.

The Pan African Rinderpest Campaign Phase II/PACE has a budget to put in place at least 100 private veterinarians. Under the arrangement, a Memorandum of Understanding has been signed between the Government and the Uganda Veterinary Association for the management of the loan scheme and a more pragmatic approach of accessing the loan is being worked upon. However, it must be noted that over 80 veterinarians have started their practice utilising own resources.

The Department of Livestock Health and Entomology, under the Inspectorate and Regulation Division, has the function of registration and supervision of veterinary practitioners so that they perform in accordance to the laws, regulations and codes of professional conduct. The laws pertaining to veterinary practice are found in the Veterinary Surgeons Act. The professional code of conduct has been drawn up.

However, both the laws and the code of conduct are due for amendments to take into account the private practice, para-veterinarians and the Uganda Veterinary Association. The revision of the laws is also essential to protect private veterinarians from competition by Government employed veterinarians.

The role of the private veterinary practitioner has been defined to include:

- Curative services - treatment, surgical and obstetrical cases
- Vaccinations including routine vaccination and vaccination campaigns on contract basis.
- Drug and other farm input supply

- Tick Control programmes
- Disease identification and reporting
- Artificial Insemination
- Herd health programmes
- Consultancies to farmers
- Examination of laboratory samples

(iii) Role of Government Veterinary Service In Private Veterinary Practice

1. Amend the existing laws and regulations i.e. Veterinary Surgeons Act, Animal Diseases Act and the National Drug Statute to accommodate private veterinary practice, the role of Uganda Veterinary Association and the para-veterinary group.
2. Formulate appropriate policies, guidelines and performance indicators.
3. Enforce laws, policies and regulations.
4. In collaboration with the District Veterinary Officers, undertake inspection of private veterinary practice to ensure compliance to guidelines and performance standards.
5. In collaboration with the Uganda Veterinary Association, oversee the routine operation of private practice.
6. Protect private practitioners from extrinsic hindrances and undue competition.
7. Contract Government vaccination programmes to private practitioners.
8. Monitor the extension services offered to farmers by private veterinary practitioners.
9. Ensure regular reporting by private practitioners to the District Veterinary Officers.
10. Sensitise private veterinary practitioners on their responsibility in compliance with the professional code of conduct.

Some of the above functions are performed through the Uganda Veterinary Board which has the mandate to register, discipline and even de-register errant veterinarians. The Board together with the Association and the Department will review the professional Code of Conduct.

(iv) Role of Animal Scientists and Laboratory Technologists

Under the Department of Livestock Health and Entomology, there are zoologists who are engaged in tsetse and tick control in addition to productive entomologists. There are laboratory technicians who contribute to livestock industry. Although their work is not regulated, with the demand for their services in future, they may need to eventually consider them.

(v) Role of Para-Veterinarians in the Delivery of Veterinary Services

The Para-veterinary staff are those diploma or certificate holders in the field of animal health and production after completion of three or two years respectively in recognised veterinary training institutes. They form the bulk of the frontline staff.

Unlike the veterinarians who are registered and regulated by the Veterinary Surgeons Act, these para-veterinarians are neither registered nor regulated. It is a well-known fact that they are involved in veterinary practice in one form or the other. Currently they have organised themselves into an association and are demanding recognition.

(vi) Position of the Auxiliary Staff and the Community-Based Animal Health Workers

The cadre of auxiliary staff was created during the colonial time to fill the gap created by lack of training veterinary staff. This cadre of staff had little formal training, but was trained on the job and deployed in the field as Veterinary Guards, Scouts, Field Assistants, etc. They were deployed in the field for scouting

diseases and could participate in some support activities during disease control under the supervision of the qualified staff. These positions have recently been abolished with the current trend of professionalising the service.

The community based Animal Health Workers are similar to the auxiliary workers created to meet the demand of veterinary services under a nomadic pastoral situation where qualified staff is not available. It is however important that these groups should operate under strict supervision of trained veterinary practitioners. The creation of the Community Animal Health Workers is an NGO and donor innovation. Quite a number have been trained in Karamoja. Their impact is yet to be assessed.

6.0 Conclusion

Uganda has undergone several social and economic changes in the last decade. The trend has been to shift the delivery of services from the dominance of the Public to the Private sector, aimed at creating effectiveness and efficiency. The delivery of animal health services, therefore, has followed the same trend. The challenge for all stakeholders involved is how to make the delivery of services successful for the enhancement of livestock development, without compromising the veterinary profession.

Private Practice and CAHWs

by Dr. Opolot.

Context

The situation on the ground is that veterinary services are delivered by veterinarians in those areas where they exist and by paravets/ CAHWs in local communities. The latter are in fact the immediate service providers to farmers in remote areas. They bring drugs and consultations to farmers who cannot easily travel to town.

Challenges to Private Practice

Whereas privatisation of veterinary services has taken root in Uganda there are greater challenges facing the practitioners. Thus:

- Need to provide quality services to a wide range of customers in order to gain their confidence & increase market share.
- Logistical problems i.e. Need for appropriate transport, finances, technical manpower, equipment & infrastructure.
- Wider area of coverage. Due to inadequate technical manpower there is little follow up of distant cases.
- No standardised mode of operation for CAHWs & yet they bridge the gap caused by lack of vets in rural areas.
- Lack of resources to supervise/check the work of CAHWs as well as lack of a clear mandate to do so.
- Need to sustain the services in pastoral areas against in-apparent demand for vet services due to low income levels & lack of knowledge by farmers.
- Lack of networking among the practitioners in sharing information & experiences.
- Lack of regular refresher courses for both practitioners & CAHWs basing on the needs assessment. This would improve efficiency in service delivery.
- Lack of incentives in making PVP a viable enterprise since there is overlap of roles between the public & private vets breeding unfair competition. Or if the roles are clear then there is a weak implementation of the laid down regulatory rules & legislation regarding licensing & practice.
- Lack of business planning & management skills.

To solve this therefore, I suggest an objective analysis of the above problems and efforts be made not only to put solutions place, but also make sure they are actually implemented.

Community Animal Health Workers

This is a well-known phenomenon in pastoral/rural areas. As the name suggests they are community members formally/informally trained by NGOs, CBOs or veterinarians who serve in the local communities in provision of animal health services.

The main relationship with the private veterinarian is that of a privileged customer, who increases the veterinarians' distribution network through supplying services to farmers who would otherwise be inaccessible.

The other role CAHWs have is in referring difficult cases needing a veterinarian's attention or seeking clarification on field problems encountered, and which they do not know how to manage themselves. However this is quite limited, due to logistical problems and high transport costs. These hinder reporting of cases and also reduce the number of home visits it is feasible for veterinarians to make.

Problems faced by CAHWs:

- Small capital increasing the cost of inputs purchased relative to the distance travelled.
- Lack of appropriate training & updating of acquired knowledge leading to inefficiency at work (lack of capacity building).
- Improper drug storage & drug abuse leading to loss of confidence by farmers in CAHWs.
- Seasonality of the job & availability of other options for business. Many CAHWs switch on & off to other businesses like cattle trading, produce buying & general merchandise leading to difficulty in maintaining the service in rural areas.
- Others fall off business of treating animals due to inability of their clients to pay for treatments given on credit, or from using business profits for unplanned expenditures rather than restocking. This is due to poor business skills/debt management & is one of the major reasons causing failure of many CAHWs.
- Lack of consistent reporting on their progress, difficulties & no system in place for evaluating the quality of work.
- Lack of networking between NGOs/CBOs which trained CAHWs & the private practitioners on what indicators of performance have been set & monitoring system in place and knowledge gap that need to be addressed.
- Wars and adverse weather conditions affecting the livestock industry.

Suggested Strategies:

1. Training – Livestock farmers on improved animal husbandry practices.
– CAHWs using a standardised curricular nationally developed.
2. Refresher courses for CAHWs.
3. Veterinarians should offer technical assistance in training CAHWs on aspects of simple disease management, drug storage & administration of the recommended category.
4. Development of viable distribution networks by Vets/Paravets in bringing services closer to the people.
5. Putting legislation in place to standardise & regulate the operations of CAHWs.
6. Development of simple vet kit for field assistants (CAHWs).
7. Networking by all stakeholders in trying to develop community based services so as to serve the farmers at affordable cost.
8. Integration of provision of livestock services with other activities like food, security, water resource management, maintenance of existing infrastructure & peace initiatives especially in pastoral areas by NGOs, CBOs & Gov't.

Advantages of CAHW

1. They are locally based
2. It is cheap to train CAHWs
3. They are efficient in vaccination and diagnosing of certain diseases sometimes even more than inexperienced veterinarians.
4. The communication network work with farmers is good because they come from farmers themselves.

For many vets, paravets have been solely looked as major competitors especially at rural areas. In my view, they fill the gaps not covered by veterinarians and help to maintain service/distribution network in remote areas.

However the services of paravets/CAHWs could be improved by regular short courses & promotion of a referral system that takes their limitation into account. A veterinary service delivery policy that clearly defines the role of public, private vets & paravets will be appropriate to avoid unfair competition.

Conclusion:

The improvement of productivity & animal health in the farms is a prerequisite for rise in the farmers' & veterinarians' income.

This will enhance the farmer's capacity to pay for veterinary services, inputs & marketing services thereby sustaining the private practice.

Community Animal Health Workers and Government Veterinary Service in Kotido and Moroto districts.

By Dr. J.B Kasirye

Introduction

Kotido and Moroto Districts constitute the former Karamoja District, located in North Eastern Uganda. These districts have a semi arid to an arid climatic condition that have influenced peoples ways of life adopt the style highly dependent on extensive livestock production for the economic and socio-cultural survival.

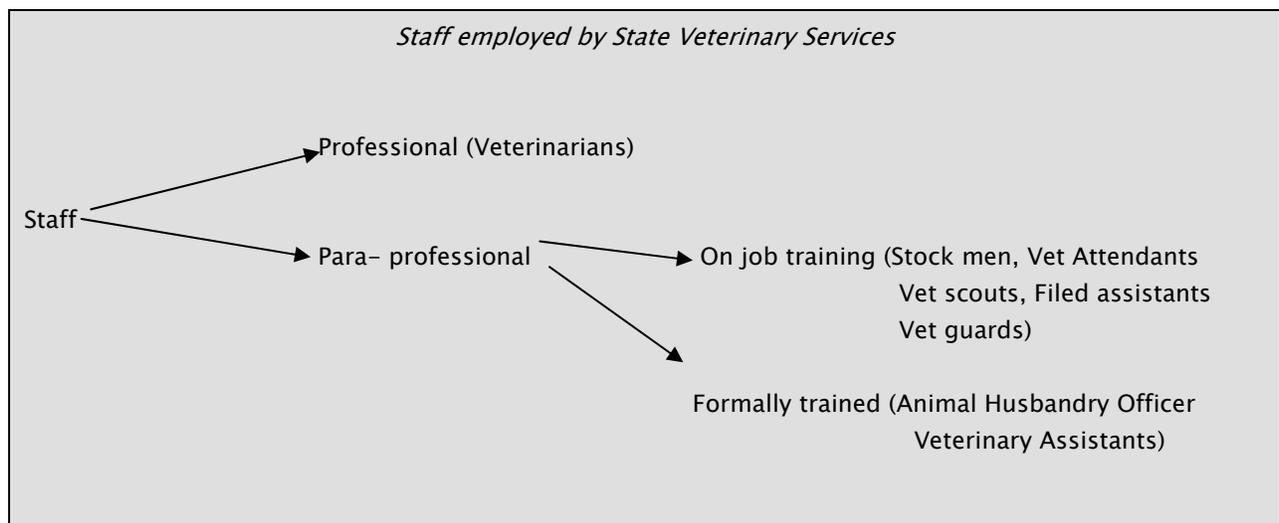
The two districts have 12% of the 5.6M National herd, kept under pastoral systems. Social services are not well developed, few Hospitals and Dispensaries, Schools watering points and less dependable, poor road infrastructure.

Livestock population and veterinary cover in Moroto and Kotido

	H/Cattle	Sheep	Goats	Vets	CAHWS
Moroto	275,000	51,000	35,080	4	-
Kotido	295,380	150,000	200,000	4	-

The National Delivery of Veterinary Services up to the late 1990's involved recruitment of all cadres of staff, provision of tools and equipment transport, salaries and allowances which were centrally controlled; there was very limited private sector participation.

Staff were both professional and para professions that included the on job trained Vet scouts, Field Assistant, Vet. Guards, Vet. Attendants and Stockmen. Their roles were very instrumental in control of epidemic animal diseases, animal census and communal dip management.



However, Government resources became too constrained to support adequately the public sector, resulting in serious deterioration of Animal Health Services Delivery countrywide. This led to the current Governments policies of liberalisation, privatisation, decentralisation and civil service reforms whereby the traditional delivery of Veterinary Services is being restructured accordingly.

Liberalisation and privatisation are being tried with some success in the areas with intensive livestock husbandry practices but are not likely to be effective in the extensive situations, unless modified. The civil service reforms have resulted in the retrenchment of all frontline veterinary service providers; and this has been most felt in extensive areas like Kotido and Moroto.

Decentralisation has divested the recruitment of staff to the districts. Some of which are fragile and their perception of staff requirements is dependent on their funds and staff interest.

There is, therefore, a growing gap between the required and the practising numbers of veterinary service providers especially in remote areas, which are unattractive for professional Animal Health Service Providers. One of the plausible solutions to this is for Government to encourage and support the participation of livestock owners in the provision of the needed services. This is the philosophy behind the concept of Community-based Animal Health Workers.

Moroto and Kotido districts offer opportunities for CAHW services.

The CAHWs are associated with several advantages namely; low income expectations, they are drawn from the same or similar ethnic backgrounds as the pastoralists, they are cheap to train, they are adaptive to the socio-cultural aspirations of the pastoralists they serve, and usually, they are expected to be easy to retain in the communities they serve.

In the ideal situation the CAHWs should give support to the veterinary services delivery system and should, therefore, be responsible to a qualified practitioner (Government or private). This is not the case at the moment. There are issues of a policy nature, which should be put in place before the ideal situation could even be thought of.

The CAHWs were said to have been efficient in the following interventions.

- Mass vaccinations,
- Diagnosis of specific animal diseases
- Drug administration
- Determining dosage
- Livestock data collection

The continued services of the CAHWs are under the following threats:

- The professionals are not willing to accept the role of CAHWs in the legal and professional context.
- The professionals are not willing to work in remote situations because private practice in these areas is not viable due to rising economies of scale.
- No body has identified a standard training menu for the CAHWs
- The recruitment and deployment of the CAHWs is ad hoc.

The Government has to accept that the changes brought about by the various macro economic and administrative policies have to be supported by a conducive and enabling legal environment to redress the constraints. (Amendment of the veterinary surgeons Act and other relevant statutes). There is also need to have uniform training guidelines to this cadre of staff.

NGO Perspective on CAHW -LEP

By Dr. Ojala (LEP)

Role of NGOs

Most NGOs adopt the rural reconstruction credo of "*going to the people, living with the people, planning with the people, working with the people, and learning from the people*". Since Karamoja and other pastoralist communities are always located in most remote areas and few vets are willing to work there, CAWHS are an appropriate alternative for livestock service delivery.

In Karamoja the NGOs try to empower the local communities to improve their livestock health thus people improving their livelihoods

NGOs which operate in Karamoja in Livestock Programmes include:- LWF, LEP, CHIPS, CVM/WC, Happy Cow, SVI, and Oxfam. The KPIU also has a major role.

LEP has 35 CAHWs so far elected, of whom 89% (16/18) are still active in Bokora and 65% (9/17) are still active in Pokot sub county. Drug kits were issued to these trained participants.

In spite of some weaknesses significant successes have been obtained using the CAHW approach.

What CAHWS do in pastoral areas

- Mobilizing the livestock owners
- Assisting in the actual vaccination campaign
- Diagnosis and treatment of the livestock

Constraints for effectiveness of CAHWS

- High fall out rates
- Insecurity in the area
- Irregular drug supplies and drought in the area which leads to migration of people and animals.
- Low supervision.

Elders response to CAHWS

- CAHWS are near their kraals and home saved many animals from diseases
- They are locally known and were pleased by their services.

Private Livestock Health Service: Providers and Privatisation

By Richard Isabiryte

ABSTRACT

This paper states the evolution of veterinary services in Uganda from colonial to post independence. The paper goes ahead to discuss the factors which has led to these changes. It identifies some of the key players in animal health services, their roles and co-existence.

It spots out some of the legal forms and the way they affect the veterinary profession in the era of liberalization and recommendations to the problems.

Introduction

Government animal health services in Uganda have for the last 40 to 50 years had the mandate to carry out both clinical and preventive livestock health care.

Unfortunately over the last 10 to 20 years, the resources available to run government veterinary services have either not been maintained or have not kept pace with rising costs within the agricultural sector. The result has been that the government services have been unable to provide the service they would like to have. In the 1990's this led to calls from government departments to raise their own funds through cost recovery and use of revolving funds. It has however been difficult for government departments to adapt to this system. The cost recovery funds are often either not sufficient to function as a true revolving fund or are diverted to other uses within the department.

Amidst all the above, the veterinary services deteriorated below acceptable standards. This prompted government to re-think on how to strengthen animal health services by redefining new roles for the government and the beneficiaries. This idea also received strong support by both donors and moneylenders, as World Bank and European Union, with an argument that the government should remain with core responsibilities of animal health services that are non-delegable and others taken up by the private sector.

Another line of argument is that the private sector is more innovative, aggressive and efficient than the public sector.

The Central Government, Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) remained with:

- (i) Formulation of Policy, National Plan and Standards.
- (ii) Technical guidance.
- (iii) Enforcement of regulations.
- (iv) Ensure standards are maintained.
- (v) Monitoring and Evaluation.
- (vi) Ensure manpower and institutional development.

The Private Sector was given the responsibility to undertake:

- (i) Curative services – treatment surgical and obstetrical cases.
- (ii) Vaccination, including routine vaccination and vaccination campaign on contract basis.
- (iii) Drug and other farm input supply.
- (iv) Tick control programs.
- (v) Disease identification and reporting.
- (vi) Artificial Insemination.

- (vii) Herd Health Programs including reproductive diseases, mastitis, control and parasite control and prevention.
- (viii) Consultancies to farmers.
- (ix) Examination of laboratory samples.

The above changes brought in several players from the private sector to fill the gaps:

- Veterinary Service Providers: (Veterinarians with degree / Paraveterinarians with diplomas / CAHWs / Artificial Insemination Technicians)
- Private drug companies: (Importing pharmacies / Wholesale pharmacies / Drug Stores)
- Feed manufacturers for poultry and animals
- Artificial Inseminations technicians
- Private diagnostic services coming up
- Non Government Organisations (NGOs) have also taken a major role in providing the above services and involved in restocking programs of poultry, pigs, goats, donkeys and cattle.
- Some NGOs and private companies have got involved in research
- NGOs and individual entrepreneurs have got involved in training of veterinary health providers especially at certificate and diploma level.
- Extension service providers

This looks a very promising move although much leaves to be done in expanding the scope of veterinary privatization and clearly defining the roles of each player. This can be achieved through regular review of the government policies and regulations to match with the changing market needs and challenges. Short of this will derail veterinary privatisation. This will require total commitment of the policy and decision makers at all levels to achieve a meaningful veterinary private practice.

Relationship between the different players in Animal Health Services

In many aspects, the relationship has been well streamlined and is working out well. However some aspects still leave much to be desired due to:

- Laxity in implementation and enforcement of the regulations
- Unfavourable laws and regulations which favour some players at the expenses of others
- Unethical competition intended to kick other would be partners in delivery of Animal Health Services
- Little financial support from Central Government to Veterinary Departments
- Failure of government to harmonize roles of different players

Influence of outside forces:

The veterinary profession and privatization faces strong pressures from outside sectors and authorities. To a great extent the outside sectors have posed a great threat to the veterinary profession and privatisation programme.

Much of the killer pressures emanate from government authorities who often fail to harmonise policies and action plans, thereby one policy frustrating the other.

- Importation of cheap Livestock products, thereby killing the efforts of the Ugandan farmer.
- Barn on recruitment of Certificate and Diploma veterinary cadres and strong support of Community Based Animal Health Workers (CAHWs).

Challenges to Veterinary Privatisation:

- The process of privatising veterinary services in Uganda is in full swing. The government and the Uganda Veterinary Association are both committed to it. Most farmers and veterinarians talked to seem to welcome the idea. Government through the European Union has secured a loan to finance veterinarians who intend to go into private veterinary practice.
- However, few veterinarians have benefited from this programme because of lack of collateral to access this loan. The interest rate of 17% is too high compared to other Commercial Banks.
- The para veterinarians form a front line at the grassroots in animal health services in Uganda. The Veterinary Surgeons Act prevents para veterinarians from carrying out clinical practice. These cadres have been denied access to the privatisation loan.
- The National Drug Authority policy (1993) prevents veterinarians from importing and running veterinary pharmacies without supervision of a pharmacist. Drug sales make 70% of the veterinarian's income. This policy has denied veterinarians chance to expand their businesses and extra costs are passed to the farmer due to the exorbitant salaries levied by pharmacist.
- Strategic location of a business is a key factor for its success. Unfortunately NDA does not appreciate this. It imposes restrictions on the locations of drug outlets.
- Registration of new drugs and annual retention fee are quite high. As a result drug companies tend to import in drugs with a high sale turn over. Vets are limited to few available drugs undermining their full professional skills and knowledge.
- Drug outlets dispense all classes of drugs and biologicals to whoever stands before their counters. This practice has been a major factor in frustrating the practicing veterinarians.
- Failure of enforcing defined roles of various cadres involved in the Animal health services.
- Poor diagnostic facilities.
- Hawking of veterinary services. This makes enforcement of standards very difficult and gives untrained (QUACKS) a chance to thrive.
- Unfair competition between public and private veterinarians.

Recommendations:

- Review of the veterinary surgeons Act to accommodate para-professionals.
- Allow para-professionals access to privatisation loan.
- Immediate review of the NDA policy and statute to allow veterinarians have direct control of veterinary drugs.
- Total commitment of all players in enforcing the regulations.
- Defining and enforcing roles of public and private veterinarians.
- Continuous veterinary awareness programme.

Conclusion:

With government commitment to liberalisation and modernisation of agriculture, veterinary privatisation has got a bright future. This will however require total commitment of all the players and refocusing on the true principles of economic liberalisation.

Developments in the Training of Animal Health Providers

By Prof. Okot Bwangamoi, Dep. Vet. Sci. (E.A.) PhD. (Colorado)

INTRODUCTION

An animal health provider may be defined as any person who is interested in the health of animals and actively does something to keep them healthy or cure them of diseases. Clearly, this group of persons fall under two categories: those who learn their trade by experience and those who undergo formal training in veterinary institutions. The focus of this lecture is on the latter category, and to discuss them, one needs to visit the history of modern veterinary practice in Uganda.

Before any veterinarian arrived in Uganda, doctors belonging to the Sleeping Sickness Commission of the Royal Society began a study of trypanosomiasis in humans and as early as 1903 discovered that the parasites were also a problem in cattle in Uganda. They therefore began to take blood smears from various animal species for examination. This move soon brought them face to face with *Theileria* organisms, the cause of East Coast Fever. At that time, a few British settlers had established cattle farms in the Protectorate. In some parts of the country such as Gondokoro, now renamed Lado, (which was part of Uganda at that time) and Nimule, government officials owned donkeys for transportation. In the absence of veterinarians, the Sleeping Sickness doctors were implored by farmers and government officers to investigate disease outbreaks among cattle and donkeys. Mr. J.M. Tate, the first appointed veterinarian, arrived in the Protectorate in 1908. Unfortunately, he vanished without leaving any record of his work. The second veterinarian, Mr. E. Hutchins, who must be regarded as the father of veterinary science and medicine in Uganda arrived in 1909 to find the Sleeping Sickness doctors *de-facto* controllers of veterinary affairs in the Protectorate. As a new-comer, they assigned him a minor role to work under Captain F.P. Mackie of the Indian Medical Service. Even though he worked hard and was responsible for elucidating the cause of Amakabe and other diseases in cattle, all the credit was given to Dr. Mackie. It was probably this injustice which stimulated Hutchins to urge the immediate creation of a Veterinary Department in the year 1910.

There has been much speculation about the origin of the Veterinary Department in Uganda. Some said that it was the offspring of the Bacteriology Department which was in Entebbe at the beginning of the twentieth century. Others that it arose from the Agriculture Department in 1919 and split in 1920 to remain alone till the Idi Amin era when it was re-amalgamated, then re-separated and again re-amalgamated with Agriculture. It is obvious that agriculturists are very uncomfortable about an independent Veterinary Department or Ministry and whenever any agriculturist has power in a military government in Uganda, their first act is always to amalgamate Veterinary to Agriculture.

The Veterinary Department was first mentioned by name in the Annual Report of the Agricultural Department in 1910. But it will be recalled that in 1972, the Golden Jubilee of the Veterinary Department was celebrated with much pomp. It is regrettable that those who researched the archives at that time were terribly inefficient and gave a date thirteen years off target. The Centenary of Veterinary Services in Uganda will be in the year 2010.

In his annual report of 1911, the Chief Agricultural Officer Mr. P.H. Lamb said "During the year under review, the Agricultural department has been reorganised. The Veterinary Department instead of being worked separately, now exists as a Division of the Agricultural Department." But despite Mr. Lamb's boast to have clipped the wings of Hutchin's organisation, the latter boldly wrote out an Annual Report of the

Veterinary Department (not Division) for the year 1911. The alliance was a very sore one, with veterinarians taking every opportunity to rub salt into the wound, saying that their longer years of training was proof of the superiority of their trade over that of their agricultural counterparts.

The plan for Veterinary Laboratories in Entebbe was prepared by R.E. Montgomery who came as a consultant from Natal in South Africa. But the final allotment of the site was not made until March, 1922 and a Stock Inspector was stationed in the place to begin the erection of paddocks and evict natives from the selected building site.

The erection of permanent buildings commenced in November 1922 and was completed by 1924. The Veterinary Pathologist, U.F. Richardson found the Laboratory inadequate in space and embarked on its expansion in 1925. In the same year, one room was loaned to the Bacteriology Division of the Medical Department headed by H. Lyndhurst Duke. The Veterinary Pathologist found to his dismay that once the camel put its head in, it demanded the whole tent and so in 1926, Lyndhurst Duke and his Medical team occupied most of the space. This is what led some veterinarians to speculate that the Veterinary Department was born by the Bacteriology Division or Department.

At the beginning, the Laboratory was named simply the Veterinary Laboratory. Later on, because the head was usually a pathologist, it became Veterinary Pathological Laboratory. That again gave way to Veterinary Research Laboratories and finally in 1925 it took the name of Animal Health Research Centre.

VETERINARY EDUCATION IN UGANDA

In 1933, the Director of Veterinary Services Mr. W.F. Poulton stated that “ *The aim of departmental education is to reach the mass of the stock owners which, in effect, includes nearly all natives in the Protectorate and after obtaining their confidence to persuade them to help freely in disease control and to use their animals to an increasingly beneficial degree in both a health and economical sense.*”

Poulton continued “Thus veterinary education in Uganda demands basically a study of the African and his beliefs and customs, as well as investigation of his stock, for unless both aspects receive full consideration it is doubtful if genuine and lasting progress can be made.”

The key words in the Poulton’s discourse are:

1. To reach the mass of stock owners
2. To gain their confidence
3. Persuade them to help in disease control
4. Make their animals useful economically and improve the health of the owners

However, to achieve the above objectives certain vital conditions must first be met, namely:

1. Get to know the beliefs and customs of the cattle owners
2. Investigate the status of health of their livestock
3. Recognise the importance of the Local Assistant in linking the veterinarian to stock owners

Poulton distinguished three classes of assistants:

1. The more highly trained (2 years at Makerere College plus 3 years Entebbe Laboratory = 5 years course). These later became Assistant Veterinary Officers. The award for this course was Diploma in Veterinary Science. The course was terminated in 1962 when all diploma holders (except the author)

were returned to Kabete for a one year up-grading course culminating in a Bachelor of Veterinary Science degree which was the precursor of the current Bachelor of Veterinary Medicine.

2. School leavers from Budo, Kisubi and Mengo who got trained for 12–18 months. These became Veterinary Assistants.
3. Lastly there were those from Mission Farm Schools whose training was geared toward improving farming methods, these became Veterinary Scouts. Later, Veterinary Assistants and Scouts were also trained in Entebbe.

All three categories of assistants were placed under the supervision of British veterinarians. The Animal Husbandry Diploma Course was started in 1962 with eight trainees.

In summary, historically the training of Animal Health Providers in Uganda had three tiers:

1. At the top was the professional Veterinarian whose training took 5 years. He was the guardian of the Veterinary Profession just like his counterparts worldwide.
2. In the middle was the Veterinary Assistant and later the Animal Husbandry Officer. This division of nomenclature was coined with the idea that Veterinary Assistants would concentrate on disease control while the Animal Husbandry Officers concentrated on production of milk and meat. The training took 2–3 years.
3. At the bottom was the Veterinary Scout whose training took 1–2 years and whose main role was to detect disease outbreaks and report to the D.V.O. However, it must be mentioned that until the mid 1950s some districts in Uganda were being wholly run by Veterinary Assistants and Scouts who were supervised by veterinarians either from adjoining districts or direct from the Veterinary Headquarters in Wandegaya or Research Division in Entebbe.

CONCLUSION AND RECOMMENDATION

A very strange twist of events is that the days when Hutchins and Poulton had less than 10–20 veterinarians, they were not only covering the whole of Uganda effectively to control animal diseases and improve milk and meat production but had time in hand to produce bacterial and viral vaccines as well as train veterinarians and para-veterinary staff. One would have expected that with about 1,500 veterinarians in Uganda now, every square kilometer of the country would be well covered, and yet large parts remain unattended. But what are the reasons for this shortfall?

1. **Economic Stringencies:** In the past the British Vet in Uganda had a free house, vehicle and subsidy for his children's education. He could therefore concentrate on his official duties which he performed very well and with dedication. Since the Economic War which Idi Amin introduced in 1972, the Vet's salary and fringe benefits are inadequate to keep him and his family comfortable. He therefore must engage in ancillary activities that will bring additional income, to the detriment of his official duties.
2. Bad politics has created insecurity (many guns in wrong hands) and a lot of mistrust as well as blood feud between tribes and even clans and families. Consequently many vets feel that there are no-go areas for them in the country. At the same time many livestock owners, especially in pastoral areas like Karamoja, don't trust their animals with strangers.

For these reasons it is necessary to remember what Poulton said in 1933 that "The importance of the Local Assistant in linking the veterinarian to stock owners must be recognised." Hence the importance of Community Animal Health Workers. Some veterinarians have expressed outrage at the idea of employing the so-called CAHWs fearing that they may turn into the camel that kicked the owner out of the tent. I do

not believe that this will happen since we have a vigilant and active Veterinary Board. To deny that others must not provide services to the pastoralists where we ourselves cannot reach is like being a dog in the manger. At the same time it is essential that the CAHWs be not given a free reign but put under the supervision of District Veterinary Officers, just as the British did.

Community Animal Health Worker Training

By Dr. Valery Shean, B.S., DVM,

1 Evolution of CVM/World Concern CAHW Training Programme in Moroto District

- 1996 Development of CAHW training materials in Soroti for Teso (about 40 trained)
- 1997-99 Occasional consultations and CAHW training with other NGOs with adaptations for lower literacy among pastoralists:
LEP (about 20, CHIPS (about 9)
- 1997 Observed the huge expanse of indigenous knowledge of the Karamajong people.
Began integration of indigenous knowledge into the curriculum.
- 1998 Formation of the BOLI group with CVM/World Concern as consultants
(12 trained LEP, CHIPS, LWF)
- 1998 Training of Trainers for BOLI to equip NGO staff to train CAHWs
- 1999 Surveys reveal several problems associated with the CAHW programmes
- 2000 CVM/WC initiates a small model CAHW programme to test various modifications



Group work at Soroti Workshop

2 Problems Associated with CAHW Programmes

CAHW Limitations/Constraints:

- Minimum knowledge base of CAHWs
- CAHWs working on credit
- Depletion of drug kits
- Misuse of medicines
- Fall out of CAHWs from the programme
- Lack of accountability/quality control service

Internal NGO Limitations/Constraints:

- Financial limitations on training numbers and frequency
- Lack of standardisation between various NGOs
- Lack of women's involvement
- Lack of communication and reporting to the District Veterinary Office
- Poor veterinary drug supply

External Environmental Limitations:

- Insecurity
- Black market drugs
- Poor infrastructures (roads, communications)

3.1 Overcoming CAHW Limitations/Constraints:

Minimum knowledge base of CAHWs

- Simplify training
- Build upon the indigenous base
- 2-3 week-long seminars
- Periodic refreshers (annual)
- Encourage relationships with VOs and AHOs

CAHWs working on credit

- Community sensitisation - monthly

Depletion of drug kits

- Small drug kits with 50% co-payment (cash or in-kind)
- Additional ½ drug kit after 6 months
- Discounts on medicines bought from associated VOs or AHOs

Misuse of medicines

- Character training - integrity, honesty, work-ethic

No official recognition of their work

- Certificate of competency following passing of the exam with DVO recognition
- Photo CAHW ID cards

Lack of accountability/quality control of service

- Examination at the end of the 2nd or 3rd training

Community dialogue with communities monthly
 Monthly record keeping with quarterly DVO report

Fall out of CAHWs from the programme

Monthly CAHW site visits
 Encourage prices that can provide enough profit
 Monthly acaricide spraying together
 Appropriate community selection and monitoring

3.2 Overcoming Internal NGO Limitations/Constraints:

Financial limitations on training numbers and frequency

Simplify the trainings and meetings
 Community and member contributions

Lack of standardisation between various NGOs

TOT courses for interested NGOs (LEP, LWF, CHIPS, SVI, VSF, CVM)

Lack of women's involvement

Training of women's Manyatta Animal Husbandry Assistants (24), meeting about every 2 months for 2 afternoons

Lack of communication and reporting to the District Veterinary Office

Dialogue and advice-seeking
 Reporting
 Invitations to events and trainings

Poor veterinary drug supply

Low interest loans to VOs or AHOs to help set up drug shops in target communities
 Transport of drugs for sale to monthly community and CAHW meetings
 Partial renewal of drug kit

3.3 Overcoming External Environmental Limitations:

Insecurity

Peace building discussions among elders
 Participation in cross-border harmonisation meetings
 Evangelism, directing people to the Prince of Peace
 Character training
 Prayer

Black market drugs

Provide quality service

Provide quality drug storage
Provide reasonable prices

Poor infrastructure (roads, communications)

Vehicle maintenance
Vehicle and base station radios

4 Critical Components of a CAHW Training Programme

- Appropriate Selection
- Appropriate Curriculum and Training Methodology
- Quality Control
- Consistent Drug Supply
- Gender Sensitivity
- Indigenous Foundation
- Character Training
- Government Support and Collaboration

Evaluating CAHW Programmes - Literature Review

By Dr Delia Grace, CAPE, PACE

Introduction

For humans and animals alike, most health care is delivered by non-professionals within the community. In developed countries where professional services are widely available and often free of charge to the user, more than 70% of health care is provided by the sufferer themselves, friends, family or community healers. In developing countries and in veterinary health this figure is likely to be even higher. In all societies depending on livestock, there are specialists within the community who treat animals, often in exchange for money, goods or services.

In the 19th century western medical systems were introduced into African countries as the official systems of health care. Lay auxiliaries have always played an important role in these systems but in the 1960's and 1970's a new concept emerged: that of the community health worker. She (and it usually was a woman) was envisaged as a para-professional who while based in the community was both the first line of the health care system and an extension agent. Since the Alma Ata Conference of 1978 CHWs have been an integral part of the human health systems in many developing countries.

This concept was extended to animal health care and from the 70's on community-based animal health workers, (bare-foot vets, para vets, primary animal health workers etc etc) have been trained in almost all livestock dependent countries. But despite their long history and global dispersion, there are still doubts over the impact, cost-benefit and sustainability of CAHWs. This paper reviews published evaluations of CAHW programmes in an attempt to summarise current understanding.

Evaluations

Development projects are notoriously difficult to evaluate. They take place within a challenging and rapidly changing milieu, where information is scarce, unreliable and difficult to collect. Their priorities, understandably, are often been disbursement, activity, and output rather than impact and learning. Evaluation is expensive, time consuming and not always welcome. Rigorous, scientifically valid evaluation may be neither practical or necessary for day to day management of projects, for, learning, capacity building for clients and staff, building community ownership, developing better ways of doing things, planning, sharing, convincing others, building trust and social capital.

However without credible evaluation it is difficult to show that programmes met objectives or made a worthwhile impact. For innovative and controversial projects such as CAH, evaluation is particularly needed. It is perfectly legitimate to distrust new and radical approaches, and testimonials and anecdotes by interested parties cannot be expected to convince CAH sceptics.

Types of Evaluation

Credible evaluations of health interventions come in three guises: experimental, quasi-experimental, and non-experimental. Experimental designs are the most powerful and produce the strongest evidence. These are characterised by random assignment pre-project, blinding and positive and negative controls. Obviously, they are extremely difficult to do under field conditions, and none of the CAH programmes in this review attempted an experimental-design evaluation.

Quasi-experimental designs compare project participants to those not receiving program services, or compare project participants before and after the intervention. Time series studies (with repeated measures) are the most powerful and valid form of quasi-experimental design but surprisingly, have not been used in evaluation of CAH projects.

The most common type of evaluation uses non-experimental designs. These analyse a particular intervention, using the judgement and opinions of implementors and beneficiaries in order to attribute causation and impact. While these can suggest plausible links, and identify areas for further study they do not provide evidence of causality.

Box 1 Common weaknesses in evaluations of CAH programmes

- Lack of a baseline
- Using retrospectively constructed baselines – these cannot be relied on
- Use of general, un-quantifiable information when specific quantifiable was obtainable.
- Failure to take biases into account, or to show validity of information.
- Failure to use sampling techniques which would allow generalization to be made
- Failure to describe activities and link with outcomes, especially veterinary outcomes
- Reporting perceptions as reality

As well as the aforementioned weaknesses in evaluation methodology, it can be assumed that publication bias exists for CAH programmes. Well-managed, well-funded programmes are more likely to publish, and are also more likely to have positive results. Projects that have been less successful are less likely to disseminate findings, and this will inevitably result in an over-optimistic picture.

Evaluation review

Even taking these factors into consideration the published evidence on the impact of CAH programmes is striking. All economic analyses of CAHW programmes have shown a large return on money spent in operating the programme. Cited returns in dollars for each dollar invested vary from \$2.1 to \$209. (Martin, M, 2001).

Reports on individual projects are no less positive. In Afghanistan CAHW programmes reduced mortality by 5% in calves, 10% in lambs and 38% in kids, compared with control areas without CAHWs. The benefits to farmers were estimated at \$120 000 per district per annum, while the costs of the programme were \$25 000 per district. (Schreuder et al, 1995, Ward et al 2000). Several large-scale control studies were carried out in this program, and the results are extremely robust. However it has been argued that the special, post-war circumstances mean that results cannot be generalised to non-conflict situations.

Several ground-breaking studies have been carried out in Kenya. In Kathekani farmers without access to CAHWs reported 70% more cattle deaths and 200% more shoaat deaths than those farmers who had access to CAHWs. The decrease in mortality provided benefits worth \$48 a year to each farmers using CAHWs. (Holden, 1997a). A study in Wajir, Kenya found that 60 CAHWs treated over 35 000 animals a year. There was an estimated 20 000 fewer livestock deaths in areas covered by CAHWs and a resultant saving of nearly £500 000 to the pastoral communities over the life of the project. The same study found families who had access to CAHW services needed less food aid and consumed more milk than control families without access to CAHW services. (Holden, 1997b). In Meru Kenya, 44 CAHWs treated nearly 7 000 cases over a 10 month period. 248 cases were referred to linked veterinary professionals. (Kaberia, B, 1999)

Elsewhere in Africa results have been equally positive. A study on the activities of over 1000 CAHWs in Ghana found over half were having good to excellent impact on animal health service delivery. CAHWs provided a regular flow of information to veterinary professionals, including reporting disease outbreaks (anthrax, Pest de Petits Ruminants and Newcastle Disease) and the referral of difficult cases. (Hanks, J et

al., 1998). In Guinea cattle treated by CAHWs for parasites had higher calving rates. In Cambodia 95% of CAHWs are active and successfully treating animals after 5 years. (Intertaglia, 2000). In Tchad over 3000 CAHWs have been trained in the last 25 years. There is a standardised curriculum, and a ministry department mandated to supervise CAHW training and activities. An active CAHW can provide services to an average of 100 households (Grace, D, 2001). A study in Malawi used both economic and livelihood indicators to evaluate the effectiveness of CAHWs. It showed that saving from increased livestock production in areas where CAHWs were active was \$57 000 in the year 1998–99. Farmers with CAHW services were more likely to be able to afford a tin roof, window glass, ox cart, plough and radio, than farmers without access to CAHW services. (Huttner, 2000). In one study in Lesotho CAHWs treated over 65% of small ruminants during a 5month period. (Abdel – Messieh, F. W, 1989).

The development of thermostable rinderpest vaccine made possible the involvement of CAHWs in Rinderpest vaccination campaigns. In Cameroon CAHWs were trained in pastoralist communities where no Rinderpest vaccination had taken place for 3 years. They vaccinated with 86.2% vaccination efficiency. This compares well with overall efficiency ranges of 50–80% achieved by PARC member states. While in Somaliland CAHWs achieved 95% vaccination efficiency – the highest efficiency reported in Africa since PACE began. (Mariner et al, 1994).

In conflict situations CAHWs have proved invaluable. In Southern Sudan there are over a 1000 CAHWs, vaccinating more than 1 000 000 animals a year. (Jones, B 1999). In a typical NGO project in Southern Sudan CAHWs treated 17 365 animals in 6 months (Groot, T, 1997). In Somaliland participatory methodologies were used to demonstrate pastoralists' perceptions of reported decreased disease and increased profits due to the activities of CAHWs, and high satisfaction with CAHWs over the 7 year study period (1992–1999). (Sanaag, 1999)

In Asia impact has been if anything even more remarkable. In Indonesia training total CAHWs costs (project implication costs plus community payment for services) were \$15 per CAHW trained. The benefits in terms of improved calving rates and herd performance amounted to \$170 per farmer. (Neemark and Morris, 1988). In India CAHWs were trained at a total cost of \$200 per CAHW, the subsequent saving from decreases in mortality was valued at \$800 per CAHW per year– a cost benefit ration of 1:4. (Anthra, 2000). In Thailand treatment of calves for roundworm by CAHWs results in a cost benefit ratio of 1:8, treating for liver fluke produced a cost benefit ratio of 1:47 (Lohr, F. K et al, 1988). In Nepal 70% of farmers surveyed used CAHWs, they considered that animal disease was less of a problem since CAHWs were introduced (Young, J B, 1992)

Synthesis reviews and metaanalyses

In the past decade several reviews of CAH programmes have been produced, the first of these by McCorkle et. al (1995). This was a global overview which emphasised the scope (CAH programmes effectively implemented in Africa, Asia, Latin America), sustainability (20–30 years of CAH) and effectiveness, but also the need for more quantitative and objective analysis.

A literature review 3 years later (Oakley, R., 1998) noted that CAH services can be a successful means of animal health delivery where state services have been reduced and private veterinary practice is not viable. It emphasised the need for good training, follow-up, and community involvement, and pointed out that for sustainability, CAHWs must make adequate profits from their services. It also highlighted the need for an enabling legal framework and good relationships with the professional veterinary services. While noting that qualitative evaluations of CAH projects are generally positive, it suggested that output and impact data require improvement.

Livestock in Development (1999) carried out a major review of animal health development projects (59 in all), some of which had a CAH component. It found that many development projects failed to meet objectives or deliver measurable benefits to the target group. The review argues that this is because earlier interventions were either technical (i.e. focused on development or transfer of technology) or managerial (i.e. focused on increasing management skills of government or research organisations). Newer projects are more likely to take an 'institutional' approach (i.e. emphasis governance, participation and organisational behaviour and the need for enabling policy) and these are more likely to be successful. CAH projects are institutional projects, consisting of new, pragmatic, and have been among the most successful of projects. Major constraints of CAHW programmes were: unfair competition from the government, uncertain legal basis, and insufficient skills of the implementing organisation.

Vétérinaires Sans Frontières (VSF) France (1995) has attempted to capture and analyse project information in order to inform new and existing projects. They advocate sensitising farmers to the existence of the CAHW and the provision of mass training on e.g. correct drug dosages and disease diagnosis. Another francophone review (Intertarglia, D., 2000) evaluates four CAH programmes, which had not previously been presented in reviews. The author analyses the projects using technical, economic, social and institutional criteria and concludes that in 3 out of 4 cases there was clear and significant benefit to livestock keepers.

A comprehensive evidence-based review of CAH projects, was published by VETAID in 2001 (Martin, M., 2001). The author consulted over 300 documents in the published and grey literature. Twenty-nine reports were analysed in depth and 28 of these demonstrated significant benefits to farmers. Eight studies included economic analysis and all of these showed the benefits of programmes greatly exceeded costs. The cost benefit varied from 1:2 to 1:209.

Catley, A. & Leyland, T (2001) focused on overview of community participation in animal health service development and research in Africa. This review argues that CAHW projects were highly effective and community-based tsetse control projects less so. The success of CAHW projects is attributed to high levels of community involvement and project staff experience and also attention to cost recovery.

The most recent analysis on the impact of animal health interventions in developing countries reviewed 72 reports on different interventions or animal health programmes, including 15 on CAHW interventions. Overall 62% of reports contained information on outcomes or impact and in 73% of cases these were positive. 50% of CAHW reports contained information on outcomes or impact and in 100% of cases these were positive (Bazeley, K et al, 2002).

Conclusion

This paper reviews published studies on community-based animal health projects. Even taking into account methodological challenges and publication bias, it seems there is good evidence that CAH projects deliver significant benefits to livestock owners, and give high returns on initial investment.

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NGO Perspective on CAHW - HCP

By Dr. Ongom Okori

Background Information

a) The project of the HAPPY COW is a teaching one in scope. The Karimojong people lose a lot of livestock due to mainly vector-borne infections which would be under control if appropriate knowledge is authentically delivered to the pastoral stock owners.

The project is therefore built on the assumption that enlightened and will-hearted stockowners who practice sustainable vector & helminth control will have health livestock of increased production and productivity hence improved livelihood of the people.

b) The project approaches livestock owning communities directly to equip both men and women with appropriate knowledge. The more keen members will continue to be exemplary teachers to the neighbours, hence the amplifier effect to surrounding communities, these most keen and competent members become de facto health service deliverers.

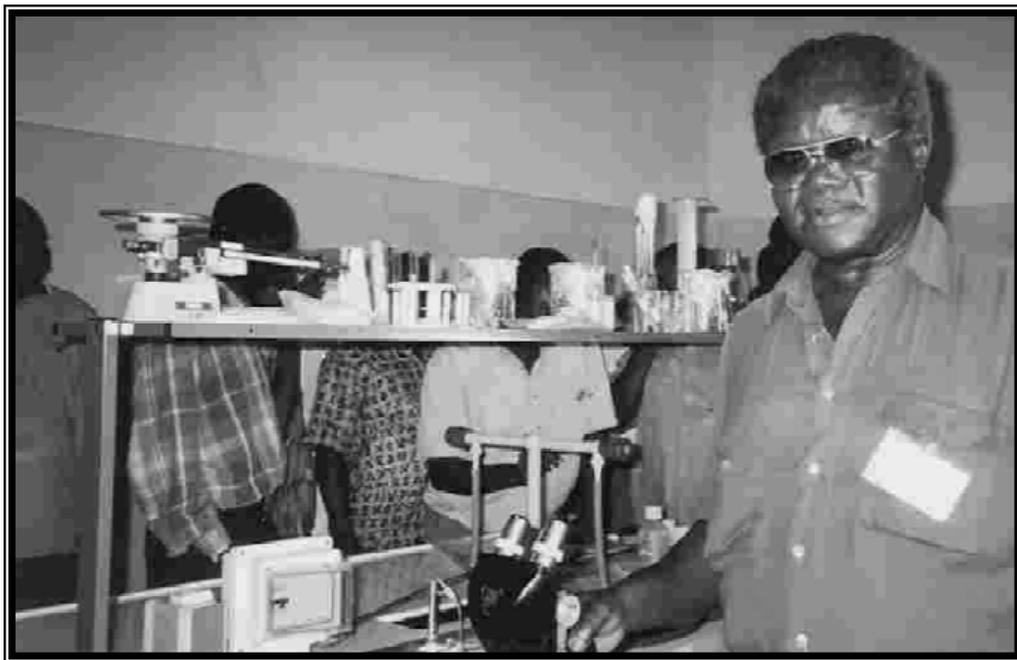
c) Since 1998, the project areas are Jie county (population: 57,19.8 people) in Kotido district & Pian County (Population 25,606 people) (Uganda National Housing & Population Census 1990).

Project Goal:

The overall goal is increased livestock health, production and productivity, hence improved human livelihood.

Objectives:

1. To increase cadres of pastoralists sustainably practising healthcare measures.
2. To realise amplifier effect from the core cadres with resultant overall community adoption.
3. To achieve improved pastoral livelihood due to healthy and productive livestock.



Participants visiting Karamoja Field Laboratoru

Project Measures:

1. Teaching livestock healthcare measures at Village and Kraal levels.

2. Conscientising the communities on benefits (economics) of keeping healthy animals.
3. Teaching importance of improved fodder provision for increased livestock production and productivity.

Interventions Accomplished:

1) Training

a) Pastoral farmers trained			
1998/99:	Jie county	:	158 people
	Pian county	:	<u>239</u> “
			397 “
1999/2000:	Jie county	:	53 people
	Pian county	:	<u>90</u> “
			143 “
2000/2001:	(ongoing)	Jie county	: 85 people
		Pian county	: <u>97</u> “
			182 “

Grand Total Trained: **722 people**

b) Residential course for most keen and competent members:			
2000/2001:	Jie county	:	29 people
	Pian county	:	<u>25</u> “
			54 “
2000:	Jie county	:	36 people
	Pian county	:	<u>41</u> “
			77 “
	Grand Total Trained	:	<u>131 people</u>

*Reduction depicts farmers taught on individual basis.

c) Healthy livestock competition:				
2000	:	Jie county	:	34 people
		Pian county	:	<u>98</u> “
				132 “
2000	:	Jie county	:	202 people
				<u>128</u> “
				330 “

Grand Total: **462 people** – participated in the competition to-date

- 2) The Pastoral communities of Pian and Jie have respectively been registered in Kampala with the Registrar of Association.

Major Constraints Encountered:

- Rampant insecurity due to armed cattle rustling.
- Strongly routed dependency concept of the communities.
- Limited financial resources to amplify project activities.

Appendix 1: Discussions

PACE / CAPE Papers : Questions and Comments

Dr. Nasinyama: How does the situation in Uganda relate to other countries with regard to co-ordination of activities in the region? Are there any guidelines for vaccination of CBPP?

Dr. Kasirye: No livestock census has been taken for along time in Uganda.

Dr. Asimwe: Are there any plans by PACE/CAPE to constrain brucellosis that has assumed epidemic levels? What measure do you have to avoid tails falling off after CBPP vaccinations?

Dr. Kanyima: Do you know the CBPP status in these areas that are not covered by your project e.g borders to Congo?

Mr. Busulwa: Involvement of CAHW is well mentioned, but how do you involve the Paravets whose number of 2350 in Uganda is not small!

Dr. Biryomumaisho: What is the relationship between PACE and Commissioner Disease Control?

Dr. Eladu: Can the paying of CAHWs be considered by the Organisations that control them?

Prof. O. Bwangamoi: Veterinarians tend to write incomplete annual report, even counting of livestock should be derived from their report. It is surprising how vaccinations are planned for Gulu where there are no animals.

Lucy Daxbacher: Would OAU/IBAR, facilitate a process of policy formulation regarding pastoralism in Uganda?

Dr. Isabirye: Can UVA, in collaboration with private veterinarian practitioners, be availed the cold chain facilities and be contracted by PACE/CAPE to participate in vaccinations?

ANSWERS

PACE is a regional Programme. Unfortunately, there is no vaccination for other diseases apart from BCPP and Rinderpest; only surveillance support for other diseases.

PACE is acting under broader macro economic situation in this country, where there is decentralization, privatization, liberalization; they no longer have a say on districts.

CAPE works preferentially in areas where Rinderpest is a threat. PACE will set regional guidelines for the CBPP vaccine and have a policy of cost recovery. However, the available vaccine is not yet perfect. However, efforts are being made for improvement, for example, tails no longer fall off, which incidents used to be exploited by traders to scare off farmers from vaccinations.

It was agreed that census was done long ago 1991. But Prof. Katunguka informed the participants that there was an incoming census.

There is poor communication between field veterinarians and Ministry. There is no effective chain of command between the Ministry, CAO and DVO, which is a result of decentralization. The DVO should report to MAAIF and not to CAO with regard to issues of disease control.

Sub contracting UVA, is possible for CBPP vaccinations through the Uganda PACE office, however, the office is responsible for only 4 diseases, CBPP, Rinderpest, FMD and Rabies. The rest of the diseases are a responsibility of the District.

Dr. Asimwe suggested that the Government should be informed of brucellosis, which has taken on epidemic proportions.

Other countries involved include Tanzania, Rwanda and DRC where rinderpest is being vaccinated and for the last many years there has been no report on rinderpest from DRC, but if there is any report, the emergency preparedness is on ground. When LSD became epidemic, government was involved.

About the para vets, it was reported that there are about 20 paravets in Soroti, and when PACE is giving out loans, they give the private veterinary practitioners who in turn may appoint paraveterinarians. Rinderpest still exists in Kotido.

Paying CAHW could be a responsibility of NGOs who train and engage them. But they are not obliged to pay them.

The linkage between PACE and the Commissioner Disease Control (MAAIF) is through Districts. It is a long and slow process especially for notifiable diseases.

There are 6,000 head of cattle in Gulu.

The question of the cold chain, the private section was mandated to distribute vaccines country wide, so if you liease with the DVO, you can get the facilities.

The chairperson emphasised that this workshop should make recommendations on strengthening linkages.

Holistic Pastoral Policy by OAU/IBAR was instituted in pastoral livelihood systems in the districts.

MAAIF Policy Paper: Questions and Answers

Q: What is the policy on Entomology after decentralisation?

A: This aspect of entomology has been brought back to the centre.

Suggestion: more power should be vested to UVB and the body should have full powers to register and there is need to rejuvenate the veterinary council/UVB and also revise the laws for instance to have powers to discipline veterinarians.

Dr. Asiimwe: NAADS operates in six districts only. What about the other districts?

A. The six districts are at pilot level and NAADS will be funded by government, they will contract private service providers. The rest of the districts will operate as usual.

Dr. Asiimwe: The Ministry is responsible for the control of 4 diseases viz CBPP, Rinderpest, FMD and Rabies, but what about the other important diseases?

A. The Ministry, in addition to the 4 diseases, if there is an outbreak of a disease that takes epidemic proportions e.g recently LSD, the Ministry comes in to import vaccines.

Prof. Lonzy: stressed the need to regulate the activities of CAHW's and suggested that there is need to increase awareness of the importance of animals and consumption of animal products.

Mr. Busulwa: Is there a way this forum could bring out alternatives to animal production at Bukalasa, and who is concerned about this training?

Suggestion: He requested that paravets be included in PACE loan scheme.

Prof. Katunguka in answering the question of training in Bukalasa , he informed the participants that DANIDA was given the mandate by Government to be responsible for Bukalasa and Arapai colleges. A committee was instituted for curriculum developments for these two institutions. About the loans for paravets, Dr. Samanya promised to forward this to PACE.

Dr. Isabirye: Why do Private vets tend to shy away from referring complicated cases to competent vets.. The answer was that, it's because of client protectionism.

Prof. Katunguka further added that UVB would rejuvenate the Vet Surgeons Act. It will soon register all vets and at a fee. He appealed to Vets to work hard to protect their profession and more so, there is need to re-introduce certificate trainees. There is also need to focus on Animal Production in our curriculum

including business management. Vets must introduce upgrading/re-training in order to keep ones name on register of vets i.e all Vets should go for upgrading and this training will be at a cost.

Private Practice, NGOs and CAHW :Discussion

Questions:

Dr. Azuba: Have you explored a possibility of farmers paying in terms of material terms instead of cash? Also the presenters should give us the real situation on ground rather than giving a rosy picture, they should give weaknesses as well as strengths. (This comment was supported by several people).

Dr. Okwi: Dr. Kasirye said it is easy to retain CAHWs, but from personal experience I note there is a high drop out rate.

Dr. Eladu: How do the CAHWs get access to drugs?

Dr. Walter Jura: Can Dr. Opolot identify and outline what he calls incentives.

Dr. Nasinyama: How is the issue of record keeping and feed back of information handled? Secondly, How does the policy relate CAHWs with NAADS? Thirdly, It appears the number of NGOs is big, how do they co-ordinate their activities?

- What has PACE done in Tanzania in streamlining the relationship between government and Private Veterinary Practitioners?
- How have the Private Vet Practitioner been able to compete with Government practitioners?
- How did the NGO's determine emoluments of CAHW in relation to Government standards.

Answers:

Payment of CAHWs in kind has been tried, but it is deceptive because it is usually not equivalent to the service being offered.

Farmers are given knowledge of how to keep records and the CAHWs are supposed to check on these records. They get feedback from farmers with positive and negative comments.

The question of competition between Private Vet Practitioner and Government. The UVB is going to work on this. There are suggestions to come up with a Uganda Veterinary Council which has more powers, policy guidelines especially for NAADS, to safe guard the interests of the two parties.

A point of information from Dr. Grace was that there are 250 – 300 trained CAHWs in the Karamoja region and 100 – 200 are still active.

National Livestock Development Forum has tried to compile as much as they could the Animal Health Workers in Uganda including some of the CAHWs. They will provide the report to all of the stakeholders.

There are weaknesses in the system of CAHWs, as identified by project evaluation reports.

- There is high fall out rate so they need follow up
- Availability of cheap drugs is a problem.
- Lack of consensus over the CAHW issue.
- Need of sufficient time in selecting CAHWs
- Lack of sufficient capital
- Lack of security, low supervision of CAHWs

Field Visit :Discussion

This was a session of discussion through question, answers and field reporting. Panel of field experts to answer questions were Dr. Akabwai, Dr. Okwi, Dr. Ojala, and a representative of CAHWs,

Dr. Akabwai was asked to give his views about the trip. He said, the trip was rather abrupt, field supervisors were not present, clients were scanty.

Question: Are these activities spread to other counties outside Bokora which has 167 clusters?

Dr. Ojala: Yes, there is KPIU in Matheniko and they were trying to harmonise their activities

Prof. Katunguka: How do CAHWS link up with NGOs, DVOs, Vos and PVPs? It seems they have no specific obligations.

Answer: LEP has a screening committee and the DVO is a member and a report is written where the DVO is given a copy. But the linkage between NGOs and Government is still informal. There is need to streamline and strength the reporting system.

Question: What is your experience of the CAHWS on use and abuse of vet drugs?

Dr. Okwi: Unqualified people sell the drugs because of the need for guns and this drug selling was divested to private sector. There is no law which can be implemented, but they hope that by training the CAHWS will reduce drug abuse.

There is also a problem of staffing in Moroto and Kotido. Retrenchment of field Assistants worsened the situation.

Appendix 2: Workshop assessment

Participants, whose attendance was 95% assessed the workshop using a questionnaire (Appendix 3). All participants (100%) found the workshop objectives justifiable, and 90% agreed that the proceeding addressed the objectives appropriately. Almost all participants (98%) had learnt something new, either from the trip, which was enjoyed most by 40%, or from the seminar sessions, which were enjoyed most by another 40%, or from group work, enjoyed by 17%, while 4% enjoyed all sessions equally

Assessment Form

1. Were the workshop objectives justifiable?
 1. Yes
 2. No

2. Did the workshop proceedings address the objectives appropriately?
 1. Yes
 2. No quite so
 3. Not at all
 Elaborate.....

3. How did you find the workshop programme?
 1. Adequate
 2. Needed more time
 3. To much time wasted

4. Was there any new information you gained?
 1. Yes
 2. No
 - Specify.....

5. How would you rate the presentations generally.
 1. Very good quality
 2. Good
 3. Fair
 4. Poor

6. Which session did you enjoy most?.....
.....

7. Which session did you enjoy least?.....
.....

8. How did you like the facilities?

Venue:	1. Very good	2. Good	3. Fair	4. Poor
Hotel:	1. Very good	2. Good	3. Fair	4. Poor
Food:	1. Very good	2. Good	3. Fair	4. Poor
General facilitation:	1. Very good	2. Good	3. Fair	4. Poor

9. How would you rate the extent to which your expectations were met?
 1. Very good
 2. Good
 3. Fair
 4. Poor

10. Suggestions:
General comments and/or suggestions.

Appendix 3: List of participants

NAME	ORGANISATION	ADDRESS
1. Dr. Robert Ojala	Livestock extension Programme (LEP)	P.O. Box 44 Moroto
2. Mr. H. S Busulwa	DAVAU/MAAIF	Box 22470 Kampala
3. Dr. S. Biryomumaisho	F.V.M , MUK	Box 7062 Kampala
4. Dr. C. S. Rutebarika	MAAIF (PACE)	Box 513 Entebbe
5. Dr. A. Mugisha	F.V.M , MUK	Box 7062 Kampala
6. Dr. G. W. Nasinyama	F.V.M, MUK	Box 7062 Kampala
7. Dr. J.B. Kasirye	Dept CLHXE MAAIF	Box 513 Entebbe
8. Dr. B. Kanyima	F.V.M, MUK	Box 7062 Kampala
9. Prof. J. S. Ogaa	F.V.M, MUK	Box 7062 Kampala
10. Prof. Katunguka	F.V.M, MUK	Box 7062 Kampala
11. Dr. Azuba Musoke	F.V.M, MUK	Box 7062 Kampala
12. Prof. Ojok Lonzy	F.V.M, MUK	Box 7062 Kampala
13. Dr. J. P. Saamanya	MAAIF	Box 102 Entebbe
14. Abura Stephen	L.W.F	Box 21, Moroto

15. Lokee Andrew	CAHW	Moroto/ NAKA
16. Longoli Matthew	CHIPS	Box 99 Katakwi
17. Dr. R. Isabirye	U.V.A	Box 16540 Kampala
18. Dr. P. Eyudu	Vet. Dept. Soroti	Box 61 Soroti
19. Lucy Daxbacher	Oxfam G.B Katido	Box 6228 Kampala
20. Dr. Nae Tortajada Soks	V.S.F Spain	Box 749 Soroti
21. Dr. G. W. Opolot	Wilcon (U) Ltd	Box 713 Soroti
22. Mr. Pulkol Victor	Christian Vet Mission/ World Concern	Box 22 Moroto
23. Mr. Lobur Gabriel	CAHW Naturumurune	Box 22 Moroto
24. Dr. Val Shean	Christian Vet Mission/ World Concern	Box 306 Soroti Box 22Moroto
25. Mr. Francis Okitoi	L.C I Chairman Madera Central	Box 55 Soroti
26. Dr. Walter Jura	OAU/IBAR/PACE/ CAPE	Box 30786 Nairobi
27. Dr. Vicent Okwi	DVO, Moroto	Box 4 Moroto
28. Dr. Eladu Fred	DVO, Kotido	Box ----- Kotido
29. Dr. Benjamin Asiimwe	President U.V.A	Wandegeya Kampala
30. Prof. Okot Bwangamoi	F.V.M, MUK	Box 7062 Kampala

31. Dr. E. Kyewalabye	F.V.M, MUK	Box 7062 Kampala
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