

Training Notes
For
Community Animal Health Workers

**Animals and
Communities**

Small Scale Livestock and Livelihoods Program
PO Box 1604, Lilongwe Malawi



Animals and Communities

Session 1: Uses of animals

Session Objectives:

At the end of this training session, each participant should be able to:

1. Understand and explain the reasons animals are kept by smallholders in Malawi
2. Discuss the economic and social and cultural benefit of raising animals
3. Explain in broad terms what are the principal requirement for raising livestock

Exercise:

What do we gain from keeping animals?

What use are animals?

Which uses are most important?

Animal	Main Uses
Cattle	Like money in the bank Dowry Pride and status Meat Skins/hides/leather Milk Power (ox carts, ploughing) Manure for fertilising crops
Donkeys	Power Meat (minor use) Manure for fertilising crops
Goats	Like money in the bank Pride and status Meat Skins Milk (minor use) Manure for fertilising crops

Animal	Main Uses
Pigs	Like money in the bank Meat Manure for fertilising crops
Sheep	Like money in the bank Skins Meat Manure for fertilising crops
Chickens	Like money in the bank Meat Eggs Manure for fertilising crops Traditional remedies (blood)
Ducks	Like money in the bank Meat Eggs
Rabbits	Like money in the bank Meat
Dogs	Protection/guarding property Hunting wildlife Companionship
Cats	Rodent control Companionship

Exercise:

Discuss what people do with animal products. What happens in your area?

- 1) Meat from cattle:- Where does it get eaten? Who gets the money when it is sold? What use is that money put to?
- 2) Meat from goats or pigs or sheep:- Where does it get eaten? Who gets the money when it is sold? What use is that money put to?
- 3) Milk from cows (or goats):- Is it mostly drunk locally or mostly sold for cash?
- 3) Skins from cattle and goats:- What use are they put to? Does the animal owner get paid for the skin?
- 4) Meat from chickens:- Are chickens mostly eaten at home or are they mostly sold for cash?
- 5) Eggs:- Are eggs mostly eaten at home or are they mostly sold for cash?
- 6) Animal power:- Are work oxen or donkeys used only by the owner? Do owners charge others for the use of their work animals? Do they get a fair payment?

Exercise:

Discuss what is the monetary value of livestock. Thinking of your area, what is the estimated cost if you needed to purchase the following healthy animals:

- a Malawi Zebu cow about 1 year old
- a dairy heifer about 1 year old
- a trained work oxen
- a female goat about 1 year old
- a female pig about 6 months old
- a young village chicken about to start laying

What do animals need

Exercise:

Discuss the following key elements necessary for successful raising of farm animals. Use a particular species for your discussion, perhaps chickens or goats. Discuss what constitutes good housing, good feeding, etc.

Housing	Good housing for protection from bad weather and predators
Feeding	Good feed and water for growth and reproduction
Breeding	Proper selection of breeding animals
Disease control	Control of diseases to prevent deaths, improve production and reproduction

Exercise:

Choose your own species as an example and discuss the ways in which good housing contributes to good health for that species.

Discuss the ways in which good nutrition contributes to good health.

Session 2: Healthy and unhealthy animals

Session Objectives:

At the end of this training session, each participant should be able to:

1. Appreciate and explain the differences between healthy and unhealthy animals of the principal livestock species
2. Take the temperature of animals and correctly read a mercury thermometer
3. Describe sickness in animals and competently give a basic report of a suspected disease outbreak
4. Understand and describe the basic features of rabies

- Many of the signs of health or poor health are obvious from a distance.
- Never forget to **look at the animal from a distance** before you interfere with it or get it excited.

Exercise:

Discuss what are the signs of a healthy animal vs an unhealthy animal.

Visit a village which has various species of livestock with several different owners. Look at the animals and discuss what you see in terms of body condition and health status.

Using an example from your own experience, describe an animal which you have seen which was sick. Describe the signs to your colleagues in such a way that they will fully understand what the animal looked like.

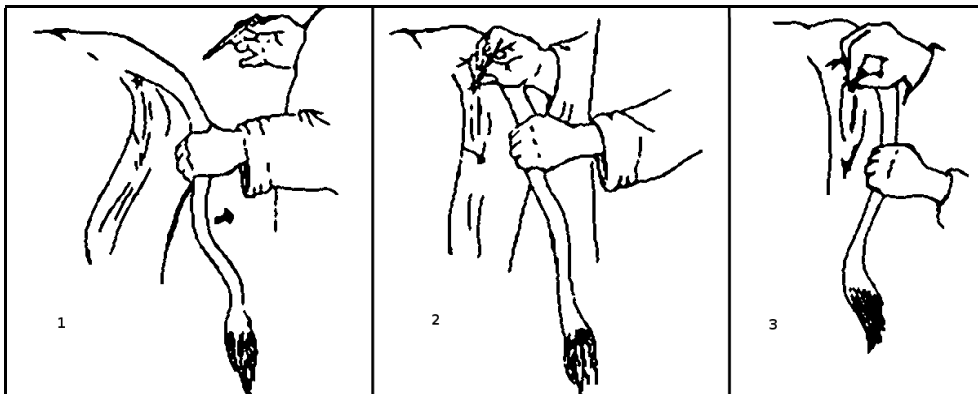
	Healthy animal	Unhealthy animal
General appearance	Bright, alert, aware of its surroundings	Dull, tired, unresponsive, lack of appetite, fails to join its group
Coat/hair	Smooth, shiny in short haired breeds	Shaggy, dull
Muzzle/mouth	Muzzle moist but not dripping with saliva	Can be dry or salivating excessively
Body condition	Good body shape. Well rounded, well filled backbone, smooth muscles. (Remember that some dairy cattle and dairy goat will be lean during lactation.	Thin, pot-bellied, bones showing (backbone, ribs and hips). Observe and feel the animal.
Feathers	Sleek glossy feathers	Ruffled feathers
Droppings/dung	Normal consistency Tail area clean	Diarrhoea (soft) or constipation (hard, dry); Tail area soiled with faeces
Legs	Strong and well aligned	Weak, bent, turned or twisted abnormally. Lameness. Swollen joints.
Skin	Smooth, shiny	Blotchy, roughened, scaly or itchy
Milk (dairy cow)	White, smooth	Flecks of blood; lots of white fragments
Hooves	Normal shape, strong	Overgrown, bent out of shape
Growth/production	Grow at normal pace Egg/milk production normal	Slow body growth; Egg/milk production slow or stopped
Body temperature	Normal (see table below)	High; Occasionally low

Taking the temperature of animals (using a mercury thermometer)

Exercise:

Read a mercury thermometer. Every candidate should repeatedly read a thermometer (at different temperature readings) until proficient (at least 3-5 consecutive correct readings). If possible, this exercise should be done using animals, and the animal identification and date should be recorded to mimic practical conditions.

- To take the body temperature of animals, first shake the thermometer to push the mercury down and check the reading. Put the thermometer gently into the anus, as far as possible. The thermometer should touch the side of the rectum, it should not be embedded in dung inside the rectum. Keep a firm grip on the thermometer, don't let it come out or get broken. Hold in place for one full minute. Remove the thermometer, wipe it if necessary and read the temperature.
- Always write down the temperature, the animal identification and the date so that other animal health staff can read the full record later.



Taking the temperature of a cow

(Courtesy FAO "A manual for the primary animal health care worker")

Normal temperature of animals (°C)

Cattle	38.5
Calf	39.5
Goat	39.5
Sheep	39
Donkey	38.2
Pig	39
Piglet	39.8
Chicken	42

The normal temperature may be up to 1 °C above or below these temperatures.

Describing sickness in animals

Exercise:

Discuss cases of sickness in animals which you have seen. How would you report the case to a government officer? What would you need to tell him or her?

Discuss a case of an animal disease which has occurred in your area. Complete the reporting form for that disease as if it were a problem occurring today.

- When you report that animals are showing signs of being sick, it is important to provide information so that more expert people can help you. It is not enough to say that animals are sick or animals have died. It is necessary to provide more details.
- Here are some of the questions which you should answer. You might need to ask the owner of the animals to give you some of the answers.
 - What animals are affected? What species? What ages? What sex? What body condition?
 - What are the symptoms of the disease? How does it affect the animals?
 - What do you think might be the causes of this disease?
 - How long does it last?

- How many animals are dead?
- How many animals are sick now?
- How many animals are healthy now?
- When did these sickness first start?
- What area is affected? Is it just one farm or a wider area?
- Have there been any attempts to control or treat the disease? If so, what?
- What do you think you might need to assist you to deal with this outbreak?
- Any other information you think is relevant.

Reporting an animal health problem

- The reporting form below is for reporting an animal health problem.
- The community animal health worker can complete the form if he or she encounters a problem with the health of animals in the community.
- The form can be photocopied and supplied to all community animal health workers.
- If a disease problem occurs, this form should be completed as soon as possible and sent to the nearest alangizi.

Reporting form on an animal health problem

The community animal health worker should complete this form as soon as possible if he or she encounters a problem with the health of animals in the community. It should be sent quickly to the nearest alongizi.

Name of community animal health worker:	
Date:	
Village/location:	
Nearest phone contact, if available (name and phone number):	

What animals are affected? What species? (Please circle)	Cattle	Goats	Pigs	Chickens	Other (specify):
What ages?	Mainly adult animals		Mainly young		All ages
What body condition?	Animals in good condition		Animals in poor condition		Animals in any condition
What is the nature of the problem? What are the symptoms of the disease? How does it affect the animals? What do you think might be the cause? (Continue overleaf if necessary)					
When was this problem first noticed?					
How many animals have died?					
How many animals are sick now?					
How many animals are healthy now?					
What area is affected? Is it just one khola, or a wider area?					
How long does it last?					
Have animals recently moved into our out of the affected farm or area? When? How many?					
Have there been any attempts to control or treat the disease? If so, what?					
What do you think you might need to assist you to deal with this outbreak?					
Any other information you think is relevant. (Continue overleaf if necessary)					

Note: A full size (A4) version of this form can be downloaded from the SSLPP website at <http://www.smallscalelivestock.org>.

Session 3: A special disease - Rabies



Session Objectives:

At the end of this training session, each participant should understand:

- 1. What causes rabies**
- 2. How rabies is spread**
- 3. The signs of rabies in animals**
- 4. How to prevent rabies**

Exercise:

What do you know about rabies?

- What causes rabies?
- What species of animals can get rabies?
- Can all these animals spread rabies to man?
- How is rabies spread to man?
- What are the signs of rabies in a dog?
- What is the best thing to do with a dog which is showing signs of rabies?
- What is the best thing to do with a cow or a goat which is showing signs of rabies?
- What is the best thing to do with a human who has been bitten by an animal which is showing signs of rabies?
- If a dog has been bitten by another rabid dog, how long can it live before it starts to show signs of rabies?

- How long can a dog live once it has started showing signs of rabies?
- How can we treat rabies?
- How can we prevent rabies?

- Rabies is a disease mostly of dogs, hyaenas and some other wild animals. Rabies can affect many many species of animals. It can also affect man. It does not affect chickens or other birds.
- Rabies is most dangerous in dogs and hyaenas because these animals are more likely to bite a person causing that person to get rabies.
- Rabies is caused by a tiny germ, a virus. The virus affects the brain so that the infected animal cannot eat or drink. Often, but not in every case, the disease causes the animal to become aggressive. Dogs and hyaenas will bite other dogs, or people, or even objects. They will lose their fear of man. Cattle and goats will often become aggressive and noisy, bellowing loudly.
- An infected animal can pass on the disease to other animals or to man through biting them. The virus lives in the saliva of the rabid animal and can infect the bite wound. The virus cannot get through normal healthy skin. There is no risk to man through touching a rabid animal - there is only a risk if the animal bites you.
- Remember that not every dog that bites you has rabies. If the dog does have rabies , it will die within 10 days. If the dog is still alive and healthy more than 10 days after it has bitten you, it did not have rabies.
- If an animal or a human is bitten by a rabid animal, the disease does not start immediately; it may take anything from 2 weeks to several months before the animal or person shows any signs of rabies.
- The signs of rabies in a **dog** are:
 - They change their normal behaviour and behave very strangely.
 - They stop eating and drinking, although they may try to drink without being able to swallow.
 - Often they become aggressive and bite other animals or objects, or people. Sometimes they don't become aggressive but just sit quietly and may not be able to keep their mouth closed.

- The signs of rabies in **cattle, sheep or goats** are:
 - The animals become restless and excited.
 - They may bite themselves and saliva drips from the mouth.
 - The animal bellows very frequently and with strange sound.
 - The animals will become paralysed and die.
- What to do with a biting dog:
 - Remember that not every dog which bites has rabies.
 - If the dog belongs to somebody ask the owner about its behaviour. Is it behaving abnormally now? Has it behaved abnormally in recent days? If the answer to either question is yes, suspect rabies.
 - If the dog is showing signs of rabies you must inform your veterinary officer immediately. The dog must be killed and if it has bitten anybody, they must be taken to a hospital immediately for vaccination.
- What to do with livestock showing signs of rabies:
 - Cattle or goats which have been bitten by a rabid animal may subsequently show signs of rabies. If this happens, the animal should be killed and disposed of. You cannot get rabies by eating the meat of livestock which have died of rabies. However, you can get rabies through skin scratches when you are butchering the animal.
- Can rabies be treated?
 - No. Animals with rabies cannot be treated. If an animal is showing signs of rabies, it will die. If people claim to have special cures for rabies, they are wrong.
 - People who have been bitten by an animal suspected of rabies must be taken to hospital immediately. Do not delay.
- Can rabies be prevented?
 - Yes. But only **before** the animal has been bitten. Animals of all species can be vaccinated against rabies. Vaccination of dogs is important because they can be dangerous to humans. Other animals eg cattle or goats can be vaccinated to protect them if there is a high risk of them being bitten by a rabid animal.

Session 4: The role of the community animal health worker

Session Objectives::

At the end of this training session, each participant should understand:

- 1. What a community animal health worker is**
- 2. The role and functions of a community animal health worker**
- 3. How a community animal health worker can be paid for work and how he/she can charge for drugs and medicines**
- 4. How a community animal health worker should be selected by the community**
- 5. The role and responsibilities of people involved in animal health in the village or district:**
 - the farmer/owner**
 - the community animal health worker**
 - the Assistant Veterinary Officer**

What is a community animal health worker

- A community animal health worker (CAHW) is a member of the local community who is specially trained to assist livestock farmers or groups to raise their livestock in a healthy, productive and profitable manner. Other names given to the CAHW include Village Animal Health Workers, Community Animal Health Volunteers, Community Based Animal Health Workers, Basic Animal Health Workers, Keymen, and so on.
- A community animal health worker will be paid for his/her work by the animal owners or by the local community. Payment may be in cash or in kind.
- The community animal health worker is entitled to purchase, sell and/or administer animal drugs within Malawi's normal legal requirements such as the Pharmacy, Medicines and Poisons Act and the Dangerous Drugs Act. The community animal health worker is entitled to sell drugs at an appropriate profit to give him/her an incentive to purchase and stock suitable products.
- However, neither animal owners nor community groups are obliged to use the services of the community animal health worker if they choose not to.

Selection of a community animal health worker

- Selection of community animal health workers is the responsibility of the community in question.
- Selection can be done by a community committee which represents all sectors of the community (including particularly women).
- The community committee should adopt criteria for selection of prospective community animal health workers.
- Selection criteria should include at least the criteria in the table below.
- It is essential that the community committee understand and agree on the selection criteria before they identify candidates.

Selection criteria for community animal health workers
<p>Candidates for training should:</p> <ul style="list-style-type: none">• Be <u>trustworthy</u>; be trusted and respected by the general community and have no record of default on financial affairs;• Be <u>committed</u>: be available, willing and able to serve the community and not be very busy with other jobs or occupations;• Be <u>responsible</u> individuals who have a good general knowledge of and interest in raising livestock and have farming as their primary occupation;• Be generally physically capable, able to visit and treat animals;• Be able to read and write (for record keeping) and do basic arithmetic (for medicine dosages);• Be long term residents in the focus area;• Be able to maintain trust and mutual respect with the extension staff and local leaders responsible for animal health in the area;• Since the activity is on a voluntary basis, candidates should be those who expect any incentive to come from the provision of their services and not from outside donors.

Roles and responsibilities

1. The farmer/owner

- The farmer/owner of livestock is the person who sees the animals every day. His/her role involves:
 - being attentive to the needs of the animal
 - making sure it has proper access to feed, water and shelter
 - undertaking basic treatments and preventative measures
 - reporting any signs of disease to the community animal health worker or to the responsible Assistant Veterinary Officer

2. The community animal health worker

- The community animal health worker is a person who knows livestock well. He/she is able to advise farmers on how to keep animals, how to recognise signs of disease, and so on. He/she has been trained and has the necessary skills to do anything an average competent livestock farmer can do, and more.
- The community animal health worker is entitled to charge a fee for services based for example on the time and distance travelled, and is entitled to charge for medicines supplied. The fee should be consistent for all members of the community. Any disputes over the level of fees should be referred to the appropriate local community committee. Livestock farmers are not obliged to use the services of the community animal health worker if they do not wish to.
- The role of the community animal health worker involves:
 - knowing and understanding the situation within his/her community with respect to livestock and livestock farmers, the approximate numbers of livestock, the main problems faced by livestock producers, and so on;
 - looking into problems experienced by livestock producers;
 - treating animals in a manner in which he/she is competent; the competency level of the community animal health worker should be at least equal to that of a knowledgeable livestock farmer;
 - reporting cases of disease to the Assistant Veterinary Officer responsible for the area;

- use and administration of medicines and vaccines including those given by mouth, by injection, eye treatments, intra-mammary and udder medicines, dips, sprays and pour-ons;
 - The community animal health worker must not administer any restricted medicines eg those which are required to be given by a registered veterinarian, nor medicines about which he/she has no knowledge.

3. The Assistant Veterinary Officer (mlangizi)

- The Assistant Veterinary Officer is an employee of the government responsible for the area. His/her role includes:
 - knowing and understanding the situation within his/her area with respect to livestock and livestock farmers, the approximate numbers of livestock, the main problems faced by livestock producers, and so on;
 - treating and vaccinating animals in accordance with DAHLD policies;
 - giving guidance to community animal health workers on livestock production and health;
 - collaborating with community animal health workers on gathering of basic information on animal health and production data;
 - reporting to the Divisional Veterinary Officer (through the appropriate channels) any suspected cases of disease outbreaks;
 - assisting to provide access to medicines which are required for treatment of animals in the area;

Review questions

1. What do farmers gain from keeping animals? What are the main reasons for raising livestock? Limit your discussion to goats and chickens.
2. What do animals need - what are the four key elements of raising livestock?
3. List the signs of a healthy animal vs an unhealthy animal.
4. What is the normal body temperature of a cow? A calf? A goat?
5. You have visited a farm where there animals are sick and you suspect a disease outbreak. You are writing a report to the AVO or DVO to come and investigate? What information should you include in your report?
6. How is rabies spread to man? What is the route by which the virus enters the body?
7. If an animal is bitten by a rabid dog, how long might it take it to get sick?
8. How do you treat rabies in an animal?
9. How do you protect an animal from getting rabies?
10. What is a community animal health worker?
11. How does a community animal health worker get an incentive to do his/her work?
12. What are the essential criteria for selection of community animal health workers within the community?
13. What is the role of the Community Animal Health Worker?