



USER GUIDE

Animal Health Pedagogical Toolkit

Manual for Animal Health Staff
Priority Animal Diseases Sheets

♦ Educational Kit









ANIMAL HEALTH PEDAGOGICAL TOOLKIT

This User Guide is extracted from the Animal Health Pedagogical Toolkit which includes:

The Manual for Animal Health Staff which constitutes a support for continuous training and a reference guide for the field. It contains five sections organized around the main areas of animal health. Each section provides a clear and illustrated explanation of the important concepts to be aware of for the daily exercise of community-based animal health workers, veterinary paraprofessionals and private and/or public veterinarians. The role of each of these actors, the recognition of priority animal diseases and the basic animal health techniques are fully explained in this handbook.

The Priority Animal Diseases Sheets for the recognition of 30 animal diseases and syndromes. Included in the Manual for Animal Health Staff, they are also available as independent double-sided sheets. Each of them provide a clear, practical and illustrated summary to optimize the recognition of the clinical signs of priority animal diseases in the Sahel and the actions to be taken by animal health staff in response to them.

The Educational Kit composed of 8 practical sheets on active teaching methods and techniques. These sheets are intended for trainers who will deploy the Animal Health Pedagogical Toolkit in the field during training and awareness-raising sessions for animal health staff.

The User Guide below which explains the content and the objectives of the Animal Health Pedagogical Toolkit. It also describes the intended audiences, teaching and learning situations in which trainers will be able to deploy it.



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INTRODUCTION

I. Brief presentation of the toolkit

The Animal Health Pedagogical Toolkit is an educational package that includes scientific and practical materials: The Manual for Animal Health Staff, the Priority Animal Diseases Sheets, the Educational Kit and the User Guide below.

- The Manual for Animal Health Staff is a continuous training support and a practical reference guide for the field. It has been produced in order to contribute to the maintenance of the knowledge of veterinarians, veterinary paraprofessionals (paravets) and community-based animal health workers (CAHWs) and to a better management of livestock health at camps, villages or pastoral areas, especially when priority animal diseases occur.
- The **Priority Animal Diseases Sheets** for the recognition of 30 animal diseases are proposed independently of the Manual for Animal Health Staff (sheets included in the Manual for Animal Health Staff but also printed as independent double-sided sheets) in order to optimize the recognition of clinical signs by field workers, the actions to be taken immediately to promote early detection and early warning by health authorities.
- This set is completed by an Educational Kit composed of 8 practical sheets on teaching methods and techniques for trainers who will carry out training and awareness-raising sessions for animal health staff in the field.
- The User Guide below details the educational objectives of the toolkit and describes the actors, contents, intended audiences and the teaching and learning situations in which trainers will be able to deploy the Animal Health Pedagogical Toolkit.

II. Intended audiences

The Animal Health Pedagogical Toolkit was written for three main audiences:

- Community-based Animal Health Workers (CAHWs);
- Veterinary paraprofessionals (paravets);
- Private and/or public veterinarians.

These three audiences are an integral part of «veterinary services» in the broad sense of the term, as defined by the OIE (World Organization for Animal Health).

III. Requirements

Although having basic knowledge of livestock and animal health is a plus, a special educational effort has been made in the design of this toolkit to make it as accessible as possible, with many illustrations (photos and drawings).

IV. Application channels

The Animal Health Pedagogical Toolkit has been designed for use by and for the following sectors:

- Animal health staff;
- Livestock staff;
- Veterinary staff;
- Other stakeholders involved in the livestock industry;
- Staff involved in «One Health» approach or zoonotic diseases.

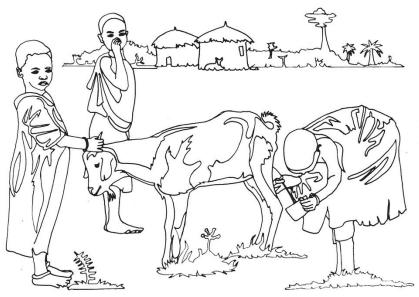
V. Authors' intentions and educational objectives

The development of a general animal health manual for stockbreeders, CAHWs, paravets and private and/or public veterinarians in all PRAPS countries, including illustrated practical sheets specific to the main animal diseases in the PRAPS area, was one of the recommendations of the Phase II study of the project.

The main educational objective of this toolkit is to specify, notably through the Manual for Animal Health Staff, the interactions between the various animal health staff working in the field in order to promote better livestock health and to work towards the general preservation of animal health at national level. To this end, their roles and missions are clearly defined, particularly regarding the declaration of animal diseases, the implementation of veterinary treatments and vaccination and the distribution of medicines. The principle of basic animal health care and the main veterinary technical procedures are described and illustrated. In addition to these basic concepts, most of the priority animal diseases in the area are described, in order to allow better appreciation of clinical signs, to carry out appropriate sampling and to implement the rightful measures expected. Eventually, educational and awareness-raising methods are highlighted and detailed in order to support the users of the toolkit in spreading this information and teaching them to the intended audiences (field workers).

VI. Key concepts

Veterinary services, community-based animal health workers, veterinary paraprofessionals, veterinarians, priority animal diseases, zoonotic diseases, basic animal health care, procedures, diagnosis, treatments, active teaching methods and techniques



Géraldine Laveissiere © cirad-astre, 2018

DETAILED PRESENTATION OF THE TOOLKIT

I. Description of the content

The Animal Health Pedagogical Toolkit includes 4 specific entities:

- A Manual for Animal Health Staff intended for 3 intended audiences (CAHWs, paravets and private and/or public veterinarians), allowing its contents to be applied to the entire chain of veterinary services;
- 30 recognition and intervention sheets on priority animal diseases and/or syndromes;
- An Educational Kit composed of practical sheets on teaching and awareness-raising methods to be implemented by the trainers;
- A User Guide detailing the contents and terms of use of the toolkit.

II. The Manual for Animal Health Staff

Composed of 5 chapters and 9 appendices, it will serve as a reference guide for the three main types of animal health stakeholders. The Manual for Animal Health Staff, which is the basis of the toolkit, describes the roles and missions of each, the basic animal health care techniques, the most commonly encountered animal diseases, the prevention and alert measures to be implemented in the event of an outbreak, the diagnostic methods (clinical examination, autopsy, sampling) and the drugs that may be used. Didactic and very detailed, it illustrates each situation using photos and contextualized drawings in Sahelian countries.

The 5 chapters of the Manual for Animal Health Staff are as follows:

- Chapter 1 «Animal Health Staff»: It describes for each animal health staff its roles, responsibilities and missions. It also details the interactions that bind them together;
- Chapter 2 «Basic animal health care»: It deals exhaustively with basic animal health care technical gestures;
- Chapter 3 «Introduction to animal diseases»: It describes the different pathogens and how they are transmitted and spread. It also covers the concepts of prevention, treatment and control.
- Chapter 4 «Priority animal diseases»: 30 priority animal diseases are addressed in this chapter, classified into three sub-sections (non-zoonotic notifiable diseases, zoonotic notifiable diseases and non-notifiable diseases). In addition to the description of the pathogens and clinical signs, the preventive and protective measures to be taken in case of suspicion or outbreak are described for each animal health staff;
- Chapter 5 «Main treatments»: It presents the main vaccines and drugs, detailing their conditions of use.

The 9 appendices of the Manual for Animal Health Staff are as follows:

- Rational use of trypanocidal drugs;
- Trypanosomes: Herd level control strategies;
- Epicutaneous treatment of cattle;
- The acaricide footbath;
- Autopsy techniques on small ruminants;
- Autopsy techniques on poultry;
- Contention techniques;
- Some national or international diagnostic and reference laboratories;
- Regulatory framework for the transport of samples.

These 9 appendices are dedicated to specific veterinary techniques widely used in the field by animal health staff and will serve as practical guides for their optimal implementation.

III. Priority Animal Diseases Sheets

Included in the Manual for Animal Health Staff, the 30 recognition and intervention sheets for the main priority animal diseases that occur in the PRAPS countries have been individually published in order to make their use in the field easier. A plasticized print is recommended for their long-lasting use.

The 30 diseases are as follows:

Non-zoonotic notifiable diseases (13)

- Anaplasmosis;
- Babesiosis;
- Sheep pox and goat pox;
- Cowdriosis;
- Lumpy skin disease;
- Foot and mouth disease;
- Bluetongue;
- Newcastle disease;
- Contagious bovine pleuropneumonia;
- Peste des petits ruminants;
- African swine fever;
- Contagious caprine pleuropneumonia;
- Theileriosis.

IV. The Educational Kit for trainers

Zoonotic notifiable diseases (10)

- Brucellosis;
- Anthrax;
- Echinococcosis;
- Rift Valley Fever;
- Q Fever;

- West Nile fever;
- Avian influenza;
- Rabies:
- Trypanosomiasis;
- Bovine tuberculosis.

Non-notifiable diseases (7)

- Blackleg;
- Dermatophilosis;
- Fasciolosis;
- Scabies;

- Pasteurellosis;
- Photosensitivity;
- Intestinal worms.

This training kit contains 8 practical sheets written specifically for trainers (usually veterinarians or veterinary paraprofessionals) who will use the Manual for Animal Health Staff and the Priority Animal Diseases Sheets as training materials on their agents (paravets) and field assistants (CAHWs).

The 8 practical sheets are as follows:

2 "Awareness-raising session" sheets describing the methods of conducting awareness-raising sessions:

- Preparation and organization;
- Communication and entertainment.

6 "Educational techniques" sheets on active teaching techniques:

- Knowledge sharing;
- Review questions;
- Analogies;
- Progressive method;
- Educational games;
- Role-play: Meeting simulations.

The purpose of these practical sheets is to optimize the teaching provided by the trainers to the intended audiences, whether they are CAHWs, paravets or veterinarians. They have been specifically written for adult education and adapted for an audience of stockbreeders. They are intended for trainers and to be used in train-the-trainer sessions as well.

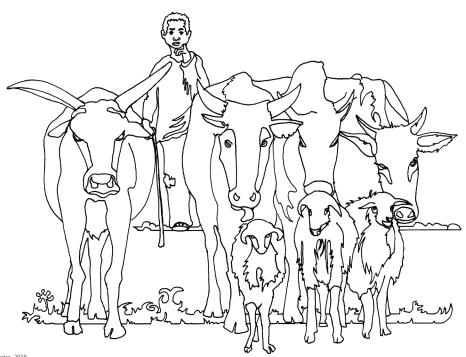
V. The User Guide

This User Guide describes the authors and people involved in the development of the toolkit, its contents, objectives, intended audiences and possible teaching and learning situations for trainers to use the toolkit in the field.

VI. Presentation and Formats

The Animal Health Pedagogical Toolkit is fully available in digital format (interactive PDFs). These files have also been formatted in such a way as to make it possible to print "a la carte" for each country:

- The Manual for Animal Health Staff has been produced and published for A4 double sided printing, landscape format. These 5 chapters can be used separately in the field, each dealing with a well-defined theme. Color printing and solid binding are strongly recommended;
- The 30 Priority Animal Diseases Sheets have been produced and published for A4 double sided printing, landscape format. They can be incorporated into a specific binder dedicated to priority diseases and plasticized for long-lasting use in the field. Color printing is strongly recommended;
- The Educational Kit has been produced and published for A4 double sided printing, portrait format. The 8 sheets that compose it can be incorporated into a specific binder dedicated to active teaching techniques and plasticized for long-lasting use in the field. Color printing is strongly recommended;
- The User Guide has been produced and published for A4 double sided printing, portrait format. It can be distributed as a booklet added to the toolkit. Color printing and solid binding are strongly recommended.



TEACHING AND LEARNING SITUATIONS

The Animal Health Pedagogical Toolkit can be deployed in different ways depending on the teaching and learning situations encountered. It can be used in train-the-trainer sessions (cascade training programs) at a national level and, also for workshops and specific field training sessions for intended audiences. It has also been designed to support self-learning and skills maintenance for animal staff.

I. Train-the-trainer sessions

As part of a cascade training program (or scaled-up training), veterinary trainers will have the opportunity to train other veterinarians in the use of the toolkit in the field. This will allow them to work on improving their learning techniques. The aim will be to train future trainers on the scientific and technical content of the Manual for Animal Health Staff and to use, properly and according to their audiences, the educational techniques adapted to the situations encountered.

II. In standard training

The veterinarian trains his agents (paravets) on basic animal health care techniques or diseases recognition and treatments using the Manual for Animal Health Staff and/or the Priority Animal Diseases Sheets. He would provide the printed materials to the agents to maintain their post-training knowledge. He would also use the techniques provided in the Educational Kit to improve his training methods.

The paravet trains the CAHWs on their missions, on technical gestures and/or on the recognition of animal diseases using the Manual for Animal Health Staff and/or the Priority Animal Diseases Sheets. The printed materials would be given to the CAHWs. It will possibly follow the techniques provided in the Educational Kit to improve his training methods.

III. In Self-training

Animal health field agents (CAHWs, paravets and veterinarians) can use the documents in the toolkit to review or revise basic technical concepts and/or procedures. They may also wish to improve a diagnosis that he must carry out in the field (sampling, autopsy, etc.) and/or consider improving their knowledge of educational techniques to make future training/awareness-raising workshops more efficient. To this end, he will use the digital or printed content of the toolkit made available to him in order to maintain his skills through continuous self-learning.

IV. Possible uses

The different components of the Animal Health Pedagogical Toolkit can be used in two distinct ways:

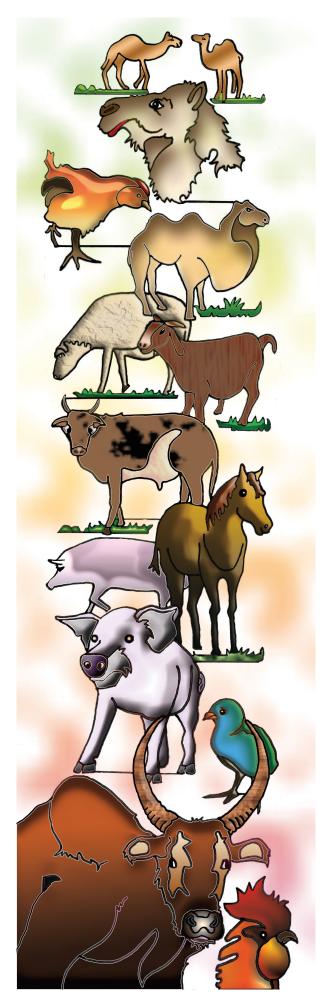
• First, as a training support on specific topics of interest to field staff in animal health. It will then be an audience of generalist scolars present in various animal health training courses.

<u>Example of use</u>: Training on "Roles and missions of CAHWs in the field and their interactions with other animal health stakeholders." In this case, chapter 1 of the Manual for Animal Health Staff will be deployed by the trainer and presented, part by part, to CAHWs in a specific region. The paravets involved in these activities should also be involved in the session. The trainer will adapt his teaching techniques and use the appropriate educational techniques (described in the Educational Kit) provided for this purpose (group size, composition, training location).

• Second, as an introduction to more specialized modules or as an introduction to a specific broader theme or of national interest. This will involve training for field staff on the implementation of new animal health programs, for which the contents of the toolkit will be used as a support or introduction to remind them of specific technical aspects.

<u>Example of use</u>: Specific training on "Implementation of a national program for the vaccination of peste des petits ruminants" In this case, the manual parts devoted to the peste des petits ruminants (chapter on priority animal diseases) and medicines (chapter on the use of vaccines) will be used as reminders or as introduction to the broader theme that will be covered during the training.





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This User Guide details the content and educational objectives of the Animal Health Pedagogical Toolkit. It describes the intended audiences and the teaching and learning situations in which it can be deployed.

























