# Sustainability of a Privatized Community-based Animal Health Worker System in Mwingi District, Kenya

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Rubyogo, J.C., Murithii, P.M., Agumbah, G.J.O. and Obhai, G., 2005. Sustainability of a privatized community-based animal health worker system in Mwingi district, Kenya. *Tropical Animal Health and Production*, **37(4)**, 253–266

#### ABSTRACT

This paper describes a study on the sustainability of Community-based Animal Health Worker (CAHW) services in Mwingi District, Kenya. These services began in 1992 and were supported by the District Veterinary Authority (DVA) with assistance from the Integrated Food Security Programme – Eastern (IFSP-E). Over time and using a process of participatory reviews with multiple stakeholders, the system evolved into a network of CAHWs. The study focused on CAHWs' service sustainability and their relationships with other animal health service providers. A mutually beneficial and supportive arrangement existed between the CAHWs and Animal Health Assistants (AHAs), based on a private drug supply system, referral and backstopping support. The CAHWs derived sufficient income from their veterinary work to maintain their interest in the system. Seventy per cent of CAHWs were continuing to offer adequate animal health services 3 years or more after their initial training and the withdrawal of donor support. Ninety-five per cent of sampled CAHWs (n = 40) viewed their business as successful and expanding. Considering the agro-ecological and socio-economic conditions of the district, the CAHW system can be viewed as an initial stage in the process of extending quality private sector veterinary services.

Keywords: community-based animal health workers, Kenya, sustainability, privatization

Abbreviations: AHA, Animal Health Assistant; AHSP, Animal Health Service Provider; CAHW, Community-based Animal Health Worker; DVA, District Veterinary Authority; DVO, District Veterinary Officer; DVS, Director of Veterinary Services; NGO, non-governmental organization

## INTRODUCTION

Community-based approaches to animal health services in Kenya have been evolving since the late 1980s. Previous studies in Kenya have shown a positive impact of community-based animal health workers (CAHWs) in terms of decreased livestock morbidity and mortality and the acquisition of benefits for the livelihoods of the stakeholders (Holden, 1997; Odhiambo *et al.*, 1998).

Many of these CAHW projects were initiated by non-governmental organizations (NGOs) using subsidized systems of drug supply but with limited involvement of the private sector. These projects have suffered from poor sustainability (Catley *et al.*, 2002), leading to questions on project viability by Kenyan policy makers. Sustainability of CAHW projects is related to the financial incentives received by CAHWs, proper linkages to supply of quality medicines, and harmonious relationships between CAHWs and other Animal Health Service Providers (AHSPs) such as Animal Health Assistants (AHAs) and veterinarians.

Mwingi District covers an area of 10 031 km<sup>2</sup> and has a population of 355 000 and an average population density of 37 inhabitants per km<sup>2</sup> made up predominantly of the Kamba ethnic group (95%), the rest being divided between the Tharaka ethnic community and a small mixed-ethnic minority (Mwingi District Statistics Report, 2002). It is estimated that about 70% of the District population live below the poverty line (<1\$/day per person). Eighty per cent of the Mwingi District's landmass is located in the Low Midlands 5 agro-ecological zone (LM<sub>5</sub>), with a 66% probability of food crop failure (Office of the Vice-President and Ministry of Planning and National Development, 1997). Therefore, the majority of the population rely on livestock products, which provide 70% of all household cash income, draught power and farm manure for crop production. In the year 2000, the district livestock population was estimated at 178 000 cattle (Zebu), 270 000 goats (East African, Galla breeds and their crosses), 42 000 sheep (local), 570 000 birds (indigenous chickens) and 55 000 donkeys (Mwingi District Veterinary Office, 2000).

This livestock population was served by only three veterinary surgeons stationed at the District headquarters and 15 paraprofessionals (nine AHAs based at divisions each of about 1000 km<sup>2</sup> and six Junior Animal Health Assistants (JAHAs) at location level), leaving most locations and sublocations without provision of animal health services. This inadequacy of personnel led to poor or non-existent provision of state veterinary services to the farmers in remote areas of the district. It was this service vacuum that led the IFSP-E in conjunction with stakeholders to perform a needs assessment in their effort to train and deploy CAHWs selected by their communities on the basis of socially acceptable criteria in the underserved areas. Between 1992 and 2001, 99 CAHWs were trained and deployed in Mwingi District of Eastern Province in Kenya by World Neighbours (an International NGO) and Integrated Food security Programme (IFSP-E), a Kenyan-German bilateral development programme. The CAHWs' initial training was for a period of 2 weeks followed by at least a one-week local field experience-driven refresher training every 6 months thereafter. The training manual was based on one developed and used by the Intermediate Technology Development Group - East Africa (ITDG-EA) but adapted to suit the local conditions. The trainees were examined by qualified trainers (veterinary surgeons and AHAs). Once trained, the CAHWs were provided with a cost-shared essential veterinary drug kit and presented to their communities for provision of private animal health service delivery.

The two above-mentioned development agencies established a revolving fund scheme to be used by CAHWs for veterinary drug kit replenishment. However, this system was not successful for several reasons, including bureaucracy-related problems,

misuse of funds and failure of remission of money to the scheme by the CAHWs, AHAs and District Veterinary Officer (DVO). Therefore, in 1998 the system was reviewed and CAHWs were linked to private drug suppliers commonly called agro-vets in Kenya. The role of District Veterinary Authorities (DVAs) was to monitor CAHWs' activities, provide regular backstopping and training, and facilitate linkages to other service providers. The new approach led to more harmonious relationships among the various animal health service providers.

All the CAHWs have been active for at least 2 years and some of them have been working since 1992. However, no systematic study has been carried out to assess the sustainability of services offered by CAHWs or their working relationship with other AHSPs in the district. The issue of CAHWs' service sustainability and their working relationship with other AHSPs have been questioned by veterinary professional bodies and other policy makers (Okwiri *et al*, 2001).

# **MATERIALS AND METHODS**

# Data collection from CAHWs and AHAs

A questionnaire (not provided in this paper, but available from the lead author) was used to collect information from CAHWs and AHAs. Out of the 99 CAHWs working in Mwingi District, 40 were randomly selected from a list provided by the DVA. The selection of AHAs was based on their role as divisional heads, and therefore the questionnaire was administered to 7 AHAs. Thirty-four (85%) of the 40 CAHWs sampled were men and 6 (15%) were women. Female CAHWs comprised 10% of the 99 CAHWs. The questionnaire was pre-tested on two CAHWs and two AHAs, and the content was adjusted accordingly. The research team members administered all questionnaires, and no other enumerators or translators were used. The questionnaire focused on issues related to the financial sustainability of CAHW services and their working relationships with other animal health service providers Financial sustainability of CAHW services was assessed using indicators such as the longevity of their business, clinical and non-clinical workload, business service turnover and trends, and service market volume and demand. Other assessment criteria of financial sustainability included drug supply systems, service payment terms and modalities, other income sources not related to animal health service, and CAHWs' investment options and disaster coping mechanisms.

Assessment of the relationships among different types of AHSPs entailed their competition and complementarity, the referral system (if any), the impact of these relationships on each other's businesses and suggestions for further improvement in collaboration.

# Data collection from livestock keepers

Participatory methods were used with 250 livestock owners from five community groups representing five divisions of Mwingi District. The five communities were randomly selected through community meetings. Of the 250 livestock owners, 108 were female and the rest (142) male. Focused group discussion was the main method used, but was complemented by other participatory method.

Proportional piling was used to collect information on animal disease priorities in cattle, goats, donkeys and poultry. Two other techniques were used, namely Venn diagrams and a service provider's matrix. The former was used to assess the relative accessibility of different AHSPs as described below and the latter to assess the affordability, time response and client satisfaction of various AHSPs as perceived by the livestock owners themselves. For proportional piling, each of the five livestock owner groups was given 10 stones per listed disease or animal health problem. Each group then chose a representative to pile the stones according to how they collectively considered the most common animal diseases or health problem in their communities. The level of agreement between the five groups for the two techniques was determined using the Kendal coefficient of concordance W (SPSS version 11.0).

The livestock owners in their groups listed all the AHSPs they encountered when seeking animal health services and then used a Venn diagram to map out the accessibility of various service providers in relation to their households. The most accessible AHSPs were placed closest to livestock owners' households, while the least accessible was placed farthest from their households in that Venn diagram. In the service provider's matrix, each of the five groups was asked to award marks ranging from 0 to 3 (don't know = 0; poor = 1; good = 2 and very good = 3) for each of the criteria mentioned above.

## Livestock owners' questionnaire

A questionnaire (available from the lead author) was used to collect information from livestock owners. Of the 250 livestock keepers who were involved in the participatory discussions described above, 85 were selected by their respective communities (based on village representation in the location) to be respondents to a questionnaire. Nineteen (23%) were female and 66 (77%) were male. In common with the AHA/CAHWs questionnaire, this questionnaire was pre-tested on two livestock keepers and administered by the research team to the final selected groups. The questionnaire covered similar sustainability and relationships issues as covered by the CAHW/AHA questionnaire. It also included questions related to sustainability by assessing livestock density, morbidity, and willingness to pay for clinical and non-clinical services.

# Secondary data

In addition to the participatory group sessions and questionnaire described above, secondary information related to the above areas of assessment was collected through CAHWs financial business analysis (based on monthly business activities). Their monthly reports were used to assess existing clinical workload, potential services demands and business success/failure rates. Successful businesses were those that generated a profit and an increase in client numbers, while business failure constituted decreases in client numbers and abandonment of the business owing to non-rewarding financial income. The investigators also used some other secondary data from the CAHWs including daily caseload, drug use records and the DVAs' reports for cross-checking the information.

# **RESULTS**

Age, education and animal health training of CAHWs and AHAs

The mean age of the CAHWs was 35.9 years (95% CI 33.05 to 38.85) while the mean age of AHAs was 41.1 years (CI 38.45 to 43.84). Among the CAHWs, 12 had received education to Form IV level, 16 had reached between class 8 and Form III, and 4 were educated to below class 8 level. The CAHWs in the sample were trained in six groups between 1992 (n = 1), 1996 (n = 5), 1998 (n = 6), 1999 (n = 14), 2000 (n = 3) and 2001(n = 11). The study indicated that by the end of 2001 each CAHW had attended between two and eight refresher trainings. All seven AHAs were trained at an Animal Health and Industry Training Institute for 2 years. No refresher training had been provided to the AHAs apart from participatory extension approaches and project cycle management by the IFSP-E.

# Duration of CAHW and AHA work experience

Thirty (75%) of the sampled CAHWs had been in the business for 4 years or more without any external material support such as veterinary drugs and equipment. The two CAHWs with more than 8 years' work experience had been operating as 'quacks' before they were selected by their communities for training as CAHWs, and the AHAs' work experience varied from 15 to 20 years

Factors influencing service demand

Animal ownership and observed diseases

Table I summarizes data on animal ownership among the livestock keepers (n = 85) who participated in the questionnaire survey and Table II shows the relative priorities of animal diseases as perceived by livestock keepers (n = 5 groups).

TABLE I Animal ownership in Mwingi District (*n* = 85 households)

	Cattle	Goats	Sheep	Donkeys	Dogs	Cats	Poultry
Number of households owning livestock (%)	72 (85%)	82 (96%)	32 (38%)	71 (84%)	43 (51%)	51 (60%)	79 (93%)
Mean number of animals in households with animals (95% CI)	7.6 (5.9 to 9.3)	19.5 (13.8 to 25.2)	6.2 (2.4 to 10.0)	2.0 (1.8 to 2.4)	1.7 (1.4 to 1.9)	1.6 (1.4 to 1.9)	21.5 (17.9 to 25.1)

TABLE II Comparative prioritization of livestock diseases using proportional piling by livestock owners

Disease	Cattle	Goat	Donkey	Poultry
Worms	1st	1st	1st	6th
Anaplasmosis	2nd	2nd	_	_
Trypanosomosis	3rd	_	3rd	_
East Coast fever	4th	_	_	_
Foot and mouth disease	5th	_	_	_
СВРР	6th	_	_	_
LSD	7th	_	-	_
Rabies	=	_	6th	_
Black quarter	8th	_	_	_
Respiratory diseases	_	_	5th	4th
CCPP	_	3rd	_	_
Pox	_	6th	_	5th
Mange	_	7th	7th	_
Orf and foot rot	_	4th	_	_
Wounds	_	_	2nd	_
Newcastle disease	_	_	_	1st
Fowl typhoid	_	_	_	3rd
Skin diseases			4th	
Ticks and fleas	=	_	=	2nd

 $CBPP, contagious\ bovine\ pleuropneumonia;\ CCPP, contagious\ caprine\ pleuropneumonia;\ LSD, lumpy\ skin\ disease$ 

# Willingness to pay for services and service demand

The livestock keepers who participated in the survey listed the types of animal health services they were willing to pay for and explained the reasons behind their decisions. The majority of farmers were willing to pay for any intervention that involved the use of veterinary medicines and major professional skills such as castration and vaccination, whereas they did not wish to pay for minor skilled interventions such as dehorning, hoof trimming or transport (Table III).

As an indicator of service demand it was noted that, for example, between November and December 2002 (i.e. the period immediately before the study), 71/85 (83.5%) of the livestock keepers requested an intervention from local AHSPs. This information was further verified by data collected on CAHWs' and AHAs' monthly workload (Table IV).

# Income from veterinary activities

Veterinary work constituted a major source of cash income, with 80% of CAHWs deriving 26% or more of their total household cash income from this source. For 20% of CAHWs, more than 50% of their cash income came from veterinary work. The mean gross monthly income was KSh 1996.10 (95% CI 1557.60 to 2374.60). On average, CAHWs used 55% of their monthly income on recurrent expenditures such as food items, clothing, family medical care, school fees, books, uniforms and constructions. The remaining 45% was used for investments such as the purchase of livestock, veterinary drug kit replenishment, various business expansion activities such as food kiosk and retail shops, farm-related activities (crop farming and bee-keeping), purchase of land and cash savings. This information was not obtained from AHAs since they also have income derived from their formal employment.

# CAHW preferences drug supply system

The study showed that CAHWs sourced all their drugs on their own within an average distance of 15 km. The drugs were sourced from two major suppliers, namely agroveterinary ('agro-vet') input shops at the divisional and district headquarters. The majority of these divisional agro-vet shops belonged to AHAs who were DVA staff but also ran these private businesses. Qualified pharmacists, veterinary surgeons or AHAs owned the agro-vet shops at district level. It was observed that the prices offered by each player determined a supplier's competitiveness. In general, price variations between small agro-vet shops at the divisional level and the district town pharmacies were minor.

TABLE III Livestock keepers' (n = 85) willingness to pay for different types of service

Type of service	Percentage willing to pay	Reasons for willingness to pay (no. of respondents)	Reasons why unwillingness to pay (no. of respondents)
Advice or extension	7.3	Service provider has special skills (3)	No cost incurred by service provider (34); they are expensive (1).
Castration	54.9	Recognition that the service provider incurs costs (i.e. equipment) (3); labour is involved (18); service provider has specialist skills (4); motivation purposes (1)	No cost incurred by service provider (5); easy, anybody can do it.
Hoof trimming	45.8	Recognition that the service provider incurs costs (i.e. equipment) (1); labour is involved (6); time factor (1)	No cost incurred by service provider (1); easy, anybody can do it (10); not a serious 'sickness' (1)
Dehorning	28.6	Physical labour used (4)	Easy, anybody can do it (10)
Vaccination	64.3	Recognition that the service provider incurs costs (i.e. vaccines) (23); labour involved (1); use of specialist skills (2); time factor (1)	Government should pay (5); these services are funded by donors (2)
Clinical treatment	92.6	Recognition that the service provider incurs costs (i.e. drugs) (45); time factor (1); use of specialist skills (1)	Government should pay (2); farmers can buy their own drugs (2)
Branding	0		No cost incurred by service provider (1); they are expensive (2); government should pay (1)
Transport	0	I	An added cost that make services expensive (1)
Drenching	83.3	The cost incurred by the service provider (i.e. drugs) (5)	Easy and anybody can do it (1)

TABLE IV CAHW and AHA caseloads in Mwingi District

Species	Mean number of cases handled per CAHW ( $n = 40$ ) per month	Mean number of cases handled per AHA ( <i>n</i> = 7) per month
Cattle	35.8	47.6
Goats	83.7	89.6
Sheep	9.4	9.0
Donkeys	16.6	16.6
Dogs	4.4	_
Cats	0.8	_
Poultry	30.7	_

## Business expansion and growth

Analysis of business records and discussions with CAHWs revealed that their services had experienced a series of positive and negative changes. Forty of the CAHWs (95%) noted a positive business trend. Indicators of this trend included rising incomes, more drugs in their kits and more CAHWs viewing their work as a form of self-employment. Thirty-four of the CAHWs (85%) suggested that this trend was associated with increased livestock owners' awareness and satisfaction. The remaining 16 CAHWs (15%) attributed the change to a stable demand and good crop harvests that had boosted livestock owners' liquidity.

Two CAHWs (5%) noted a negative business trend. The major reason contributing to the failure was drought that reduced the number of clients and their ability to pay for services. Other reasons for failures were loss of veterinary drug kit, late issuance of the kit and increases in the cost of drugs.

# Non-payment for services and debts

Ten CAHWs (25%) perceived debts to be a major factor in business failure. When asked to give reasons why they incurred debts, 90% of CAHWs and AHAs associated non-payment of services with socio-economic conditions of their communities, namely poverty and subsistence production systems. Considering the importance of debt as a cause of business failure, CAHWs were requested to indicate how they recovered debts from their clients and whether or not they accepted payment in kind. Seventy per cent of CAHWs waited until their clients paid the debt or continued reminding their clients until they paid. Twenty-five per cent of the CAHWs sought alternative ways of debt recovery such as seeking assistance from Provincial Administration staff (Chiefs). Four per cent of CAHWs accepted payment in kind, including provision of manual labour.

TABLE V Relationships between CAHWs and other animal health service providers, as perceived by CAHWs (n = 40)

	Positive	Negative
Other CAHWs	13 CAHWs reported that they shared ideas, knowledge, they sometimes loaned/shared vet drugs and deputized for one another whenever one was absent.	1 CAHW reported that when operating in his/her area his/her colleagues gave conflicting information to his/her clients. 4 other CAHWs reported that other CAHWs were competitors and therefore reduced their profit margins and service demands.
AHAs	20 CAHWs viewed AHAs as advisers and trainers to whom they referred difficult cases and who supervised their work. They also viewed them as their drug suppliers, assisted them when they were not around and popularized their work.	5 CAHWs viewed AHAs as being a negative impact on their business due to competition, which reduced their profit margin and service demand.
Traditional healers	13 CAHWs viewed traditional healers operating in the area as complementary because they shared ideas and knowledge and assisted in their absence. They also dealt with different diseases and used different medicines.	One CAHW reported traditional healers operating in their area as competitors because they reduced his profit margin and service demand
Farmers	7 CAHWs viewed farmers who offered the same services as positive and complementing their work. They said that they shared ideas, exchanged knowledge, reduced their workload, assisted in their absence and also helped in offering first aid to cases before reporting.	31 CAHWs reported farmers as competitors who lowered their service demand, misleading other farmers to reject their services since CAHWs were not GoK staff, making wrong diagnoses, using fake drugs, under-dosing their patients and hence possibly causing drug resistance
Quacks	One CAHW saw quacks' activities as being positive and complementing their services and sharing knowledge.	11 CAHWs saw quacks as unskilled competitors who reduced their profit margin, misled farmers, made wrong diagnoses, gave wrong treatments and used fake drugs, and therefore believed that they caused deaths in animals
AgroVet	4 CAHWs saw agro-vets as their drug suppliers who sometimes offered them drugs on credit.	None

The respondents explained that the number (value) of items paid in kind was based on the market value of any one item at the time.

Working relations between different animal health service providers

# Collaboration

Formal, semi-formal and informal animal health service providers operated in the district. The formal sector comprised *agrovets* and DVA. The semi-formal sector comprised the CAHWs, while the informal sector included herbalists, traditional healers, farmers, quacks and drug peddlers. The study revealed that these various AHSPs enjoyed good and complementary working relationships, especially between CAHWs and government AHSPs, who shared veterinary equipment and drugs. They also shared knowledge, skills and a bi-directional case referral system depending on the case complexity. This model of operation, linking CAHWs to government AHSPs, extended the quality of service coverage, allowed viable business volume and kept the service cost low, thus reducing the poor-quality service provided by the less-qualified but competitive informal sector.

# Competition

Minor competition existed among all categories of AHSPs in the district. Livestock owners preferred to use the semi-formal sector (CAHWs) and the formal sector (AHAs), mainly owing to quality-related aspects of service provision. This aspect is dealt with in a separate paper. The relationship among AHSPs as perceived by CAHWs is summarized in Table V.

#### DISCUSSION

Our study examined the sustainability of the CAHW system in Mwingi District and concluded that the existing system based on CAHWs linked to AHAs performed well with regard to financial indicators. Out of 40 sampled CAHWs, 2 (5%) were relatively inactive (offering intermittent services), the remainder (95%) were active. This does not agree with the commonly held view that once the supporting/initiating organization leaves so will the CAHWs. The CAHWs' services in Mwingi District were found to be sustainable. The CAHWs were self-reliant in procuring relevant inputs. They were motivated by income derived from their veterinary work and the social recognition they received. Livestock keepers were most willing to pay for clinical services (including drenching), vaccination and castration. This finding was supported by information on CAHWs' caseloads, showing that they handled substantial numbers of cases per month, particularly in cattle and goats (see Table IV). Furthermore, information on CAHWs' income indicated that the proportion derived from veterinary

work was sufficient to keep them involved in the system. Although some livestock keepers still felt that the government was responsible for providing assistance such as clinical and vaccination services, the overall trend was a rising demand for CAHWs' services even in areas where CAHWs were not operating. This finding agrees with Okwiri *et al.* (2001)

The CAHWs established a mutually beneficial relationship with other AHSPs, especially the state veterinary service providers. The introduction of the CAHW system in the district facilitated a new arrangement for the delivery of veterinary services. Each cadre exploited a niche service market built on a bi-directional referral system and comparative advantages. Most of the time AHAs focused on difficult cases, supplying veterinary drugs and providing backstopping services to CAHWs. This complementarity between CAHWs, AHAs and DVAs for the private supply of supervised clinical services agrees with the findings of previous studies in Kenya (Holden, 1997). This mutually beneficial arrangement was adhered to by the CAHWs probably because of the need to obtain an annually renewable practice licence from the DVAs. An economic assessment of different models of veterinary service delivery in Wajir, Marsabit, Turkana, Kajiado and Meru districts concluded that privatized networks of AHAs linked to CAHWs were the most economically feasible approach to provision of sustainable primary-level services (Okwiri et al., 2001). In addition, our study showed that CAHWs at times received non-cash payments for their services, including payments in livestock, grain and labour. It is unlikely that higher levels of veterinary workers, such as veterinarians, would be satisfied with these types of payment.

The poor infrastructure in the district, subsistence livestock production systems and high transport costs for a private veterinarian mean that profits would probably be too low to support a conventional veterinary practice. In contrast to the needs of a veterinarian, our study showed that CAHWs and AHAs were able to operate private services and had been doing so for a number of years. It is possible that the system would be strengthened by the involvement of veterinarians running pharmacies in the main urban centres to supply drugs to AHAs and supervise their service. Veterinarians wishing to establish new businesses in such districts would need to be confident that their work would add value to the existing system and would be paid for by livestock keepers. However, such an approach would require a system of referral to the veterinarian to ensure its quality (Taylor, 2003).

In Mwingi District, it was noted that the strong links between CAHWs and AHAs were based partly on a referral system. All the CAHWs interviewed referred obstetrical and surgical cases to AHAs and unfamiliar disease to the CAHWs. Although there was some competition between CAHWs and informal service providers (farmers, quacks and traditional healers), this did not seem to affect the CAHWs' business very much, possibly because these were still surplus cases not attended to. Therefore, further market penetration was still possible for all AHSPs.

#### **ACKNOWLEDGEMENTS**

The study team expresses its gratitude to the Community-based Animal Health and Participatory Epidemiology (CAPE) Unit of the African Union/Interafrican Bureau for Animal Resources (AU/IBAR) for financial and material support while initiating, carrying out and reporting this study. The work as made possible by a grant to the CAPE Unit of AU/IBAR from the Department for International Development, UK. The team is also grateful to staff of CAHNET for freely allowing us to use their office space and to make consultations with their professional staff. Further, the contribution of the various national stakeholders who contributed to the design of the study and provided feedback on the draft report is highly appreciated. Many thanks go to Mwingi livestock owners, CAHWs and DVA staff who diligently supported the team and provided much valuable information, which will certainly be instrumental in facilitating other people's learning about community-based animal health care around the world.

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(Accepted: 3 August 2004)

# Durabilité d'un système de prestation de conseils sur la santé des animaux privé basé dans la communauté dans le district de Mwingi, au Kenya

Résumé – Cet article décrit une étude de la durabilité de services de prestation de conseils sur la santé des animaux basés dans la communauté (CAHW) dans le district de Mwingi, au Kenya. Ces services ont commencé en 1992 et ont été appuyés par l'Autorité vétérinaire du district (DVA) avec l'assistance du Programme sur la sécurité alimentaire intégrée est (IFSP-E). Avec le temps et en utilisant un processus de revues participatives avec des dépositaires d'enjeux multiples, le système a évolué en un réseau de CAHWs. L'étude s'est concentrée sur la durabilité des services assurés par les CAHWs et sur leurs relations avec d'autres pourvoyeurs de services de santé aux animaux. Un arrangement mutuellement bénéfique et d'un grand soutien existait entre les CAHWs et les assistants à la santé des animaux (AHAs), basé sur un système de fourniture de médicaments en privé, sur une orientation et une assistance. Les CAHWs ont dérivé un revenu suffisant de leur travail vétérinaire pour soutenir leur intérêt dans le système. Soixante-dix pour cent des CAHWs continuaient à offrir des services de santé aux animaux 3 ans plus tard après leur

formation initiale et après le retrait de l'assistance des donneurs. Quatre-vingt cinq pour cent des CAHWs (n=40) échantillonnés ont considéré leurs activités comme étant couronnées de succès et en voie d'expansion. Compte tenu des conditions agro-écologiques et socio-économiques du district, le système de CAHWs peut être considéré comme le stade initial du processus d'expansion de services vétérinaires de qualité dans le secteur privé.

# Sostenibilidad de un sistema privatizado de trabajadores de sanidad animal comunitarios en el distrito de Mwingi, Kenia

Resumen - Este informe describe un estudio sobre la sostenibilidad de los servicios de trabajadores de salud animal comunitarios (CAHW, en inglés) en el distrito de Mwingi, Kenia. Estos servicios comenzaron en 1992 y fueron apoyados por la Autoridad Veterinaria del Distrito con ayuda del Programa de Seguridad Alimentaria Integrado del Este (IFSP-E). A lo largo del tiempo y utilizando un proceso de revisión participativa con múltiples partes interesadas, el sistema evolucionó hacia una red de CAHWs. El estudio se centró en la sostenibilidad del servicio de trabajadores de salud animal comunitarios (CAHWs) y sus relaciones con otros proveedores de servicios de salud animal. Entre los trabajadores CAHWs y los auxiliares de sanidad animal (AHAs, en inglés) existía un acuerdo mutuamente beneficioso y de respaldo, basado en un sistema de suministro farmacológico privado, de remisión y de apoyo en última instancia. Los CAHWs obtenían suficientes ingresos de su trabajo veterinario para mantener su interés en el sistema. Setenta por ciento de los CAHWs seguían ofreciendo adecuados servicios sanitarios animales a los 3 años o más después de su entrenamiento inicial y de la retirada del apoyo del inversor. Noventa y cinco por ciento de los CAHWs de la muestra (n = 40) consideraba su negocio como exitoso y en expansión. Teniendo en cuenta las condiciones agro-ecológicas y socio-económicas del distrito, el sistema CAHW puede considerarse como un estadio inicial en el proceso de extensión de servicios privados veterinarios de calidad.