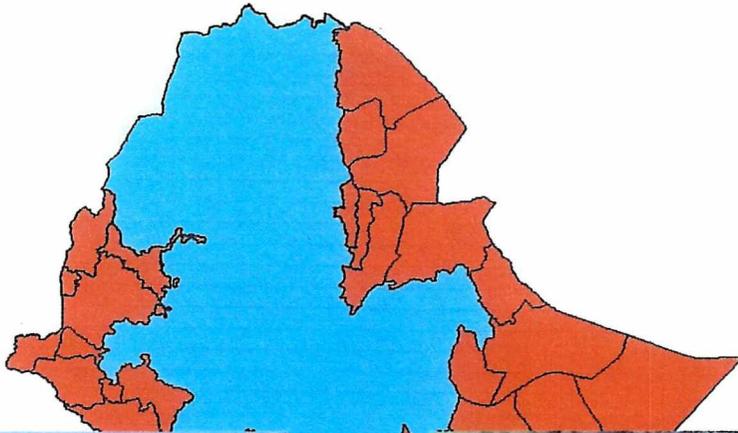


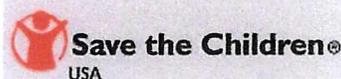


Experiences and the Way Forward on Community-based Animal Health Service Delivery in Ethiopia



**Proceedings of a workshop held at the
Queen of Sheba Hotel, Addis Ababa, Ethiopia
6th to 7th March 2003**

***Organized by
Pan African Programme for the Control of Epizootics, Ethiopia Programme
(PACE -Ethiopia)
African Union/Interafrican Bureau for Animal Resources (AU/IBAR)
Community-based Animal Health and Participatory Epidemiology Unit (CAPE)
Save the Children USA (SC/USA)***



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ACRONYMS

AAU	Addis Ababa University
ACF	Action Contre la Faim
ACORD	Agency for Cooperation and Research in Development
AHS	African horse sickness
APDP	Afar Pastoral Development Project
AU	African Union
BLPDP/GTZ	Borana Livestock Pastoral Development Project
BOA	Bureau of Agriculture
CAHW	Community-based Animal Health Workers
CAPE	Community-based Animal Health and Participatory Epidemiology Unit
CBO	Community Based Organization
CBPP	Contagious bovine pleuropneumonia
CCPP	Contagious caprine pleuropneumonia
CPAR	Canadian Physicians for Aid and Relief
CVA	Community Veterinary Agents
DDO	District Development Office
EARO	Ethiopian Agriculture Research Organization
ENA	Ethiopian News Agency
EPaRDA	Ethiopian Pastoral Research Development Association
ESAP	Ethiopian Society of Animal Production
ETV	Ethiopian Television
FAHR	Farmers Animal Health Representative
FAO	Food and Agriculture Organization
FARM Africa	Food and Agriculture Research and Management
FITCA	Farming in Tsetse Controlled Areas
FMD	Foot and mouth disease
FVM	Faculty of Veterinary Medicine
GDP	Gross Domestic Product
HCS	Hararghe Catholic Secretariat
IBAR	Interafrican Bureau for Animal Resources
ILDIP	Integrated Livestock Development Project
IMF	International Monetary Fund
LECDB	Livestock Environment Crop Development Bureau
LSD	Lumpy skin disease
LVIA	Lay Volunteers International Association
MOA	Ministry of Agriculture
MP	Member of Parliament
NAHRC	National Animal Health Research Centre
NCD	Newcastle disease
NGO	Non Governmental Organization
NLDP	National Livestock Development Project
NVI	National Veterinary Institute
OIE	Office International des Epizooties
PACE	Pan African Programme for the Control of Epizootics
PARC	Pan African Rinderpest Campaign
PIA	Participatory Impact assessment
PPR	Peste des petits ruminants
SC(US)	Save the Children, United States
SEPP	Southern Ethiopia Pastoralists Project
SNNPR	Southern Nations Nationalities Peoples Region

SORDU	Southern Rangeland Development Unit
SSI	Semi structured interview
SWOT	Strengths Weaknesses Opportunities Threats
TCP	Technical Cooperation Project
ToT	Training of Trainers
UN	United Nations
USAID	United States Agency for International Development

EXECUTIVE SUMMARY AND RECOMMENDATIONS

This report summarizes the proceedings of a workshop on the 'Experiences and the Way Forward on Community-based Animal Health Worker Services in Ethiopia' held in Addis Ababa, Ethiopia from 6th -7th March 2003. The focus of the workshop was to examine how CAHW service provision in Ethiopia could be improved. It sought to bring together a wide range of CAH practitioners operating in different regions and capacities with the aim of sharing information. The workshop also aimed to define the next step for the design of a national CAHW service delivery strategy as part of the country's veterinary policy.

The participants were drawn from CAHW service implementers mainly NGOs, Federal and Regional animal health implementing partners, the Federal Ethiopia Parliament Pastoral Standing Committee, relevant Animal Health Institutions, the Professional Association and funding agencies. The Head, Animal and Fishery Resources Development and Regulatory Department, W/O HADERA GEBRU officially opened the workshop. The workshop was held courtesy of the Federal animal health services staff and CAPE-PACE AU/IBAR, SC(US) and USAID funded the workshop.

During the workshop, a number of practitioners from PACE Ethiopia, Somali National Regional State and CAPE/PACE/IBAR made presentations. Professor Getachew Abebe, Dean of the Faculty of Veterinary Medicine, Addis Ababa University, made a keynote address on community-based animal health services in Ethiopia with the aim of stimulating ideas and discussions. Professor Getachew highlighted that currently the animal health service delivery covers only 30% of the country's livestock population. This low service coverage is attributed to lack of personnel, shortage of drugs and equipment, poor mobility, and highland-oriented animal health service delivery. Owing to these major problems the community animal health approach is the only alternative way of delivering animal health service in pastoral and remote areas of the country. The keynote presentation concluded that:

- CAHWs are proving to be useful BUT there is a challenge on how we can improve their management and their integration into the existing system.
- There is a need to build linkages between vets, paravets and CAHWs, as they complement each other in order to strengthen animal health services delivery.
- There is a need for regional integration and harmonization of primary animal health services particularly in cross boarder areas.
- There is a considerable evidence that community based disease surveillance strengthens national disease surveillance system.

On the plenary discussion the workshop discussed issues related to challenges, opportunities, and experience/lessons learned with regard to community animal health programmes. A number of critical issues were raised. Participants noted that the CAH is not institutionalized in Ethiopia. Due to this, implementers of CAH programme are facing many problems. To alleviate this, a suitable environment should be created at all levels of government. Currently, the government is focusing on a process of decentralization that aims to empower Woredas and communities. In addition to the activities of the Ministry of Agriculture, the Ministry of Federal Affairs is planning huge development activities in pastoral areas. In order to alleviate the problems in CAH and to coordinate the activities undertaken by different stakeholders, participants of the workshop agreed that an ad hoc committee should be established to work on a CAH service delivery strategy and incorporate it as part of the country's animal health strategy and veterinary policy. The proposed members of this committee were:

- Ministry of Agriculture
- Ministry of Federal Affairs
- Pastoral Standing Committee of the House of Peoples' Representative
- Regional Agricultural Bureaus (to be represented by Oromiya)
- CAPE Unit, AU/IBAR
- FAO/Livestock Working Unit
- Faculty of Veterinary Medicine

The agreed tasks of the ad hoc committee were as follows:

- Improve coordination between government departments, and between government and other stakeholders in pastoral and agro pastoral areas at all levels.
- Develop a strategy document; identify areas of change and amendments in the existing animal health policy and legislation.
- Emphasize pastoralism in policy formulation and as an integral part of Ethiopia's economy and national development agenda.
- Advocacy to increase awareness and appreciation of CAH service delivery systems as well as to continue to support CAHW systems.
- Facilitate regular interactions of technical personnel on CAHW technical issues.

Based on the deliberations and discussions the workshop had forwarded the following recommendations:

1. In recognition of the fact that the current animal health policy and strategy severely affects service delivery, it is recommended that the Ministry of Agriculture develops a veterinary service policy that incorporates the recognition of community-based animal health services.
2. It is recognized that the structure of the government veterinary service does not enable the execution of its duties and responsibilities. It is recommended that Federal and Regional Agricultural Bureaus create a working structure to improve their capacity to fulfill national and international responsibilities.
3. Many agencies are now implementing CAH programmes and there is an urgent need for coordination. It is recommended that personnel responsible for CAH services should be assigned at all relevant levels of the government veterinary structure within the shortest time possible.
4. National minimum standards and guidelines for the training of CAHWs has been prepared by PACE Ethiopia. It is agreed that implementers of CAH programme shall design their own guidelines according to conditions at regional level but based on the general national minimum guidelines.
5. Participants recognized that the absence of a sustainable drug supply hinders CAH services in all areas. Therefore, it is recommended that linkages between private practitioners and implementers are strengthened to improve drug supply and create a more favorable environment for private practitioners.
6. Workshop participants agreed that technical backstopping is a key issue in CAH services. To ensure professional involvement in the quality control of CAH systems, implementers should create conducive conditions for private practitioners to conduct supervision and monitoring activities. Innovative programmes are expected from implementers for creating a conducive environment for privatization.
7. Developing a sense of ownership among the community is vital for the continuation of CAH services. However, this is a weak aspect of CAH in most areas and continuous efforts are needed to ensure community involvement in planning and monitoring services.
8. Article 17 of the Animal Disease Prevention and Control Proclamation No.267/2002 stipulates the involvement of the private sector in animal health service delivery. Therefore, strategies, regulations, directives and subsidiary laws should be developed and endorsed as soon as possible in order to improve the efficiency of the service and the involvement of the private sector.

Finally, the workshop was officially closed by Honourable Ato KIBRE JEMERE, MP, Deputy Chairman, Pastoral Standing Committee, Federal Democratic Republic of Ethiopia Parliament (the House of People's Representative). The full presentations, discussions and recommendations are contained in the text of this document.

INTRODUCTION

Workshop Visions and Objectives

The workshop organizers opened the workshop by presenting the main objectives and vision for the workshop. A question driving the workshop is whether we are addressing the animal health problems in the lowland parts of Ethiopia, which covers about 60% of country's total area and where animals are the only means of livelihood.

Despite the greatest values given to livestock by their owners due to rampant disease and feed shortage problems the actual benefit from the livestock sector has remained very minimum comparing to the huge potential existing.

The national veterinary service has been suffering from a chronic shortage of skilled manpower and the absence of enabling veterinary structure and appropriate strategy that fits pastoral livestock production systems. It is true that pastoral areas are characterized by being very remote, inaccessible and unpredictable security situations for the professionals to reach herders and provide the service on a regular basis and as required. The livestock production depends on high mobility in search of feeds and water, thus the town based veterinary centers and services have been remaining idle while the pastoralists have been suffering chronic shortage of even the basic services throughout. In this part of the country the community-based animal health (CAH) service has become the sole source of veterinary services and extension inputs needed by pastoralists.

Although CAH services have been contributing significantly by bridging the gaps due to the very limited capacity of the public sector and the high demands for basic veterinary services, especially in pastoral areas, there has been very limited attentions directed to the role of the CAH service delivery by the public sector. As a result the CAH service delivery has been suffering from lack of ownership with regards the sustainable technical and material supports needed - the service mostly ends with the NGO projects. This workshop is therefore expected to escalate the role of the CAH service delivery and will discuss a mechanism where upon CAH service delivery would last long through better attentions from both the public and the private veterinary sectors.

The main objectives of the workshop are to:

1. Share the best practices and lessons learned in the area of CAH services delivery with the concerned policy formulating and decision making government bodies.
2. Lay grounds for the streamlining and institutionalisation of CAH service delivery.
3. Define the next step towards the design of a national CAHW service delivery strategy as part of the country's veterinary policy.

A WELCOMING ADDRESS

DR. Silesh Zewdie
Head, Animal Health Services and Regulatory Team

Participants of the workshop
Ladies and Gentlemen

First of all it is with immense pleasure that I welcome you all for this workshop on ‘Experiences and the Way Forward on Community-based Animal Health Worker Services in Ethiopia’.

The Ethiopian livestock sub-sector is the largest source of foreign exchange earning next to coffee and contributes about 16% of the total GDP. Despite the importance of livestock to the larger sector of the population and to the economy at large, the sub-sector has remained untapped. One of the major constraints that hampered the development of the sub-sector is the widespread prevalence of highly contagious animal diseases.

These animal diseases, which are widespread in all agro-ecological zones of the country, cause major economic and social losses to the livestock community. The impacts of these diseases are devastating in pastoral and remote areas, where the lives of the communities entirely depend on their livestock. However, provision of veterinary services becomes very difficult in these areas due to a number of reasons including poor infrastructure and limited resources. Besides, since the human population tend to be small & highly mobile, there are difficulties in reaching them since they travel much in search of water and grazing resources. Therefore, in order to be benefited from the livestock resources, emphasis has to be given to the pastoral communities since they possess huge livestock population and their livelihood depends on the health of their animals.

It is to be recalled that through the Pan African Rinderpest Campaign (PARC), rinderpest is eradicated from Ethiopia. However the disease persisted in pastoral areas of the Horn of Africa and the project was experiencing difficulties in accessing remote pastoral communities. It was through the Community Animal Health Programme that was possible to eradicate the disease in pastoral and remote areas. In the Pan African Programme for the Control of Epizootics (PACE) programme, it is believed that the contribution of Community Animal Health Workers is vital in strengthening disease and sero-surveillance activities. Therefore, the establishment of a sustainable Community Animal Health care system in the pastoral areas of the country will reinforce the veterinary service delivery of the country.

Participants of the workshop

This workshop mainly focuses on creating awareness and common understanding among the stakeholders on the roles and contributions of the Community-based Animal Health services in those remote parts of the country where it remained the sole source of basic veterinary services to herders. Besides, it is expected that the workshop will lay good grounds to create enabling environment to harmonize the CAH service delivery both at national and regional levels and design a strategy to ensure sustainability of the service. Moreover, it is expected that the resolutions of the workshop will help the process of establishing and implementing a system where Community-based Animal Health service delivery would be contributing to the national disease surveillance programs.

Finally, I would like to thank the participants for being able to attend this workshop. I also thank the workshop organizers who devoted much time for the success of the workshop. With this brief statement, I invite W/o Hadera Gebru, Head of the Animal and Fishery resources Development and Regulatory Department of the Ministry of Agriculture, to officially open the workshop.

Thank you !!!

OPENING SPEECH

W/o Hadera Gebru

Head, Animal and Fishery Resources Development and Regulatory Department

*Workshop participants
Ladies and gentlemen*

In advance, it gives me great pleasure to be amongst you to officially open this workshop entitled 'Experiences and the Way Forward on Community-based Animal Health Worker Services in Ethiopia' and I am highly honored to welcome you all.

Throughout Africa, livestock provide about 25 percent of the region's total food production and are a vital source of economic and social support for millions of people. Livestock ownership has major cultural and social significance in many societies, whether rural or urban, and features strongly in local perceptions of wealth and poverty. Besides, integration of livestock and crops is crucial to agricultural production in Ethiopia since the draught power is mainly generated from oxen. Even though Ethiopia has immense livestock resource and a home of many genetic resources; the livestock resource of the country is characterized by low productivity levels even below the average of Africa, leading to low per capita consumption of animal products. This is mainly due to the high and widespread prevalence of animal diseases.

*Workshop participants
Ladies and gentlemen*

It has been known that livestock are the main assets of pastoral communities in Africa. Particularly in areas with low rainfall, livestock are important for human survival. The pastoralist population of sub-Saharan Africa is estimated to be more than 50 million while there are about 20 million pastoralists in East African countries. Pastoralists and agro pastoralists own 50% of Africa's cattle and small ruminants, and almost 100% of the camels. Their large size, limited development, and poor infrastructure characterize pastoral areas in the horn of Africa. Human populations tend to be small, highly mobile and difficult to reach. This is due to the low and erratic rainfall in dry land areas that caused spatial and temporal variations in the grazing resource on which livestock depend. Pastoralists in Eastern African countries are mostly encountered with the problems of livestock diseases and water supply.

Diseases cause rapid loss of livestock assets and chronic reductions in supply of milk, fertility, or draught power. Moreover, diseases prevent animals from pastoral areas entering formal international markets. Since export live animals route mainly through these pastoral areas to the Middle East countries, control of epizootic diseases should be given due attention. Since pastoralists' livelihood depends entirely on the health of their animals, provision of veterinary services in pastoral areas is of paramount importance. Therefore, the cost of ignoring and marginalizing pastoralists production is famine, conflict, political unrest, and environmental degradation.

*Workshop participants
Ladies and gentlemen*

Even though government veterinary services and Non Governmental Organizations have tried much to provide services to pastoralists by constructing veterinary clinics, these clinics cover only a fraction of the livestock population in pastoral areas due to a number of reasons like absence of infrastructures and lack of veterinary staff. Therefore, livestock diseases of major economic and international importance still persist in pastoral areas. To alleviate these problems, alternative systems for providing animal health services began to develop in pastoral areas of Africa. This endeavour is being supported by organizations that promote the principles of appropriate technology and community participation to make the best use of the skills and knowledge of livestock owners.

These are often said to be 'community-based' because they involved local people in various stages of project implementation and focused on local priorities. Many projects worked with communities to select people for training as community-based animal health workers.

During the Pan African Rinderpest Campaign (PARC), community-based approaches were developed to rinderpest control by combining rinderpest vaccination with the provision of primary-level veterinary services by Community Animal Health Workers. These Community Animal Health Workers played a paramount role in the vaccination programme against rinderpest especially in Afar area.

*Workshop participants
Ladies and gentlemen*

Even though the community animal health service has been contributing significantly in bridging the gaps between demand and supply capacity in the veterinary sector, there is very little knowledge on how the system operates and its roles. Furthermore, the service has been remained at large in the hands of NGOs and the involvement of the public sector has remained very limited so that there has been great challenge to sustainability side. This workshop, therefore, would appreciate the role of the Community Animal Health Workers service and will discuss a mechanism for the Community Animal Health Programme to last long through better attentions from the public veterinary unit and the private sectors both. Since a wealth of information now exists to support new understanding of pastoralist livestock production systems, exposing policy makers to the results of recent studies on pastoralism is one step towards acceptance of mobile herding systems as a rational and efficient use of dry land resources.

Within the context of community animal health programme, PACE Ethiopia and AU/IBAR CAPE unit are trying to establish sustainable community-based animal health delivery systems in pastoral areas where the public as well as the private sector cannot intervene for economic or logistical reasons. Past experiences of Community-based animal health care delivery system in the pastoral regions of Ethiopia have demonstrated a success in controlling rinderpest in the most remote and marginalized areas within a short period of time. Due to this, the establishment of Community Animal Health care system in the pastoral areas of the country is occurring at an increasing rate. Currently, PACE Ethiopia does not only train Community-based Animal Health Workers (CAHWs) in basic animal health but also equips them with the necessary equipment and drugs. Therefore, it makes easier to access the pastoral communities and it facilitates the provision of veterinary services in pastoral and remote areas.

*Workshop participants
Ladies and gentlemen*

The pastoral community constitutes a considerable part of the population of Ethiopia. The government of the Federal Democratic Republic of Ethiopia, through the five years' strategy plan, gives due emphasis to the changing of the life of the pastoral community and is fully committed to organize and standardize foundation for the establishment of a sustainable animal health care delivery system. In respect with the Agricultural Development Led Industrialization strategy, the government is making every effort to alleviate the bottlenecks of the livestock sub-sector so as to increase the share of this sector in the national economy.

Regarding the considerable damage that has occurred on the livestock resources of the pastoral people due to the recurrent drought, the Government of Ethiopia is doing its at most effort to avert the problematic situation by way of distributing veterinary drugs, vaccines and providing the necessary logistics and technical back up to drought stricken areas in the country.

Workshop participants
Ladies and gentlemen

The main objectives of this workshop are

- Share experiences and lessons learned in the area of Community Animal Health services delivery, mainly by NGOs, with the concerned policy formulating and decision making government bodies
- Laying grounds for the Community Animal Health service delivery streamlining and institutionalization step and the on going process
- Define appropriate strategy to design national Community Animal Health Workers service delivery strategy as part of the country's veterinary policy and the way forward.

I hope, after this workshop, the participants shall have a good insight on how to strengthen the community-based approach in controlling livestock diseases in pastoral areas. Moreover, it is expected that awareness and good understanding will be developed among policy makers and relevant stakeholders about the contribution of the community animal health service programme.

Finally, I would like to thank the participants for being able to attend this workshop despite many pressing responsibilities. Besides, I would also like to acknowledge PACE Ethiopia, AU/IBAR/CAPE Unit, USAID mission to Ethiopia, and Save the Children (US) for organizing the workshop. Wishing you all the best in your discussion, I officially declare the opening of this workshop.

Thank you!!!

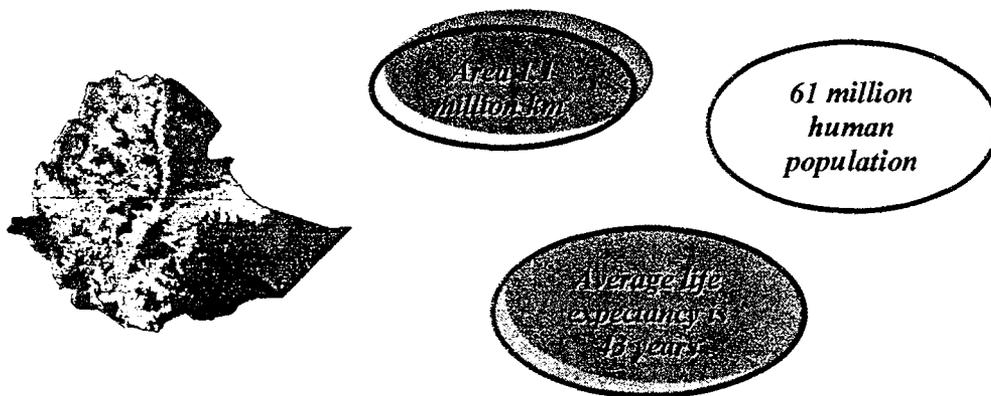
KEYNOTE PRESENTATION

COMMUNITY-BASED ANIMAL HEALTH SERVICES DELIVERY IN ETHIOPIA

Professor Getachew Abebe
Dean, Faculty of Veterinary Medicine, Addis Ababa University

BACKGROUND

Ethiopia has a total land area of 1.1 million sq. km and 61 million human population in which the average life expectancy of the country is 43 years. Agriculture is the mainstay of the country's economy and accounts about 46% of the GDP.



The livestock population of the country is estimated to be 31 million cattle, 42 million sheep and goats, 8.6 million equines, over 1 million camels, and 59 million poultry. The livestock sub-sector contributes about 33% of the agricultural GDP and 19% of export earning. Generally the livestock sub-sector has huge contribution to agricultural productivity as a whole. The lowland part constitutes 65% of the country's area where 15% of human population, 20% of cattle, 25% of sheep, close to 100% goats and the entire camel population exist. Whereas 85% of human population, 80% of cattle, 75% of sheep, and 90% of equines found in the highland part of the country that covers 35% of the total area.

Lowland Areas:

- ✓ 15% human population
- ✓ 20% cattle
- ✓ 25% sheep
- ✓ Close to 100% goats
- ✓ Entire camel population



Highland Areas:

- ✓ 85% human population
- ✓ 80% cattle
- ✓ 75% sheep
- ✓ 90% equines

Even though the livestock sub-sector contributes much to the national economy, its development is hampered by different constraints. These include rampant animal diseases, poor nutrition, poor husbandry, poor infrastructure, and shortage of trained manpower. Livestock diseases has impacts that include

- Loss of livestock and farm productivity

- Reduction of market opportunity
- Disturbance of human health
- Impairment of human welfare

Besides, disease risks have impacts on vaccination and chemoprophylaxis. Moreover, disease control activities may have negative impacts on improper use of chemicals and drugs.

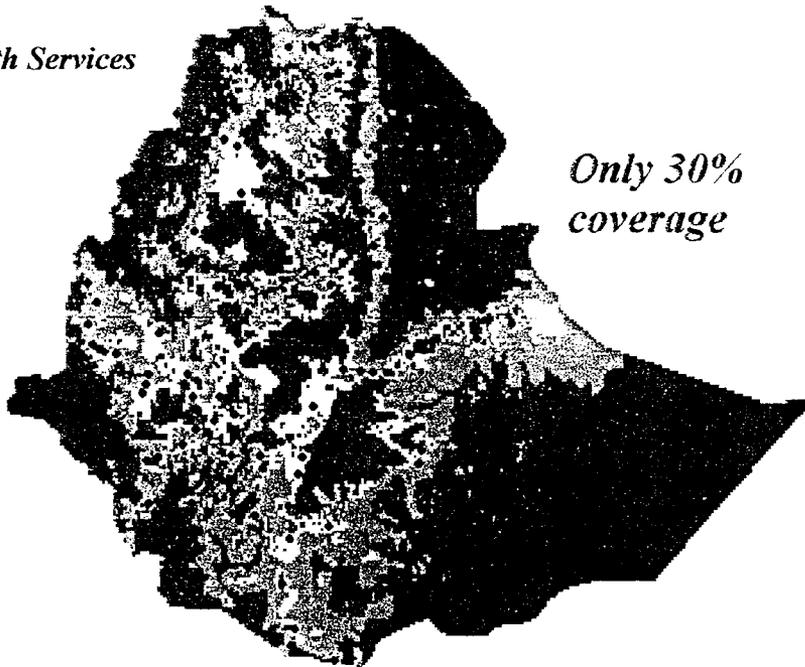
ANIMAL HEALTH SERVICES

Animal health services can be classified as curative services, preventive services, production of pharmaceuticals, human health protection, and advisory and extension services. Eventhough Africa has huge livestock population and the prevalence of animal diseases is high, the animal health service is steadily deteriorating in many African countries. Some of the reasons for the deterioration of the service are

- Stagnant economies with increased responsibilities of the state
- Inadequate and unpredictable access to foreign exchange
- Recession of global economy
- Influence of the structural adjustment programmes supported by World Bank and IMF
- Existence of different production systems with in a single economy in a country

In recognition of the shortcomings of conventional veterinary service delivery system, many development agents including NGOs and UN organizations started using primary animal health care approaches.

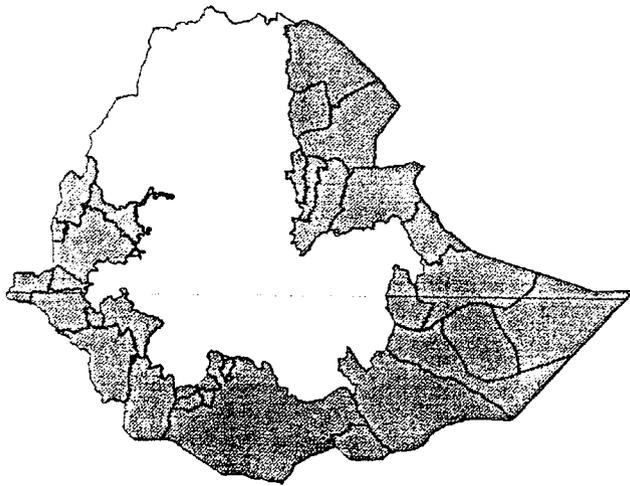
Animal Health Services Delivery



When we come to the animal health service delivery in Ethiopia, the service covers only 30% of the country's population. This low service coverage is attributed to lack of personnel, shortage of drugs and equipment, poor mobility, and highland oriented animal health service delivery. With regard to veterinary personnel in the public sector, there are 446 veterinarians, 947 animal health assistants, 3436 animal health technicians, and 277 others (meat inspectors, laboratory technicians).

PASTORAL AREAS OF ETHIOPIA

The pastoral area of Ethiopia is characterized by large size, limited development poor infrastructure, and insecurity. The human population tends to be small, highly mobile, and difficult to reach, and derive at least 50% of their food and income from their livestock. The main concerns of the pastoral people are livestock diseases, water supply, and insecurity. The most important diseases found in pastoral areas are CBPP, FMD, Trypanosomiasis, and internal and external parasites.



- *Pastoral Area*
- ✓ *Large size*
- ✓ *Limited development*
- ✓ *Poor infrastructure*
- ✓ *Insecurity*
- ✓ *Human population tends to be small, highly mobile & difficult to reach*

WHY A COMMUNITY-BASED APPROACH?

Currently, the Community-based Animal Health Programme is the only alternative way of delivering animal health service in pastoral and remote areas of the country. It is because of :

- Governments are unable to continue funding many goods and services
- The public sector is not always efficient or effective provider of goods and services and should instead focus on policy formulation and regulation
- Communities had always managed their own livelihoods and natural resource base
- The failure of top down approaches and the success of participatory and community based approaches
- The mainstreaming of human rights and entitlement concept

Community-based Animal Health Workers (CAHWs) are community members who have received basic and non-formal training in animal health care and who prevent and treat animal diseases within their community. In Ethiopia, a total of 1512 CAHWs are so far trained by the government and NGOs, in which the share of the government is 53% and the share of NGOs is 47%. Services that are delivered by CAHWs are treatment using antibiotics, vaccination, deworming for internal parasites, spraying for external parasites, minor surgical treatments, dehorning, close castration, and report disease outbreaks.

SUCCESS OF CAHWs

Community-based Animal Health Workers (CAHWs) have played a key role in eradication of rinderpest from Ethiopia and improved the rinderpest control in the southern Sudan. Besides, most CAHWs in Ghana had good to excellent impact on animal health and were regularly reporting to veterinary authorities. Moreover, in Kenya CAHWs were still working ten years after training. Generally, economic analyses of CAHW programmes have shown large return (\$2 - \$209 for each dollar invested).

CHALLENGES OF CAHWs

There are some challenges in executing community animal health programmes. These include:

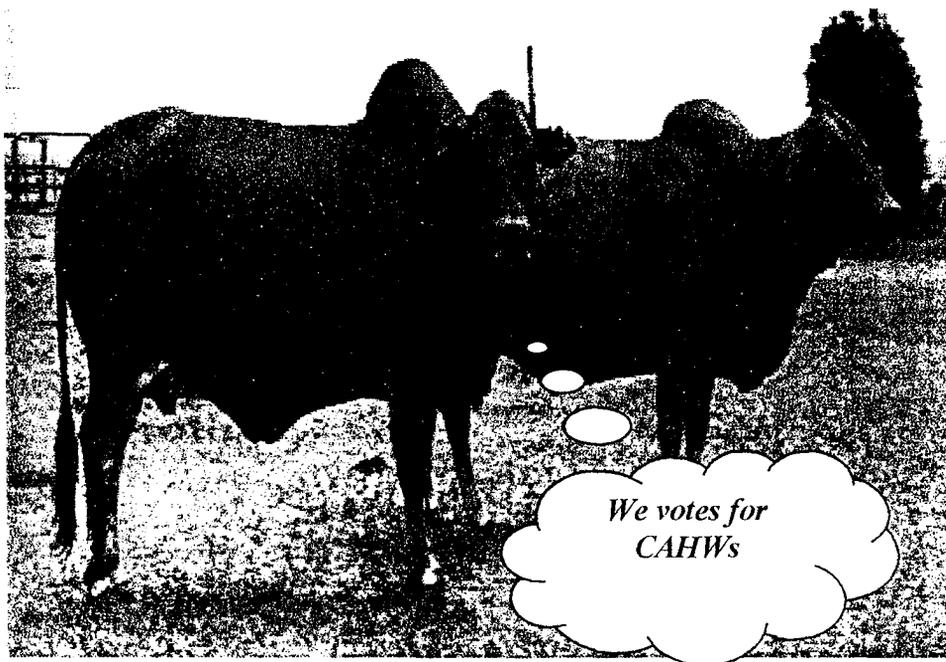
- If CAHWs lack skills, they can jeopardise human and animal health, and waste scarce resources of poor livestock keeper
- CAHWs may exploit farmers by overcharging and under-dosing with medicines
- CAHW service quality can be safeguarded by improved selection and training of CAHWs, and veterinary supervision within privatised systems
- The state and veterinary boards have key roles to play in legislation for CAHWs and ensuring adequate monitoring and regulation

ASSESSMENT OF CAHWs and IMPLEMENTATION OF PAHC PROGRAMME

Assessment of community animal health workers has been conducted in 2001 by PAHC programme in Afar area of Ethiopia and Southern Sudan. Concerning the performance of CAHWs, the assessment shows 9% poor, 68% moderate, and 23% good in Afar while 7% poor, 73% moderate, and 20% good in Southern Sudan. Concerning the participation of livestock owners in the implementation of the PAHC programme, the result shows 32% weak, 54% strong, and 14% not participating for Afar while 80% weak, 7% strong, and 13% not participating for Southern Sudan.

CONCLUSIONS

- CAHWs are proving to be useful BUT there is a challenge on how we can improve their management and their integration into the existing system
- There is a need to build linkages between vets, paravets, and CAHWs as they compliment each other in order to strengthen animal health services delivery
- There is a need for regional integration and harmonization of primary animal health services particularly in cross boarder areas
- There is a considerable evidence that community based disease surveillance strengthens national disease surveillance system



OVERVIEW OF THE CURRENT VETERINARY SERVICES

Dr. Sileshi Zewdie

Federal Veterinary Service Team Leader and National PACE Coordinator

BACKGROUND

Even though Ethiopia has an enormous livestock resource; the output remained to be untapped. The sub-sector contributes about 16% of the GDP 33% to the agricultural share. Food Production & Supply and per capita consumption of animal products are all below the world and African average. The main constraints to livestock development are diseases, nutrition, husbandry, and marketing.

The major Objectives of the veterinary service are

- Ensure health and welfare
- Responsible for health of animal & public health
- Provide guarantees animal & animal products

Organizational Set up

The veterinary service of the country is organized both in the federal as well as regional levels. In the federal, it is structured under Animal & Fisheries Resources Development & Regulatory Department and in the region; it is organized under regional states.

Duties and responsibilities of Federal Veterinary Service

- Formulation of policies & strategies
- Centre for animal health information
- Conduct surveys and investigation
- Project formulation
- Control husbandry diseases
- Enforcing regulations and certifications
- Prepare work plan & budget
- Provide technical inputs

Duties and responsibilities of Regional Veterinary services

- Provide preventive & clinical services
- Annual vaccinations and diagnostic activities
- Meat inspection
- Collect data
- Infrastructure development and procurement
- Training AHT & CAHW and Licensing private practices

Concerning the disease situation, out of the 15 diseases that are classified as List A by the Office International des Epizooties, seven of them are endemic in Ethiopia. These are CBPP, LSD, FMD, NCD, PPR, sheep & goat pox, and AHS. Other diseases that are economically important include CCPP, trypanosomiasis, anthrax, blackleg, haemorrhagic septicaemia, and brucellosis. The widespread prevalence of these diseases in the country has different effects like slow growth, difficult access to international markets, reduction of quality of hides & skins constraints to exotic breeds by tick borne diseases and zoonotic diseases. Even though detailed study not conducted to

know the direct loss due to mortality from animal diseases, it is estimated that the direct loss due to mortality is 8-10% for cattle, 14-16% for sheep, and 11-13% for goats.

MANPOWER AND INFRASTRUCTURE

With regard to the statistics of the Veterinary Personnel of the country, there are 500 veterinarians, 800 Animal Health Assistants, and 3000 Animal Health Technicians in the public sector and there are 57 veterinarians, 58 Animal Health Assistants, and 102 Animal Health Technicians in the private

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Legal Power

Proclamations

- Animal disease control No 267/2002
- Meat inspection No 274/1970
- Meat inspection amendment No 81/1976

The House of People's Representatives endorses these proclamations in 2002.

Regulations

- Meat inspection No 428/1972

Guidelines

- Meat inspection, hygiene and construction of export abattoir, 2000
- Operational procedures of export abattoir

Draft proclamations and regulations

- Meat inspection proclamation
- Animal diseases prevention and control regulation
- Regulation to control movement of animal and transportation of animal products & by-products
- Regulations to provide for the registration and licensing of animal health professionals

DISEASE REPORTING

It is known that animal health information is vital in designing disease control programmes. In line with this, the Epidemiology Unit of the veterinary service team is performing disease-reporting activities and it is believed that these reports are the centre for animal health information. The unit collects two types of disease reports or data. These are active and passive data collection. Even though it mainly focuses on active disease search on Stomatitis – enteritis cases, surveying and investigation of other diseases is also conducted. Sero-surveillance & monitoring are also conducted by taking blood sample from the selected herd.

DISEASE CONTROL

Annual vaccination and treatment are entirely carried out by regional veterinary services. However, the cost of vaccine for List A diseases is covered by the Federal government.

QUARANTINE AND INSPECTION

The main objective of quarantine and inspection service is to prevent the entrance of exotic diseases into the country and to inspect exported and imported animals, animal products & by products. As to the export of livestock products, there are eight export abattoirs in general, of which four are currently exporting livestock products to Middle East countries. A technical committee has been established to monitor and provide technical backup for these abattoirs. Besides, training on Good Management and Hygiene Practices has been conducted.

ANIMAL HEALTH PROJECTS

A. PAN AFRICAN RINDERPEST CAMPAIGN (PARC)

This was a regional project started in 1989 with the objective of eradicating rinderpest from Africa. The European Union mainly financed the project & the government allocated significant amount of budget as a matching fund. In Ethiopia, the campaign was conducted from 1989 up to 2000 in three phases through one national coordination office, eight branch coordination offices and 7 sero-surveillance teams. In the lifetime of the project, 56 millions cattle in all regional states have been vaccinated. Moreover, sero-surveillance activities are still conducted in areas where vaccination stopped two years ago. In this instance, more than 10000 blood samples have been collected & tested yearly in order to detect the virus. Due to the satisfactory result of the project, the last rinderpest outbreak is observed in Mehoni wereda of Tigray regional state in 1995. Since the strategies that the country followed to control & eradicate rinderpest brought a satisfactory result, the country declared itself as a provisional free zone from rinderpest as of May 1/1999.

B. RIFT VALLEY FEVER PROJECT

This project is a TCP funded by the Food and Agriculture Organization of the United Nations. The main objective of the project is to establish RVF Surveillance that paves the way for the export of small ruminants. Generally, the project focuses on training to establish a national capacity, providing inputs, establish early warning system using remote sensing satellite data, and identification of high-risk areas.

C. NATIONAL LIVESTOCK DEVELOPMENT PROJECT (NLDP)

The project is started in July 1999 with a total budget of Birr 308.123 million, of which 258.174 million Birr is loan from the Africa Development Bank while 49.949 million Birr is a government-matching fund. NLDP is structured in four main components; namely, Livestock production, Animal health, Forage production, & Project management. The main objectives of the project are sustainable increase in livestock income, increment of nutritional status, and increment of the supply of meat & milk. The main activities envisaged in the animal health component are

- Increase animal health information network & establish an emergency preparedness plan
- Strengthen disease surveillance & diagnostic capabilities of regional laboratories. Currently there are 9 regional laboratories and the objective is to add four other laboratories.
- Support the National Veterinary Institute (NVI) for the production of CCPP & PPR vaccine.
- Establishment of veterinary products quality control laboratory
- Promote livestock certification and export
- Establishment of quarantine stations

Concerning upgrading the animal health information system, eleven computers purchased and distributed to regional agricultural bureaus. Besides, laboratory equipment and short-term training provided to regional veterinary laboratories to strengthen their disease surveillance & diagnostic capabilities. As to the control of PPR & CCPP, study on the distribution of the disease has been conducted and blood samples collected. Serological test conducted for PPR while the test of CCPP awaits the importation of materials from abroad. Moreover, purchase of equipment made to strengthen the capability of the National Veterinary Institute in producing vaccine for PPR and CCPP.

D. PAN AFRICAN PROGRAMME FOR THE CONTROL OF EPIZOOTICS (PACE)

The Pan African Programme for the Control of Epizootics (PACE) is currently implemented in 32 African countries with the aim of consolidating the achievement of the PARC project and controlling major transboundary animal diseases. The budget of the project is an allocation from member countries and a grant from the European Union. The overall objective of the PACE programme is to relieve the poverty by improving animal productivity, trade, and food security. It will thus help to improve farmer's nutritional status, income and people's general living conditions. The duration of the project is five years.

E. FARMING IN TSETSE CONTROLLED AREAS (FITCA)

FITCA is an EU financed regional project that is currently operating in four African countries. The main objectives of the project are building National competence, manpower development, field data gathering, model testing, and provision of infrastructure.

F. QUALITY & SANITARY ASPECTS OF ANIMAL PRODUCTS

It is French granted project with the aim of improving the quality of and sanitary aspects of animal products for export since low quality of animal products is a hindrance for foreign market. The major activities envisaged in the project include reinforcing the effectiveness of vet services, consolidating the epidemiology unit, strengthen laboratories, support to the faculty of vet medicine, and providing training to the private sector.

G. FEASIBILITY STUDY FOR ESTABLISHING DISEASE FREE ZONE

It has been estimated 255,000 cattle and 750,000 sheep exit the country annually across the border into Djibouti, Somalia, and Kenya. To alleviate this problem and increase our share in the international market, establishing disease free zone in huge resource areas is vital. In line with, a TCP that covers 18 months duration has been prepared with the support of FAO. The main objective of the project is to conduct feasibility study for the establishment of disease free zone. The project budget is US\$ 290,000.

H. EXCELEX

It is a project focuses on livestock certification in the Horn of Africa. The budget of the project is US\$ 1,777,900, a grant of the Italian government through FAO. The duration of the project is 2 years.

CONSTRAINTS

The main constraints that hamper the development of the veterinary service of Ethiopia include

- Lack of central disease investigation laboratory
- Shortage of operational funds & equipment

- Lack of established disease controlled areas
- Lack of quality control laboratory
- Shortage of skilled manpower

CHALLENGES OF VETERINARY SERVICES

Some of the challenges of the veterinary service are

- Enforcement of the new Animal Disease Proclamation
- Prevent the introduction of exotic diseases
- Achieve freedom from RP
- A contingency management plan to contain & eliminate an unexpected outbreak
- Access to contingency funds & resources for use in an emergency
- A reliable system for preventing the introduction of infection which is carried out by proper border control and quarantine
- Treat RP outbreak as National Disaster
- Gain confidence of importing countries
- International animal Health Code is now the standard rule to ensure the health security of international in animal & animal products
- Import & export procedures
- Veterinary ethics & certification
- The reporting requirements
- Guidelines for risk assessment
- Evaluation of veterinary services in terms of structure, authority, laboratory capacity & quality of staff
- Create conducive environment for private sector
- Integrate CAHWs to the delivery system
- Establish disease free zones
- Establish National Animal Disease Investigation & Diagnostic central laboratory

QUESTIONS AND COMMENTS

1. Is the veterinary policy and strategy in place? How is it planned to enforce the regulation of livestock movement control inline with the high mobile nature of the pastoral community?
2. What are the roles of export abattoirs? Is there a clear linkage between the Federal Ministry of Agriculture and these abattoirs?
3. Due to the weakness of the veterinary service of the country, would it not be difficult to categorize the country only based on surveillance results?
4. What is the linkage and relation between the Federal and regional veterinary services?
5. Concerning the census of Ethiopian livestock, it is the one we have been hearing for the last 40 years. Professor Getachew's presentation stated that the camel population of the country is about 1 million. However, in Somali region, there are clans that have more than 1 million camel each. Since statistical surveys were not conducted frequently in many parts of the country and very rarely in pastoral areas, we cannot approach to the reality. The presentation also stated the human population in the lowland is low. This might give an impression that the lowland is a reserve land and no dynamism in lowlands. So, this needs to be corrected.

Higher learning institutions of the country are almost highland biased and neglect the lowland. I think this wrong perception of the lowlands significantly contributed to the underdevelopment of the area. When we think the pastoral area, it is not only the veterinary service that disturbs the status quo of the area. There are so many other integrated factors like the problem of desertification. There is also a question of making a balance system inline with the increment of livestock population. Therefore, we should use a holistic approach to solve the problems of the pastoral area.

6. Since the CAHP is initiated to fill the gap in the provision of veterinary service, what are the measures taken by the MOA to strengthen the activities of CAHWs?
7. The training of CAHWs should be seen vis-à-vis the long-term manpower development plan of the country. The government is currently trains considerable number of animal health professionals in Alage training center. Therefore, how do you see this in line with training of CAHWs?

ANSWERS

1. The veterinary policy and strategy is not in placed. It is on a draft level. The only endorsed policy is the rural development policy and strategy. We have developed the draft veterinary policy and strategy on the basis of the rural development policy and strategy. Concerning the control of livestock movement, it will be implemented or enforced when there is an outbreak of diseases and without disturbing the way of life of the pastoral community.
2. Regarding the linkage with external abattoirs, quarantine is the responsibility of the federal veterinary service as indicated by the international Office of Epizootics. But, this responsibility was given to regions when regional states are established some 10 years ago. Now, it is felt that this task should be attached to the federal veterinary service and we request the concerned bodies to return back the responsibility. However, for the moment, regional offices assigned professionals to facilitate the activities of the abattoirs.
3. Regional and district veterinary offices, due to a number of constraints, can not conduct strong surveillance activities so as to determine/categorize areas based on prevalence of diseases. Therefore, the only left option is to establish disease free zone and make surveillance and effective veterinary activities like Botswana and South Africa. That is why the Ministry of Agriculture is now focusing on the establishment of disease free zone.
4. The link between the federal and regional veterinary services is weak and needs to be strengthened. The Ministry plan to have a forum with regional bureaus bi-annually to harmonize and plan and activities.
5. Regarding the livestock population of the country, the problem with statistics is persistent. We are static and using the number that we have been using the last 30 and 40 years. Unless we make a census frequently (say 10 years), we should be dynamic by increasing the number of our livestock population by a given growing rate like the Sudanese who increase their livestock population by 2.5%. The census of camel in the presentation is found from the FAO document that is published in 1993. The number of camels in lowlands is always raises question in pastoral areas of any country due to the mobile nature of the people. So, that is why I put the number of the number of cattle more than 1 million. There is a debate for several years as to veterinary services Vs environmental degradation. Studies indicate that veterinary service has a little impact on environmental degradation; rather feed has high impact. Some argue that eradication of highly contagious diseases like rinderpest will bring about shortage of animal feed. Therefore, the appropriate way is to increase the supply of feed and exploit the resource.
6. The role of CAHWs is to serve their communities where the government veterinary service is

inaccessible. In the country's veterinary legislation, there is a provision that allows CAHWs to deliver the service with in their communities after being registered. Studies that are conducted by the Interafrican Bureau for Animal Resources and other organizations have shown the efficacy and efficiency of CAHWs in remote, inaccessible, and in secured areas.

7. Since the government veterinary structure does not absorb all the graduates from the training centre, there is always a large room left for private practitioners and CAHWs. Even in those countries that trained huge professionals, the fate of CAHWs is not affected. Therefore, the trend of CAHWs will be continued.

FACILITATOR

I think concerning the veterinary policy and strategy in general and for CAHWs in particular, we can say two conclude by two statements.

1. The CAHP policy and strategy is not in placed; but it is in a process – as a draft stage.
2. There is not a systematic and policy based linkage between CAHWs and the government veterinary service.

COMMUNITY-BASED ANIMAL HEALTH (CAH) EXPERIENCE IN THE GREATER HORN OF AFRICA

Dr. Berhanu Admassu

Veterinary Field Officer, African Union/Interafrican Bureau for Animal Resources, Community-based Animal Health and Participatory Epidemiology Unit

Community-based systems have been significant providers of animal health in the Greater Horn of Africa for over a quarter of a century. CAH builds on the concepts of community level assistants (veterinary scouts, dip attendants) who were essential components of the nascent state veterinary systems in East Africa, and of the community experts who treated livestock for reward in most African cultures. McCorkle (200) has reviewed literature and estimates that since the early 1970s, CAHW initiatives have been implemented in 46 Nations. A recent survey by AU/IBAR/CAPE unit identified over 230 organizations currently or recently involved in CAH in the nine countries of the Greater Horn of Africa. The following table shows the distribution of these organizations by countries.

Table 1
Minimum Number of organizations currently or recently involved in CAH

Country	Number of organizations
Kenya	72
Tanzania	48
Uganda	30
Ethiopia	24
Chad & CAR	21
Sudan	17
Somalia	17
Eritrea	1
Total	230

Not all organizations involved in CAH are included, and some organizations active in more than one country and are included twice. Taking into consideration the likely cover of the survey, and the difficulty in obtaining comprehensive information, it is probable between 300 and 400 organizations are involved in CAH in the Greater Horn of Africa region.

Table 2
Type of organizations currently or recently involved in CAH

Country	INGO	LNGO	Church organiz- ations	Bilateral projects	SVS	Private sector	Knowledge Institutes	Local authorities	Others	Total
Kenya	21	19	18	8	0	3	2	0	1	72
Uganda	8	7	9	2	0	3	1	0	0	30
Tanzania	9	8	4	3	0	0	5	18	1	48
Chad & CAR	3	2	0	11	2	1	2	0	0	21
Sudan	13	1	1	0	1	0	0	1	0	17
Ethiopia	12	3	1	7	0	0	0	0	1	24
Eritrea	0	0	0	0	1	0	0	0	0	1
Somalia	12	4	0	1	0	0	0	0	0	17
Total	78	44	33	32	4	7	10	19	3	230

Of all organizations doing CAH only 7% are specialist veterinary organizations e.g., VSF-B and only 18% are livestock/ pastoralist-focused organizations e.g. Horn Relief. The majority of organizations (75%) are engaged in general development activities, although they may have specialized livestock staff within the organization. Specialized veterinary organizations train more CAHWs and have higher retention rates than less specialized organizations.

Organizations involved in CAH by country

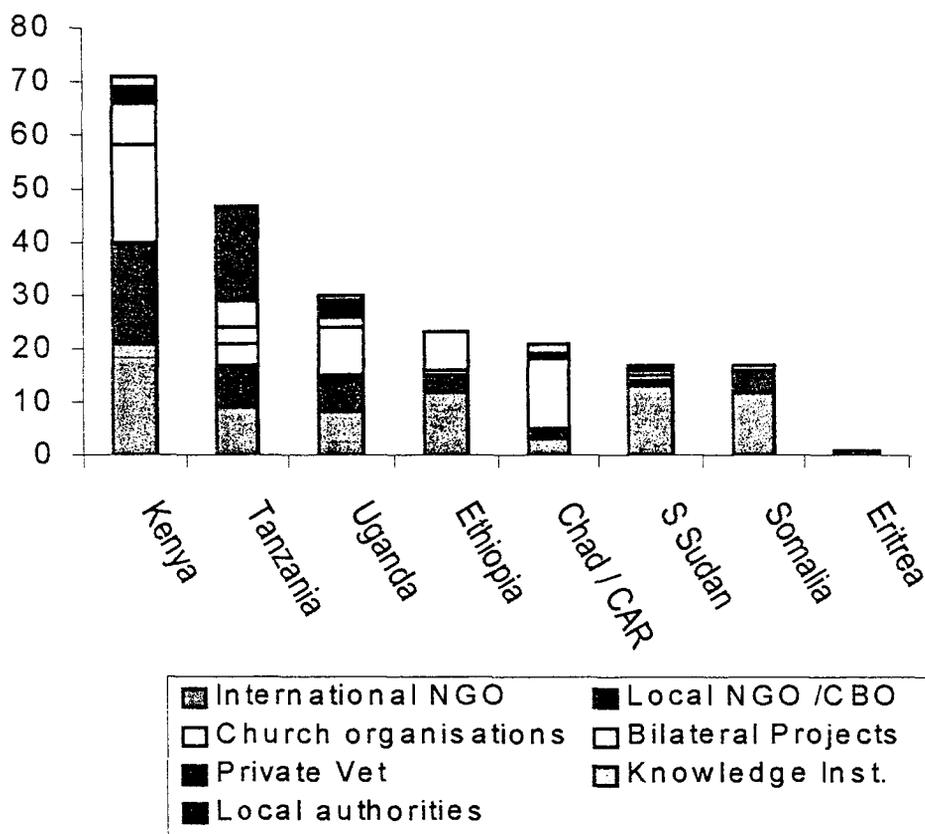


Table 4

Retention of CAHWs according to type of training organization

Type of organization	Average no. CAHWs trained	Retention of CAHWs (%)
Veterinary specialised	479	81
Livestock/pastoral development	276	59
General development	53	56

Community-based Animal Health Workers trained

A minimum of 22,041 CAHWs (the estimated¹ figure is 27,000 CAHWs) have been trained in the nine countries of the Greater Horn of Africa. CAHWs are the single largest professionally trained cadre of service providers.

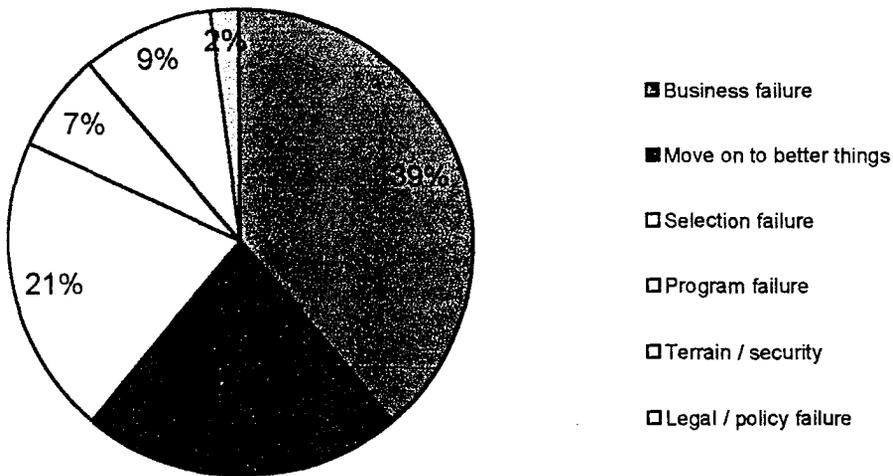
¹ (Calculated by assuming organizations who are known to have trained CAHWs but which didn't provide information on numbers of CAHWs, trained an average number of CAHWs)

Table 5
CAHWs trained in the nine countries of the GHA

	Minimum CAHWs	Av trained per org.	Estimated CAHWs
<i>Kenya</i>	7777	125	8652
<i>Chad & CAR</i>	7190	514	8218
<i>Sudan</i>	2138	126	2264
<i>Tanzania</i>	2031	58	2669
<i>Ethiopia</i>	1215	58	1389
<i>Uganda</i>	1110	46	1294
<i>Somalia</i>	505	84	673
<i>Eritrea</i>	142	142	142

CAHWs active: less information is available on active CAHWs, but at least 6809 CAHWs are reported to be active, and an estimated 13,000 CAHWs are active in the Greater Horn of Africa². Across all organizations the average retention is 64% (36% drop out).

Why do CAHWs become inactive? Reasons for drop out



² (Estimated calculated by assuming that organizations which didn't provide information on numbers of CAHWs active have an average number of CAHWs active)

Table 6
Reasons for drop out

Business weakness	Low profits	14
	Poor credit management	10
	Lack capital / business skills	5
	Drug supply	6
	Quacks more competitive	3
Move on	Get better job / opportunity	12
	Migrate	9
Selection weakness	CAHWs lack motivation or are too busy	8
	Dishonesty by CAHWs	7
	Poor selection	6
Environment	Security risks	4
	Vastness of area to be covered	2
Individual	Individual reasons - death / family problems	6
Programme	Poor training / follow-up by programme	7
Legal / policy	Lack legal standing	2

Table 7
Major problems identified by CAHWs

Low profits from being a CAHW	1
Difficulty in getting paid for services and difficulty in managing credit	2
Not being able to restock because money from treatment is diverted to other needs	3

Table 8
Reasons reported by CAHWs for drop out

Some people do not pay	22
Some people want drugs and services on credit	18
Drug prices are high	7
Some people think drugs are for free	6
Some people call you to treat a moribund animal and when it dies they want their money back	4
Some skills forgotten I need refresher	2
I lack water for spraying in kraals	2
Insecurity	2
No cattle crush	2
Family sickness has prevented working	1
Proper record books lacking	1
Some livestock owners are not cooperative	1
Most people pay with sheep and goats which are difficult to sell	1

GENDER ASPECTS OF CAH

80% of organizations able to give disaggregated data train women CAHWs, and women CAHWs are more likely to remain active.

*Table 8
Number of male and female CAHWs trained and their activity levels*

	Trained CAHWs	Active CAHWs	Trained per org (av)	Active per org. (av)	Retention rate
Female	450	312	15	12	63%
Male	2482	1700	79	56	57%

Qualitative information on women CAHWs as compared to male shows

- Women are more hardworking, reliable, and honest than men
- Women find it easier to insist on payment – men are ashamed to refuse to pay
- Women spend more on their families
- Women have greater need to earn money than men, as they are more responsible for their family
- Women can manage the physical aspects of the work very well

Most organizations were not able to provide a breakdown by gender only 17% (36 out of 217) were to provide this). The proportion of women CAHW trained is likely to be an overestimation as organizations, which are able to provide disaggregated data are also more likely to be train.

QUESTIONS

1. In the community animal health implementation, what is the role of the government and NGOs in training of CAHWs?
2. Your presentation shows women CAHWs are more active and their retention rate is higher than men. What is the secret behind?
3. It is known that a number of NGOs are involved in training of CAHWS. What is the driving force or the reason for their involvement in the training of CAHWs? There is a rumour of associating NGOs with drug companies.
4. Last year, a workshop has been conducted in Jijiga where those stakeholders were participated. The main problems raised during the workshop were non-uniformity of the curriculum and lack of coordination among the stakeholders. So, what has been done to alleviate the above stated problems?

ANSWERS

1. In Greater Horn of Africa, the approaches in CAH implementation are not the same. In some areas, the government is the main actor while in other areas, NGOs are the main actors or in some other areas both the government and NGOs are the main actors. If we take the case of Ethiopia, the government carries out 50% of the implementation where as in Southern Sudan the entire implementation of the programme is conducted by NGOs. As to sustainability, since the programme is carried out under the umbrella of FAO and UNICEF, the sustainability of the programme in Southern Sudan is better than Ethiopia.
2. As to the high retention rate of women, it is clearly presented in the presentation. There might be some other reasons and the implementers may supplement me.

3. The common factor for Greater Horn of Africa is pastoralism (pastoral and agro-pastoral) and the most alarming issue in the area is the absence of veterinary services. To give the service and to fill the gap, NGOs are involved in the implementation of CAH programme. I think, the main driving force for NGOs to involve in the programme is the objective reality in the pastoral areas. However, we may get other small reasons if we evaluate the organizations one by one.
4. The Somali region veterinary team is currently working hand in hand with NGOs with the coordination of the region DPPB. As to the impact of the intervention, the veterinary team has conducted an impact assessment and now it is evaluating the activities of ACF. As to the success of CAHWs, we, pastoralists, have ample experience. We can't do much animal health service delivery, in a pastoralist system, without CAHWs.

SUPPLEMENTARY

Dr. Fisseha

The implementation of CAHP started in Ethiopia in 1978 through the Third Livestock Development Project. In the project life, more than 60 CAHWs were trained. Therefore, one can say that CAHP in Ethiopia is a government initiation programme. As to the procedure, when NGOs initiate a CAHWs based veterinary service delivery, project proposals presented to regional agricultural offices for discussion. It is after the approval of the agricultural bureau that the regional Disaster Prevention and Preparedness Bureau endorsed the document. Besides, regional bureaux are highly involved in training programmes and partially in supervision. So, the question should be how to go further. Concerning the activities of SC/US, it is currently implemented a CAHP in Afder through which 80 CAHWs are trained and it is assumed that the mortality rate in the area reduced to 30% due to the intervention. Besides, we penetrate other adjacent areas through them and in that area people are started to pay for vaccines. This shows CAHWs can highly influence their community and through them we can perform a number of activities.

Dr. Deribe

When we talk of a system, an idea we perceive today might be changed tomorrow and approaches may change through time. The approach concerning CAHP is emanated from lack of veterinary services in pastoral and inaccessible areas. In a place where there are not CAHWs, there are traditional healers in the community that are engaged in treating animals. The question should be how to design animal health services that fit the animal production system and the way of life of the community. Therefore, CAHP is a more palatable programme for delivering animal health service delivery in pastoral and remote areas.

Dr. Solomon

There are some people who think that CAH is a donor-imposed programme. But, when we see the reality of our country, community animal health is a government driven programme. We have ample practical experience in our country. The Somali region is the first to eradicate rinderpest since it had a number of paravets. In Afar region, only CAHWs could reach inaccessible and insecure areas during PARC programme. However, during that time, we use CAHWs as trouble-shooter not sustainable development agents. Therefore, it is a high time to integrate the activities of CAHWs in the national veterinary service delivery system.

Ato Abdinur

Concerning the experience of highland let me say something. The SC/UK implemented an integrated rural programme programme that includes CAHP in North Wollo and Sekota areas. Eventhough there are many government veterinary clinics, they only serve the nearby areas due to mobility problems. So, it due to this reality SC/UK started the implementation of CAHP. The impact assessment and evaluation in Sekota area indicate that CAHWs cover 30% of the area that was not covered by the government veterinary service. Besides, in the CAHWs' operational area, it is able to control mange mite, an economically important shoats disease.

COMMUNITY-BASED ANIMAL HEALTH DELIVERY IN ETHIOPIA: EXPERIENCES, CHALLENGES AND THE WAY FORWARD

Dr. Solomon Nega

Veterinary Privatization Promotion Officer, PACE Project

INTRODUCTION

Community-based Animal Health Programme is accepted in Ethiopia to complement the existing veterinary services because the public service is plagued by many problems such as inadequate manpower and logistical inputs and poor communication facilities. Therefore, the Community-based Animal Health Programme is an alternative way of service delivery. However, there are a lot of factors that influence this alternative way of service delivery. These include remoteness of a location, the way of life of the community, peace situation, and availability of alternatives.

When we consider the current situation of the government veterinary service, the few public clinics present are located in major towns and provide services mostly to cattle owners residing around these towns. Curative and preventive services are presently not available to the vast majority livestock owners in pastoral areas of the country. The problem is not only the shortage of staff but also inadequate operational budget for animal health services compared to the magnitude of the disease problems in the country. Besides, staff mobility is very limited and only occasionally do staff venture outside clinics to investigate out breaks and render services.

Due to the inefficacy of the public service, in the late 1980s veterinarians began to develop alternative system for providing animal health services in pastoral areas of Africa. Much of the early work was supported by Non Governmental Organizations (NGOs) who used the principles of appropriate technology and community participation to make best use of the skills and knowledge of livestock keepers. These small-scale projects were often said to be community-based because they involved local people in various stages of project implementation and focused on local priorities. Many projects worked with communities to select people for training as community based animal health workers (CAHWs)

Community Animal Health in Ethiopia is not a new undertaking. The different names that used to describe the workers also revealed the fact. The names that were commonly used in Ethiopia are Community Animal Health Workers (CAHWs), Vet Scouts, Paravets, Community Veterinary Agents (CVAs), and Farmers Animal Health Representative (FAHR). Different government organizations were involved in the training of community workers on animal health. Among the organizations involved in the training of paravets were:

- Third Livestock Development project, MOA.
- Agarfa peasant training institute, MOA.
- Fourth Livestock Development project, MOA.
- FAO project
- European Union (Afar pastoralists development pilot project)
- FARM Africa Dairy Goat Development project & APDP
- Catholic Mission
- And some other NGO's

Using more positive experiences of CAHWs from NGOs and with better understating of community participation, the idea of "Community based primary animal health care in Remote Areas" has become a professional agenda. In many parts of the country, NGOs, Bilateral Organizations, and the government are taking part in the promotion of Community Based Animal Health Service delivery as one part of their development program particularly in pastoral and agro-pastoral areas. Currently,

both the government and NGOs are involved in the training of CAHWs. Government projects trained 891 CAHWs in Somali, Benishangul regions, Borena, South Omo and Maji zones. NGOs have so far trained 603 CAHWs from all the pastoralist regions. This makes the total number of trained CAHWs to 1494.

CURRENT STATUS OF CAHWs

Currently, promoters of the community animal health programme increasing rapidly. To date 1494 CAHWs trained by different institutions. The Federal MoA Animal health policy recognizes CAHWs as primary health providers and much is undertaken by the PACE project. Training of trainers' manuals and training curriculum on the community-based animal health workers developed by PACE project.

CHALLENGES

The community animal health programme is endowed with so many challenges that include

- ❖ Many (too many) implementers
- ❖ Weak coordination of such sensitive programmes
- ❖ Sense of ownership of the programme by communities is poor
- ❖ Training given by different organizations is not uniform.
- ❖ Absence of responsible veterinary officer (CAHP desk officer) at regions level.
- ❖ Significant variation in the duration of training (it differs from five day to three months.)
- ❖ The selection of participants varies and so does the content of the training.
- ❖ Lack of clear fund management method
- ❖ Absence of sustainable drug source
- ❖ Weak linkage with line ministries
- ❖ Weak or no supervision and technical back stopping
- ❖ Trainers not following national guidelines
- ❖ Free distribution of drugs

THE WAY FORWARD

In order to the alternative service delivery be efficient, there should be a clear strategy laid regarding linkage, supervision and monitoring, fund management, drug supply. Besides, due emphasis has to be given to National guidelines, ToT manual and indicative training curriculum guide. Moreover, regional agricultural bureaus should assign a desk officer for the community animal health programme.

The elements necessary for the successful implementation of a sustainable community-based animal healthcare strictly followed by implementers are mentioned below:

1. Site Selection Based on Community Support and Needs Assessment

Identification of the need for a CAH program may come from a number of sources including government NGOs of the community itself. CAH program should never be imposed on a community if the community itself has not articulated a clear commitment to and understanding of its implementation

2. Cooperation/participation of Veterinary Authorities

Professional veterinarians in the area may resent the introduction of CAHWs into a village or district. Every effort should be made to diffuse that resentment. It is critical to enlist the involvement and support of local veterinarians and veterinary authorities in the program development as early as possible since there are many opportunities for their participations throughout the entire implementation process and these opportunities should be capitalized up on.

It must be demonstrated to local veterinarians that CAHWs are not competitors but rather extensions of their own influence and importance within the community. By having veterinarians participate in supervisory and supportive roles, such as training monitoring and drug supply, the long term prospects for success of the program can be bolstered and the entire framework of veterinary service delivery in the pastoral areas of the country can be favorably influenced.

3. Ethnoveterinary Studies and Disease Ranking

Community livestock keepers need to have the opportunity to communicate their knowledge and experience with regard to local live stock keeping practices, production constraints, indigenous animal health interventions, patterns and perceived causes of animal morbidity and mortality, and their perceived needs with regard to livestock health and production.

4. Selection of Drugs Supplies and establishing a drug procurement chain and realistic fee Schedules

A portable kit of drugs and supplies must be developed for CAHWs. Since there are several considerations in preparing a CAHW kit, the kit inventory is based on the diseases ranked most highly by livestock keepers and the subsequent professional investigations that confirmed the causes of these diseases. Besides, the number of items should be kept to a minimum so as to allow CAHWs to physically carry their kits easily from household to household. Moreover, selected drugs should be broad-spectrum so that a single drug will cover a number of etiologic possibilities.

Drugs should be as inexpensive as possible (without sacrificing quality efficacy) so that poor livestock keepers can afford to purchase them from CAHWs. The drugs and supplies should be reliably obtainable through existing supply networks so that availability can be assured over the long-term. For a better supply of drugs, dependable suppliers need to be identified and contracts established. With this regard, private traders may be the best source of materials. At the inception of CAHP, the situation may not attract private traders. Therefore, importation and distribution by the implementing agency of project may be necessary, at least initially.

With regard to costs, the costs of medicines must be recovered in the fee charged by CAHWs so that additional medicines can be purchased without repeated infusion of funds from external sources. So, reasonable fees have to be established that are affordable for service users, but that also allow for cost recovery and some minor profit for the CAHW to serve as an incentive for continuing work. It is suggested that it may be necessary for implementing agencies to subsidize costs initially until the program is well established and service users are accustomed to paying.

As the sustainability of CAHW projects depends on the willingness of the community to pay for services provided by the CAHW, the failure of some users to pay can be a serious threat to the entire program, and the community must ensure that all service users cooperate in the payment scheme.

CURRICULUM DEVELOPMENT, TRAINER SELECTION, AND TRAINING

An appropriate training curriculum and enthusiastic and supportive trainers are necessary to develop competent and effective CAHWs. To achieve this, it is critically important that veterinary professionals actively participate in the curriculum development. Besides, it is essential to avoid turning the training course into an intensified, condensed version of a complete veterinary school curriculum. The challenge with this regard is to identify and capitalize on the indigenous knowledge that local livestock keepers already possess concerning disease processes. It is also essential to integrate that knowledge with some core principles of veterinary science.

SELECTION OF CAHWS

Proper selection of trainees strongly influences long-term success of any CAHP. The selection criteria has to be depend on the local custom and project goals, in which either men or women or both can be trained as CAHWs. The training of CAHWs should be done locally whenever possible, and should not be far or too long period of time, so as not to compromise the livelihoods of trainees by removing them from homes, families and livestock.

Hands-on practical exercises as well as theoretical training under the supervision of a professional veterinarian who is both linked to the project have to be provided. CAHWs training should include content on pricing, money and inventory management, simple accounting and record keeping since they are private practitioners that engaged in fund management. Training concerning potentially dangerous drugs should also be addressed.

MONITORING OF CAHWS

Once trained CAHWs begin working in their communities, it is vital to the overall success of the program that their technical and personal performance be regularly evaluated.

Integration with professional Veterinary Services

A sense of trust and co-operation has to develop between CAH project and local veterinary authorities. Woreda veterinary officers may assume responsibility for regulatory oversight of the CAHW drug supply, serve as trainers, clinical consultants or field monitors, and conduct continuing education programs. In turn, CAHWs may provide valuable disease surveillance and reporting functions, and can be hired or recruited by government when circumstances demand, to assist in mass vaccination campaigns or quarantine efforts related to emergency disease control. Moreover, creating a sense of mutual reliance between the community-based program and government authorities may be the most significant aspect of ensuring sustainability of the community-based animal health program.

ROLE OF GOVERNMENT VETERINARY SERVICES

The government veterinary services gain because epizootic and enzootic diseases are more quickly reported and reliably controlled resulting in increased livestock production. Besides, the government services are more able to utilize their meager resources for the public good.

Opportunities of a community based animal health service delivery

Community animal health workers will play paramount roles in disease surveillance and monitoring, in trans-boundary disease control, and in Research.

CONCLUSION

- ❖ CAH service is the only available veterinary service for remote and pastoral areas in Ethiopia
- ❖ There are favorable policy and legal grounds for the promotion of the service.
- ❖ Assessments indicate lack of clear exit strategy leaving the programme unsustainable.
- ❖ Regions should take more responsibility in regulating and harmonizing such sensitive programmes

MINIMUM REQUIREMENTS AND INDICATORS TO ENSURE SUSTAINABILITY OF CAHW SERVICE

Dr. Gezu Bekele
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1. Past practice and efforts made to establish CAHW service indifferent parts of the country

Conceptually Community Animal Health Workers (CAHW) service could be defined as a veterinary service:

- That supplements existing veterinary services to fill gaps between demand and supply of basic veterinary service especially in the marginal parts of any given areas
- Primary animal health service, which is based with in the community being established based on the actual service demand existing, run and managed by livestock producers themselves by large
- The smallest scale private veterinary business run by livestock keepers as a sideline to livestock keeping business

With this common understanding the followings could be generalized about the past practice and efforts made to establish CAHW service in different parts of the country.

- Training of local people on primary animal health care procedures has been widely practiced during the last two-three decades most by NGOs although the government had also considered.
- The objectives of establishing such programmes and of conducting the trainings varied very greatly to include use of the trained people for mass education purpose, to eradicate Rinderpest from remote areas such as Afar, safeguard imported animals from tick borne diseases, address basic service demand of pastoral communities, etc.
- Currently the CAHW service has become the sole source of veterinary service to many pastoral communities being implemented by NGOs.
- However almost all of the past CAHW services were terminated quick enough following the termination of NGOs running the projects.

In line with the above characterized points about the past practice and efforts the following could be sited as to the lessons learned. The past practice and efforts have had two phases, trial and lesson dissemination, that a lot of changes have taken place in the principle and approach toward training of local people on basic animal health care procedures.

The Trial Period

The trial period was characterized by being top to down approach, planning of the service mostly to meet objectives not derived based on veterinary service side problem of the beneficiaries rather to overcome challenges encountered in the process of implementing projects/programmes planned to be implemented in different ways. Thus, in the early stage of the trial phase the practice of establishing such service had been considered as small elements of a given livestock project and there was no concern about whether the system remain sustainable or not. In the late trial phase the fashion had changed because of the donor principle in the area of development programmes that NGOs started to crudely justify their projects would be taken over by government with out addressing the specific activities to transfer although the public veterinary section strongly oppose such practice.

As the development fashion continued changing community participation in the designing and implementation of projects became priority to get fund. Some NGOs started to open their mind to

learn from the community about the realities by practising participatory method to start justifying the role of such service in areas where livestock disease remained priority concern with no official service in place to consumers. However, the challenge from the public veterinary section to the NGOs has continued to force them exclude all the life saving elements from the service CAHWs could provide, whatever the community might prioritise killer diseases.

Lesson Dissemination period

The early stage of the practice had been done on the performance of the CAHWs by large with out addressing damages caused due to the none solved priority diseases existing in the area their projects operate. Similarly there had been very limited emphasis given to the sustainability challenges in the lesson dissemination process by the implementers, as efforts were to attract the attention of donor and of the government sides.

In the current phase of CAHW service delivery practice the need to have sustainable in put sources and continuous technical back up supports to the system is well understood by all stakeholders. Further project documents qualify the criteria of being sustainable in terms of incorporating future drug sources and the technical supports to the CAHWs to train in a long lasting manner. The very limited attentions given to the CAHW service by the government side to follow up as well as support the implementation of project documents form the key factors, very little has been done in practice. Recognizing all the facts and factors especially the role of the service in being cost-effective way of extending veterinary service to more marginalized herders especially in pastoral areas and the fact donor and government bodies need to understand and the required support AU/IBAR CAPE started to deal on lesson dissemination work.

In general none of the currently operating CAHW services have improved the past limitations nor totally ensured the sustainability side.

Sustainability challenges to CAHW service projects

a. Internal to the project

Nature of CAHW projects

- ❖ Failure to meet consumers actual demand
- ❖ Service considered as a sideline or for immediate purpose to achieve main objective, which is different from animal health problem mostly
- ❖ Service born out of completely contradicting veterinary service delivery practiced under the project such as emergency intervention that the service faces resource deficit problem including fund, time, etc
- ❖ Poor project planning mainly failure to include sustainability elements and the strategy to ensure sustainability
- ❖ Failure to fulfil commitments entered to donors while justifying sustainability of the service planned
- ❖ Failure to conduct institutional capacity analysis while formulating projects that weak institutions would be wrongly considered in the implementation and also in the exist strategy.

Wrong implementation

- * Poor community participation
- * In appropriate training
- * Weak supervision and technical back up
- * Wrong drug supply system
- * Unnecessary competition by the implementer itself
- * Low profit margin to CAHWs

- * Failure to ensure and maintain cost recovery principle
- * Failure to establish or link the CAHWs to reliable drug source although targeted while formulating the service.

b. External to the project

- Restrictions on the service CAHWs should provide to exclude the basic priority demands of herders
- Failure to interpret commitments entered in practice to maintain the service and ensure sustainability by the government side:
 - Most NGO project documents have been prepared and signed on the grounds that the government would take over and maintain the out puts through providing all the required supports
 - In this regard most CAHW projects have seen to suffer unnecessary competition from the government side whatever the service could be highly acknowledged
 - In general such wrong commitments have additional importance of confusing donor communities who need to see sustainability of projects to fund.
- Absence of private input sources to supply CAHWs

c. Others of minor importance

- Presence of free or subsidized service at accessible radius from any other sources
- Black market drugs and service dealers

2. Minimum requirements and indicators to ensure sustainability of a CAHW service

Requirements

- ❖ Actual demands and capacity to effectively utilise the service by the consumers
- ❖ Enabling environment to design the service in line with the existing service demand
- ❖ Presence of principle of full cost recovery based service delivery in the area
- ❖ Long term service improvement objective while planning and running the CAHW service project
- ❖ Presence or the capacity to ensure all the inputs required to sustain the service will be in place or could be established with in the project life
- ❖ Project document with clear logical frame work on the out puts, activities, time schedule, the step wise approaches toward the implementation and the strategies to accomplish the activities and achieve the out puts along with resources allocated including technical staff

Indicators of the requirements

- Gaps in the area of consumers service demand and supply capacity of the existing service source(s)
- Active participation and full decision making rights given to the community to include all their basic needs in the service to establish
- Nature of the service; its being profit oriented, full cost recovery based and totally free market and client relationship regulated principles
- Enabling external to the project environments; full cost recovery service delivery principle or at least full recognition given to the CAHW service by the public service in case free or subsidized drug provision appears a must to consider it a head.

Specific indicators to observe gaps in the service demand and availability

Security problem

- * Livestock production system
- * Veterinary service delivery methods and its coverage radius

- **War between communities:** at least one of the groups will be cut from the service During the hot conflict period animals are taken far and no outsider can penetrate any of the sides in conflict
- **Mobile communities:** incomers have little right to have access to the local public service as required because they were not considered even in the service planning process. At the same time, it is very difficult for the responsible public service to follow mobile herds.
- **Service delivery methods:** the nearest veterinary service sources are clinics that are based at district administrative towns and the average radius covered under a district is not less than 30km even in the highland parts of the country. The maximum radius possible to traverse for sick animals to come to the clinics remains less than 10km while emergency treatments can not be provided home beyond 5km radius, the remaining 20-25km radius if is served it should be through selling of drugs to livestock keepers.

3. Conclusion and recommendations

The sustainability of CAHW service depends on several conditions of which the followings are key factors to immediate failures of other wise functional system in the past.

- Absence of regular technical and material inputs to the CAHWs
- Unnecessary competition from external official service delivery programmes
- Poor commitment of the implementing bodies to materialize the targeted outputs
- Weak follow up of the donor and local government partners that the targeted outputs could easily be dropped by implementing agency

In order to ensure sustainability of any CAHW service to plan the followings are very important.

- Meeting of the actual service demand existing
- Clear project document with defined exit strategy to be ensured during project life and strong appraisal to see the possibility of achieving the outputs with budgeted resource including time
- Full commitment to follow up the implementation process both by the local and donor project partners
- All these should be undertaken mainly to ensure that there will be continuous sources of the inputs required and no competition from any official bodies.

QUESTIONS AND COMMENTS

1. It is said that a number of NGOs are involved in the training of female CAHWs. I would like to hear the experience concerning the participation of women. How is the acceptance of women by the community?
2. Those of us from the pastoral areas used to treat our animals from the age of childhood. Every pastoralist has a needle and a syringe that used to treat his animals and he said that you don't know my animals more than I. So, what we have to do is to guide them to the proper way than try to stop them. As to the number of trainees by GTZ, the number is 54 not 68. Since the last five years, different organizations that are involved in CAHP implementation have tried to coordinate and harmonize the CAHP intervention and developed a uniform training manual. To achieve this exertion, CARE and SORDU organize a workshop in January 2003 with the objective of improving the manual. In fact, the national guideline was an input for this endeavor. In this workshop, the government veterinary office and a number of CAHP implementing NGOs like LVIA, GTZ, SC/US, SORDU, AFD, and CARE participated.
3. The Oromiya bureau of agriculture is now try to develop regional training manual. However, in the selection criteria, the level of education becomes a controversial issue. The bureau gives due emphasis for educational background and it sets a criteria in which the CAHWs to be selected should read and write since we can find a number of literate people in the lowland.

4. ILDP so far trained 75 CAHWs and they are doing deworming and other simple activities. Concerning injectable treatment and vaccination, the regional Bureau of Agriculture does not allow CAHWs to do these. However, when we see the situation in the area, the people around Metema (Sudan border) have their own syringe and needle and treat not only their animals but also their family. Besides, these people import vaccine from Sudan and vaccinate their animals even if the bureau forbids CAHWs to give vaccination and injectable treatment. So, how could we solve such type of problems?
5. In some areas of SNNP, some drug vendors do not sell genuine drugs. This situation leads to lack of confidence by the community on CAHWs. What is the solution for wrong supply of drugs?

ANSWERS

Concerning the participation of women in the CAHP, it is FARM Africa the first NGO that employed women as CAHWs in goat project at Harrarghe highland. The assessment of this project shows women are effective, and honest concerning CAHP implementation. Besides, the experience in Afar and Borana areas also shows women are more efficient, effective, and honest than men are.

Moreover, ACCORD has a very good practical experience with regard to the involvement of women in the CAHP. For the last three years, ACCORD trained 53 CAHWs of which 13 are females. Currently, 41 of them are operating of which 12 are females. This shows the retention rate for females. This is mainly due to:

- * Women are not involved in a tribal fighting
- * The usual migration to Southern Sudan does not include women
- * Women are encouraged by their husbands to be involved in this activity since brings another income to the family
- * Women are more honest than men

There is a gender component in the ACCORD project that entirely devoted on much advocacy and awareness creation activities concerning gender equality. It is this advocacy that creates a belief and acceptance of women by the community.

As to the setting of educational background, participants forwarded their views and opinions:

Dr. Solomon

For the establishment of any CAHP, the criteria should be demand for the service and animal health problem is an issue. Since community-based programmes are aimed at solving the demand of the community, it should be the community that has to explain and decide on the demand. Violating this basic issue is violating the entire principle. When CARE trained CAHWs, this problem has been reflected in which there is a gap between the result of the baseline survey and the demand of the organization. So, the demand of the community should be respected.

Experiences in many African countries shown there is no as such significant differences between the literate and the illiterate. Since we believe that CAHWs are to fill the gap in the veterinary service and have a good knowledge more than us, we should left the decision for them. As a principle, respecting of the need assessment of the community is a key to a successful CAHP. If we impose, we may end up with failure. Therefore, literacy should not be a barrier for a person to become a CAHW. There is a professional fear in so many areas but this should be seen in line with community participation.

Dr. Fisseha

CAH should be emanated from the community and we should give full responsibility to the community to set criteria for the selection of CAHWs. Since the literates do not cope up with the mobility nature of the community and their tendency is to live in major towns, I think, they are not fit

for the CAHP. So, we should not set criteria on behalf of the community.

Dr. Berhanu

The training of farmers should be emerged from the baseline survey of the area. You can train an adult for 15 days or 3 months; what matter is your methodology. The secret behind adult education is participatory training. If you know how farmers name a disease, it is the start of the technique. Pastoralists have a huge and diversified indigenous knowledge of their area and mode of life. All we have to do concerning CAHP should be based on the indigenous knowledge of the community. Therefore, since the training of CAHWs is based on participatory training techniques, the selected to be CAHW be literate or not, it does not matter. Studies indicate that the retention rate is higher for illiterate. It is because literate CAHWs have other agendas whereas the agenda for the illiterates is to remain in the business. Since we implement participatory training, there are different techniques like pictorial representations that suit illiterate persons. These pictorial representations are standardized even to OIE level.

Concerning the indigenous knowledge of farmers, I do have one good example. While giving training for CAHWs in Afar, I asked if they could properly work with a syringe. Then, one farmer gave his AK 47 rifle to dismantle and fix it again. But I couldn't do it. Then, he dismantled and fixes the rifle and said to me your syringe is by far less complicated than my rifle. This shows farmers have more indigenous knowledge concerning their area. So, rather setting criteria for them, it is better to let them to make decision and better to learn from them by making a paradigm shift.

Ms. Aurelie

ACF is involved in CAHP in Ogaden and Afar areas. In selection of CAHWs, we held a 3 days meeting and the elders chose the CAHWs. In Ogaden area, the CAHWs are literate while in Afar they are illiterate but performing very good. So, level of education should not be a criterion to select CAHWs.

Dr. Deribe

Concerning the question raised by the ILDP and SNNP, I would like to forward some comments. First of all, we should accept that the principle of community participation is a key for a sustainable animal health service delivery in pastoral, remote, and inaccessible areas. In Amhara region, I think, there is a sentiment that reflects only professionals can undertake treatment activities. This way of thinking is not acceptable, as there is a huge gap between the demand and supply and supply of the service in the above-mentioned areas. Therefore, what we have to do is to shape up the current CAHP in a supervised way. As to the supply of drugs, the only alternative is to promote the participation of private practitioners in the supply of drugs.

FACILITATOR

It is the belief of almost all participants that educational background should not be a criterion to select CAHWs. So, the Oromia Bureau of Agriculture should lift this criterion and better to go inline with the requirements that have been set in the national indicative guideline to select CAHWs. But, I would like to raise one question concerning the improvement or progress of CAHP. Dr. Solomon in his presentation stated that CAHP is a government initiated programme and still improving as time elapses while Dr. Gezu stated that CAHP is not improving despite change of name and things are still static. So, what is your opinion in this issue?

Dr. Solomon

The CAHP is still improving although we can not reach the desired level. We can site a number of examples with regard to the improvement of the programme; the number of CAHWs trained, the number of implementing organizations, and the coverage of the service.

Dr. Gezu

When I said things are static, it is from the sustainability point of view not from the implementation side. As to the implementation of the programme, I agree that the situation is improving.

Dr. Berhanu

In some areas, CAHWs start to send disease occurrence reports directly to the federal veterinary service. It is a good start and an indicator for the improvement of CAHP. In areas where CAHWs are operating, people pay at a cost recovery level. Concerning, cost recovery, it is there is a double standard by the government. For example in North Wollo farmers that are nearby to Woldia town paid for veterinary services at a subsidy level where as farmers live in faraway areas like Sekota paid at a full cost recovery level. The situation is the same in the Somali region. The government should make consideration concerning cost recovery.

FACILITATOR

We have discussed much with regard to this issue. Finally, I would like to say something about good performance indicators. In all aspects of a programme, the good performance indicators are rate of success, compatibility to the local system, profitability, contribution to risk reduction, and level of community participation.

DOLLO ADO & DOLLA BAY COMMUNITY ANIMAL HEALTH SERVICE: FINDINGS OF A PARTICIPATORY IMPACT ASSESSMENT

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1. Introduction

A Participatory Impact assessment (PIA) team, composed of nine professionals from different organizations, has conducted Community-based Animal Health service delivery impact assessment in Afdher zone of Dollo Bay and Liben zone of Dollo Ado Woredas of Somali Region. The objectives of the assessment are to evaluate the impact of Dollo Ado-Dollo Bay Community-based Animal Health service pilot project on primary animal health services delivery system and provide the output of the impact assessment result to decision makers.

2. Methodology

The methodology employed included:

1. The two woredas of the project were taken as one project area for the purpose of this assessment.
2. Out of the thirty-five sites having Community Animal Health Workers in the two woredas ten (six from Dollo Ado and four from Dollo Bay) were selected using purposive sampling method.
3. Based on the information obtained from the project staff and available map of the project area 10 villages were selected as sample sites.
4. Secondary data were collected from the project proposal, reports and different project documents or files.
5. The Dollo Ado District Development Office (DDO) animal health section and the Community Animal Health Workers Saving and Credit Association executive committee members were interviewed on different issues.

Participatory Impact Assessment method was applied to collect all the required data and information. Semi structured interview (SSI), Timeline, “Before and After” proportional piling Disease ranking and matrix scoring are the participatory tools used to assess the impact of the Community Animal Health Workers services delivery in the project area. Timeline method was conducted to collect information major socio-cultural, political, economical, natural, etc. events that have taken place in the area. A pile of counters for scoring method was used to measure indicators before and after the project. Women, men and young informants have participated in the assessment (annex 4). Locally available materials (stones) were used as counter. Each indicator was symbolized pictorially and represented by objects.

Collected data on disease patterns (incidence and mortality) for “before” and “after” scoring and comparison of the different animal health service providers are entered in to SPSS Version 10.0 software. The median, range and Kendall Coefficient of Concordance (W) were calculated for the level of agreement between informant groups. SWOT analysis of the project was conducted with the community, administrative officials and project staff.

3. Findings

3.1 Livestock diseases

As perceived by the beneficiaries themselves; General livestock deaths and diseases incidence has reduced substantially during the project.

Camels

The camel diseases incidence and mortality due to Caadho, Furuq, Kud, Dugato, Gorriyan and Dhukan have remarkably reduced. The occurrence of disease and mortality as a result of Shimbir, Hergeb, Shimbir and Gudan has no change. In spite of the application of acaricides, Shillin and Shimbir has remained increasing or unchanged.

Cattle

The general trend of diseases occurrence and mortality are declining and encouraging. Diseases like Cabeeb and Jommo it's chronic form, Kud, Goriyaan and Garabgoye have significantly reduced. Except Cabeeb the rest of the diseases are handled by the CAHWs. According to the perception of the community the incidence of Cabeeb has decreased owing to their restricted movement due to increased settlement. Like in camels the infestation of Shillin and infections from Tuunyo has increased.

Shoats

Diseases of shoats that are handled by CAHWs; like Riin weyne (CCPP), Har (Diarrhoea), Caal (Internal Parasitism), Caadho (Mange infestation) and Hargeb (ovine pasteurellosis) have shown notable decline both in incidence and mortality. Diseases like Furuq (Sheep and goats pox), Qelesh, Afbog (Contagious Ecthyma) and have also decreased in frequency of occurrence and causing mortality.

Others

The diseases of poultry and that of donkeys is least known by the community and the CAHWs.

3.2 Service providers

The summarised matrix scoring of service providers indicates:

- CAHWs are near to the community and respond quickly when their animals get sick.
- It is more convenience to herders to get drug from CAHWs than the other drug sources. Drug dealers are second in drug availability.
- Best quality drugs are in the hands of CAHWs followed by the Government clinics.
- Mostly, animals treated by the CAHWs recover from illness.
- CAHWs are providing advice to the community better than other service providers. CAHWs advice herders to vaccinate their animals to prevent disease occurrence in herd and also not to use drugs that are not handled properly and outdated.
- CAHWs were also considered as having enough capacity in solving all animals' health problems in the area contrasted to other service providers. CAHWs treat infectious diseases, internal and external parasites and also provide vaccination and castration service.

- Respondents have agreed that the service provided by CAHW is cheaper than the service provided by others.
- Informants have perceived that the community trust the CAHWs more than any other service providers
- It is inferred that the community has highly utilized the CAHWs to get veterinary service.
- It is inferred that the CAHWs provide affordable, accessible and quality service to the community than any other service providers.

3.3 Impact on livelihoods

- With regard to changes or benefits derived from healthy animals before and after the CAH project as perceived by the beneficiaries
- Cash income from sales of livestock has increased double fold.
- Quantity of meat obtained from individual animals has increased
- Amount of milk and cash form milk has increased
- The impact of the CAHWs services have been visibly perceived by the beneficiaries in the improvement in the health of shoats and cattle and this has resulted in increased income opportunities.

4. Conclusions

The CAHP has registered an appreciable result in the reduction of disease incidence and mortality and irrespective of the sites visited, beneficiaries are happy with the project. Despite all its shortcomings, the impact due to the project is encouraging and commendable. As a general recommendation the PIA team has agreed that the project together with the community critically evaluates the existing CAHWs and corrects their shortcomings before the launching of any other training.

QUESTIONS

1. In the one hand it is said that there are some government services in the area, and on the other hand there is a vaccination of thousands of animals considered as strength of CAHP. This seems contradictory and how do you attribute this strength to the intervention?
2. Why the incidence of tick borne disease increased after the intervention? Could you also tell us the increment of the number of livestock in household level?
3. In the recommendation part, poor recording system of CAHWs, poor community participation, and wrong drug supply are ignored. What measures should be taken to improve these drawbacks?
4. Over 50% of the weaknesses stated in the presentation are related to the community. So, how the community can perceive ownership? Besides, since there were not baseline data before the intervention, how do you measure the impact of the intervention?
5. The data are more of qualitative in nature. So, how can you measure the impact without having quantitative data? How is it possible to form CAHWs association?
6. SC/US is conducting the CAHP for the last three years and what is the reason for conducting this assessment in Dollo Ado and Doll Bay areas?

EXPLANATION

Before going to give responses to the above questions, let us say something as a background with regard to this assessment. Prior to this PIA, one-month PIA training has been held and a sample assessment conducted in North Wollo and Afar areas. And we become sure that PIA is the most acceptable method methodology to assess CAHP. It is with this belief that we conduct a PIA in Dollo Ado and Dollo Bay Woredas. In this PIA, first we select 10 sites from the project area whereby all stakeholders were participated in the selection. We select 10 sites since the standardized methodology of PIA stated that the minimum selected site should be 10. We take qualitative data and use SPSS statistical package for analysis. This statistical package checks the level of agreement of the community to know whether the concordance is narrow or not. We have tried to see the impact of CAHP from three points: is there an impact, what type of impact, and the welfare of the community.

ANSWERS

1. Concerning the service of the government, its role was only organizing the activity and the entire activity was done by CAHWs. So, the achievement of vaccination is entirely attributed to CAHWs.
2. The community perceived that the incidence of tick borne diseases increased due to a decrease in mobility and good pasture that helps the multiplication of ticks. We have tried to put the increment of livestock in household level in figure. But, as you know, livestock is a secret livelihood in every part of a country and it becomes difficult to measure the increment. Nevertheless, the general trend shows an increment in the number of livestock.
3. Poor recording system and poor participation included in the recommendation part. As to the wrong drug supply, the solution is to promote the participation of private veterinary practitioners in the intervention.
4. In order to ensure community ownership, the implementers should conduct further awareness activities and empowerment of the community. As to the base line data, we agree that no baseline data collected in the area. But, the people were living many years before the project. so, in this assessment, what we have tried to analyse before and after the project is community's perception not data.
5. One can measure the impact by using qualitative data since the main agenda is analysing perception not figure. Besides, it is possible to change qualitative data in to quantitative by using different participatory appraisal methods. Concerning CAHWs association, the association is established with the initiative of the members and the support of SC/US with the main objective of alleviating the problem of drug supply.
6. The Southern Team Initiative Programme of the SC/US has 4 major components and operating in 7 woredas of Somali and 4 Woredas of Borana in which the CAHP is implemented only in Dollo ado and Dollo bay Woredas. The project has so far trained 22 CAHWs. The main objective of this PIA on CAHP is to learn from weakness and strength and thereby to perpetuate to other Woredas to have a sustainable community animal health service delivery system.

FACILITATOR

I have done much with regard to PIA in different settings. This is a very nice assessment since it used the best participatory methodology; the after and before analysis using qualitative information. No one can refute that qualitative analyses are less important than the quantitative one. But, we have to be careful when we talk of the betterment of the welfare of the community. Besides the CAHWs

intervention, there can be a number of factors that might bring an improvement in the welfare of the community. Concerning sampling, it is a debatable issue. But, in the participatory appraisals and assessments, it should be geared towards purposive sampling since it has the best line of truth to perform such appraisals.

With regard to participation and involvement, we can have different type of participation like contractual, consultative, collaborative, and collegiate (partnership). So, we can use any type of participation that suits our objective. The success of any PIA is participation. Eventhough we get the lowest participation, it does not mean no participation rather better to improve the level of participation.

PLENARY DISCUSSION

THE CHALLENGES, OPPORTUNITIES & LESSONS LEARNED

Participants of the workshop make a hot deliberation on the challenges, opportunities, and experience/lessons learned with regard to community animal health programme. A number of critical issues were raised.

CHALLENGES

- Although CAHP is accepted by the community as well as the professionals, there is not clear policy and strategy in the federal as well as regional level
- Lack of attention, coordinated activities, and integrated approach by the government concerning CAHP
- Few NGOs to take part in CAHW service
- Clinical services are limited in scope of service coverage
- Service in infectious diseases treatment is not strong
- Subsidized government veterinary service
- Shortage of drug on the market
- Shortage of vaccines
- Shortage of logistic in the public service
- Problem of drug supply sustainability

OPPORTUNITIES

- Federal as well as regional governments encourage CAHWs service delivery
- Encourage privatization of veterinary service
- Local (zone) level harmonization of training manual and curriculum

EXPERIENCES & LESSONS LEARNED SO FAR

- CAHWs selection criteria should be left for the community
- There is a gap in the area of the government veterinary service
- There is huge livestock resource and greater array of livestock diseases
- Severe shortage of skilled manpower and logistics
- Under served areas can be covered by CAHW, which is proved to be viable and cost effective
- CAHWs can play a great role in mass vaccination and disease reporting
- Women should be encouraged to take part in CAHW service
- CAHP needs more emphasis like any other development issues
- Community dialogue should be given due emphasis
- Creating sense of community ownership is highly important
- There should be community participation in planning, monitoring, and implementation of the programme
- Gap between federal and regional bureaus of agriculture and there is lack of national coordination
- There must be a change in the intellectual thinking of CAHP
- Recognition of the importance of CAHWs service is vital
- More has to be done in the areas of policy and strategy
- Government should concentrate on regulatory activities and technical backup

THE WAY FORWARD: INSTITUTIONALIZING THE SERVICE

Participants noted that the CAHP is not institutionalized in our country. Due to this, implementers of the programme are facing so many problems. To alleviate this, at all levels of the government body, a suitable environment should be created. Currently, the government is focusing on the process of decentralization that focuses on empowerment of Woredas and communities. Besides the Ministry of

Agriculture, the Ministry of Federal Affairs is planning to perform huge development activities in pastoral areas. In order to alleviate the problems in the CAHP and to coordinate the activities undertaken by different stakeholders, participants of the workshop agreed that an adhoc committee should be established to work on CAH services delivery strategy and incorporate it as part of the country's animal health strategy and veterinary policy.

The proposed members of this committee are:

1. Ministry of Agriculture
2. Ministry of Federal Affairs
3. Pastoral standing committee of the House of Peoples' Representative
4. Regional agricultural bureaus (to be represented by Oromiya)
5. CAPE/AU/IBAR
6. FAO/Livestock Working Unit
7. Faculty of Veterinary Medicine

Tasks of the committee:

1. Improve coordination between government departments, as well as with and between other stakeholders in pastoral and agro pastoral areas at all level.
2. Develop a strategy document, Identify areas of change and amendments in the existing animal health policy and legislations.
3. Emphasizing pastoralism in policy formulation and national development agenda as an integral part of the countries economy.
4. Advocacy for increased awareness and appreciation for CAH service delivery system as well as to continue supporting CAHW system.
5. Facilitate regular interactions of technical personnel on CAHW technical issues

RECOMMENDATION AND RESOLUTIONS

The activities, experience, and recognition of Community Animal Health Programmes in Ethiopia is traced back over thirty years. The Community Animal Health Programme is the only recognized alternative service available in pastoral, remote, and inaccessible areas. The recently conducted participatory impact assessments also revealed this fact. It is to be recalled that the role of Community Animal Health Workers was vital in eradicating rinderpest in pastoral areas of the country where the Pan African Rinderpest Campaign (PARC) project was experiencing difficulties in accessing remote pastoral communities. The contribution of CAH programmes is currently gaining momentum and accepted by international organizations like the Interafrican Bureau of Animal Resources. In February 2003, the World Animal Health Organisation (the Office International des Epizooties) formed an ad hoc committee to deliberate possible changes to the International Animal Code to take account of the roles of private veterinarians and para-professionals in veterinary services. For the past two days, participants of the workshop made detailed deliberations and discussions on the challenges, opportunities and the way forward concerning the community based animal health delivery service. Therefore, based on the deliberations the following recommendations are forwarded.

1. In recognition of the fact that the current animal health policy and strategy severely affects service delivery, it is recommended that the Ministry of Agriculture develops a veterinary service policy that incorporates the recognition of community-based animal health services.
2. It is recognized that the structure of the government veterinary service does not enable the execution of its duties and responsibilities. It is recommended that Federal and Regional Agricultural Bureaus create a working structure to improve their capacity to fulfill national and international responsibilities.
3. Many agencies are now implementing CAH programmes and there is an urgent need for coordination. It is recommended that personnel responsible for CAH services should be assigned at all relevant levels of the government veterinary structure within the shortest time possible.
4. National minimum standards and guidelines for the training of CAHWs has been prepared by PACE Ethiopia. It is agreed that implementers of CAH programme shall design their own guidelines according to conditions at regional level but based on the general national minimum guidelines.
5. Participants recognized that the absence of a sustainable drug supply hinders CAH services in all areas. Therefore, it is recommended that linkages between private practitioners and implementers are strengthened to improve drug supply and create a more favorable environment for private practitioners.
6. Workshop participants agreed that technical backstopping is a key issue in CAH services. To ensure professional involvement in the quality control of CAH systems, implementers should create conducive conditions for private practitioners to conduct supervision and monitoring activities. Innovative programmes are expected from implementers for creating a conducive environment for privatization.
7. Developing a sense of ownership among the community is vital for the continuation of CAH services. However, this is a weak aspect of CAH in most areas and continuous efforts are needed to ensure community involvement in planning and monitoring services.
8. Article 17 of the Animal Disease Prevention and Control Proclamation No.267/2002 stipulates the involvement of the private sector in animal health service delivery. Therefore, strategies, regulations, directives and subsidiary laws should be developed and endorsed as soon as possible in order to improve the efficiency of the service and the involvement of the private sector.

CLOSING REMARK

*By: Honorable Ato KIBRE JEMERE
MP, Deputy Chairman, Pastoral Standing Committee,
Federal Democratic Republic of Ethiopia Parliament (the House of People's Representatives)*

*Participants of the workshop
Ladies and Gentle men*

It gives me great pleasure to make a closing statement on this workshop. Although Ethiopia has immense livestock resource; the country is not benefited from the sub-sector mainly due to the high and widespread prevalence of livestock diseases. Considering the huge but underdeveloped livestock resource of the country, the government of the Federal Democratic Republic of Ethiopia has given special attention to this sub sector more than ever before. The government is fully committed for the establishment of a sustainable animal health care delivery system. Much effort is being made to alleviate the bottlenecks of the livestock sector so as to increase the share of this sector in the national economy and improving the life of the livestock community.

*Participants of the workshop
Ladies and Gentle men*

Even though government veterinary services and non governmental organizations have tried much to provide services to pastoralists by constructing veterinary clinics, these clinics cover only a fraction of the livestock population in pastoral areas due to a number of reasons like absence of infrastructures and lack of veterinary staff. So, it is a high time to deliver animal health services that are based on the community. The community animal health programme that is now being implemented in the remote and pastoral areas proved to be vital and viable. This programme matches the current government strategy of empowerment of Woredas and the community.

The purpose of this workshop was to make a deliberation on those policy and other issues that are believed to be the constraints for the development of the community animal health programme. Applying the recommendations set by this workshop will definitely help to enhance the delivery of the veterinary system in the remote and pastoral areas.

*Participants of the workshop
Ladies and Gentle men*

It is my sincere belief that during your stay you have benefited from this workshop and I would like to thank you for following the programmes seriously and bringing it to a successful completion. At this juncture, I would like to thank PACE Ethiopia, AU/IBAR/CAPE Unit, USAID mission to Ethiopia, and SC/US for organizing this workshop.

Thank you!

ANNEX 1: WORKSHOP SCHEDULE

Day 1 (March 6th, 2003)

Time	Activity	Responsible
09:00 – 9:20	Registration	Organizers
09:20 – 9:30	Welcome speech	Dr. Sileshi Zewdie
09:30 – 9:40	Opening speech	W/o Hadera Gebru
09:40 – 9:50	Keynote address	Prof. Getachew Abebe
09:50 – 10:20	Tea break	Organizers
10:20 -10:50	National Animal Health Service; Policy & Strategy	Dr. Sileshi Zewdie
10:50 – 11:50	Discussions on Presentations	Facilitator
11:50 – 12:30	Community-based Animal Health Service in the Horn of Africa	Dr. Berhanu Admassu
12:30 – 14:00	Lunch break	Organizers
14:00 – 14:20	Community animal health delivery in Ethiopia; experiences, challenges and the way forward	Dr. Solomon Nega
14:20 – 14:40	Minimum requirements and indicators to ensure sustainability of CAHWs service	Dr. Gezu Bekele
14:40 – 15:00	Tea break	Organizers
15:00 – 17:30	General discussions on presentations	Facilitator

Day 2 (March 7th, 2003)

Time	Activity	Responsible
09:00 – 10:00	Dollo Ado & Dollo Bay CAH service PIA finding report	Dr. Abdullahi Hussein
10:00 – 10:30	Tea break	Organizers
10:30 -12:30	General discussion	Facilitator
12:30 – 14:00	Lunch break	Organizers
14:00 – 16:30	General discussion continued	Facilitator
16:30 – 17: 00	Tea break	Organizers
16:30 – 18:00	Recommendation	Facilitator
18:00 – 18:30	Closing remark	Ato Kibre Jemere

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