

**REPORT ON THE PROMOTION OF ETHNOVETERINARY MEDICINE
THROUGH FARMER ASSOCIATIONS AND PARTICIPATORY RESEARCH
NOVEMBER 2004**

**RELIEF TO DEVELOPMENT PROJECT, NORTH WOLLO AND WAGHAMRA
ZONES, AMHARA NATIONAL REGIONAL STATE**

SAVE THE CHILDREN-UK, ETHIOPIA

Suzan Bishop, Vetwork UK

Vetwork UK, 35D Beach Lane, Musselburgh, EH21 6JX, Scotland
<http://www.vetwork.org>

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ACRONYMS

CAHW	Community Animal Health Worker
CBO	Community Based Organisation
CLDP	Community Livestock Development Project
EVA	Ethiopian Veterinary Association
EVK	Ethnoveterinary knowledge
EVM	Ethnoveterinary medicine
FFS	Farmer Field Schools
FPR	Farmer participatory research
IPM/ICM	Integrated Pest Management/Integrated Crop Management
MoU	Memorandum of Understanding
NGO	Non governmental organisation
PA	Peasant Association
R2D	Relief to Development Project
SC UK	Save the Children (UK)
TOR	Terms of Reference
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

Save the Children UK (SC UK) has been involved with livestock and animal health through its Community Livestock Development Project (CLDP) in North Wollo and Waghamra Zones in the Amhara National Regional State (1999-2003). This project aimed to provide reliable, affordable and sustainable veterinary services through support to the government animal health clinics and sub-clinics, and the establishment of a community based animal health delivery system. Part of the CLDP was to conduct a survey to collect data on ethnoveterinary knowledge and its uses in order to assess its potential to complement the existing government services and community based animal health structures. The results of this study, conducted in 2001, provided the basis for SC-UK to develop an ethnoveterinary medicine (EVM) component in their Relief to Development (R2D) project which is being undertaken from 2002-2005. The terms of reference (TOR) for this consultancy resulted from several of the study recommendations, with the overall aim of developing and implementing a community based project for promoting the use of EVM.

This study was undertaken from 24th September-10th October 2004, and focussed on the two target woredas of the R2D project, Gubalafto in North Wollo Zone and Sekota in Wag Hamra Zone. The consultant was accompanied by a government team of veterinarians from the regional to the woreda level, as well as SC-UK field staff. The approach used by the team revolved around participatory discussions with healers and farmers in order to explore the key issues such as popularity of traditional veterinary medicine and other animal health service providers, ways of promoting EVM, in particular by providing support to healers, and validation of plant remedies through farmer participatory research (FPR). Baseline data from the initial EVM study done in 2001 was used to inform the work in Sekota Woreda enabling issues to be examined in some depth. No baseline data was available for Gubalafto as this was not part of the EVM study which restricted discussions to more general themes.

The results indicate that there is wide spread use of traditional healers though other service providers, such as community animal health workers (CAHWs) and the government veterinary clinics, are also appreciated. Farmers base their choice of service provider on the specific condition affecting their animal, having preferred options for different conditions. Healers themselves also advise their clients to use the CAHWs or the veterinary clinics for cases that they cannot deal with. This suggests that there is already a partly integrated system of animal health care, and traditional and modern medicine is working together to some extent. However there was general agreement that the use of EVM could be improved through changing negative attitudes held by certain farmers and veterinary staff, validation of remedies to ascertain appropriate doses, training in modern techniques for healers and registration of healers to give them the support of the woreda authorities to practice their trade. Other areas identified by participants needing support were plant conservation and preservation of EVM knowledge.

Healers and, to some extent, farmers supported the concept of local group formation within each Peasant Association (PA), with each PA covering on average 4 to 5 villages. Healers proposed that associations could provide an improved service to their communities because there would be learning between healers about different skills and practices, and a group would be able to take responsibility at village level for ensuring one healer was available at all times. Farmers felt that groups would help to authenticate healers and identify illegitimate practitioners. If groups were registered with the woreda authorities this could provide the sought after legalisation of healers' services.

Whilst group formation should be supported the team felt that there were certain constraints that had to be acknowledged prior to initiating field work. Healers were

generally very secretive about their remedies and skills, and though they talked of sharing and working within a group, there may not be the cohesion needed in all the PAs for groups to survive. Each PA will need to be assessed separately in order to identify and encourage keen individuals who understand the concept of the mutual benefits and responsibilities of being a group member. This will require significant time input from SC-UK field staff and expertise in organisational development.

Though validation of plant remedies was a specific part of the ToR this issue was a common theme which arose unprompted by the team. Farmers and healers stated that validation would increase confidence and acceptance of EVM. Through earlier work initiated by SC-UK on Integrated Pest Management (IPM) using the Farmer Field School (FFS) approach many participants were familiar with the notion of field based participatory research, with farmers and healers acting in partnership with scientists and technical people.

Due to the secrecy of many remedies it was decided to base field trials on commonly known treatments. This could have the dual effect of validating a remedy whilst also attempting to gain the confidence of healers to be more open. Since field trials rely on having a sufficient number of animals with the relevant condition at a specific time, chronic diseases such as internal and external parasites were chosen for research. These conditions are also relative simply to investigate and thus should provide the experience in participatory research needed to conduct more complex studies. In two PAs in Sekota Woreda, which the team had selected as pilot areas for the EVM work, four to five important diseases falling within the research criteria and their plant remedies were identified by participants. A simple protocol for field research was developed for one disease in each PA which can easily be adapted for other diseases.

An essential element for the development of the EVM project, including support to local healers groups and validation of plant remedies, is ensuring that those involved have the correct skill level for their respective roles and responsibilities. For example SC-UK staff and woreda level veterinary staff, who will play a leading role in the project, need to be confident trainers with a good understanding of adult learning approaches and participatory training techniques. It is envisaged that SC-UK staff and government veterinary staff from the woreda and also from a veterinary laboratory such as Kombolcha Regional Veterinary Laboratory should provide training to farmers and healers in a range of subjects including FPR, trial protocol and technical issues. All stakeholders involved in field research, including farmers and healers need to have training in the basics of farmer participatory research (FPR) and the trial protocol.

Finally for any of the identified activities to be implemented clear roles and responsibilities have to be ascribed to the partners, in this case SC-UK and the woreda level veterinary department within the Office of Agriculture. An issue that will require some thought and discussion concerns the need for a veterinarian experienced in both EVM and field research to coordinate plant validation work through FPR. This experience is not available at woreda level but is within Kombolcha Regional Veterinary Laboratory. The possibility of secondment of a veterinarian for short periods to cover training and trial implementation should be explored. In time it may be possible for the woreda veterinarians to lead the work depending on their availability. The team had some concerns about the already heavy work commitments of the SC-UK field staff responsible for supervising the EVM component. Certainly if SC-UK should ever think of scaling up this work they will need to re-assess their human resource capacity and consider employing a veterinarian with EVM, participatory research and community development skills to cover both woredas.

1 INTRODUCTION

Ethnoveterinary medicine has been recognised for many years as being an important system used by livestock owners to deal with disease control and prevention. It can be described as the knowledge and practices that have been developed by livestock owners and specialists within a community to deal with animal health and production problems. This knowledge has been acquired over time through practice, and encompasses a range of methods for dealing with livestock disease and production related conditions. It is usually based upon the use of a variety of plants as medicines but also includes skills such as bone setting, correction of dystocia, castration, removal of retained foetal membranes and minor surgery. EVM also makes use of a number of non plant materials such as honey, oil, cow dung, milk and eggs that are either used directly as treatments or are mixed with other ingredients, often acting as an “adjuvant” to improve absorption and hence the effectiveness of a certain plant as well as facilitating its administration. In addition to this the magico-religious element of EVM should not be overlooked as it can form a key part of the treatment rational and ritual.

With the introduction of what is referred to as modern veterinary medicine traditional practices have not always received the attention and credit they deserve. They have sometimes been labelled as being “unscientific” having no validation to determine their effectiveness, safety and efficacy. In some circumstances practitioners of traditional medicine have been criticised to the extent that they have feared to use their skills. The loss of some EVM knowledge has been ascribed to this reduction in its use, amongst other reasons, such as the secrecy that surrounds EVM and the oral tradition used to pass knowledge from one generation to the next. There is also a school of thought that certain plants are no longer available or in danger of extinction due to changes in land use and management systems, and the increasing human population.

Fortunately in more recent years there has been increasing acceptance of the benefits of EVM and efforts made to support its preservation and promotion. A significant body of knowledge has been documented in many countries and a range of activities initiated to support its continued use.

Whilst it should be acknowledged that EVM is not a “cure all” and has its own limitations, its benefits include its accessibility, affordability, and adaptation to local conditions, all of which need to be recognised and developed. Although collection of plants and preparation of the remedies can be time consuming and many plants are only available in season, traditional healers and farmers have systems for dealing with these problems such as collecting and keeping enough stocks of plants to last for several years. Concerns about the effectiveness and safety of EVM have been voiced over practices which may be harmful to livestock, and the usefulness of treatments for infectious diseases. One approach to investigating these concerns has been to promote collaboration between the traditional and the modern through field validation, observation and sharing of experiences and knowledge.

Ethiopia has a long history of using traditional medicine, both for humans and animals, with a vast array of practices resulting from its ethnic and geographic diversity. In a paper published in 1991 (Bishaw) it was noted that over 80% of the population relied upon human traditional medicine, not only due to a lack of modern health facilities but because of strong cultural traditions and the persistence of local beliefs. When it comes to animal health services, given the enormous size of the country and its challenging topography in many areas, it is not surprising that some communities find it difficult to access veterinary services. The introduction of the CAHW system has improved the coverage since these people are based within their community but nonetheless they still service a large area with high numbers of livestock. It should also be noted that livestock owners chose to use certain service provider above another and often use a combination of

traditional and modern depending on the condition. Healers and farmers are well aware of the benefits of some modern techniques such as vaccination for disease prevention and use of antibiotics for dealing with infectious diseases. Thus promoting EVM alongside modern medicine can improve livestock owners' choices and also provide a wider range of options for dealing with a particular case.

Save the Children UK has been involved with livestock and animal health through its CLDP in North Wollo and Waghmra Zones in the Amhara National Regional State (1999-2003). This project aimed to provide reliable, affordable and sustainable veterinary services through support to the government animal health clinics and sub-clinics, and the establishment of a community based animal health delivery system. A component of CLDP was a survey to collect data on ethnoveterinary knowledge and its uses in order to assess their potential to complement the existing government services and community based animal health structures. The potential benefits of linking the traditional and modern systems of animal health care were seen as a reduction in the dependency on modern drugs that were not always available, provision of a low cost service, improvement in the relations between the traditional practitioners, farmers and animal health personnel and the possibility of discovering new drugs.

2 PURPOSE OF THE STUDY

2.1 Aims of the study

In November 2002 SC-UK began a three year Relief to Development Project, financed by the United States Agency for International Development (USAID), which covers Gubalafto Woreda in North Wollo Zone and Sekota Woreda in Waghmra Zone. The project goal is:

To effectively combine relief and development resources to protect and restore household and community assets as a first step to stabilising food needs in Sekota and Gubalafto Woredas, whilst strengthening the institutional capacity of community and local government to prevent further destitution in these areas.

R2D has six project objectives, with the following two being relevant to the promotion of ethnoveterinary practices.

- 1. To strengthen the institutional capacity of community based institutions and local government authorities in both Woredas to plan and implement livelihood security initiatives.*
- 2. To develop locally appropriate solutions to productions constraints, restore and protect household assets and diversify agriculture income sources.*

The output of this work falls within the Agriculture and Livestock project component which includes support to community based animal health systems, promotion of ethnoveterinary practices, restocking, forage development, poultry production and bee-keeping. The ethnoveterinary component was developed following the EVM study undertaken as part of the CLDP.

The thinking behind the initial EVM study in 2001 was that since the introduction of modern veterinary services people had become more dependent upon these services at the expense of traditional medication, leading to failure of the latter to solve the majority of animal health problems due to its inadequacy and small geographic coverage. The overall purpose of the survey was to explore and assess the potential of the knowledge for dissemination as complementary to the existing governmental veterinary services.

The study concluded that although there was a vast body of knowledge amongst the traditional healers and livestock owners the number of practising healers and the number of medicinal plants were both declining. Reasons cited for the decrease in practicing healers were that:

- *They did not have adequate knowledge to treat all the cases in the face ever changing and/or increasing disease conditions*
- *There was prejudice from modern veterinarians ("do not prescribe your 'generic' local drugs without adequate diagnosis and known the exact dosage")*

The study collated detailed information of diseases and traditional practices including local disease names and descriptions, local plant names and their uses, and a range of practices for dealing with conditions such as fractures and dystocias.

The study also made the following recommendations for future activities:

1. *Work with linguists and local ethnoveterinary knowledge practitioners to standardise use of language within each society and develop dictionaries of animal health terms for each which contain accepted terms and variations.*
2. *This study is the first attempt in these zones and is not exhaustive, neither has it covered every peasant association (PA) or all healers in the zones. There is need for further comprehensive investigations.*
3. *The scientific diagnoses for different local names, descriptions and practices were made tentatively and need to be further verified through appropriate diagnostic methods.*
4. *Priority should be given to comprehensive investigations and compilation of information on effective medicinal plants for skin diseases and helminthiasis. Pharmacological screening of plants and reviews of toxic properties should complement this investigation.*
5. *As these practices are expected to be economically, socially and culturally more acceptable for marginalised communities, a thorough identification of local experts in the field of livestock health care and compilation of a healers' directory are required. The dictionary would profile the local healers in terms of their bio-data, experience in treatment, area of specialisation and problems experienced as healers.*
6. *The ultimate goal of future work should be to take validated indigenous knowledge back to the communities in the form of appropriate educational aids.*
7. *To prevent further loss of ethnoveterinary knowledge (EVK) through increased research within the logic of "farmers on farm trial and practice".*
8. *Disseminate the results in local language and involve formal agricultural education in this process.*
9. *A good strategy needs to be established to encourage healers to share information on certain plants and their uses.*
10. *It is apparent that ethnoveterinary practitioners are important in the village primary animal health care system and should be include in development planning and for sustainability of the production system. This preliminary survey shows that there is urgent need to identify and have authentic data on the number of ethnoveterinary*

practitioners working in each village, types of patients they are treating, the diseases they cure and the plant materials that they use are recorded and documented. The ultimate aim is to create a complete database on the traditional system for future use.

11. *There is another facet: organising the village ethnoveterinary practitioners at the grass roots level to initiate participatory conservation and utilisation of medicinal plant biodiversity.*
12. *The ethnoveterinary practitioners also need recognition, training and technical support enabling them to be fit for the existing animal health service delivery system.*

SC-UK therefore based the TOR for this consultancy on several of the study recommendations, aiming to develop and implement a community based project for promoting the use of EVM. The study also provided an excellent source of baseline data for Sekota Woreda.

An ethnoveterinary medicine survey of the Eastern Amhara region which includes Gubalafto Woreda was undertaken by the Kombolcha Regional Veterinary Laboratory in 2002. The five PAs in which SC-UK is working were not part of the study but material from other PA's of similar topography was collected. However the information from this study was not available at the time of this consultancy and therefore there was no baseline data for Gubalafto regarding ethnoveterinary medicine.

2.2 Terms of Reference for the study

The objectives of the consultancy were:

1. *Assess the feasibility and need to establish farmer groups for the promotion of ethnoveterinary medicine and based on the assessment, provide initial organizational support and training to these groups as appropriate.*
2. *Develop a programme of participatory research with farmer groups to test ethnoveterinary medicines.*

It was felt that supporting traditional healers to form groups would allow them to undertake participatory research which in turn would help to develop confidence in their practices, deliver more efficient services, and conserve knowledge and curative plants.

It was foreseen that groups would help the farmers to:

- *Develop their livestock diseases diagnostic skills; mainly accurate observation and comprehensive record keeping*
- *Test the efficacy of local plants for identified diseases through participatory research*
- *Make dosage and ingredient verification of the plants to improve their efficacy and minimize side effects with support from a veterinary laboratory.*
- *Enhance learning by doing and cross-fertilization of EVM knowledge and practices.*

3 STUDY DESIGN

3.1 Study area

Gubalafto Woreda, North Wollo Zone

Five PAs which were pilot areas for the R2D project formed the basis of the work. Three of the villages in Gubalafto, Hara, Laste Gerado and Kilie-adame are described as being

lowland, below 1300 metres and the other two PAs, Ahun Tegegne and Ezeit are highland, above 3000 metres.

There are clear differences in farming practices between the highland and lowland areas in Gubalafto; the main crops grown in the lowlands are sorghum and teff (*Eragrostus abyssinicus*), plus some legumes, oils seeds and maize, whilst in the highlands teff predominates with barley. Livestock rearing practices also differ; livestock holdings are relatively high in the lowlands due to availability of grazing land with cattle and goats being most common species kept, whilst in the highlands livestock holdings are considered moderate and sheep are the common species. Lowlanders practice some level of pastoralism by moving their livestock to dry season grazing areas in Afar.

Sekota Woreda, Wag Hamra Zone

In Sekota Woreda two pilot PAs were selected as they had been part of the EVM study. Wolleh is a midland area and Mekanegenet is in the lowlands. In this woreda goats are common due to the dry environment and relatively limited grazing though cattle are popular in the lowland areas. The same livestock management practices are seen as in Gubalafto.

In both woredas donkeys are used as pack animals in the highlands, midland and lowlands whilst camels are found only the lowland and horses in the highlands.

3.2 Study methodology

Through the R2D project SC-UK had previously identified farmers and healers in each of the PAs who were active and interested in the subject of EVM, and these individuals were met along with CAHWs and veterinary clinic staff if available. The participants in each PA were divided into livestock owners and traditional healers in order to understand the differing perceptions of EVM, its practitioners and its uses. In Sekota despite requesting to meet farmers and healers few farmers presented themselves for the meetings and neither was it possible to locate all the participants of the previous EVM study. Details of the participants are listed in Annex 5. The number of participants per group was limited to 10 to allow for manageable discussions which meant that in some PAs there were two or three groups.

Each group had a facilitator and a recorder, both of whom were Amharic speakers, Amharic being the local language in all the PAs. In Mekanegenet, Sekota Woreda, another local language “Agewgna” is used in addition to Amharic and a local translator assisted the team.

Participatory appraisal was used to explore the key issues, mostly through group discussions, the results of which are documented a separate report. Meetings averaged 2 hours and in some PAs two meetings were held on consecutive days. Due to harvesting being in progress at the time of the work farmers’ time for meetings was limited.

Gubalafto Woreda

As this was the start of the EVM project component of R2D there was limited awareness of SC-UK’s interest in this subject, added to which the lack of baseline data meant that a general approach was adopted in discussions to elicit views on EVM and gauge the key areas that were of interest to participants. These issues were followed up in a feed-back meeting held in Woldia for the participants from all the PAs where the main findings of the PA meetings were presented for discussion, certain points were explored further through group work and final recommendations made.

A total of 25 farmers, 32 healers, 2 CAHWs and 2 Animal Health Assistants were met. Eighteen of these participants attended the feedback workshop as representatives of their PA. Farmers, healers and CAHWs from the three lowland PAs were met as one group in Hara due to their physical proximity. For the two highland PAs separate visits were made to each due to their distance from Woldia and the other PAs.

Sekota Woreda

A more specific approach was possible in this area due to the first EVM study. However many of the participants were not part of the first study and for those that were issues were not fresh in their minds as the study was done in 2001. Unfortunately despite repeated requests from the team only one farmer participated in the meetings. A total of 60 healers were met. It should be recognised that healers are also farmers so their views in this capacity are valid.

Debriefing meeting

A debriefing meeting was held in Addis Ababa for SC-UK senior staff and a veterinary representative from the Bahir-Dar Bureau of Agriculture. The team presented the main results of the study and key recommendations. Issues raised by the audience are addressed in section 5 and Annex 6.

3.3 Study Team

Members of the study team were:

Dr. Sefinew Alemu, Gubalafto Woreda veterinarian

Dr. Alekaw Sinshaw, Bahir-Dar Bureau of Agriculture veterinary epidemiologist

Dr. Araya Mengistu, Kombolcha Regional Veterinary Laboratory veterinarian

Alebachew Aklile, SC-UK Agriculture project officer for Sekota Woreda

Dr. Suzan Bishop, veterinary consultant to SC-UK

Abu Assefa, Animal Health Assistant for Sekota Woreda and Haile Reday, Animal Health Assistant for Gubalafto participated in the study for their respective areas. Dr. Sefinew Alemu and Abu Assefa were members of the team that undertook the initial EVM study in 2001.

4 RESULTS

The results have been divided into sections according to the TORs. Other points not specific to the TORs which arose from discussions are noted under section 4.1.

4.1 General issues about EVM promotion

As is explained in section 3 a general approach was taken to introduce EVM and attempt to understand its current use and possibilities for promotion. This led to debate around a number of issues which are vital to the overall framework of the SC-UK project but that do not fit precisely under the specific sections of the TORs.

4.1.1 Importance of EVM

As a means of understanding the use of EVM, the popularity of healers and their links to other providers of animal health services, farmers were asked about their preferred service provider giving reasons. They identified four levels of service provision – themselves, healers, CAHWs and government veterinary clinics. They made use of all four depending on the condition, access to a service provider and cost. Views differed between the PAs

but healers were seen as having an important role to play in improving animal health and production. It was apparent that all four services were essential giving farmers a choice of options. Farmers often tried their own treatments first as this was quick, cheap and allowed acute conditions to be treated immediately but also understood that there were cases they could not deal with and had clear views on where to seek help for particular conditions. In general relationships with all the service providers (healers, CAHWs, veterinary clinic staff) were described as good but a shortage of drugs in the clinics, limited availability of the clinic veterinary staff and insufficient veterinary clinics were identified as problems. Veterinary staff cover a large area and are not always available to deal with disease outbreaks.

In some instances farmers said that healers had specialist knowledge and therefore their practices were more effective than other treatments. They used their services for treating acute problems such as bloat, blackleg, colic, anthrax, dystocia and fractures. Others preferred to use the veterinary clinic because they thought they would receive a correct diagnosis with a solution and there was good recovery for conditions like pasteurellosis, diarrhoea, emaciation and blackleg. An added value of the veterinary clinic was access to other services such as vaccination. In Eziet PA farmers described the customer relations with animal health workers (government) as being poor partly due to the large distance and difficult terrain to the nearest clinic.

Further reasons for using the veterinary clinics included the treatment of loss of body condition and severe diseases which were beyond the capacity of the farmers and healers. CAHWs were used for less severe disease such as lice infestation, diarrhoea and fascioliasis but also for acute conditions, including bleeding and wounds due to the proximity of the CAHWs to the livestock. CAHWs also provided services such as hoof trimming, dehorning and castration. Farmers stated that they had confidence in CAHWs because they were licensed by government. In some cases healers were seen as a last resort if other treatments had not been effective.

Some negative views were expressed about healers from both farmers and veterinary clinic staff. One Animal Health Technician did not want any links with healers because he was of the opinion that some of their practices were detrimental to the animal e.g. healers often apply a drench through the nostrils which he thought could lead to aspiration pneumonia. This individual however, was willing to accept healers that offered treatments with validated plants. In one PA healers were cited as often disagreeing with the CAHW and other veterinary professionals over issues such as the route of administration of remedies. There was also a feeling amongst some of the animal health workers and farmers that certain healers had no knowledge, tricking farmers by using any plant available. Other farmers stated that they did not like particular practices used by healers such as bleeding through too a large cut, examination of the female reproductive tract, closed castration for horses (preferring the open method) and traditional castration methods for cattle (they prefer use of burdizzos). Others mentioned side effects of plant remedies and vagueness about correct doses.

However the negative views expressed were in the minority and there was general support for the use of EVM and its promotion from all sectors. Wider use of EVM was seen as helping people to become self-sufficient due to the long distances to the veterinary clinics especially for lame or acutely ill animals. Traditional healers were close to the animals, providing free services which gave access to the poor. It was described as safe, easy to use, sustainable, and avoided dependency on veterinary services. In Mekanegenet animal diseases were considered the primary problem of the area, ranking higher than food shortages and there was a felt need to promote EVM to have animal health services near to the community. The healers in this PA considered their treatments to be effective but they saw room for development of their practices and integration with the modern system.

The idea of linking and mutual support between the modern and traditional systems was a commonly expressed idea for improving the delivery of animal health services.

Recommendations

- Whilst there is wide acceptance of EVM and its practitioners there is clearly a need for improving the relations between the “traditional” and the “modern”. Suggested approaches could include participatory trainings for healers and clinic staff which would allow both groups to exchange ideas in a positive learning environment. It should not take the form of a traditional training but would be done as a sharing experience with all participants being able to provide information about their knowledge and practices. These could be facilitated by the woreda veterinarian with the support of SC-UK. Likewise involving the veterinary clinic staff alongside healers and farmers in any trials to validate remedies or practices may help to eliminate some of the prejudice on both sides. Legal recognition of healers could also increase their acceptance by the veterinary professionals.
- Most healers are interested in furthering their skills and understand they can learn from modern systems. They appreciate that the CAHWs and the clinics can deal with some cases that they cannot. They also see a role for themselves in supporting the veterinary clinics by acting as informants and data collectors on the local disease situation. This is a solid base upon which to build an integrated system where healers would have a role recognised by the veterinary clinics, for example, by acting as disease surveillance monitors. Healers should also be considered for training as CAHWs, something which SCUK had already taken into consideration in some of its more recent activities.
- It is clear that livestock owners seek help from different service providers for specific conditions. Promotion of traditional healers as a complementary service to those provided by the CAHWs and the veterinary clinics could be enhanced by developing “niche” areas of specialisation. This should be linked to the types of services available but also the preferences of livestock owners. Many healers are already specialists and further investigation would help to define their competencies. Suggested services could include bone setting, obstetrical problems, wound care, bloat, external and internal parasites. Validation of plant remedies would help to further define key areas. However it should be remembered that certain owners would not be able to afford CAHWs or veterinary clinic services so although specialisation of healers may be promoted they still need to cover the range of conditions presented to them.
- Support to all service providers is crucial if farmers are to increase their options and benefits in terms of animal health care. This may be outside the remit of SC-UK but they should use their position to support further development of the CAHW system, the services that they provide and the facilities of the veterinary clinics.

4.1.2 Preservation of EVM knowledge

Farmers were quick to point out that the high degree of secrecy amongst healers was an obstacle to the preservation of knowledge. Healers viewed certain aspects of EVM knowledge as increasing amongst the local community such as the manipulative skills (e.g. bone setting, correction of dystocia) since healers were frequently observed whilst performing these procedures. There were varying views amongst the healers about preservation of plant knowledge but with no consensus that this knowledge was disappearing. Some cited that people were learning through observing healers and then experimenting on their own animals whilst others noted that people took every

opportunity to gain more information. Some expressed the view that use of plants for remedies was decreasing due to the system of knowledge transfer and also due to the increasing scarcity of plants. The current system for EVM knowledge transfer is either to a favoured son, if there is no son to a close relative who expresses an interest and very rarely to a close friend. Many of healers believe that common knowledge of remedies decreases their effectiveness, whilst there is also the belief that some curse will befall the family if secrets are divulged. However there was general agreement that knowledge had to be preserved. Healers remained convinced that the only way to maintain their advantage as service providers was to have healer groups where knowledge would be passed within the group only and no information could be passed to “lay-people”.

Given the secrecy of herbal remedies it could be that healers were unwilling to acknowledge that their system of EVM information transfer is leading to a decrease in knowledge. Farmers obviously have a real fear that knowledge is being lost and may be a better indicator of the real status of EVM knowledge. It should be noted that all the informants, whether farmer or healer, supported the preservation of EVM knowledge.

Recommendations

- Support separate healer and farmer groups which would encourage exchange of knowledge amongst themselves since in most instances, apart from Mekanegenet in Sekota, healers were not willing to pass information to farmers or others.
- Mekanegenet could provide useful experience on how healers and farmers interact in an open environment and the type of information exchanged. Positive experiences from here could be shared with participating healers and farmers in other PAs.
- Encourage both groups to start documenting their knowledge within the groups and in time the healers may be prepared to start passing this on to others outside the group.
- Organising meetings between groups from different PAs for exchange of information. This could also help with plant preservation and exchange of plants.
- SC-UK and the veterinary department should continue documenting information in the course of their EVM work.
- Patenting of indigenous knowledge should be explored to assess if this is possible without undertaking lengthy trials. Patenting may serve to encourage healers to share information. Kombolcha Regional Veterinary Laboratory may be able to advise on the relevant institutions to consult on patenting and the current laws. The EVA would be a valuable partner to involve in any discussions and could take a lead role in supporting this issue.
- There are fears that sharing of EVM knowledge will lead to over-use of certain plants which will contribute to their decrease or even loss. Systems for plant conservation are proposed in section 4.2.1.2 under *Recommendations*.

4.1.3 Income for healers' services

The issue of income in relation to promoting EVM was raised by healers with conflicting opinions being expressed. In Hara PA several healers claimed to have left their work due to lack of fees and lack of time, stating that there was often conflict with farmers over charging for services and the lack of payment was resulting in a decrease in use of EVM. In most of the PAs healers and farmers said that cash payments were rarely made but there were payments in kind (farm labour), coffee and social benefits, and the majority of healers saw their work as being a community duty with payment not being an issue.

However a view was expressed that if the healers were to acquire a legal status and their practices were officially recognised, they may be in a position to charge in a similar way to the Community Animal Health Workers (CAHWs). Legal recognition was seen as important for charging as it would then have official backing from the government.

Another idea expressed was for legally recognised healers to receive an incentive from the government for delivering their services. Contrary to this, in Mekanegent healers said that if they had a chance to form an organization they would generate their income by contributing an amount of money on monthly basis to build up their capital, and later they would determine the fee for each service.

Recommendation

- Be aware that since CAHW do receive some income this might be a future source of conflict if healers are legitimised but not getting paid.
- At present monetary income is not generally perceived as an issue but SC-UK should keep in mind that as healers become more accepted by the veterinary department and possibly registered, they may then want to charge fees. In order to pre-empt problems and as a means of encouraging healers to promote their services SC-UK and the veterinary department should initiate community discussions about fees, for example the types of services that might require payment and level of charges. In two PAs, Wolleh and Mekanegenet, farmers need to be consulted on this issue since they were not presented in any of the meetings during this study and only healers views were recorded.
- Healers should be treated as private providers from the start and this should be made clear to them. Even if government finances could stretch to supporting healers there is a working system accepted by the local communities which would be undermined by external financial support. If healers decide to introduce a more structured approach to fees for services this should be discussed within each community to harness support for the healers and their services.

4.1.4 Legal registration of healers

Legal recognition for healers was identified by both healers and farmers as being essential for the promotion and wider acceptance of EVM. There appears to be a certain fear level amongst healers due to historic criticism by previous authorities and veterinary personnel which was used as a means of suppressing healers and their practices. This was cited as a factor still preventing wider use of EVM. Registration was mentioned as a means of increasing healers' income whether cash or in kind, possibly because some healers were aware that human traditional practitioners were able to register and that there were associated benefits. Healers felt that recognition would allow them to access training to complement their skills and some stated that they would feel more willing and confident to transfer their knowledge if they had official backing.

Some farmers were concerned about good and bad healers, side effects and correct use of doses for certain remedies and they thought that a function of registration would be for the government to issue guidelines on EVM practices such as correct doses and validation of remedies. Another group stated that registration would help to determine the authentic healers from the "pretenders" and this was also supported by the healers. Interestingly during the group meetings in Wolleh it became evident that only a few of the healers who had participated in the early EVM study were present – the explanation given was that quite a number of those involved in the first study were Kebele authorities and senior figures in the community rather than true healers who were expecting per-diems. It was not possible to verify this information but is worthy of note for future work in all the PAs.

Recommendations

- Legal recognition should be investigated by assessing the situation for human traditional healers. There is a national Human Traditional Healers Association with a base in Addis which should be consulted. The situation regarding animal health traditional healers should be established - does the law differentiate between the two types of healers and is it already legal for animal traditional healers to register?
- There needs to be a body that is willing to represent and further the interests of traditional healers, such as the Ethiopian Veterinary Association (EVA) which could play the lead role in supporting EVM, particularly over healer registration.
- The process of individual registration is likely to be a slow and it would be appropriate to begin with local registration of groups of healers in order to give them and their clients' confidence and recognition from the woreda authorities and possibly from the regional level. This should be discussed with the Bureau of Agriculture Veterinary Department Regional Office in Bahir-Dar and with the Woreda Office of Agriculture. At both levels there are veterinary staff who were part of the study team who could lend valuable support to the registration concept.
- Since registration has been repeatedly identified by all stakeholders as crucial to EVM promotion it needs to be acted upon as a priority. This would serve not only to encourage both healers and farmers that SC-UK is really committed to EVM promotion but also to demonstrate that there is support from the veterinary department.
- The role of SC-UK in supporting registration should be to:
 - Establish contact with the EVA and encourage them to become partners in the EVM promotion project. The role of the EVA should ideally cover the issue of national level registration as well as supporting the woreda level registration of healer groups. They would need to liaise with the national, regional and woreda veterinary departments. It would be helpful for SC-UK and the EVA to develop clear roles for each partner in EVM promotion and registration.
 - Play the lead role in seeking woreda level registration of healer groups by identifying the exact registration process, by working with the Woreda Office of Agriculture to ensure their approval of healer groups and by working with the PA local authorities to ensure that the necessary measures have been taken to allow for registration e.g. correct number of members, official positions, written "constitution" (broad aims, objectives, activities and structure of the group). More information on legal aspects can be found in section 4.2.1.1.

4.2 Results relating to the Terms of Reference

The following section addresses the actual TORs and uses the general debate on EVM promotion as a base for more specific and detailed discussion.

4.2.1 TOR 1 Promotion of ethnoveterinary practitioners

The organization of farmers would be to develop an association, either formal or informal (although the former is preferred). The association would serve as a mechanism to get farmers to address issues and, hopefully, exchange information on practices.

4.2.1.1 TOR 1.1

In discussion with relevant stakeholders (including community members), assess the desirability, feasibility and legality of organizing ethnoveterinary practitioners into associations or similar groups for the purpose of promoting ethnoveterinary practice.

Results

Desirability

The idea of forming groups primarily for healers but in some cases for farmers was repeatedly suggested by all the participant groups without prompting from the study team. However it should be acknowledged that most of the PAs had been sites for SC-UK Farmer Field Schools (FFS) which involved group formation so it is probable that there was familiarity with this approach. Nonetheless participants were able to express clear reasons and interests for group formation and obviously saw the FFS groups as having beneficial effects for their participants.

Some PAs were more cohesive than others in terms of their interest in groups and their functions, but healers had the general aim of exchanging information amongst themselves in order to improve the services they offered and to increase the level of knowledge to provide healers for next generation. They suggested that access to multi-disciplinary knowledge would increase and as an association healers could provide treatment to a larger number of animals and have increased geographical coverage capacity. In the feedback workshop for PAs in Gubalafto Woreda healers expressed an interest in exchanging herbal preparations (the product but not the plants or the recipe). In both woredas an often repeated idea was that groups would be responsible for providing a continual service with a practitioner assigned for a given time period per village. All the healers felt that the groups should be restricted to healers, mainly in an attempt to maintain the secrecy of their knowledge.

Farmers viewed groups as a positive step in helping to identify true and false practitioners as well as improving access to the range of services healers could offer. A group would provide a permanent service which was available and sustainable and which should be supported by the veterinary profession. Healers could improve their services by adopting more modern practices as used by the veterinary clinics and CAHWs.

In a meeting in Hara where three lowland PAs of Hara, Laste Gerado and Kilie-adame were represented there was no common agreement on the issue of group formation and it provoked a range of opinions. Some people exhibited interest in the concept but there was no strong confirmation of an over-riding agreement. Others preferred to stay working independently for reasons of secrecy whilst some individuals sited that they lived too far from others to be an effective part of a group.

Feasibility

The main suggestion from participants was to form groups at PA level with less formal sub-groups acting at village level. This would allow for groups to provide services to their own villages given that one PA can cover a large area. The PA group would meet regularly, for example once per month for specific activities such as training whilst the village groups would provide the day to day animal health cover. Most groups felt they would need material inputs from the government to support the group in its activities and resources such as offices, stationery, per-diems and incentives were all mentioned. On a more positive note the healers in Mekanegenet appreciated their independence and ability to support their own development. They talked of building their own offices and contributing towards the cost of furniture, office materials and technical veterinary equipment. Help from an “external” agent was also identified as essential to group development – this was either government or non governmental organisation support (NGO) support.

Key issues arose that are likely to affect the feasibility of group formation and their viability.

- **Cohesion of the group:** it was evident that there were differing levels of interest and commitment within a PA which is to be expected given individual interests. Personal gain has to be accepted as always being a major incentive however there should also be an acceptance of common or mutual benefit deriving from the group. Interests of some members could undermine the real intention of EVM promotion if they see other benefits such as financial gain (per-diems) or aspire to a key position in the group. The issue of secrecy amongst the healers was still unclear and despite the fact they indicated their willingness to share their knowledge with other group members this remains to be seen.
- **The group concept:** The study team felt that although people expressed interest in groups they may not have always fully understand what being a member of a group meant nor the purpose or the implications of forming a group. The FFS groups has paved the way for group formation but these were for a very clear purpose from the start with strong backing from SC-UK and the agriculture office. There is some evidence that a number of FFS groups started to dissolve once the activities had been accomplished. Healers’ groups are likely to have a broader range of interests and activities and therefore will need the capacity to last beyond a specific activity.

Legality

Participants requested that there should be approval of EVM from the woreda level administration to allow healers to practice freely. For an association to be legal it requires a minimum of five members. Any group should be legally recognised by the Ministry of Justice and would receive certification from the woreda level department for cooperatives and associations under the Office of Agriculture and Rural Development.

Recommendations

General recommendations on group formation

- Group formation and its long term success will be a very time consuming part of the EVM promotion since organisational development with local community groups is complicated and requires on-going support and patience. Groups often start enthusiastically only to fail after a few months through lack of understanding, lack of common goals, lack of time, lack of support from organisational development or community development experts.

- Successful groups are the ones that are given autonomy to set their own agenda, their own rules and procedures, aims and activities. They should not be forced into a certain type of structure or be given pre-set aims and activities as this will not be sustainable. They need support to be able to articulate their interests, activities and needs which again requires a significant time commitment. It has been noted in many development projects that successful groups are based upon locally defined methods of organisation rather than those set up by external agents.
- Group formation can not be done by a few training sessions, it requires regular and committed input from someone who understands organisational development and community dynamics.
- Experience has shown that being transparent from the start about inputs to a group leads to improved long term success. For example OXFAM GB in Kenya found that in their pastoral development projects in Turkana and Samburu there had been insufficient analysis of the dynamics between the implementing agency and the community such that there was limited development of local capacity, particularly regarding financial resources, to sustain activities if OXFAM were to withdraw. The later and more successful experience of OXFAM's Pastoral Development Programme in Wajir, Kenya, with community based organisations (CBOs) illustrates the point: no one in Wajir was promised individual benefits whereas in the former projects people had seen the NGO as being a source of income, making it unsustainable. Similar recommendations were made by the Netherlands Development Organisation (SNV) from their experiences of the Semi-Arid Rural Development Programme (SADERP) in Kenya. SNV emphasised that participatory planning with communities and CBOs helped them to see the project as a learning process rather than a means of receiving external financial support.
- Commitment from group members to make financial contributions is a strong indicator that the project is truly wanted and needed, and that there is a level of group cohesiveness that will ultimately be reflected in effective participation in the project implementation.

Specific recommendations on group formation

- Membership of any group must depend on the willingness of each individual to contribute to a mutual aim and actively contribute to the group. Groups should begin as informal with a limited membership depending on the size of the PA and the cohesiveness of the group. They should be interest groups with material inputs being limited to essentials and the emphasis should be on the non-material gains such as exchange of knowledge and legal recognition. This may help identify those with a committed interest in promoting EVM and weed out the "hangers-on".
- Groups should be truly representative of the healers and farmers. Local PA officials should not be allowed to take senior positions unless they are healers since this may not represent the true wishes of the group and may bias the agenda.
- Each PA has to be considered separately since the participants met demonstrated different levels of cohesion, different interests and understanding of the benefits of a group.
- In Mekanegenet, Sekota Woreda there appeared to be good cohesion between the people met, common agreement and real understanding of the benefits they could gain rather than expecting inputs from outside. This appears to be a group ready to be supported and a group size of up to 15 members could be established.

- In Wolleh, Sekota Woreda, there was less cohesion and less openness between healers which indicates that a larger group may not work at the current time. A maximum of six interested farmers and healers could be identified to be involved in field trials for plant remedies. If this group works well together they could then form the basis of a PA level group and slowly expand as other become interested. The group may evolve during the trials if the participants have the right dynamics.
- In Gubalafto Woreda there was more ambivalence regarding the benefits of groups. In Ezeit the healers had never met as a group before as they live far from one another and although most participating healers were interested in being part of a group the relationship between them would need to be developed to ascertain their common interests. In the three lowland PAs again there were mixed attitudes with greater interest being shown by younger healers. In Ahun Tegegne most healers were very secretive about their practices and though they showed interest in a group further discussions are needed to understand the group dynamics and level of cohesion.
- The appropriate legal bodies need to be consulted to confirm the process for registering a new group.

It is outside of the scope of these TORs to go into additional detail about organisational development, however it is crucial that all partners have a good understanding of the issues. Further information about organisational development can be found in the documents listed in Annex 8.

4.2.1.2 TOR 1.2

Assuming that associations of ethnoveterinary practitioners are a viable option and acceptable to local stakeholders, work with SC UK and ethnoveterinary practitioners to draft the aims and objectives of the associations, core activities over a three year period and required structure, procedures for registration and resources.

For the reasons explained in section 3 in Sekota Woreda the specific details of group formation was explored with the participants whilst in Gubalafto more general discussions were held on group aims and activities. Not surprisingly it was difficult for healers to understand the differences between aims, objectives and activities and the information collected had to be sorted accordingly.

Sekota Woreda Wolleh Healer Group

Aims

- To exchange information to improve healers' knowledge and preserve knowledge
- To provide healers for next generation.

Objectives

- To provide a better service to the community by recommending other healers from group and to help farmers accept any of the members of the group for providing treatment.
- To relieve problems of access to modern drugs through using traditional treatments.

Activities:

- Holding meetings once per month to exchange information for expansion of individual healer's knowledge
- Provide a person from group who is responsible for responding to requests from farmers to treat their livestock every day in each village

- To follow up animal on treatments to assess the results
- Record information on number and types of cases, treatments and results, and disease outbreaks and pass this to the government veterinary clinic.
- Act as a warning system on disease outbreaks to the veterinary clinic and serve as liaison to government or organisations on issues relating to animal health
- Evaluation of different treatments and monitoring by validation of remedies through field trials
- Establish local regulations regarding treatments (treatment guidelines and prices). Set payment according to ability of herbalists
- Preserve plants
- Ensure that plants are available all year by collecting during wet season to provide services for whole year.

Structure:

- There would be a PA level group with up to 24 members and then smaller village level groupings.
- The structure would have be locally registered and have official positions (chair etc) and members.

Resources:

- An office, furniture and stationery were requested.

Mekanegenet Healer Group:

Aims:

- To provide a service to every sick animal in all villages in the PA
- To increase individual member's knowledge through the group and provide a better service to the community.

Objectives:

- To advise each other and select best option for treatment through discussion.
- To take responsibility for animal health within their PA or village and liaise with the veterinary clinic on relevant issues
- To obtain legal recognition for their work
- To consider the option of charging for services if tested and approved

Activities:

- Conserve seasonal grasses and crop by-products for animal feeding and advise community on feed conservation
- Advise community on isolation of sick animals to control disease
- Document information about plants and EVM techniques to avoid disappearance of knowledge.
- Collect plants and their seeds when available and plant for conservation.
- Develop rules and regulation of group, and practice the rules
- Liaise between members, community and authority on animal health and production issues
- Report and record disease information
- Teaching and training each other and community
- Preparing training manuals

Structure:

- Only herbalists in group.
- Grouping should be per PA and members from different villages – larger exchange of knowledge.

- Five to six people per village.
- The CAHW also uses some EVM techniques and he could be the chairperson to organise groups
- Group activities will be recorded
- Members will decide on the chairperson, who will record, who will lead discussions.
- Different activities will be selected by the community per village but the leader will be per PA.

Resources:

- Participants requested provision of receipts and stamp as well as materials like overalls, goggles, scissors, sprayers, knife blades and containers for collecting plants.

Both PAs requested supported from an external agent to help them organise the group and to give it credibility in the eyes of the government and farmers.

Gubalafto

The results stem from the meetings in the PAs and the feedback workshop. The following general ideas were presented by the participants:

Aims:

- To keep animals healthy
- To deliver better service to the community and to contribute their share to government

Objectives:

- To follow up on disease situation (e.g. outbreaks)
- To expand knowledge to all farmers
- To avoid negative impressions of healers.
- To teach others and maintain knowledge from generation to generation and within the family

Activities:

- Exchange of information on plants between highland and lowland PAs
- Exchange of plants and seeds between highland and lowland PAs.
- Exchange of herbal preparations (but not the plants)

Structure:

- A maximum of 10 members with an equal number of herbalists and farmers.
- Needs a group leader and one facilitator either from project or government to help with supervision every week.
- Group leader would be contact person and provide a report to partners
- Groups should be in PAs and should include herbalists and farmers that were absent from any of the meetings.

Resources:

- It requires an office, logistics, stationary, four representatives (secretary etc.)
- Need support from external agent to organise themselves as they have no experience in group work.

Recommendations

- Each PA will have slightly different aims and activities and interests. Although the report has documented these aspects of group formation this was a first meeting to

discuss groups and the information will need to be cross-checked with them when the groups are started.

- Identifying activities: it was stated in the TORs that activities over a three year period should be planned. This was not possible given the status of people's understanding of group formation and given that most of them had not had previous discussions with SC-UK on the subject. It is proposed that the activities listed per PA are revisited with the groups when formed to agree on a time frame.
- In Gubalafto the discussions about group formation were more generalised and further time must be spent with any potential group to develop the thinking and ideas. Few activities were cited by participants and this may be an indicator that the participants need support to establish the real purpose of groups.
- Group size: The team felt that a maximum of 15 persons should start the group as this would be a manageable size. It is probable that the 24 member group suggested stemmed from the FFS group size.
- Although there is no one model which will fit every PA groups are likely to have similar structures and possibly functions. A basic structure that could be adapted for the needs of each group could look like this:
 - Members to be limited to 15 (an odd number is useful for voting issues)
 - Elected positions for chair, secretary, treasurer. These could be elected every year or every two years depending on the choice of the group
 - Members must be willing to support the group, for example, by actively participating in all the meetings, taking decisions, contributing information and ideas, and if necessary making a small financial contribution to enable the group to purchase basic items (pens, books for recording minutes and accounts).
 - A simple constitution should be agreed by the members, that sets out the aims, objectives, key activities, structure, resources, membership and rules of the group. This need only be two pages and should be read back to non-literate members for approval and signing (or thumb prints).
 - The constitution can be used a guide for the group as it attempts to initiate activities. It may be necessary to re-visit the constitution after the first year when the group is stronger and clearer about its goals.
 - A group should be encouraged to meet regularly to develop its dynamics and cohesiveness. Since a PA can cover a large area monthly meetings are likely to be appropriate and should be attended by the relevant SC-UK and Office of Agriculture staff. Meetings should be led by the group but with guidance from the external participants. As group confidence increases over time external support will start to diminish but it could take at least one year of full time support.
 - Basic training in group management should be provided at an early stage. This should cover topics such as how to organise and run a meeting (planning, timing, setting the agenda, recording minutes, decision taking, action points), management of financial resources, planning and implementing group activities, monitoring and evaluating group activities.
 - If the group members wish to have weekly or two weekly meetings at village level they should be encouraged to do this. The aims of such meetings may be to further discuss issues from the monthly meetings, inform community members about group activities, and to discuss new ideas or problems. These meetings could be informal and would not necessarily need external support.
- Inputs for groups: Whatever the case it is important not to start with inputs despite the fact that all the groups we met (apart from Mekanegenet) asked for materials, income

and an office. A per-diem for attending training should be considered if it is taking people away from other productive activities but the IPM FFS experience should be used to decide on this issue.

- Plant preservation: This was prioritised by healers as a key group activity and thus was explored in greater detail. The following options were suggested by the healers:
 - Planting back yard nurseries with plants that are either hard to find during dry season for those that are becoming rare. The team suggested that this activity could be undertaken with the SC-UK Integrated Pest Management/Integrated Crop Management (IPM/ICM) project as it has already begun such nurseries.
 - For areas like Mekanegenet which is very dry backyard nurseries will not be possible so a communal area near a stream or river should be chosen.
 - There are areas in the forest which are set aside for conservation and maybe plants could be grown there.
 - There could be exchange of actual plant material as well as information between highland and lowland (this was put forward by Gubalafto participants). Many plants are found in the lowlands for this area and highlanders have to travel far to collect them.
- Data recording: healers are willing to act as disease information recorders and pass this information onto the veterinary clinic. They could collect data on the cases they treat and the outcomes, as well as information about disease outbreaks. Healers were keen to liaise with the veterinary clinics which is a positive step in creating good relations between healers and the veterinary department. The veterinary clinics should be encouraged to see the healers as partners in the control and prevention of animal diseases and welcome their willingness to work together.

4.2.1.3 TOR 1.3

Identify training needs with ethnoveterinary practitioners and develop a training plan and outline of training to be conducted. If feasible, conduct training sessions with ethnoveterinary practitioners during this assignment.

Results

Farmers and healers requested training in modern techniques as well as means of improving their own practices. Training was also described as a moral incentive since it gave credit and recognition to practitioners, and it was considered that training would help healers to use their herbs uniformly (preparations and dosing). Many healers were willing to provide training to other healers and farmers, though this was mostly seen as an activity within the group. The most skilled healers should be expected to teach others and select the best approach for group e.g. a remedy for wound treatment would be presented by each healer, verified and the best ones selected. Participants expected government or organisation to arrange trainings and also anticipated receiving a per diem to compensate them for time lost for other productive activities. They suggested trainings could be provided during the quiet time after the harvest (November-February). Farmers felt that providing them with training in EVM would allow them to be seen as healers and develop a further source of income.

Types of training requested:

- Validation of plants and how to prepare plant remedies uniformly
- Plant cultivation and conservation
- Plant collection, preparation and storage of remedies
- Follow up of cases after treatment

- Zoonotic diseases and their transmission and prevention
- Data recording
- Training in which treatment to give for a particular condition (modern or traditional or both).
- Modern techniques (drenching, correction of dystocia, injections), equipment and materials

Recommendations

- Training could be done as an informal sharing of information and demonstration between modern and traditional practitioners on a selected subject (e.g. control and prevention of zoonotic diseases, correction of dystocia). The local vet department and CAHWs should be involved as much as possible in training to foster good relations with healers and farmers. Further information on approaches to training is found in section 4.1.1.
- Any technical staff who are to be trainers should themselves receive training in participatory training technique.
- Other areas of training that would be useful would be collection of plants, preparation of remedies, hygiene, and sterility for surgical procedures.
- There is a need to investigate healer practices e.g. drenching techniques, to identify training needs in greater detail. This could be done through participatory training or simply spending time working with the healers.

4.2.2 TOR 2 Participatory research on ethnoveterinary medicines

To develop a program of field trials on ethno vet medicines. SC UK had a previous ethnovet project in which ethnovet medicines were identified but never developed field trials. Also, ethnoveterinary practitioners may share some of their medicines and developing field trials of these should be included in the project.

4.2.2.1 TOR 2.1

Introduce stakeholders to the general concepts of participatory research on animal health problems and provide examples of such research from Ethiopia (or elsewhere); equip stakeholders with relevant reports and other materials.

Results

- SC-UK staff, animal health staff: SC-UK staff were familiar with the concept mostly through the FFS experience although they had not been involved in any participatory research for animal health. Woreda veterinary staff were also very familiar with the concept but lacked the field experience. Throughout the period of the consultancy the issue of farmer participatory research (FPR) was discussed and developed with several key documents being distributed (Annex 7).
- Farmers and healers: most had experience of the FFS approach but were unfamiliar with FPR. However the FFS activities had laid the foundations for introducing FPR and there appeared to be good understanding of the approach.

Recommendations

- Two members of the study team, Dr. Alekaw Sinshaw and Dr. Araya Mengistu are very familiar with participatory research as well as having a keen interest in the subject of EVM and its promotion. They could be valuable advisers to SC-UK on the EVM project and key trainers in FPR.

- Farm Africa has a wide body of knowledge on FPR which should also be consulted.
- Links could be made with other organisations, projects and individuals in the region such as the Intermediate Technology Development Group based in Nairobi. The Vetwork UK website has a number of reports and documents concerning EVM. A list of useful contacts is set out in Annex 8.
- SC-UK obviously has good experience in FFS which should be used to support the EVM activities. Other areas of internal expertise in participation, community development and training should be identified and exploited.

4.2.2.2 TOR 2.2

With stakeholders, review the available survey report on ethnoveterinary practices and identify priority local treatments (anticipated number treatments may be between 3 and 10 but to be identified during assignment) which require validation via participatory research with healers and farmers. Work through confidentiality issues with ethnovevets and address issues that would lead to sharing of (some) medicines by the ethnovevets.

Results

It was only possible to conduct this activity in Sekota due to the lack of base line data in Gubalafto. Initial attempts were made to collect information on key diseases in Gubalafto but information on plant remedies was not collected. It was decided that trials should focus on chronic diseases, in particular endo and ectoparasites. Acute diseases such as anthrax and blackleg are difficult to trial as they are sporadic, only a few animals may be affected and there is an ethical issue that the animal should be treated immediately with the best available drug rather than being used for research purposes. In addition to this there are difficulties in confirming certain acute diseases due to a lack of adequate laboratory facilities in trial areas.

Fortunately endo and ectoparasites were often sited by the farmers and healers as being of major importance. The healers and farmers identified a number of priority diseases that can be treated confidently with plants as shown in Annex 3. The diseases were then prioritised according to the feasibility of researching treatments through field trials.

Wolleh PA

Condition	Number of plants identified	Trial
Mange in goats	4	Yes
Ticks in ruminants	3	Yes
Emaciation due to GITP* in young ruminants	5	Yes
Lice in calves, kids, lambs	2	Yes
Leeches in cattle	None	Need to establish importance
Strangles in equines	None	Need to establish importance

*GITP = gastrointestinal parasites

Mange is a problem from September to May so there is a good time period over which trials could be undertaken. Ticks have a more specific season so the timing of trials would be more limited.

Conditions to be researched through field trials

- Mange was selected as the first disease to be trialled due to its importance, availability of affected animals for trials and the time factor. Four plants were listed as being used for treatment; *Aloe species*, *Calpurnia aurea*, *Calotropis procera*, *Agave sisalana*. Healers expressed a slight preference for using *Aloe species* but further discussions would be needed to assess availability and seasonality in order to select one plant.
- Ticks or emaciation due to gastro-intestinal parasites would be the second option for trials due to the number of animals affected
- For lice there is a very effective treatment but there may be problem of getting enough animals.

Mekanegenet PA

Condition	Plants identified	Trial
Mange in shoats	1	Yes
Ticks in cattle	1	Yes
Lice in young ruminants	2	Yes
Fleas in kids	1	Yes
Leeches in cattle	3	Yes
Pink eye in cattle	2	Difficult as acute condition

In Mekanegenet it was extremely difficult to give a scientific name to the plants that were described since the local names did not correspond to those in the original EVM study. This may have been due to use of different languages – Agewgna is spoken in Mekanegenet but the names in the report may be in Amharic.

Conditions to be researched through field trials

- Tick infestation is a problem throughout the year and is regarded as of great significance by farmers.
- The plant for treating ticks “Batiqua” (local name) is readily available.
- Mange could be the second condition to be researched.

Recommendations

- Trials should start with a commonly known remedy due to secrecy issues with some healers and if trials are successful this may encourage them to volunteer information. Some healers are willing to pass information on a one to one basis to a non-healer which is useful for documentation but not for trials.
- As has been mentioned identification of local plants and diseases in Mekanegenet proved complicated due to the local language “Agewgna”. Any plants that undergo trial validation will need to be sent to the National Herbarium, Addis Ababa University for scientific identification. A minimal fee is charged for this service.
- The same disease name is often used by different communities for different conditions. Their descriptions of the diseases are very detailed and hence allow the disease to be allocated a scientific name but this does demonstrate that EVK cannot simply be assumed to be the same from one PA to another. Any previously collected information that is to form the basis of future work has to cross checked and a definitive diagnosis reached for each condition. The compilation of disease dictionaries, remedies and practices per PA would be a very valuable source of information for promotion of EVM.

- For each condition that is selected for a trial there are options for primary trial follow on:
 - Either try different dose levels with the same plant
 - Or could try a different plant for the same disease
 - Or use polybotanical preparations (several plants in one remedy)
 The choice will depend on the results of the trials and the farmers' priorities.
- Selection of animals should allow for a range in severity of lesions. There may be a range in response rates to a certain remedy depending on the severity of the condition.

4.2.2.3 TOR 2.3

Formulate a detailed participatory research protocol for testing the five local treatments identified in 2.2. The protocol should include the following information:

- *treatments to be tested*
- *testing procedures, including numbers of animals in treatment and control groups, systems for scoring clinical signs and lesions for use by farmers, healers and vets, duration of trials, etc.*
- *roles and responsibilities of different stakeholders; time and resource inputs required from each stakeholder*
- *ownership of results and reports arising from the research*
- *timeframe and workplan*

Results

The basic protocol is set out in Annex 4.

Advantages of protocol:

- Limited specialist equipment or facilities are required and therefore the method can be conducted with a modest budget.
- It is simple.
- The method is flexible. This list of clinical signs can be changed according to the experience of the researchers, and can be easily adapted to other diseases.
- It also allows for comparison between the modern conventional drug and the plant remedy

Disadvantages of protocol:

- The researchers require good organisational skills.
- Good communication and cooperation from livestock owners is needed.
- It requires experience of setting up and implementing field trials, and good clinical and laboratory diagnostic skills.

Recommendations

- Animals will remain with their owners during the trial i.e. they will not be bought. The intention is to undertake field research under local environmental and management systems.
- There should be an agreement that all control animals will receive either traditional or modern treatment at the end of the trial, depending on the farmer's choice. There was some resistance met over the supply of control animals and this system may encourage farmers to supply animals. There could also be a type of insurance policy that animals that die during the trial would be compensated though this would need further discussion to avoid control animals mysteriously dying.

- As with any trial work things can go wrong – this must be factored into the planned work and trials may need to be repeated. Once a trial has been undertaken with good results further trials could be done to investigate dosage levels e.g. have three groups with low, medium and high dose treatments in order to be able to recommend the best practice.
- Trials – the techniques, protocol and general issues surrounding implementation need to be practiced and people have to gain confidence to undertake them effectively. We suggest that SC-UK should start with one trial in a PA that is close to Sekota – Wolleh. The reasons are as follows:
 - Ease of access for SC-UK, woreda veterinary staff
 - Plants for trials are readily available all year round
- A trial could be started with up to six keen individuals without the need for the lengthy process of cohesive group formation. It may then identify those who are really interested in promoting EVM and those who are expressing interest for other reasons (per-diems, official position within group etc.)
- Mekangenet could then be selected depending on the logistics –it is far from Sekota and will need a considerable time commitment from all involved, especially the woreda veterinary staff. It takes up to 2 hours to travel there and during a trial it will be necessary to observe the animals every 4-5 days.
- Validation: validation can take place at various levels depending on the need. For example one of the purposes of validation is for the veterinarians to be able to support the use of a validated plant remedy. If the veterinarians and the government veterinary department feel that positive field trial results are sufficient then this level of validation may be all that is required. However they may feel that further steps are needed to analyse a plant in order to identify its active ingredients and any possible toxicity problems. If this is the case then pharmacological analysis will be required. This can be done through the Science Department of Addis Ababa University, with the Kombolcha Regional Veterinary Laboratory acting as the linking body. It is worthwhile noting that in the *Proceedings of a workshop on the development and utilisation of herbal remedies in Ethiopia, Nazareth 4-6 June 1996, Ethiopian Health and Nutrition Research Institute*, the World Health Organisation advice on validation of medicinal plants was that if a plant has been in long term use (i.e. many years) without evidence of safety problems this should form basis of risk assessment – i.e. there should be no restriction on its use.
- Roles and responsibilities: Setting up the trials will need the supervision of a veterinarian who has field research experience and who also is very familiar with the requirements of trials. It is recommended that Kombolcha Laboratory could appoint a veterinarian who could supervise the first trial working closely with the woreda veterinarian. This will help give the woreda vet confidence and will identify any problem areas with the trial and necessary changes. It would be possible for the supervising veterinarian to provide training in basic laboratory tests to staff in Gubalafto and Sekota veterinary clinics at the same time. This training could take place in Woldia. More detail on roles and responsibilities can be found in section 4.2.2.5.
- Resources: the trials are simple so limited expenditure will be required. However it is essential that the veterinary clinics have the basic equipment for undertaking the necessary laboratory work to give a definitive diagnosis on trial animals. Cases of mange have to be skin scrapped and the scrapings examined under the microscope for positive identification of mites. Faecal egg counts have to be established for cases of

internal parasitism. For the diseases that have been selected the equipment needed is basic. Other resources include the cost of treating the control group and any treatment animals that have not responded to the plant remedy with a modern drug, compensation for any animals dying during the trial, cost of seconding a veterinarian from Kombolcha Veterinary Laboratory to coordinate and supervise the trials and logistics such as transport.

- Ownership of results: any information that arises from the research should be jointly owned by the participants (healers, farmers, veterinary staff and SC-UK). The information on plants and local diseases should be credited only to the healers and farmers from the relevant PA. This was discussed with the participants and in the two PAs there was general agreement.
- An activity plan for each woreda can be found in section 5

4.2.2.4 TOR 2.4

Based on 2.3, identify training needs for farmers, healers and vets to ensure proper implementation of the participatory research projects.

Recommendations

Training has been assessed on the basis of the training needs identified for TOR 1.3 as well as for the participatory research. The following training is needed for SC-UK staff, veterinary department staff and any extension agents/community development staff from the Bureau of Agriculture:

- Training of trainers: this should cover the concepts of adult learning, participatory training techniques, facilitation, communication and attitudinal issues. It is particularly important that any veterinary staff should receive this training as they are likely to be the providers of technical training to healers and farmers and their approach is crucial if they are to develop good relations with these groups.
- FPR: this should cover the concepts of FPR and its application in the case of EVM. It should include specific training on the implementation of the trial protocol for the technical staff such as veterinary clinic staff.
- It is recommended that the SC-UK and veterinary staff trained could then provide training to the trial participants (farmers, healers, CAHWs) in the basics of FPR and implementation of the trial protocol. Any technical training for the trial should also cover the basics of the disease, its transmission, control and prevention. Though farmers and healers already have detailed knowledge of disease this training will supplement their knowledge and will also provide the veterinarians with the opportunity to gauge the level of knowledge and learn themselves about local perceptions of disease.
- Training is needed for the veterinary clinic staff on laboratory tests for the selected diseases.
- Training providers:
 - It may be possible for SC-UK to provide in house FPR training. If not Farm Africa is one suggested provider and this organisation can also provide training of trainers courses.
 - A research veterinarian would be required to provide training in the trial protocol and its implementation to the staff and help with farmer training for the first trial

until the local veterinary staff is very confident with the trial protocol. This could be provided by Kombolcha Laboratory.

- This veterinarian could also ensure that the veterinary clinic staff knowledge of the diseases to be researched is adequate before they provide training to farmers and healers.
- Laboratory training could be provided by the Kombolcha veterinarian.

4.2.2.5 TOR 2.5

Based on the outcome of 2.3, work with SC UK to draft a Memorandum of Understanding between the different stakeholders to be involved in the participatory research

Recommendations

SC-UK will need to agree a Memorandum of Understanding (MoU) between the Veterinary Department of the Bureau of Agriculture and Kombolcha Regional Veterinary Laboratory. The contents of the MoU should be based on the proposed roles and the responsibilities as set out below. The Sekota Agriculture Research Centre does not have any involvement in animal health work but it would be useful to keep them informed of the work as they may be able to contribute experience about the application of FPR. Any research undertaken would need to be recognised by the Amhara National Research Institute, as the mandated regional institute. Equally the Regional Bureau of Agriculture should be kept informed of activities through regular meetings but an MoU would probably not be required unless they wished to play an active role in the project.

➤ Roles and responsibilities:

SC-UK

SC-UK will take the lead role in coordinating the EVM promotion project working closely with the veterinary staff from the Woreda Office of Agriculture and Rural Development and the Kombolcha Regional Veterinary Laboratory. It will be responsible for developing and ensuring that all partners are agreed and clear on their roles and responsibilities.

- The SC-UK Agriculture Officer for Sekota should be the overall coordinator of the EVM promotion project including group formation and trials (planning, organising, logistics, provision of equipment, financial support etc) in this woreda. He/she should be the lead facilitator for the local group formation working closely with the Bureau of Agriculture Extension team if appropriate.
- He/she should also work closely with the veterinarian from Kombolcha Regional Veterinary Laboratory to provide training to trial participants in the basics of FPR and its uses, provide support for the laboratory training and help develop further research.
- SC-UK should be responsible for funding the research and training, providing staff and also for logistical support.
- In Gubalafto this work would fall also under the SC-UK Agriculture Officer.
- It should be noted that the team had serious concerns about the human resources available within SC-UK to undertake the EVM project and also the time available to the woreda vets to play their key role in this work. The SC-UK agriculture officer in Sekota, under whose remit this falls already has many work commitments and it remains to be seen if he can allocate sufficient time to this new activity. It may be possible for him to manage if the work is limited to one PA but scaling up will probably require an additional staff with sole responsibility. Equally the lack of technical veterinary expertise within the organisation is likely to prevent scaling up – short term contracts with Kombolcha to second a veterinarian may be the best means of conducting a discrete number of trials but this arrangement may be too inflexible to undertake

wider work. If the woreda veterinarians have sufficient time they may be able to coordinate trials once they have been trained and had experience of running several trials. However discussions led the team to believe that the veterinarians would not be able to dedicate sufficient time on a continual basis and therefore SC-UK should consider employing a veterinarian to coordinate all the EVM work if it wishes to implement the activity in both woredas and in all the five pilot PAs.

Woreda Veterinary Department

- It is anticipated that the woreda level veterinarian and his/her assistant will play a lead role in the trial work.
- They will train the trial participants in the protocol and the diseases to be researched.
- They will be responsible for working with the farmers and healers to identify the animals for the trial, undertaking presumptive and definitive diagnoses on them, implementing and supervising all aspects of the trial.
- They will also provide any necessary care and treatment to the animals during and at the end of the trial (though this also could be done by the CAHW).

The veterinarian who will undertake the trials must be proficient and confident in the use of the relevant laboratory tests and the clinical diagnosis of the diseases. There must be good interest in doing this work as the diagnostic work may be fairly tedious (e.g. examining 20 faecal samples every 5 days for worm eggs for 3 to 4 weeks). He/she must also have a strong background in EVM, its research and application.

This has not yet been discussed with the Woreda Office of Agriculture and Rural Development and will require follow up by SC-UK to ascertain woreda veterinarian availability. Woreda veterinarians and their veterinary assistants could also provide training to healers and farmers in agreed technical subjects as set out in section 4.2.1.3.

Kombolcha Regional Veterinary Laboratory

- Could provide a veterinarian to coordinate the field trials and provide any necessary training. SC-UK may be able to arrange short periods of secondment such as five weeks to allow for training and a trial. SC-UK would be responsible for paying the salary and other costs during this time.
- Kombolcha is able to undertake the simple statistics needed to analyse trial results.
- Kombolcha could also provide training in basic parasitology for the woreda veterinarian and the veterinary assistance if necessary prior to the trials
- Can assist with *in vivo* and *in vitro* trials when appropriate on selected plants.
- Could assist with laboratory examination of plant constituents by linking with the Science Faculty in Addis Ababa University once a plant has undergone successful field trials through FPR.

Farmers

- Participate in training prior to trials
- Help with selection of plant to be trialled
- Help with selection of animals for the trial and provision of animals for trial
- Participate in all aspects of trial – clinical scoring, evaluation of remedies, further work.
- Reporting any trial animals whose condition is deteriorating or that has died

Healers/Farmers

- Participate in training prior to trials

- Help with selection of plant to be trialled
- Help with selection of animals for the trial
- Preparation of remedies and application,
- Participate in all aspects of trial – clinical scoring, evaluation of remedies, further work.
- Reporting any trial animals whose condition is deteriorating or that has died

5 ACTION PLANS

5.1 General Action Plan for SC-UK

1. Present the EVM project to the Woreda Offices of Agriculture and establish areas of partnership and collaboration, including involvement of woreda veterinary department staff and any extension staff. Develop and agree MoU. Agree on PA level action plans.
2. Establish links with Kombolcha Regional Veterinary Laboratory to discuss areas of collaboration including secondment of a veterinarian. Develop and agree MoU.
3. Present EVM project to the Regional Bureau of Agriculture and establish role of Bureau and system for project feedback and information exchange.
4. Identify SC-UK internal expertise in relevant skills: community development, organisational development, participation, FFS/FPR, training of trainers. Decide how these skills could be used to benefit the EVM project e.g. provide training to field staff, provide training to healer groups, support group development,
5. Identify external training inputs to complement SC-UK internal expertise.
6. Develop training plan for key SC-UK field staff, Woreda Veterinary Department and Agriculture Office Extension staff (if relevant). Training to include Community Development, Training of Trainers (to include Adult Learning and Communication), FPR. Training needs to be done before group support and FPR activities are initiated.
7. Present EVM project to research centres such as the Amhara National Research Institute and the Sekota Agriculture Research Centre.
8. Start to implement individual woreda action plans as under section 5.2 and 5.3.
9. Identify exact procedure for registering PA groups at woreda level and ensure that healer groups can be legally recognised at this level.
10. Establish links with EVA to present EVM project, discuss areas of collaboration and possible lead roles for the EVA (e.g. national level registration of healers, support to woreda level registration of healer groups, endorsing positive trial results for validation, developing links with Regional Bureau of Agriculture).

5.2 Action Plan for Sekota

1. Present results of study and decisions taken about key activities to Wolleh and Mekanegenet participants
2. Wolleh: Identify a small group of healers and farmers interested in EVM promotion and FPR. Provide training in FPR, diseases to be trialled, trial protocol

- Undertake field trial, analyse results, decisions on use of trial results (further trials needed, how information should be disseminated to other farmers and healers, and to veterinary profession).
 - Following trial attempt to support trial farmers and healers to form small group, working with them to develop clear understanding of the possible functions of a group, members' roles and responsibilities, aims, objectives and activities.
 - Encourage other interested farmers and healers to join to group up to a maximum of 15 people
3. Mekanegenet:
- Group formation appears to be an easier issue with strong group cohesion already existing. This should be developed as soon as possible to maintain momentum.
 - Although for the previously stated reasons a trial will not be done in this PA initially support to group formation should go ahead as the lead activity.
4. For both PAs:
- Once there is evidence of group cohesion and request from a group to support them the following activities should be undertaken:
- Finalise the aims of the group, key activities and timing, members, procedures, structure, roles and responsibilities, resources. This will be based on the information under section 4.2.1.2 but will need verification and further discussion with the final group.
 - Help the group to initiate some activities fairly quickly in order to keep up the motivation e.g. arrange a meeting for exchange of information with the local woreda vet staff on an area of interest such as dystocia. This will show commitment and interest from the veterinary department.

5.3 Action Plan for Gubalafto

1. The team recommends that SC-UK selects one lowland and one highland PA. Again this is mostly due to the human resource issue and the learning process of promoting EVM. For ease of access Hara and Ahuntegegne were suggested.
2. An extensive data collection project was undertaken by the Kombolcha Regional Veterinary Laboratory together with the veterinary department during 2002 but the information is still not available as a report due the vast amount of information collected. Although the PAs covered by this study did not include SC-UK's pilot PAs the data would be useful as baseline material. The research officer from Kombolcha who was part of this study team agreed that it may be possible to extract the questionnaires for Gubalafto Woreda for SC-UK. This should be followed up by SC-UK.
3. Whilst baseline data on EVM is being either cross checked or collected depending on the availability of the Kombolcha study, group support activities could be started.
4. Baseline information on diseases and treatments can be collected in a concentrated way that may only take a few days in each selected PA as long as it is done when farmers have time – hence after harvest would be a good time to start. This will require a veterinarian, either from the woreda or Kombolcha.
5. Once the key diseases and remedies have been identified a trial could be started fairly quickly as long as the suggested trainings have been provided.

6. Group support: this could be started even without disease and EVM baseline data. More work needs to be done in both PAs but particularly Hara to identify a cohesive group. There appeared to be quite a lot of secrecy even between healers, and peer groups would need to be identified through on-going discussion. In Hara a maximum of 10 people should start the group as suggested by the Hara participants to attempt group cohesion.

6 Debriefing and feedback meeting for SC-UK staff and the Bahir-Dar Bureau of Agriculture Veterinarian

Some key questions arose which are addressed below. General comments from the debriefing can be found in Annex 6.

Q. Will group formation, sharing and documenting of information on plants destroy the position of healers in terms of their specialised knowledge and their income ?

This is unlikely since all the healers were clear that there were certain remedies that they would never divulge. They suggested that EVM promotion would best be done through sharing of information amongst themselves. However even if information was to become more widely known, one should also consider the situation regarding CAHWs and animal health workers. The information that allows them to fill these positions is widely known and does not undermine their activities because they have official recognition within the community but more importantly from the relevant authorities which allows them and not others to practice. The local and national level legal recognition of healers might also help to maintain their positions.

Q. How would the EVM project link with the government extension services ?

If local extension services have the capacity they should play an active role in supporting group formation and disseminating results of field trials. If their capacity is limited the EVM project provides an opportunity for SC-UK to develop their skills though this will require a time commitment.

Q. How many CAHWs are traditional healers ?

One of the CAHWs met used some traditional practices but most only used modern treatments. This was partly due to the fact that the original criteria for selection of CAHWs within the SC-UK livestock project did not include knowledge or use of EVM. This policy was changed during the project.

Q. Will promotion of traditional healers and their practices undermine the CAHW system that SC-UK has helped to establish ?

It seemed that there was generally good support from the CAHWs for EVM and its promotion. CAHWs were aware that they can only cover a certain area and number of animals and there is a need for a more extensive service. Certainly if a CAHW is perceived as providing a poor service the community may stop using him/her in favour of traditional healers but this is about market forces and quality service. One benefit of EVM was that it was accessible for remote areas when CAHW and government services were not. Another benefit was that it was free which allowed all sections of the community access to some level of service, with a choice for those who could afford it.

7. CONCLUSION

The initiative taken by SC-UK to support EVM can be considered as very progressive and may have the potential to influence animal health professionals, government and other organisations involved in this sector. There still only limited references to validation of plant remedies for livestock and though there is a wide body of documented knowledge on EVM this often resides in reports and documents but fails to be disseminated to

practitioners and farmers. The interest in EVM has often been academic as demonstrated by the relative paucity of projects to promote the use of EVM and find ways for it to complement the modern delivery system. In order to influence key people and potentially animal health policy it is important that any validation work is undertaken thoroughly and scientifically, in the sense that trials must be seen to follow a standard protocol under the supervision of experienced veterinarians. Otherwise any results may not be taken seriously by those who the project is seeking to influence.

It has been three years since the EVM study was undertaken in Sekota and there has been no further work done on this component. In order to get the EVM project started it requires intensive and continuous discussion with the communities to ascertain the individuals who are interested, encourage wider interest, understand healers and farmers interests, foster good relations with the community and help develop relations between the veterinary department, CAHWs, healers and farmers. The same issue applies for Gubalafto Woredas where this work was the first introduction to EVM promotion for the participants.

It will also be important to understand how communities distinguish between healers and farmers, or whether the distinctions are in fact blurred. From these discussions it seemed that healers were people who had secret remedies, were acknowledged as having specialised knowledge in herbal medicine and indigenous diseases, and who offered services to others as opposed to using commonly known remedies and only treating their own animals. Since some farmers did express an interest in developing their EVM knowledge and skills, with the potential to earn an income it would be interesting to know how these farmers would be viewed by other farmers, and whether they would request their services.

Plant conservation is rated as essential by the communities met for the continued use of EVM. Since SC-UK is already looking at this issue for the ICM/IMP activities it would make sense to combine this activity and make use of the technical crop and plant expertise within the organisation.

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Annex 1 Terms of reference for the promotion of ethnoveterinary medicine through farmer associations and participatory research.

Consultancy work for the R2D Project, SC-UK, Ethiopia

1. Background

Livestock owners have been concerned about the health of their animals since the inception of domestication. Though difficult to indicate the exact date of its beginning, traditional animal health care is believed to have been in practice long ago in the country. Therefore, before the introduction of modern veterinary medicine, livestock owners depended solely on indigenous animal health practices. But thereafter, the people have shown dependence on modern veterinary medicine and attempted to disregard traditional medication. This has resulted in failure of the latter to solve the majority of animal health problems due to its inadequacy/small geographic coverage.

Because of the fact that Save the Children as part of its phased out project, Community Livestock Development Project which was sponsored by EU, had conducted an extensive survey to collect data on Ethnoveterinary¹ knowledge of traditional healers and use of herbal medication in North Wollo and WagHamra zones. The overall purpose of the survey was exploring and assessing the potential of the knowledge for dissemination as complementary to the existing governmental veterinary services. The survey was conducted in seven woredas of the two zones. Sekota woreda was one among the Seven. However, Gubalafto was not included in that but was included in the other survey separately done by Kombolcha animal health laboratory under the Bureau of Agriculture.

As it was indicated in the survey, identified problems in the current practices of ethnoveterinary medicine is declining of medical plants and local healers which pose the treat in the future sustainability of Ethnoveterinary in the areas. Moreover, the survey has indicated the existence of the potential of huge knowledge in this regard. Nevertheless, the traditional healers in the areas do not want to appear themselves for fear of two important reasons if not well recognized:

- They do not have adequate knowledge to treat as many cases as possible in the face ever changing and/or increasing disease conditions
- There is prejudice from modern vet scientists ("do not prescribe your 'generic' local drugs without adequate diagnosis and known the exact dosage")

This consultancy work will therefore focus in the two R2D woredas (Sekota and Gubalafto), that have been financed by USAID for three years from Nov2002 to Oct2005. The purpose of this component, ethnovet of the Relief to Development (R2D) project is therefore to carry out farmers' participatory research on ethnoveterinary knowledge of traditional practices and promote the use of local curative measures to be integrated in to the modern vet extension system in the two woredas. The survey recommendation also depicts that "*the Ethnoveterinary practitioners also need recognition, training, and technical support enabling them to be fit for the existing animal health service delivery system*".

Thus developing extension guideline and curriculum of FPR/FFS on ethnovet becomes very crucial and that organizing and recognizing the traditional healers to contribute their share in promoting the knowledge on sustainable way will be the overall goal of the work.

¹ Mathias-Mundy and McCorkle (1989) have defined Ethnoveterinary medicine as dealing with 'folk beliefs, knowledge, skills, methods and practices pertaining to the health care of animals.

2. Purpose of farmer groups

In the rural kebeles of Gubalfto and Sekota woredas, it is not uncommon to see people with indigenous/traditional knowledge, which the villagers call "*wogeshas*" literally mean bonesetters. Therefore organizing in groups the said traditional healers and allow them to do participatory research would enable them develop confidence and conserve the knowledge as well as the useful herbs used as curative medication in their localities.

Moreover, the group learning exercise will help the farmers to:

- Develop farmers' livestock diseases occurrence learning skills; mainly critical/accurate observation and good/comprehensive record keeping
- In groups, test the efficacy of local drugs for the identified diseases through participatory research
- Make dosage and ingredient verification of the heretofore known drugs to improve its efficacy and minimize side effects with support rendered from veterinary laboratory.
- Enhance learning by doing and cross-fertilization of the various knowledge and practices among the group in the field.

3. Objectives and outputs of the consultancy

- 3.1 Assess the feasibility and need to establish farmer groups for the promotion of ethnoveterinary medicine and based on the assessment, provide initial organizational support and training to these groups as appropriate.
- 3.2 Develop a programme of participatory research with farmer groups to test ethnoveterinary medicines.

4. Tasks

Under the overall support of Relief to Development Project (R2D) and Addis level food security staff, the consultant will work together with the Agricultural Project officers, concerned line department partner staff and other stakeholders to undertake the following tasks:

4.1 Promotion of ethnoveterinary practitioners

The organization of farmers would be to develop an association, either formal or informal (although the former is preferred). The association would serve as a mechanism to get farmers to address issues and, hopefully, exchange information on practices. SC UK staff advise that ethnoveterinary practitioners are willing to share some, but not all, of their trade medicine recipes.

- 4.1.1 In discussion with relevant stakeholders (including community members), assess the desirability, feasibility and legality of organizing ethnoveterinary practitioners into associations or similar groups for the purpose of promoting ethnoveterinary practice (NB this could be done through a stakeholder workshop(s))
- 4.1.2 Assuming that associations of ethnoveterinary practitioners are a viable option and acceptable to local stakeholders, work with SC UK and ethnoveterinary practitioners to draft the aims and objectives of the associations, core activities over a three year period and required structure, procedures for registration and resources.
- 4.1.3 Identify training needs with ethnoveterinary practitioners and develop a training plan and outline of training to be conducted. If feasible, conduct training sessions with ethnoveterinary practitioners during this assignment.

4.2 Participatory research on ethnoveterinary medicines

To develop a program of field trials on ethnovet medicines. SC UK had a previous ethnovet project in which ethnovet medicines were identified but never developed field trials. Also, ethnoveterinary practitioners may share some of their medicines and developing field trials of these should be included in the project.

- 4.2.1 Introduce stakeholders to the general concepts of participatory research on animal health problems and provide examples of such research from Ethiopia (or elsewhere); equip stakeholders with relevant reports and other materials.
- 4.2.2 With stakeholders, review the available survey report on ethnoveterinary practices and identify priority local treatments (anticipated number treatments may be between 3 and 10 but to be identified during assignment) which require validation via participatory research with healers and farmers. Work through confidentiality issues with ethnovets and address issues that would lead to sharing of (some) medicines by the ethnovets.
- 4.2.3 Formulate a detailed participatory research protocol for testing the five local treatments identified in 2.2. The protocol should include the following information:
 - treatments to be tested
 - testing procedures, including numbers of animals in treatment and control groups, systems for scoring clinical signs and lesions for use by farmers, healers and vets, duration of trials, etc.
 - roles and responsibilities of different stakeholders; time and resource inputs required from each stakeholder
 - ownership of results and reports arising from the research
 - timeframe and workplan
- 4.2.4 Based on 2.3, identify training needs for farmers, healers and vets to ensure proper implementation of the participatory research projects.
- 4.2.5 Based on the outcome of 2.3, work with SC UK to draft a Memorandum of Understanding between the different stakeholders to be involved in the participatory research

Deliverables

The consultant will a comprehensive report to SC UK detailing the processes and outcomes arising from TOR described above.

5. Timing

The contract duration of consultancy work will take around 15-20 days. The consultant will spend half of the duration in Sekota and the other half in Gubalafto woreda. At the final stage of the contract, the report will be presented to work shop participants and the final version incorporating comments and suggestions of the report will be submitted to SC-UK Addis office not later than 15 days of the feed back workshop.

6. Qualification

The consultant should have the following

- Minimum of masters degree in Veterinary , Livestock production or related subject
- Minimum of five years working experiences and had consultancy experiences in the same field and exposure in Participatory Farmers Research (FPR)
- Good report writing skills
- Fluent in spoken and written English. Spoken Amharic is considered as advantage.

Annex 2 Itinerary

Date	Places visited	Overnight
24/09/04	Fly Nairobi-Addis; briefings with SC-UK staff Wondwessen Delelegne, Dr. Fantahun Assefa, Catherine Fitzgibbons.	Addis Ababa
25/09/04	Review project and other key documents; meet Dr. Berhanu Admassu, AU-IBAR CAPE project.	Addis Ababa
26/09/04	Fly Addis-Lalibela, road transport to SC-UK office in Woldia.	Holiday
27/09/04	Briefings with SC-UK R2D field staff (Project Manager Berhanu Haile, EGS Officer Gubalafto Bereket, Agriculture Officer Sekota Alebachew). Plan field work and review project documents	Holiday
28/09/04	Meet with Gubalafto Woreda vet Dr. Sefinew Alemu, SC-UK project staff to finalise field work itinerary. Team travel to Hara, Gubalafto Woreda to meet PA	Holiday
29/09/04	Team travel to Hara, meet with healers and farmers	Holiday
30/09/04	Team travel to Ahun Tegegne, Gubalafto Woreda; meet with farmers and healers	Holiday
1/10/04	Team travel to Ezeit, Gubalafto Woreda; meet with farmers and Healers	Holiday
2/10/04	Feed-back meeting for Gubalafto Woreda with participants from 5 PAs.	Holiday
3/10/04	Travel to Wolleh, Sekota Woreda; meet with healers	Sekota
4/10/04	Travel to Wolleh, Sekota Woreda; meetings with healers and farmers	Sekota
5/10/04	Travel to Mekanegenet, Sekota Woreda; meetings with healers and farmers	Mekeleh
6/10/04	Travel to Sekota;	Sekota
7/10/04	Meeting with Dr. Mohammed Nur Hashim, Sekota Woreda Veterinarian Debriefing with Tesfu Kahsaye, R2D project officer Sekota Woreda	Sekota
8/10/04	Road transport from Sekota to Lalibela. Fly to Addis	Addis
9/10/04	Debriefing SC-UK staff and government veterinary staff Report writing	Addis
10/10/04	Fly Addis-Nairobi	

Annex 3 LISTS OF IMPORTANT DISEASES AND THEIR TRADITIONAL TREATMENTS

Ahuntegegne PA., Gubalafto Woreda, farmers information

Disease						Treatment		
Score	Rank	Local name	Probable English name	Species affected	Season	Local name	Probable scientific name	English name
8	1	Mitat	Blackleg	Cattle		Midirkushele (Dendero) Tult Gut	Achantus arboreus Echinops gigantus Rumex steudelli (Spp) ?	
7	2	Wurja (Woldogedel)	Abortion Calf mortality	Cattle		Ketetina Yemidir embuay Eret Honey	Verbascum sinaificum Cucumis ficifolius Aloe calydropylla	
6	3	Ajil	Pasteurellosis	Cattle		Woinagft	Senecio myriocephalus	
5	4	Nifat	Bloat	Cattle		Misrkit Lut Kosso Oil + Soap + Atella	? Malva parveflora Hygienia spp Atella(Local beer residue)	
4	5	Kizen	Diarrhoea	Cattle and sheep		Woinagft Cikugne Zingerogomen Amija Amed	Senecio myriocephalus Artemisia abyssinica ? Hypericum spp Ash	
3	6	Kuro	Strangles	Equine		Yegoyekubet		Cattle dung
3	6		Abscess					
2	8	Kisat	Internal parasitism	Calves		Gishrt Ketetina Zingerogomen Gudigne	Impatiens abyssinica Verbascum sinaificum ? ?	
2	8	Embik	Fascioliasis	Sheep		Berbere Chew	Capsicum frutesces Salt	
1	10	Abrik or Entit	Anthrax	Shoats, equines		Gudigne Gut Tosigne Yewushamilas	? ? ? ?	

Ezeit PA, Gubalafto Woreda, farmers information

DISEASE						TREATMENT		
Score	Rank	Local name	Equivalent English name	Species affected	Season of occurrence	Local name of plant	Scientific name	English name
14	1	Gofta	Septicaemia	All species		Ketetina	Verbascum siniaficum	
						Fyelefej	Clutia abyssinica	
						Geberembuay	Solanum marginatum	Bushmelon
						Dem akurit		
						Kelaho		
						Tid	Juniperus procera	African cedar
						Kebericho	Echinops species	
						Ablalit		
12	2						Black leg	Cattle
11	3	Nifat	Bloat	Cattle		Yemidir koshele	Berberis holistic	
						Bahirzaf	Eucalyptus globulus	
						Duaduate		
						Gimero	Caparis micapantha	Caper
10	4	Wurja	Abortion	Cattle		Shinet	Myrica salicifolia	
						Eret	Aloe calydropyled	
						Kestenicha	Asparagus africanus	
7	5	Kizen, Tekimat	Diarrhoea	Ruminants		Ketetina	Verbascum siniaficum	
						Gime	Brucea antidysenterica	
6	6	Metilat	Rejection of calf by dam	Cattle		Nech hareg		
						Yemidirembuay	Solanum campylacanthum	
5	7	Kulamewitat	Paraphimosis	Cattle		Yemendefia mamuacha		
4	8	Betir	Trauma	All species		Yemidir koshele	Berberis holistic	
3	9	Kumegna	Internal parasitism	Cattle		Misare feri		
						Tikur enchet		
						Jibara		
						Nechilo	Senra incana	
2	10	Tire Meblat	Grain engorgement	Ruminants		Yefereszeng		
1	11	Mekaninet	Infertility	Cattle		Dog	Ferula communis	
		Shintmekolef	Anuria	Cattle		Ensilal	Impatiens tinctoria	

Hara, Lastegerado, Kilie-adame, Farmers information
Seven most important disease conditions affecting livestock

Disease
Rabies
Septicaemia
Pink eye
Abortion
Wounds
Retained placenta
Respiratory problems

Woldia workshop for Gubalafto Woreda participants, healers and farmers information

DISEASE				TREATMENT		
Local name	Equivalent English name	Species affected	Season of occurrence	Local name of plant	Scientific name	English name
Wolidogedel	Calf mortality	Cattle		Ketetina	Verbascum siniaficum	
				Eret	Aloe calydropyled	
				Yemidir ashene		
Gogobsa	Septicaemia or Black leg	Cattle		Aregresa	Zehnerai scabra	
				Bahirzaf	Eucalyptus globulus	
				Ketetina	Verbascum siniaficum	
				Tult	Rumex steudelli	
				Dendero	Echinops gigantus	
				Feto	Lepidium sativum	
	Yemilas golgul	Acidanthera laxiflora				
Kintarot	Wart	Equine, cattle		Banje		
Berari	Anthrax	Ruminants, equine		Bedena	Balanites aegyptica	
				Gizewa		
Kimanjer	Lice infestation	Calves, kids, lambs		Zerech Embuay	Solanum incanum	
				Digita	Calpurnia aurea	
				Kimtita		
Kisat Kumegna	Gastro intestinal parasitism	Young ruminants		Ketetina	Verbascum siniaficum	
				Aserhush tebetebhush	Cyphostemma adenocaula	
				Shinet	Myrica salicifolia	
				Tikur inchet		
Meziger	Tick infestation	Ruminants		Digita	Calpurnia aurea	
				Tikur enchet		
Nifat	Bloat	Cattle		Koso	Hagenia abyssinica	
Tire meblat	Grain engorgement	Ruminants		Raskimir	Leucas deflexa	
Engidelij mekiret	Retained placenta	Cattle		Yemendefia mamuacha		

Woleh PA, Sekota Woreda, healers and farmers information

DISEASE					TREATMENT		
Rank	Local name	Equivalent English name	Species affected	Season of occurrence	Local name of plant	Scientific name	English name
4	Ekek	Mange Infestation/ dermatophilosis	Sheep Goat	September-May	Tobia Necheret Chiret Digita	Calotropis procera Aloe spp. Agave sisalana Calopurnia aurea	
	Kimanjer	Lice infestation	Calves Kids Lambs	February-May or July-October	Digita Embuacho	Calpurnia aurea Rumex nurvosus	
3	Meziger	Tick infestation	Ruminants	March-July	Kulkual Bisana Gibanchet Ebet	Euphorbia abyssinica Croton macrostachyns	Cow dung
7		Foot and Mouth	Cattle				
	Alkit	Leeches	Cattle	January-June	Timbaho Lomi Bedahush	Nicotiana tabacum Citrus aurantifolia	Tobacco Lemon
	Kuro	Strangles	Equine	All Months	Yekuro Medhanit		
5	Aklit	Emaciation/ Gastrointestinal parasites	Ruminants, Calves, Kids, Lambs	All Months, present in dry season	Duba Lenkuata Zengada Abish Telba	Cucurbite pepo Grewia ferruginea Trigonella foenum Linum usitatissimum	
1	Ajil/Abrik	Anthrax	Ruminants Equine	All Months	Girar Kulkual	Acacia spp. Euphorbia abyssinica	
2		Blackleg	Cattle				
6		Actinobacillosis	Cattle				

Mekane Genet PA, healers information

Disease				Treatment		
Local name	Probable English name	Species affected	Season	Local name of plant	Probable scientific name	English name
Ekek	Mange mites	Shoats	Sep-January	Hemitsa	?	
Engidihlijmek-ret	Retention of fetal membranes	Cattle	Any time of the year	Tsualua	?	
Meziger	Tick infestation	Ruminants	Year round	Batiqua	?	
Kimanjir	Lice infestation	Ruminants (kids, lambs, calves)	Year round (during emaciation)	Zebina Batiqua	? ?	
Kuncha	Fleas infestation	Kids	Year round	Zebina	?	
Alekit	Leech	Cattle	Dry season	Embuay Lomi Timbao	Solanum indicum Citrus aurantifolia Nicotina tabacum	
Tilatil	Myiasis	Ruminants, Equine	Wet season	Ekima Hamhamglmina	? ?	
Yeayinbeshita	Pink eye	Ruminants	Mostly from September and onwards	Zejira-ahirima Fliwa	? ?	
Kusil	Any wound	Ruminants	Year round	Aserkush- tebetebkush Ekima	Cyphostemma adenecaule ?	

Annex 4 Proposed participatory methodology for testing veterinary uses of plants

The following is a methodology to investigate the efficacy of plant remedy "X" to treat mange in goats. During participatory surveys, livestock keepers identified mange as a serious problem in camels.

The method uses a scoring system of 1 to 5 to describe the severity of clinical signs in affected animals. It assumes that an efficacious remedy will reduce the severity of clinical signs compared to an untreated animal.

Method to test efficacy of plant treatment "X" to treat mange

Null hypothesis "The use of a medicine prepared from X has no effect on the clinical appearance of mange in goats".

Herds of goats are examined in which a range of 15-21 animals are thought to be suffering from mange. Skin scrapings are conducted according to the standard parasitological methods and mange should be confirmed in all the trial animals.

The main clinical signs of mange in goats are as follows:

- pruritus
- alopecia
- scab formation
- hyperpigmentation
- skin thickening

For each of the trial animals these signs are scored from 1 to 5. A score of 5 indicates a very severe lesion or clinical sign whereas a score of 1 indicates a minor lesion or sign. The day on which the animals are first examined is called "DAY 0".

The scoring is conducted by livestock keepers (n=6) and vets (n=3). (Coordinating vet, woreda vet and woreda vet assistant)

The affected goats are then divided into 3 groups of 7 animals called Group T (treatment), 7 animals called Group C+ (positive control – conventional veterinary drugs) and 7 animals called group C- (no treatment, negative control). The animals in Group T are treated with the plant remedy; the animals in Group C+ are treated with a modern veterinary acaricide and Group C- remain untreated. Animals in different groups will need to be identified – this could be done by ear tagging.

On the day after treatment, "DAY 1", each animal is examined again and each of the clinical signs or lesions scored. Examinations are repeated at 5, 10, 15, and 20 days after treatment.² Note that the same livestock keepers and vets should examine the animals on each day. A table for recording results is shown overleaf.

A successful treatment will show a reduction in scores between DAY 0 and DAY 20, compared to the negative control animals. The scores of the treatment animals will be compared with the scores of the positive control group. The scores are non-continuous data and therefore statistical analysis and comparison of groups will be based on non-parametric tests such as the Kruskal-

² Scoring dates are fixed according to the life cycle of the parasite. Treatment regimes will depend on the plant selected and the local practice but clinical scoring should begin once the treatment is completed.

Wallis test or Spearman's rank correlation. The higher the number of animals in the study group, the greater the chance of showing statistically significant results.

Negative control group animals and any other animals that are still exhibiting lesions after the end of the trial will be given with the appropriate treatment.

Any animals that die during the course of the trial will be compensated.

EXPERIMENT TO TEST "X" - FORMAT FOR RECORDING CLINICAL SIGNS

Livestock owner
Location
GROUP (T,C- or C+)
Identification colour
Sex
Age

Scores (1,2,3,4 or 5)

Clinical sign	DAY 0	1	5	10	15	20
----------------------	--------------	----------	----------	-----------	-----------	-----------

pruritus

alopecia

scab formation

hyperpigmentation

skin thickening

total scores

name of scorer

vet (yes/no)

livestock
keeper (yes/no)

Annex 5 List of participants

	Name	Peasant association	Remark	
	Alemu Abate	Harra	Feedback workshop Group discussion	
	Berihune Alie			
	Siraj Teferra			
	Asress Demissie	Laste Gerado		
	Gedu Mehrete			
	Ali Nuru			
	Molla Marye			
	Demissie Tekye	Kilie-adame		
	Fentane Kebede			
	Mekome Kassahu			
	Gashaw Abera	Ezeit		
	Ayele Reta			
	Alebachew Molla	Ahuntegegne		
	Priest Yegnanew Fente			
	Geta-amlak Degu			
	Tegegne Mokonen			
	Tadesse Kassa			
	Abera Belew	Harra	Herbalists	
	Yasin Yimer			
	Seid Ahimed			
	Ali nurye	Lastegerado		
	Siraj Teferra			
	Misganaw Yimam			
	Shimelis Fentaw			
	Gedu Mehrete			
	Asress Demissie	Kilie-adame		
	Tegegne Semaw			
	Mekonen Kassaw			
	Washkum Seid			
	Mengesha Esheste	Harra		Farmers
	Wudu Ewunu			
	Berhanu Alie			
	Mesganawe Yername	Lastegerado		
	Alemu Abate			
	Alie Gumata	Kilie-adame		
	Molla Demessie			
	Seide Ahemed	Harra	AHA	
	Awel Hassan		CAHW	
	Mekonnen Gugessa	Ahuntegegne	Farmers	
	Abera Belew			
	Tegegne Mekonnen			
	Yalew Nigate			
	Habtemariam Fentie			
	Desale Achenef			
	Getamlak Degu			
	Gedu Kassaye			
	Demelash Mersu			

	Name	Peasant Association	Remark
	Kassie Ayalew	Ahuntegegne	Herbalists
	Fentaw Melkamu		
	Tega Sitote		
	Asresse Argo		
	Getu Kassaw		
	Yimer Tesema		
	Yemataw Afrassa		
	Priest Yignanew Fente		
	Abate Arage		
	Tadesse Kasse		
	Beyene Zewde		
	Birara Fekade		AHA
	Abera Belew		CAHW

List of participants

	Name	Peasant association	Remark
	Kes Molla Tadesse	Ezeit	Farmers
	Fiseha Desale		
	Molla Amare		
	Demeke Reta		
	Masreshaw Degu		
	Jemberu Nirotaw		
	Ayalew Aseffa		
	Ayele Reta		
	Derese Shumye		
	Tadesse Abate		
	Tadesse Reta		
	Nigatu Abe	Ezeit	Herbalists
	Demsie Arage		
	Tringo Molla		
	Chekole Shumye		
	Albachew Molla		
	Amare Kitaw		
	Gashaw Abera		
	Sisay Stotaw		

	Name	Peasant association	Remark
	Fentaw Mammo	Wolleh	Herbalists
	Mammo Biyadglgne		
	Mekuaninte Getahun (EVM study)		
	Megistie Reda		
	Alemu Beleta		
	Tamiru Adane		
	Kassaye Abera		
	Zegeye Akale		
	Assaye Getahun		
	Moges Mehrete		
	Seyem Mitko		
	Shumete Terefe		
	Mamuye Abaye		
	Wedage Bisete (EVM study)		
	Mebrate Belay		
	Tsehayehu Abera		
	Abera Megistu		
	Fantaye Birke (farmer)		
	Desalegne Sisay (EVM study)		
	Zegeye C hekole (EVM study)		
	Debash Solomon (EVM study)		
	Abera Alemayehu		
	Eshetu Mengistie		
	Tadesse Teweldo		
	Endeshaw Solomon		
	Wubu Getahun		
	Birrarra Tareke		
	Tadesse Adane		
	Baye Teferra		
	Abera Desta		
	Mammo Mitikie		
	Wubete Getahun		
	Tadesse Alemu (EVM study)		
	Dasash Alemu		
	Adisse Alemayehu		
	Haile Mitku		
	Mulaw Takele		
	Alemu Belete		
	Aberra Adane		
	Mulugeta Mamuye (EVM study)		
	Yalew Wubete (EVM study)		
	Magew Share		
	Zewude Tafete		

	Name	Peasant association	Remark
	Mengistie Tekle	Mekane Genet	Herbalists
	Mebrate Abe		
	Teferi Bellay		
	Moges Habtu EVM		
	Mulu Gebeyaw EVM		
	Goite Gebreslasie		
	Kelemework Alemayehu EVM		
	Merkye Dessie		
	Mulugeta Gebremicael		
	Desta Woldearegay EVM		
	Kinfate Gebeya EVM		
	Kiros Tadesse EVM		
	Alefe Demeke		
	Moges Gebreslasie EVM		
	Lelie Dessie		
	Alene Tadesse		
	W/o Muyene Bogale		
	W/o Meselu Tekle		
	Mekonene Belata		

Annex 6 Comments from debriefing participants in Addis Ababa

The geographic focus should be on lowlands since there is more dependency on livestock and many animals. In terms of supporting the development of the livestock sector within the national economy diseases affecting hides and skins should be the focus of validation trials.

Plants often have a range of uses, for human and animal health as well as crop protection. It would be beneficial to try to identify plants with multiple uses for trials and conservation. For example herbs that are used for crop protection could possibly be tried for disease problems such as external parasitosis.

It was noted that the process for registration was long but agreed that the EVA would be an appropriate body to spear head this work. In the human health sector there is a move towards incorporating traditional healers and birth attendants within the moderns system in order to extend service coverage but the links between traditional and modern practitioners appear to be much weaker than in the animal health sector. This acknowledgement within the animal health sector of the benefits of a combined system should be built upon. The experience of establishing human traditional healers' association could be explored and applied to the formation of associations of traditional healers in the animal health sector.

The experience from the FFS would be invaluable to setting up the EVM project. For example trainings in the FFS included special topics on crops and life cycles of pests to help farmers in their field research. It would also be appropriate for EVM training, for example, training in parasite life cycles prior to trials.

Capacity building initiatives such as organisational development with local groups requires a sound grounding in "life experience" for any facilitator and a willingness to listen to local views and needs.

It would be wise to promote preventative traditional medicine as well as curative, as is the case with modern medicine.

Annex 7 EVM documents distributed to participants (SC-UK staff, team members and woreda veterinarians).

1. Admassu, B. 2001. Community Livestock Development Project, Save the Children (UK) Woldia Area Programme. Report on ethnoveterinary practices survey in North Wollo and Waghamra Zones. RDP Livestock Services B.V.
2. Bishaw, M. 1991. Promoting traditional medicine in Ethiopia: a brief historical review of government policy. Soc. Sci. Med. Vol 33, No. 2, pp. 193-200.
3. Conroy, C. 2001. Participatory technology development with livestock keepers: a guide. Natural Resources Institute and BAIF Development Research Foundation.
4. Grade, J.T and Anthony, L. 2000. Karamoja scientists: participatory field trial of a local dewormer. Paper presented at the Uganda Veterinary Association Scientific Conference "The Veterinary Profession and Poverty Alleviation". Christian Veterinary Mission/World Concern.

Other documents and reports were available for reading but were too long to photocopy. Some of these are listed in Annex 8.

Annex 8 Useful contacts and reading

Contacts

Vetwork UK web site:

<http://www.vetwork.org.uk>

Dr. Jacob Wanyama
Intermediate Technology Kenya
P.O. Box 39493
Kenya

Christian Veterinary Mission
P.O. Box 22
Moroto
Karamoja
Uganda.

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