

HANDBOOK FOR PLANNING AND MANAGING CAHW PROGRAMMES

HOW TO BUILD QUALITY
AND SUSTAINABLE
COMMUNITY-BASED
ANIMAL HEALTH SERVICES



Disclaimer

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LIST OF ABBREVIATIONS

- AU-IBAR:** African Union – International Bureau for Animal Resources
BHA: Bureau for Humanitarian Assistance
CAHWs: Community animal health workers
CEWs: Community environment workers
CHWs: Community health workers
CSOs: Civil society organisations
ICTs: Information and communication technologies
LEGS: Livestock Emergency Guidelines and Standards
NGOs: Non-governmental organisations
PPP: Public-Private Partnerships
USAID: United States Agency for International Development
VPP: Veterinary paraprofessional
VSB: Veterinary statutory body
VSF: Vétérinaires Sans Frontières
VSLAs: Village savings and loans associations
WOAH: World Organisation for Animal Health
WVA: World Veterinary Association



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INTRODUCTION

In many countries around the world, Community Animal Health Workers (CAHWs) provide basic animal health and production services to livestock keepers in areas where public and private veterinary services are unable to deliver local services on a regular basis. Since the first CAHW projects were launched in the early 1990s, the methods used to select, train, and supervise CAHWs have evolved and varied widely across and within countries. Trained on the initiative of civil society organisations¹ (CSOs), government programmes or private actors, CAHWs may face challenges to remain part of the animal health system in their area over the long term, generally due to a lack of appropriate training, supervision, and legislation. Yet this integration is an essential condition for ensuring the sustainability and quality of their services to livestock keepers and veterinary authorities.

¹ Civil Society Organisations (CSOs) can be defined as non-market and non-state organisations. Examples include nongovernmental organisations (NGOs), public and private foundations, professional associations, independent research institutes, cooperatives, etc.

Considering these challenges, this handbook has been developed for those responsible for planning and managing CAHW programmes, whether they are private or public veterinarians or veterinary paraprofessionals (VPP), or CSO staff. Designed as a practical guide, this handbook brings together recommendations for improving approaches based on 7 pillars:

-  **PILLAR 1**
ANALYSING THE LOCAL CONTEXT AND NEEDS WITH COMMUNITIES
-  **PILLAR 2**
DESIGNING THE CAHW PROGRAMME IN A PARTICIPATORY MANNER
-  **PILLAR 3**
SELECTING THE RIGHT CAHW CANDIDATES
-  **PILLAR 4**
TRAINING CAHWS APPROPRIATELY
-  **PILLAR 5**
PLANNING SUPERVISION AND CONTINUING TRAINING
-  **PILLAR 6**
PLANNING ACCESS TO QUALITY VETERINARY MEDICINAL PRODUCTS AND EQUIPMENT
-  **PILLAR 7**
ENSURING THE FINANCIAL SUSTAINABILITY OF THE PROGRAMME



The improvements recommended to private, public or CSO initiatives will only have a lasting impact if an enabling institutional framework for CAHWs is developed in the countries where their presence is needed. At the end of the handbook, recommendations are therefore made for improving the sustainability and quality of CAHW services at country level. They are aimed at:

- Institutional actors: Veterinary Statutory Bodies, National Veterinary Services and line Ministries.
- Private, public or CSO initiatives planning to train and deploy CAHWs.
- Donors/financial partners planning to support CAHW programmes.

This handbook was developed by Vétérinaires Sans Frontières (VSF) International as part of the project “Strengthening the enabling environment for community animal health workers (CAHWs) through development of competency and curricula guidelines”, implemented by the World Organisation for Animal Health (WOAH, founded as OIE) and VSF International with funding from the USAID’s Bureau for Humanitarian Assistance (BHA). The lessons learned and recommendations contained in this handbook are based on the findings of a global literature review (Hoots, 2022) and field case studies in 4 countries (Burundi, Cambodia, Niger and South Sudan). The content of this handbook has been reviewed through consultations with CAHW experts from different organisations and countries.

During this project, many of the people met expressed the wish to receive concrete, easy-to-read recommendations for improving the effectiveness and sustainability of their CAHW programmes. This handbook has been produced with the intent to respond to this need.



WHAT IS A CAHW?

“A Community Animal Health Worker (CAHW) is a person selected from or by their own community and provided with short, initial, or recurring vocational training to perform basic animal health and animal husbandry-related services, in line with national animal welfare standards. CAHWs operate on a fee for service basis or some other means, are accountable² to a registered veterinarian, a registered VPP, or an appropriate official; and are active in their community. CAHWs can also play an important role in a range of sanitary tasks such as disease reporting.” (WOAH ad hoc group working definition, 2024)



² The notion of accountability is particularly important for the recognition of CAHWs by the veterinary authorities. At present, a CAHW may be supervised and/or directed by a private veterinarian or veterinary paraprofessional, a public livestock or veterinary services officer, or the project staff and/or trainer for the duration of the project. In some cases, CAHWs may operate without supervision: these situations are problematic and should evolve towards a supervised system as soon as possible. In this handbook, the person responsible for supervising CAHWs to ensure the quality of their services to livestock keepers and veterinary authorities is referred to as the “supervisor”.

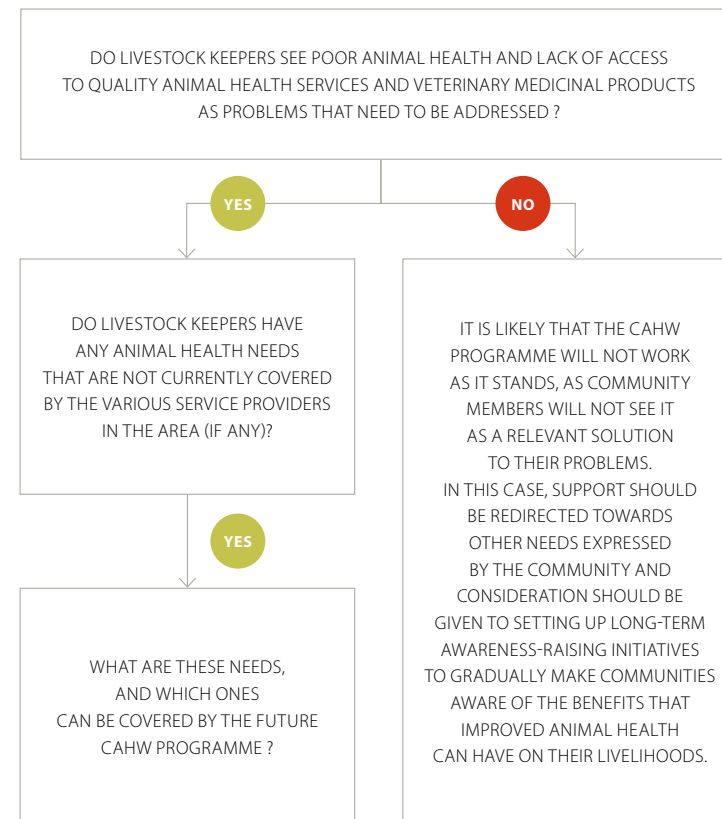
1

ANALYSING THE LOCAL CONTEXT AND NEEDS WITH COMMUNITIES

The first step in any CAHW programme is a **local context analysis and needs assessment for livestock keepers**. This step should bring evidence that training CAHWs will indeed be a relevant solution to the needs expressed by the community. This analysis should be carried out in a participatory manner and in coordination with local community representatives. It should include all the local stakeholders relevant to animal health and livestock keeping: livestock keepers and herders, livestock keepers' associations, local authorities and public veterinary services, private actors (service providers and/or input suppliers), traditional healers, etc. The needs of women, young people and other marginalised groups should also be listened to and considered at this stage.



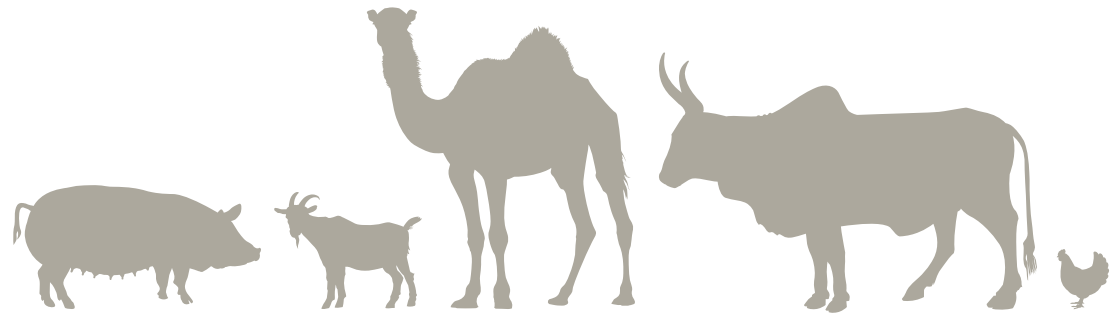
The following questions should be asked:



The levels of commitment and skills related to animal health vary according to the type of livestock keepers (pastoralists, rural mixed (crop-livestock) production farmers, peri-urban farmers). For example, pastoralists generally have higher levels of indigenous knowledge and a greater commitment to animal health than peri-urban farmers. These specific features should be considered when analysing the needs of communities.




Livestock keepers need to identify and prioritise the main animal diseases and livestock problems encountered in their area(s). This stage of needs assessment should be based on the use of **participatory approaches and methods** (including participatory epidemiology)³ and should recognise indigenous knowledge of animal diseases. Among the problems identified, it is necessary to identify those that can be handled by CAHWs (this will partly determine the training programme for future CAHWs, see [Pillar 4](#)) and those that will have to be handled by other actors. In identifying these priorities, care should be taken to include all members of the community, including women and other marginalised groups, and to consider short-cycle species such as poultry and small mammals (pigs, rabbits), as well as higher-value species such as small ruminants, cattle, and draft animals such as camels, donkeys and horses.



Alongside the needs assessment, a **participatory analysis of the local context** will help to identify any **opportunities and threats** that need to be anticipated to set up a CAHW programme. This analysis should be carried out with local stakeholders, as they are best positioned to understand the economic, agro-climatic and socio-cultural characteristics of their area.

As this local context is likely to change over time, it will be necessary to repeat this analysis with the updated information before starting any new CAHW training initiative, to identify if and where the deployment of new CAHWs is necessary.

By combining participatory epidemiology and institutional analysis, the following elements should be considered (adapted from: Ministère de l'Élevage du Niger, 2015).



DURING THIS INITIAL PARTICIPATORY ANALYSIS, MAPPING THE EXISTING WORKFORCE IS KEY

A stakeholder analysis will help identify the animal health service providers (such as vets or VPPs) already active in the area that can be impacted by the deployment of CAHWs. In particular, adding a CAHW in an area where a CAHW is already in place and meeting the needs of the community is counterproductive (discouragement, competition or even conflict, potential unviability and non-management of the less-active CAHWs) and represents unnecessary investment. Therefore, the number and location of future CAHWs to be trained need to be defined carefully to ensure equity in service access to livestock keepers without creating oversupply.

³ Participatory epidemiology (PE) is an evolving branch of veterinary epidemiology which uses a combination of practitioner communication skills and participatory methods to improve the involvement of animal keepers in the analysis of animal disease problems, and the design, implementation and evaluation of disease control programmes and policies (Catley et al., 2012). Participatory approaches can include participatory rural appraisal and participatory research action, and participatory methods include, among others, informal interviewing, ranking and scoring, visualization, direct observation (Alders et al, 2020).



OPPORTUNITIES



- Population needs and concerns in terms of livestock keeping
- Numbers and types of livestock, including the stability/mobility of herds over the seasons (which can influence the dynamics of the demand for animal health services)
- Population characteristics (density of livestock keepers, knowledge, importance of livestock keeping)
- Important animal health issues that CAHWs can address
- Presence of an enabling institutional environment (legal status for CAHWs, national reference framework of authorized authorities, support from central and local veterinary authorities)
- Economic dynamism of the area and of the livestock sector in particular, presence of functional markets and reliable supply chains and networks
- Presence (or intentions) of national, regional or local disease control programmes (eradication of peste des petits ruminants, control of brucellosis, etc.)
- Dynamism of associative environment (livestock keepers' associations, CAHW associations, possible synergies with partner development projects and NGOs)
- Types and nature of community savings programmes and other types of financial services accessible to CAHWs and communities ([Pillar 2](#))
- Presence of animal health service providers that can be positively impacted by the training of CAHWs: CAHWs, private vets and VPPs, local public veterinary services (exploring opportunities for CAHWs supervision and supply, see [Pillars 5](#) and [6](#))

THREATS



- Unwillingness to pay for animal health services
- Low level of information/awareness of animal health issues among livestock keepers
- History of vaccination failure or other issues in the area leading livestock keepers to lose confidence in animal health services in general
- Unfair competition (informal market, hawkers, some public veterinary service agents, projects bypassing the private sector with subsidised products and services, unqualified clandestine service providers posing as competent CAHWs, etc.)
- Presence of counterfeit and substandard veterinary medicinal products
- Inadequate infrastructure (transport and veterinary input supply networks, vaccination stations, etc.)
- Presence of animal health service providers that can be negatively impacted by the training of CAHWs





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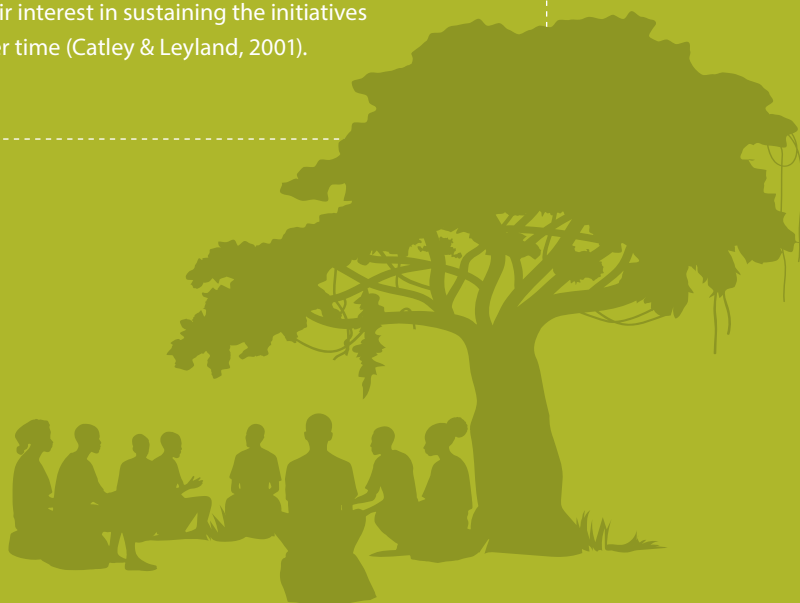


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DESIGNING THE CAHW PROGRAMME IN A PARTICIPATORY MANNER



Communities must be **actively** involved at every stage of the process: analysis, design, implementation, monitoring and evaluation. They should not just be informed or consulted; they should make decisions, take initiatives and share resources. The involvement of the community is an important element in the sustainability of the programme as it stimulates their interest in sustaining the initiatives over time (Catley & Leyland, 2001).



The operating modalities for the CAHW programme must be **defined collectively** and in a **participatory manner**, to enable all stakeholders to express their concerns, define the implementing methods most suitable to them, and agree on their respective roles and responsibilities in the programme.

The following steps should be decided in a participatory manner:

- 1** Define the **types of services** to be offered based on the animal health problems identified and the initial context analysis ([Pillar 1](#)). These services must also comply with the national reference framework of authorised activities for CAHWs, if one exists. Consider how these services will meet the needs of the different livestock keeper profiles in the area (age profile, gender, animal production system, etc.).
- 2** Define the modalities for CAHW **selection and training** and the role of each of the stakeholders in implementing these two stages ([Pillar 3](#) and [Pillar 4](#)).
- 3** Explore how **the community can contribute financially and/or materially to the programme** (by sharing the costs of training or the initial supply of kit, for example). This financial and material participation is easier to encourage when the communities themselves have taken part in the reflections and decisions linked to the programme design.



4 Agree on the **terms of remuneration** for CAHWs. Implementing animal health services can be costly and communities will be required to offer cash or in-kind remuneration in order for CAHWs to remain sustainable community resources, including renewing and maintaining their stock of veterinary medicinal products⁴ and equipment. The terms of payment, the pricing of services and the margins to be applied must be defined collectively to encourage livestock keepers to **accept paying services**. In addition to this financial incentive, which is necessary for the sustainability of the programme, CAHWs can benefit from other advantages (e.g. exemption from compulsory collective tasks) and can also be motivated by the improvement in their social status, the skills they gain in animal health and production, and the fact that they are helping members of their community.

5 Explore the possibilities for CAHWs to **access local financial services, whether formal or informal**, enabling them to save money for the purchase of expensive equipment or the replenishment of kit, for example. Indeed, there are now many local options that can be explored, such as community-based savings groups and revolving funds (e.g. village savings and loans associations (VSLAs)), or bank provided e-cards available at local veterinary pharmacies and mobile applications for micro-financing and money transfer.

6 **Define the technical and commercial relationships that the CAHWs will have with other animal health service providers in the area.** It is important to consider how a CAHW programme can be implemented in synergy with existing private and public actors. In other words, how can CAHWs be linked to other appropriate actors for their monitoring, mentoring and continuing training ([Pillar 5](#)), as well as for their supply of quality veterinary medicinal products and equipment ([Pillar 6](#))?

⁴ According to [WOAH Terrestrial Code](#), a veterinary medicinal product means any product with approved claims to having a prophylactic, therapeutic or diagnostic effect or to alter physiological functions when administered or applied to an animal.

7 **Define how CAHWs' activities will be supervised:** logically, monitoring of activities is the responsibility of the supervisor, but livestock keepers, as CAHWs' clients, and other relevant local actors (livestock keepers' associations, local authorities) have a role to play in this supervision system. While the supervisor provides more technical monitoring of the CAHW, community members provide information on conduct and ethics (compliance with rules, quality of services, relations with livestock keepers). Their involvement also develops CAHWs' sense of accountability to their communities. Monitoring arrangements should therefore involve all relevant stakeholders and include regular field visits and a community feedback mechanism. Where possible, consider using ICT options to allow data-focused and structured monitoring of CAHWs (see [Pillar 5](#)).

8 **Set up a participatory impact assessment:** as the CAHW programme is primarily designed to meet the needs expressed locally, participatory impact assessment with the communities is essential to ensure that their perspectives are taken into account. The results of the impact assessment must be cross-referenced with the needs initially identified to adapt the strategies and solutions envisaged if necessary.

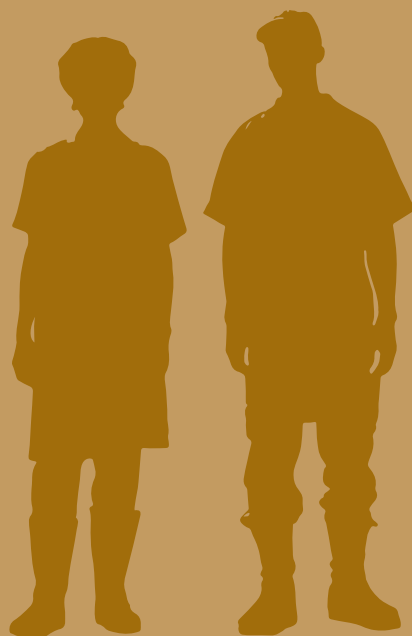
Expectations, particularly those concerning remuneration, need to be clarified with CAHWs. In most cases, working as a CAHW only provides an additional income to another income-generating activity. It is important that future CAHWs are aware of the working conditions to be expected, to avoid disappointment or abandonment of the programme once in the field. In this respect, it may be useful to involve CAHWs from neighbouring localities if they exist, so that they can exchange with the communities and the candidate CAHWs about the reality of their work.



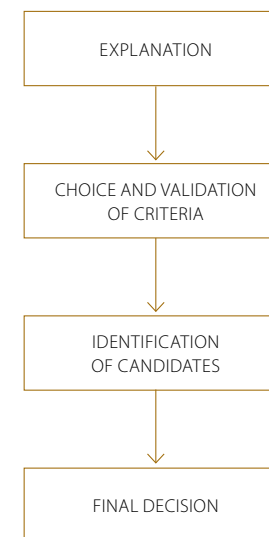
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SELECTING THE RIGHT CAHW CANDIDATES

Selection modalities for CAHWs depend on the context and should be decided during the participatory design of the programme (Pillar 2). However, there are a few guidelines that can be applied to all situations.



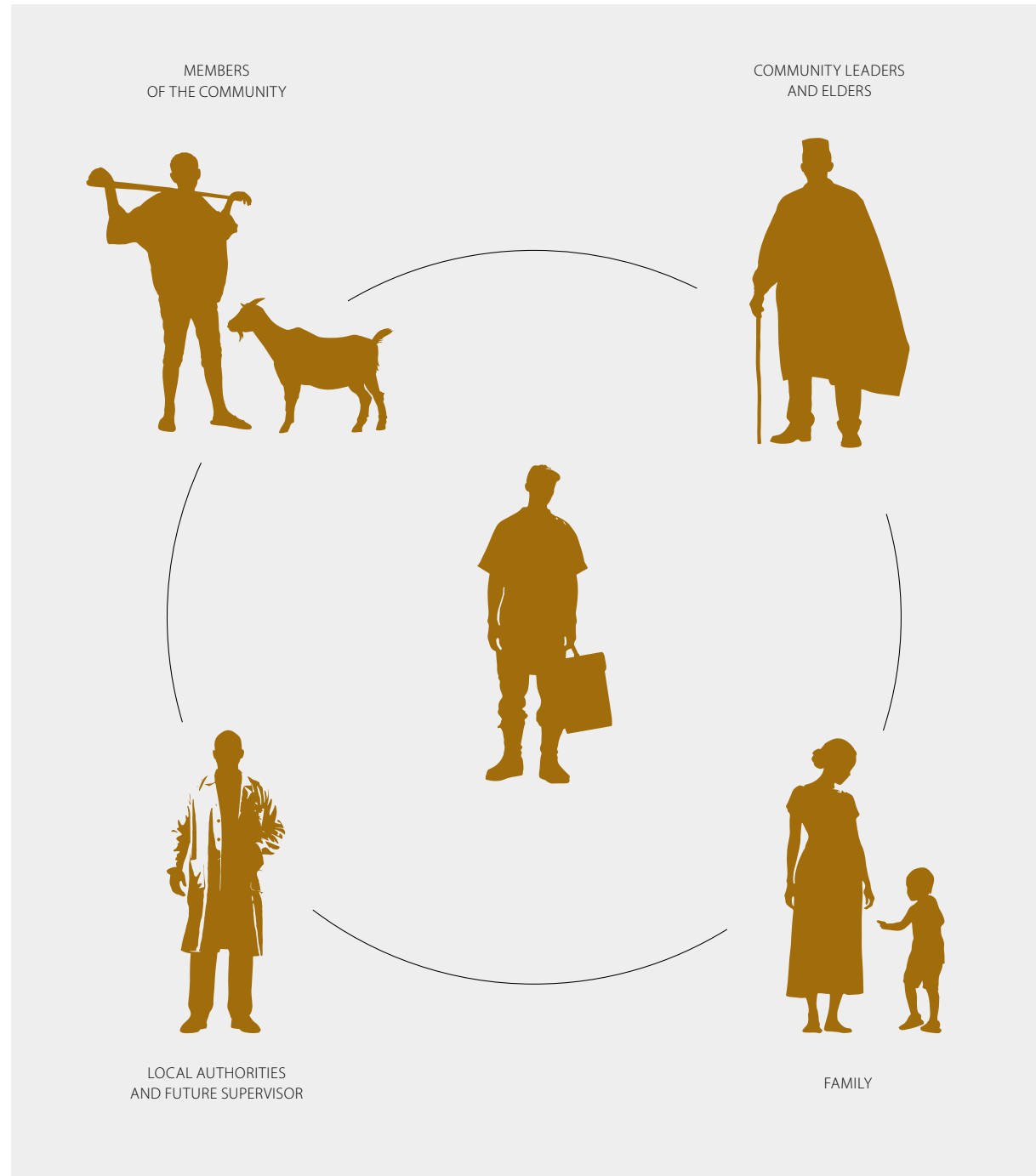
- 1 The **selection process** (explanation, choice and validation of criteria, identification of candidates, final decision) must be **transparent, participative and adapted to local customs**. In all cases, the final choice must be justified and explained to all stakeholders.



- 2 The process of identifying the right person **takes time** and relies on **building a relationship of trust** between the community and the programme planning to train CAHWs. This stage should allocate enough time to give all community members the opportunity to express their opinions and thus increase the chances of selecting the right person.

3 It is important to involve:

- **Members of the community** (and of the neighbouring communities if relevant) who play a pivotal role in the programme.
- **Community leaders and elders**, as well as **relevant local groups or associations**. These recognised and respected actors are essential to obtaining the support of community members.
- **Local authorities, including local public veterinary services**: their presence reinforces the legitimacy of the CAHWs in the eyes of the community and stimulates a sense of accountability on the part of the selected CAHWs.
- **The future supervisor** - who will assume liability for the actions of the CAHWs working under his/her direction to the veterinary authorities - needs to be involved in the CAHW selection process. This helps establish a relationship of mutual trust and accountability from the outset. For example, a two-stage selection process could be considered, with a pre-selection by the community followed by a final choice involving the supervisor (Pil, 2023).
- It has also been found that the support and acceptance of **the CAHWs' family** can play an important role in the sustainability of their activity, particularly when selecting female CAHWs. In this context, discussions with spouses and in-laws should be held to address any apprehensions and ensure their support for the female CAHW in her new role.



The **selection criteria** to be used should be decided and approved in a participatory manner by local stakeholders to consider the specific features of the local context and to promote the **social acceptability** of future CAHWs by their communities.

On the other hand, the establishment of a minimum set of official criteria at national level is often encouraged by decision-makers as a way of guaranteeing a degree of homogeneity in the “professional category” and promoting the institutional recognition of CAHWs.

A compromise should therefore be considered, combining a set of predefined criteria⁵ that all CAHWs in a country should meet with additional criteria (or “attributes”) formulated in a participatory manner by local stakeholders.

Based on VSF-Int literature review (Hoots, 2022) and the 4 case studies conducted (Pil, 2023; Ndayikeza & Nimbona, 2023; Okoth, 2024; Seng et al, 2024) **the most commonly used criteria** are:

- 1 Recognised and respected by the community:** The CAHW should be a reputable and trustworthy member of the community. Appointment of the CAHW by the local authorities or veterinary services is therefore to be avoided at all costs, as it severely limits the acceptance of the CAHW by livestock keepers.
- 2 A livestock keeper or, failing that, someone used to working with animals:** To be credible to livestock keepers who solicit the CAHW for animal health and production interventions and advice.
- 3 A resident of the community:** The proximity of the CAHWs, and the fact that they live close to livestock keepers, makes it easier to use their services, as they are in regular contact with each other, maintain social relations and therefore find it easier to discuss animal health issues.

- 4 Motivated:** CAHWs should be selected based on their own willingness and not be appointed by a third party.
- 5 Dedicated and committed:** Candidates involved in their community and helpful are more likely to thrive in the CAHW role than candidates only interested in financial gain.
- 6 Available:** CAHWs should have enough time to carry out their CAHW activities. It is therefore advisable to avoid choosing a candidate with too many roles and responsibilities within the community.
- 7 Willing and able to travel the distances** required to perform their duties.
- 8 Stable in the community** (family, children, work) to reduce the likelihood that they will leave to live elsewhere. Some programmes even add the criterion of being married to reduce the likelihood that trained CAHWs will leave their community after marriage.

The **ideal age** of candidates needs to be assessed according to the local and cultural context. At the start of a programme, it may be beneficial to train older CAHWs as they tend to hold high levels of respect from their community. Even if they only work as CAHWs for a few years, they can be important catalysts for the acceptance of CAHWs in the community. Younger candidates may be less likely to stay in the community as they may be more inclined to seek other opportunities in town than older candidates. On the other hand, older candidates may be more reluctant to travel long distances. These considerations should therefore be ascertained with the community.



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⁵ In most countries, there are no criteria officially accepted by the authorities. However, it remains possible to define a set of criteria that are commonly accepted and recognised within the same country.

Finally, **female CAHWs** have often proved to be excellent CAHWs in many situations, and particularly for small livestock (see box “[Women and CAHW programmes](#)”). Therefore, this is an important criterion to consider when the CAHW programme targets animals usually managed by women. Moreover, as women often prove to be more stable in the community than men (the latter may seek professional opportunities further afield), community members have sometimes ended up nominating female CAHWs for subsequent selections.

In addition to the above selection criteria, the community can consider other **attributes** when selecting CAHWs, such as:

- 1 Having other sources of income:** In most cases, working as a CAHW provides a supplementary income to another income-generating activity (crop production, craft, small trade, etc.). It should be noted that as women rarely have their own sources of income, this criterion may limit their participation.
- 2 Having basic literacy and numeracy skills,** to facilitate training and monitoring of activities. However, this criterion needs to be adapted to the context, particularly in areas where access to education is still limited (see box beside).
- 3 Displaying entrepreneurial skills:** Entrepreneurial spirit is an asset that should be emphasised, as the sustainability of activities as CAHWs is closely linked to the ability to promote and develop the services to livestock keepers.
- 4 Having previous experience in animal health:** People with a good empirical knowledge of diseases and/or mastery of traditional treatments can be valued during the selection process. In the same vein, it may be worth proposing **former CAHWs or trained vaccinators** to harmonise the system in the area and avoid making them potential competitors or opponents. In these cases, the evaluation and recognition of prior learning will enable the training programme to be adapted.
- 5 Being politically neutral,** to avoid the cessation of CAHW activities in the event of a political change.

ABOUT THE LITERACY LEVEL OF CAHW CANDIDATES



A minimum level of literacy facilitates training, monitoring of activities and the interpretation of medicine leaflets. This also allows CAHWs to be more autonomous in their own continuing training (access to technical documents, internet content, etc.). That said, before imposing a minimum level of education to become a CAHW, the following potential selection biases should be anticipated:

- Having been to school, literate CAHWs have usually spent less time with livestock than other members of their family. Livestock keepers may therefore **lack confidence in their skills as livestock keepers** and therefore as CAHWs.
- Candidates who have been to school are often in high demand and less available to provide their services as CAHWs. Generally, these candidates end up **leaving their community in search of other professional opportunities**.
- Care must also be taken to ensure that this criterion does not introduce a **social bias** (as literate people may belong to an “elite”) and that the CAHWs selected are genuinely close to their community.

A low level of literacy should therefore not be an obstacle to the selection of highly motivated CAHWs, as long as the training methods, memory aids and activity monitoring tools are appropriate. In this case, it is recommended to encourage literacy training alongside their first years as CAHWs so that they become sufficiently equipped to meet certain requirements related to their new role (Pil, 2023).



WOMEN AND CAHW PROGRAMMES

In many countries, it is women who look after livestock and are responsible for nutrition and health at the household level. They are often the first to notice signs of diseases, whether in the animals or in the household. They are usually responsible for small livestock (goats, sheep, poultry), which vets, VPPs and even CAHWs may neglect and see as unprofitable. **Women can therefore play a key role in positioning themselves as CAHWs for these animals.**

In addition, as small livestock are usually managed by women, it can be more socially acceptable to solicit female CAHWs to take care of them. Training female CAHWs can therefore promote women-to-women interactions and increase women's access to information and services (Loriba et al, 2023).

However, in practice, it is often the case that very few women are chosen or volunteer to become CAHWs. Once in the field, the drop-out rate among female CAHWs can be high, as they are not always called upon by their communities and often have to take on domestic tasks at the same time. They may also have difficulty travelling and face security issues. Female CAHWs sometimes find their niche as managers of veterinary input sales outlets, as they are less mobile. Furthermore, women have also been reported to be better managers than men when it comes to investments and credit (Mariner et al, 2024).

Some initiatives train female CAHWs only in species that are typically managed and cared for by women, and form male/female CAHW pairs to offer complementary services to both male and female livestock keepers. Other initiatives also train them in caring for large ruminants (whose care is more lucrative) as they would do for male CAHWs, to give them the same business opportunities. In the second case, research showed that female CAHWs end up being asked to work only with small livestock by their female counterparts, even though they have undergone more extensive training.

These mixed results are linked to social norms, which are still not very favourable to women's empowerment. Thus, before considering training women as CAHWs, it is necessary to discuss, at a community level, whether this is an appropriate choice given the cultural context, and to implement activities aimed at reducing gender inequalities and stereotypes that hinder women's success as CAHWs. A gender-sensitive programme is therefore not just about the ratio of women to men trained; it must also consider the construction of the whole system: communities, livestock keepers' associations, local authorities, markets, etc. (Pillars 1 and 2).

Ultimately, the aim is **to promote, but not impose, women's participation.** Where women's participation seems appropriate, their participation should be facilitated by organising the training within the community itself and by sequencing the training into short sessions, to enable them to meet their family responsibilities. Finally, as women have a lower access to education, it should be noted that a literacy requirement may be an obstacle to the selection of female CAHWs.





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4

TRAINING CAHWS APPROPRIATELY



The quality of the training provided to CAHWs is based on the following principles (Thonnat, 2002):

- 1 The training programme must be built using an approach that **focuses on the competencies** to develop.
- 2 **Teaching techniques** should be adapted to the target audience (adults, livestock keepers).
- 3 The **trainer** should have appropriate technical and teaching skills to successfully support the participants in their training.
- 4 **Training materials are essential** and must be adapted to the local context and the level of literacy of the participants.

These principles apply to both initial training (addressed in this Pillar) and to continuing training ([Pillar 5](#)).



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Although the training programme must be adapted to the needs of the local context, harmonising the training of CAHWs across a country is a necessary step to facilitate the official recognition of CAHWs and guarantee the quality of their services. It will therefore be necessary to define a **common set of core competencies** that all CAHWs in a same country should have, regardless of their functions in the field. In addition to this common basic set, **specific competencies** may be added depending on the context and the services expected to be provided by CAHWs (modular approach).

In this regard, the **Competency and Curriculum Guidelines for CAHWs** developed by WOA in 2024 can guide any training or standard-setting organisation in the process of harmonising CAHW training programmes. Using a competency-based approach, these guidelines propose **core competencies** and **additional competencies** (with associated **learning outcomes**) and cover both technical and soft skills⁶.

⁶ To succeed in their role as quality animal health service providers, CAHWs need a combination of technical and soft skills. **Technical skills** typically relate to the abilities needed to preserve and improve animal health (disease prevention and control, animal husbandry and welfare, management of pharmaceutical supplies, equipment maintenance, etc.). **Soft skills** relate to work organisation and CAHWs' abilities to lead, communicate, inform and influence.

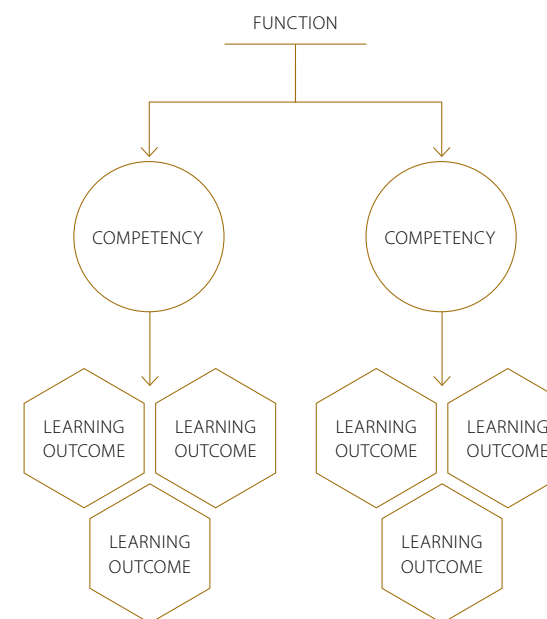
METHODOLOGY FOR BUILDING A COMPETENCY FRAMEWORK

The design of the training programme must be based on the **needs identification and prioritisation findings** (animal species, problems or diseases that CAHWs can handle) (Pillar 1) by following a 3-step process: **functions, competencies, learning outcomes**.

The first step is to identify the **functions** that CAHWs will have to perform for their communities - based on the needs assessment and in line with the national livestock support policy. For instance, CAHWs may be given role in vaccination, in clinical care, in disease reporting, in extension services, etc. On this basis, a set of **competencies** required to deliver each role or function identified is developed: this leads to the competency framework. Finally, each competency needs to be analysed in order to identify the **learning outcomes** of the training sessions that participants need to achieve to effectively gain the competency.

Care must be taken to ensure that each training element is indeed necessary to achieve these learning outcomes: **the training approach should focus on developing concrete competencies and not on gaining knowledge that will not be applicable in the field**.

Finally, all CAHW trainings should necessarily include the description and clarification of CAHWs' scope of work. CAHWs should be able to describe the animal health system of which they are a part and explain their **roles, obligations and the limits of their activities**. Specifically, CAHWs should be able to recognise when a case falls beyond their abilities and needs to be referred to their supervisor. These aspects are essential and should be covered in detail during their training.



TEACHING TECHNIQUES

Participatory teaching techniques are needed as they are better suited to the profile of future CAHWs.

CAHWs are generally **adults**, and adults learn best when they perceive that their learning meets their needs. Practice, experience sharing, and peer training are particularly fruitful approaches, as opposed to lectures centred around a presentation by the trainer.

CAHWs are also often **livestock keepers**: through their experience in livestock keeping, participants already possess a certain amount of knowledge and skills that should be considered before starting the training and valued throughout the training. This **indigenous knowledge** is particularly noticeable for pastoralists and agro pastoralists who live with their animals on a daily basis. Before starting the training, participants will need to be consulted to assess their level of experience and identify their real training needs (recognition of prior learning), to adapt the scope and depth of the training to be conducted. **Therefore, the total training duration depends on the context and on the training needs identified.**

Depending on the skills to be developed, several teaching techniques can be used, as mastering a skill generally involves several areas of knowledge at the same time (knowledge, know-how, interpersonal skills) (Thonnat, 2002):

- Acquiring **knowledge** is generally based on presentations, debates, group work, case studies and problem-solving exercises.
- Developing **know-how** is based on practical work, which may consist of demonstrations, practical exercises or training sessions, depending on the degree of mastery expected for the skill or ability being taught.
- **Interpersonal skills** are developed through role-playing, simulations and during real-life interactions (e.g. with livestock keepers between training sessions). These activities are essential to enable participants to become aware of their own attitudes so that they can change them if needed.

These participative methods also create an interesting dynamic within the group: through playful activities, participants learn from each other, share their experiences and help each other build their skills (some being more comfortable with practical work, for example, and others being more comfortable with cognitive skills). **In this regard, the WOAH Guide for trainers of CAHWs can provide additional guidance on approaches that enhance CAHW training quality.**

AU-IBAR (2003) recommended that at least 50% of the total training duration for CAHWs should be devoted to practical application. The key element for training success is that for each training element covered, participants should have the opportunity to **assimilate the concept taught and apply it in their own situation.**

Finally, the **equipment and animals** needed to carry out this practical work should be anticipated. This equipment should match what the CAHWs will have at their disposal in the field, and the training must enable CAHWs to gradually familiarise themselves with this equipment, under the supervision of the trainer. Occasional visits to livestock markets for practical work should be avoided as they generally do not enable all participants to practice and represent a health risk (disease introduction or spread). The preferable option is to **work in small groups with animals from their own communities**, under real conditions and with respect for animal welfare. As some skills are difficult to practise in real-life situations (e.g. calving or lambing), developing life-size fabric dummies (calf, lamb) can be an interesting alternative so that simulations can be performed.



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PRACTICAL RECOMMENDATIONS

Conducting training **within the community** is preferable, as this offers several advantages:

- Community participation is encouraged (e.g. loan of premises, organisation of meals or refreshments, loan of animals for practical work) and CAHWs develop a stronger **feeling of accountability towards their community**.
- **The community's confidence in the programme is strengthened:** community members can observe how the training is run and thus gain a better understanding of the future services to expect.
- **This facilitates women's participation in training:** travel and domestic chores become less of an issue.



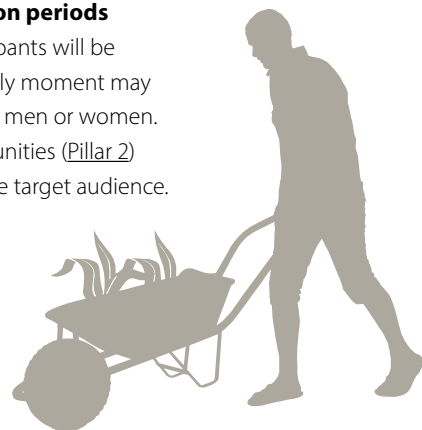
It is common practice to provide *per diem* to candidates to compensate them for the time spent on training. The amount should be determined in such a way as to cover the expenses incurred by the participants (transport costs in particular) and to compensate for their loss of income if they have other income-generating activities. In this case, it may be appropriate to ask them to document their average daily income and to compensate them according to the number of days spent on training. By conducting the training locally, the use of *per diem* may prove less necessary and the organisation of a shared meal by the community may prove sufficient.

Some practical recommendations are listed below:

- 1** Do not train more than **15 participants** at the same time (AU-IBAR, 2003), to allow sufficient interaction between the participants and the trainer.
- 2** Conduct the training in the **participants' mother tongue**. Furthermore, because of the different dialects used in different localities, the names of diseases may also be different (Abebe, 2006): before training, trainers should familiarise themselves with these potential differences. Whenever possible, the use of a trainer fluent in the local language is preferable to the use of an interpreter.
- 3** Try not to exceed **5 hours of actual training per day**, alternating theoretical and practical sessions during the day, with each session lasting no more than around 40 minutes.
- 4** As far as possible, **sequence the total duration** of the training into several sessions of 3 to 5 days, spaced out by a period to be defined with the participants (which generally varies from one week to one month). This sequencing allows:
 - To give participants time to assimilate and gradually put into practice what they are learning, while allowing them time for their other jobs or domestic chores.
 - To allow the trainer and/or supervisor to visit the participants in the field to deepen some subjects on an individual basis and assess their first steps as CAHWs.
 - To review with participants at the start of each subsequent session what they have learned from the previous modules, the difficulties they have encountered and the solutions they have found in the field.
 - To periodically revive the dynamic within the group of trained CAHWs, which in turn stimulates their motivation.



5 As CAHWs generally have parallel farming/livestock keeping activities, it is crucial to anticipate the related constraints and ensure that the training takes place at the **right time** for the participants. **Sowing, harvesting and migration periods should be avoided**, as there is a risk that participants will be less concentrated or even absent. Lastly, this timely moment may differ depending on whether the participants are men or women. The prior participatory diagnosis with the communities ([Pillar 2](#)) will help identify the right time, depending on the target audience.



6 It may be recommended to aim for a certain level of homogeneity within the cohort, in terms of language and literacy, to ensure that the training is suitable for everyone and that no participant feels overwhelmed. However, an adult audience is diverse by nature, and the trainer should therefore remain vigilant to this diversity while training, to support each participant in his/her learning. On the other hand, it may be beneficial for a group to be made up of participants with different levels of experience and skills, so that those who are more at ease can help those having more difficulty. The issue of having assorted participants will therefore need to be reflected according to the context.

7 During CAHW training sessions, it may be advisable to use **two trainers** (e.g. an experienced trainer and a more junior trainer, or the supervisor) to alternate lessons during the day, observe different learning techniques, and support each other when clarification is needed. Participation of the supervisor in the training is particularly important as this fosters mutual trust between CAHWs and their supervisor ([Pillar 6](#)).



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In addition to traditional in-person training, **distance learning solutions** are increasingly being studied and implemented. Although Internet connectivity can be a challenge in some parts of the world, these distance learning approaches are proving to be particularly appropriate opportunities for facilitating women's participation (Janzen et al., 2024). These solutions should complement in-person training in order to maintain contact with the supervisor and the other participants and to allow practical applications with animals.

SKILLS OF CAHW TRAINERS

For a CAHW training to be successful, trainers need to have content knowledge and be proficient in the use of participatory teaching techniques.

CAHW trainers (ideally veterinarians) can have very varied technical backgrounds in animal health and production (see box beside). Without appropriate training, they generally have very little mastery of participatory teaching techniques and facilitation skills, which are essential for effectively supporting CAHWs in their skills development.

It is therefore crucial to provide training for **CAHW trainers** to strengthen and harmonise their technical skills and develop their teaching skills. The development of a **trainer's guide** is recommended as it can support the training of trainers and, by harmonising trainers' skills, the harmonisation of CAHW training programmes.

Efforts to harmonise CAHW trainers should therefore be encouraged at national level, and ideally, initiatives planning to train CAHWs should be able to refer to a national list of certified trainers who would have completed a training of trainers' course.



Recognising the importance of equipping CAHW trainers with the appropriate teaching skills, WOAHA developed a **Guide for trainers of CAHWs** as an accompanying tool of the Competency and Curriculum Guidelines for CAHWs.

Trainers can have very different profiles. In Niger, the trainer for a group of CAHWs is the private veterinarian who is responsible for directing them (Pil, 2023). In Burundi, training is contracted out to veterinary consultants (Ndayikeza & Nimbona, 2023). In South Sudan, animal health auxiliaries (former CAHWs who have undergone additional training) train new CAHWs (Okoth, 2024). In Cambodia, trainers are NGO veterinarians or provincial/district veterinary officers who have undergone official training and are accredited by the General Directorate of Animal Health and Production (Seng et al, 2024). Despite these varied qualifications, it is possible to draw up the profile of an effective trainer (Ministry of Agriculture and Rural Development of Ethiopia, 2009):

- A warm personality, with an ability to win the approval and acceptance of participants.
- Social skills, with the ability to bring a group together and control it without stifling it.
- An open way of teaching, which not only generates ideas and skills, but also uses those provided by the participants.
- Organisational skills, to ensure that resources are preserved, and logistical arrangements are made without difficulty.
- Observational skills, which enable participants' problems to be identified and resolved quickly.
- Enthusiasm for the subject and the ability to present it in an interesting way.
- Flexibility in responding to the changing needs of participants.
- In-depth knowledge of the subject.

Trainers also act as role models for the CAHWs they train and as such should apply good animal health and welfare practices during training. They should set an example of respect and compassion for animals and their owners.



TRAINING MATERIALS

Training should be based on **materials** that play three main roles:

- they support and document the training sessions,
- they are used by CAHWs in the field, as a reminder or reference document,
- and they can be used as outreach materials for the individual or collective awareness-raising actions that CAHWs may carry out.

Each participant should receive their own training materials.

These tools should be adapted to the literacy level of the target audience: excessive use of text should be avoided in favour of clear, **expressive illustrations and drawings that are representative of the local context**. If text is used, it should be in the local language. When producing the drawings, it is advisable to use a designer who is familiar with the local context, and to have them validated by community members to ensure that the message to convey through the drawing is correctly interpreted by the target audience. These materials should therefore be specifically designed for participants in a given context.

As they are also working tools, these materials should be designed and organised in such a way as to facilitate their use in the field by CAHWs. They should be **durable and practical to use** (A4 or B5 format, bound, laminated). **Illustrated memo/checklists** for the use of the main veterinary medicinal products should also be developed, particularly in contexts where the CAHWs cannot read the instructions for use. During training, participants should be given the opportunity to use these aids repeatedly, so that they become familiar with them and can easily find the information they need once in the field.

These training materials, traditionally produced in paper form, are increasingly being made available and **accessible online**. Digital training solutions, for example via short learning videos or applications on mobile phones or tablets, are opportunities to be explored in contexts where internet access is satisfactory and where CAHWs have digital proficiency.

ASSESSMENT AND CERTIFICATION

Assessment should be performed at various points during training. Throughout the training, trainers need to review any misunderstandings with the participants and respond to any requests for clarification (**continuous assessment**). At the end of the session or at the start of the next one, the **formative assessment** enables trainers to check that the participants have gained the expected skills and to identify any gaps that need to be filled before moving forward. Finally, concluding training with a **final assessment** is essential to ensure that outgoing CAHWs have gained the skills required to provide quality services to livestock keepers. It is important that this assessment focuses on skills that can indeed be verified (and not on knowledge to be memorised and recited).

CAHWs passing the final assessment test should be **awarded with a certificate** from the training organisation to document training completion and differentiate them from self-proclaimed or failed CAHWs at local level. In addition, other recognition materials (e.g. identity cards) should be provided to CAHWs to reinforce their credibility and visibility to communities.

In the same vein, issuing a certificate of participation to CAHWs who failed the test should be avoided as this type of document has an official appearance and could be interpreted as a diploma by livestock keepers. In that case, it is preferable to allow failed CAHWs to take the test again, subject to a few remedial sessions.

Ideally, in countries where CAHWs are officially recognised, the final training assessment should:

- be based on a **training curriculum officially approved** by the competent authority,
- be conducted under the **oversight** of this same authority to guarantee assessment compliance with national standards,
- and lead to **official recognition and certification** of successful CAHWs who would be provided with official certificates, ID cards and other appropriate supporting materials.



INTEGRATING CAHWS INTO THE ONE HEALTH APPROACH

Where CAHWs are most needed, i.e. in remote and particularly pastoral areas, it is not only animal health services that are lacking; human health services are often considered inadequate or unavailable as well. At local level, CAHWs, community health workers (CHWs) and community environmental workers (CEWs) usually work in their respective sectors, although initiatives to link these three types of community worker are increasingly common. Indeed, the benefits of an integrated system are numerous: **financial savings** for implementers (sharing of resources such as the cold chain or means of transport), **improved disease surveillance, confidence in the system** and **improved coverage of services** (in terms of number and range of services) within communities (Mariner et al, 2024).

A recent study of the engagement of CAHWs and CHWs in the delivery of One Health services (Mariner et al, 2024) identified the main approaches to integration of community workers:

In the first scenario, CAHWs, CHWs and CEWs can receive **joint training**, retain specific roles and responsibilities in their respective disciplines and work together under a common One Health coordination and supervision mechanism (integrated supervision). They may also be requested to share certain responsibilities and activities as needs for close coordination arise (e.g. for responses to zoonoses, food hygiene activities, prevention of antimicrobial resistance, etc.). In the context of disease reporting, it is critical that all CAHWs, CHWs and CEWs are made aware of the relevant local animal health, public health and environment authorities so as to be able to report accordingly (e.g. CAHWs reporting to public health authorities when they see dog rabies or a cluster of acute watery diarrhea in children, or CHWs reporting to local veterinary authorities when they see human cases of ephemeral fever, etc.).

In the second scenario, community workers receive **cross-training** to enable the same person to provide basic health services to animals and humans. This approach is particularly relevant for transhumant communities, which are generally poorly served by human health workers who usually stay attached to static health facilities. In this case, CAHWs, who move with livestock, may be the most appropriate people to provide basic health care to people, when permitted by national regulations.

Therefore, the right approach to implement will depend on the needs of the context and on the existing regulatory framework. As with any other community initiative, community workers will need to be involved in identifying the integration approach best suited to the needs of their community. They will need to define their system and the practical arrangements for their collaboration if their One Health actions are to be effective.



5

PLANNING FOR SUPERVISION AND CONTINUING TRAINING



Supervision of CAHWs is important to:

- 1** **Guarantee the quality of services** provided to livestock keepers, by assessing knowledge and practices in terms of interventions, use of equipment and veterinary medicinal products, and by providing tailored support to the CAHW, based on the needs identified in real-life conditions,
- 2** Strengthen the **motivation** of CAHWs and the **relationship of trust** between CAHWs and their supervisor,
- 3** Encourage **acceptance and support** from local veterinary authorities and communities,
- 4** Encourage their **institutional recognition**: since, in principle, a VPP must operate under the responsibility and direction of a veterinarian⁷, it is logical to expect a CAHW to work under the responsibility of a veterinarian or a VPP, or failing that, an appropriate official.

It also allows to ensure appropriate conduct, avoid mistakes, and ensure a process is in place to correct them. Indeed, in the absence of supervision, some CAHWs may go astray (enter the informal sector, sell uncertified veterinary medicinal products, offer services beyond the scope of their training, charge excessive prices, etc.). **Providing for long-term monitoring and regulation of CAHWs' activities is therefore essential for the sustainability of the whole CAHW programme.** When designing the programme ([Pillar 2](#)), this issue of CAHWs supervision and the related resource requirements should be anticipated to ensure effective and sustainable management of CAHWs.

⁷ According to the definition of veterinary paraprofessional in the [WOAH Terrestrial Code](#)

ADVANTAGES OF SUPERVISION BY A PRIVATE VET OR VPP WHEN PUBLIC VETERINARY SERVICES ARE LIMITED

Initiatives built around CAHWs working under the direction of a **private veterinarian or VPP operating a veterinary practice or pharmacy** have proven to be especially relevant and sustainable.

Under this arrangement, the private vet or VPP is responsible for **monitoring, supporting and supplying quality veterinary medicinal products and equipment** to the CAHWs working under his/her supervision.

This relationship benefits both parties:

- By working with CAHWs, private vets or VPPs extend their area of intervention and improve their ability to reach livestock keepers they would not be able to reach on their own. Simple cases are managed by CAHWs, and difficult cases are referred to private vets or VPPs.
- By working with a private vet or VPP, CAHWs benefit from technical support and advice on managing difficult cases, as well as a reliable access to quality veterinary medicinal products and equipment.



As private vets and VPPs depend on their network of CAHWs to provide services to their clients (and therefore develop their sales), they see more clearly the value of supporting CAHWs in their skills development and access to quality equipment and medicines. This **win-win situation** also addresses the competition concerns often expressed by professionals: **in this system, CAHWs and vets/VPPs work in a complementary rather than competitive manner.**

However, for this private model to succeed, several conditions are required (République du Niger - Ministère de l'Elevage, 2015):

- 1 Where this private model is implemented, **governments need to withdraw from the provision of all curative and routine (=non-emergency) preventive animal health services** and end any unfair competition by public veterinary services officials who provide paid services to livestock keepers in addition to their official duties. Governments should focus on building an enabling environment for **Public-Private Partnerships (PPP)** to thrive (e.g. through the sanitary mandate, the use of vouchers or incentives) and reposition themselves on their **regulatory role** (monitoring and controlling the activities of the private practitioners and their CAHWs and ensuring compliance with national and local regulations).
- 2 The private vet or VPP is **liable** for the activities performed by his/her network of CAHWs to the veterinary authority and the Veterinary Statutory Body.
- 3 The private vet/VPP and CAHWs need to maintain **good relations**. To achieve this, the supervisor must be competent, available to respond to CAHWs' requests for technical support, be dynamic and motivated, and ideally be involved in the selection ([Pillar 3](#)) and training ([Pillar 4](#)) of the CAHWs.
- 4 CAHWs must obtain **their supplies exclusively from the private veterinarian or VPP** to which they are affiliated. This implies that the **quality and availability** of veterinary medicinal products and equipment at the private vet or VPP level need to be satisfactory (reliable supply chain).



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IMPORTANCE OF THE SUPERVISOR'S QUALITIES

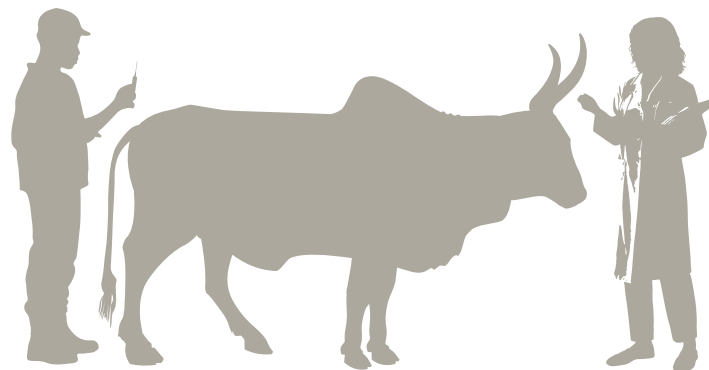
The effectiveness and sustainability of CAHWs supervision depends largely on the interpersonal skills of the supervisor. He/she should be proficient in human resource management, communication and work management. The supervisor should also be committed, rigorous, motivated, and maintain good relations with the CAHWs working under his/her supervision. For this reason, planning some training for supervisors is recommended to ensure CAHWs benefit from quality supervision and mentoring.

When no private veterinarian or VPP can supervise CAHWs in the area, and it is not possible for the time being to support the creation of a private veterinary practice or pharmacy, the solution of supervision by the public veterinary services can be implemented. This option needs to be considered carefully, as experience has shown that the supervision of CAHWs by public veterinary services is often difficult to implement effectively and sustainably. Although this supervisory role should be part of the responsibilities of the public function, budgetary constraints may not allow public officials to perform this task properly (lack of human and logistical resources).

Projects should not pay public officials for supervising CAHWs.

This practice is not sustainable, as it is unlikely that local public veterinary services will have the adequate resources to continue this task once the projects end. Instead, discussions should be held with the relevant Ministry to ensure that the monitoring of CAHWs is part of the job description of the public officials.

Finally, as some local public veterinary services staff sometimes provide services for a fee to livestock keepers in parallel with their official activities, these officials may see little interest in supervising and strengthening the capacities of the CAHWs, that they may consider as potential competitors.



CAHW MONITORING MODALITIES

Monitoring should be based on the use of **simple, clear and standardised tools** to harmonise the information collected. The monitoring arrangements should be defined by the main stakeholders ([Pillar 2](#)) to build a monitoring system that is feasible in practice and acceptable to all parties. These monitoring arrangements can be more frequent at the beginning, when the CAHW needs the most support, and less so thereafter. For example, it may be suggested to visit the CAHW every 3 months in the field for the first two years, and then every six months thereafter.

Field visits are essential so that the supervisor has a realistic view of the level of performance of the CAHWs and can react accordingly. In addition, these visits promote CAHWs' social recognition and strengthen livestock keepers' commitment to the services. In the private model, supervisors should therefore consider these visits as a necessary investment to keep their businesses healthy (Pill, 2023).

In addition to these individual field visits, **periodic meetings** can be organised where the CAHWs join their supervisor to report on their activities, discuss the cases observed and the difficulties (technical or managerial) encountered. Based on these discussions, the supervisor may conduct a short refresher session. These collective meetings not only strengthen the relationship between the CAHWs and their supervisor, but also between the CAHWs themselves.

As mentioned in [Pillar 2](#), **community participation** to the supervision system should be secured and can be encouraged by the supervisor so that the latter is made aware of the CAHW's ethics at work (compliance with rules, quality of the services provided, etc.).

Finally, where circumstances allow, **the use of information and communication technologies (ICTs)** such as instant messaging groups can facilitate the day-to-day follow-up. Moreover, digital forms or apps (e.g. to capture health events and actions attended by CAHWs), can inform evidence-based decisions and future adjustments of the programme.



FORMALISING THE COLLABORATION FRAMEWORK

The collaboration framework between CAHWs and their supervisor should be **formalised** (for instance through an agreement) to clarify CAHWs' scope of work, the geographical area or community to which CAHWs are attached and the private or public veterinary authority to which they are accountable to. Initial duration of agreement and terms of renewal and termination of collaboration need to be clearly provided, especially as in some countries, veterinary practice acts or other laws may hold the supervisor liable in the event of malpractice by the CAHWs. Commitments, rights and obligations of each party should therefore be clear to all and explicitly stated.

In addition to this agreement, it is recommended that CAHWs be provided with **visibility aids** (e.g. badge, uniform) to establish their legitimacy and credibility with livestock keepers and to distinguish them from self-proclaimed CAHWs (Pillar 4). Visibility is often a motivating factor for CAHWs, who interpret it as a sign or recognition by the competent veterinary authorities. In the event of the CAHW leaving the programme (dropping out, continuing in the informal sector), the termination of the agreement and the withdrawal of the visibility aids will discharge the supervisor of his/her liability.

CONTINUING EDUCATION

Continuing training courses enable to:

- **maintain the skills** gained during initial training,
- **correct the shortcomings** witnessed in the field,
- **adapt the skills** to the evolution of the local context (demand for new services, new diseases, new control strategies, new roles for CAHWs, etc.).

The implementation of continuing training is therefore essential and **closely depends on the appropriate supervision of CAHWs**.

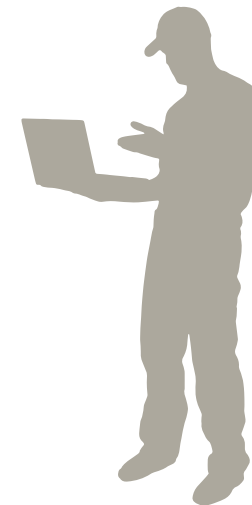
Continuing training content should be adapted to the needs identified during follow-up visits. Logically, the supervisor should therefore be (at least partly) responsible for providing continuing training to his/her network of CAHWs.

In the first few years, close support for CAHWs (combining supervision and continuing training) is particularly necessary. Historically, it has been recommended that refresher training sessions of 5-10 days should be organised once a year (AU-IBAR, 2003). This recommendation may require significant resources and may be difficult to implement in practice. In addition to in-person training sessions, other methods can therefore be considered:

- Follow-up field visits by the trainer and/or supervisor, individually or in small groups of neighbouring CAHWs,
- Or using information and communication technologies (ICTs). These include instant messaging applications (discussion and self-help groups between CAHWs, with supervisor participation), videoconferencing with the trainer and/or supervisor, etc.



The **WOAH Competency and Curriculum Guidelines for CAHWs**, with their competency-based modular approach, can also guide the design of a continuing education programme.



6

PLANNING FOR ACCESS TO QUALITY VETERINARY MEDICINAL PRODUCTS AND EQUIPMENT



Whether the CAHW initiative supports the creation of a new supply chain or strengthens an existing one, it is essential to adhere to veterinary practice standards and medication distribution regulations.

In most countries, veterinary pharmacy managers are required to be qualified pharmacists, veterinarians or VPPs. In some cases, CAHWs may not be authorised to dispense, store, transport or administer veterinary medicinal products. These considerations must be anticipated, and it is essential for the sustainability of the programme that it is designed in accordance with current legislation.



CREATING/STRENGTHENING THE SUPPLY CHAIN

It is recommended to use an existing supply chain to supply the CAHWs, rather than creating a new one and risking competing with local suppliers. Therefore, any suppliers of quality veterinary medicinal products and equipment present in the area need to be identified during the needs assessment phase ([Pillar 1](#)). The selected supplier needs to be involved in the design of the programme from the earliest stages ([Pillar 2](#)). In the absence of an existing supply chain, the creation of a local and quality private structure or network should be supported to ensure a sustainable supply chain for CAHWs. Ideally, incentives for creation should be provided in the form of a loan rather than a subsidy to improve the sustainability of the programme.

Among the possible private structures to set up, **preference should be given to setting up a local private veterinary practice or pharmacy run by a vet or a VPP** as this will also allow to ensure the supervision of the CAHW network ([Pillar 5](#)).

However, this model can face sustainability challenges in contexts where livestock keepers demonstrate a preference for **self-medication**. Indeed, they generally have ready access to unregulated drug shops (for instance in bazaars) where they can buy cheaper, often counterfeit or substandard veterinary medicinal products from vendors with little or no technical knowledge. In addition, where regulated private veterinary practices or pharmacies already exist, it is not uncommon to witness livestock keepers buying veterinary medicinal products directly from the facility when in town, hence avoiding the need to solicit and remunerate the CAHW for his/her intervention.



To overcome these barriers, **public education campaigns** should be implemented so that livestock keepers get to understand the meaning of quality, the risks of counterfeit drugs, of buying from vendors without technical knowledge, and the likelihood that lower costs in the bazaar reflect a lower quality of veterinary medicinal products. Further, livestock keepers should be made aware of the value of soliciting skilled animal health service providers including CAHWs for caring for their animals (proper administration, use of quality products, advice).

To encourage the use of CAHW services, some private models have developed a **price scale** allowing CAHWs to buy veterinary medicinal products at a preferential rate at the pharmacy. This allows CAHWs to charge a fee for their services (on top of the product price) and still offer a service that would stay in an acceptable price range for livestock keepers (Pil, 2023).

Finally, the effectiveness of this private model for CAHW supply depends on several factors, including **proximity** of the facility, **good availability and quality of products, good technical advice** (for instance with difficult cases), and **overall good personal relationships** between the CAHW and the vet/VPP (trust, payment facilities) (Pil, 2023). As with the collaboration agreement (Pillar 5), terms for CAHWs supply (prices, payment terms) from the private veterinary practice/pharmacy need to be clearly defined from the outset.

The development of a local supply chain or network should be accompanied by **capacity building for the veterinarian or VPP** operating the private veterinary practice/pharmacy in the following areas:

- **good practice in the supply, storage and dispensing of veterinary medicinal products** (keeping medicines in a dry, clean and dark place, applying the “first in, first out” method, maintaining the cold chain, monitoring and recording stocks, problems associated with over-the-counter sales, etc.). Their role and responsibilities in fighting the development of antimicrobial resistance must be explained.
- **finance and management** (financial management and record-keeping, access to financial services, optimised stock management, etc.).

Ideally, this capacity-building at local level should be part of a wider capacity-building programme covering the entire value chain (importers, wholesalers, retailers, etc.).

For their part, CAHWs need to be trained on how to manage their stock of veterinary medicinal products (e.g. awareness of temperature limits, importance of keeping products in a cool dry place, need for pest control, etc.). **The importance of the prudent use of veterinary medicinal products and the concept of antimicrobial resistance should be emphasised to CAHWs during training.**

Finally, to limit the impact that veterinary medicinal products can have on the environment, it is critical that veterinary practices and pharmacies make the necessary arrangements to manage and dispose of products appropriately within their facility. CAHWs should also be trained on safe disposal of pharmaceutical waste (vials, needles, expired products, etc.) and especially on safe preparation, use, and disposal of topical pest control products (including using and disposing of personal protective equipment, keeping children away from treatment areas, not treating animals near water sources, etc.).



Poor management/conservation practices at the selling point can lead to the sale of ineffective or even unsafe veterinary medicinal products to CAHWs, even if the incoming products were initially of good quality. As a result, livestock keepers may lose trust in CAHWs, hence threatening the sustainability of the programme.



STARTER KIT SUPPLY

The contents of the starter kit must enable the CAHWs to meet the needs expressed by livestock keepers (Pillar 1) and must correspond to the veterinary medicinal products and equipment used and demonstrated during their training (Pillar 4).

The following recommendations will help private, public or CSO initiatives planning to train CAHWs to avoid the difficulties usually encountered:

- 1 **Avoid any delay between the end of training and the provision of the basic kit.** CAHWs must receive their kit as soon as they receive their certification, so that they can quickly put into practice the skills they just gained (Abebe, 2006).
- 2 **Introduce the kit gradually**, according to the skill level of the CAHWs. In a context where the budget is generally limited, it is preferable to provide a **minimum basic kit to all trained CAHWs** to enable them to start their activities and meet the priority needs of livestock keepers (Pil, 2023). **Prioritise quality and reliability over quantity.** Ensure that the minimum needed is always available. In the context of strengthening already-trained CAHWs, it will be advisable to take stock of the equipment already available to CAHWs to avoid duplication. In a second phase and depending on CAHWs' performance and the changing needs of livestock keepers, it may become appropriate to provide **additional equipment** and/or expand the therapeutic arsenal available to CAHWs.
- 3 The equipment chosen and its spare parts must be **readily available locally** to facilitate replacement and/or repair by the CAHWs at a local structure. In contexts where the equipment is not available locally, it may be recommended to identify local artisans who could be trained to make affordable and sustainable local alternatives.
- 4 Similarly, **the veterinary medicinal products that can be used by CAHWs must be easily accessible and available at the private veterinary practice/pharmacy.** This list of veterinary medicinal products and equipment should be defined in consultation with the CAHW and their veterinary input supplier/supervisor. The [Essential Veterinary Medicine List](#) for food producing animals developed by the World Veterinary Association and Brooke can help define the appropriate list of veterinary medicinal products for CAHWs.
- 5 The **maintenance and replacement** of the equipment supplied, the **storage conditions** for the various veterinary medicinal products that can be used by CAHWs, and the **maintenance of the cold chain** must be covered during training (Pillar 4) so that CAHWs can keep their equipment in good condition.
- 6 As far as possible, explore **cost-sharing opportunities with the CAHWs and/or their community for the initial provision of the kit.** Although it is understandable to consider providing the kit free of charge to the CAHWs - who have not yet started their activities and earned an income - the financial participation of the stakeholders helps to strengthen their motivation and sense of ownership. As far as the initial kit is concerned, it may be prudent to anticipate that CAHWs may probably make beginner mistakes (on sales price calculations, profit margins, etc.) as they launch their activities.
- 7 Once the initial kit has been supplied, **CAHWs should be responsible for renewing their kit**, since they gain an income from their activities. In this respect, replenishment arrangements should be anticipated from the start-up phase of the programme, in consultation with the relevant stakeholders (CAHWs, community and veterinary input supplier). Community-based funding mechanisms accessible to CAHWs that could facilitate kit replenishment should be explored (Pillar 2). In emergency situations, initiatives supporting CAHWs should follow the recommendations of the [LEGS Handbook](#) and refrain from providing inputs free of charge to CAHWs or even to livestock keepers (see box « [CAHWs in emergency responses](#) »).





The use of animals as a means of transport, while appropriate in insecure areas where vehicle use is restricted, has generally proved less appropriate (losses, theft, costs associated with animal care).

MEANS OF TRANSPORT

A means of transport (e.g. a bicycle or motorbike) is a useful investment for CAHWs to develop their activities. That said, providing a CAHW with a bike free of charge should be avoided as far as possible, as it often leads to a lack of ownership on the part of the CAHW (deterioration, resale, donation of the bike provided) (Okoth, 2024). **CAHWs should contribute to the purchase of their means of transport and consider it as an investment to be maintained over time.**

However, at the start of their activities, not all CAHWs have the financial capacity to purchase their own means of transport in its entirety. CAHWs can be supported by their community to buy it (for example through savings groups, see [Pillar 2](#)) or could also consider taking a loan (e.g. through a local microcredit financial institution).

In the case of a programme where CAHWs are linked to private vets or VPPs, the latter could also consider providing transport for their CAHWs and setting up a reimbursement plan - this support could be provided in priority to the most motivated and efficient CAHWs, to set an example.



IMPORTANCE OF THE COLD CHAIN

Livestock keepers' confidence in CAHWs depends, among others, on the quality of the veterinary medicinal products they use.

This notion of **quality** encompasses:

- **the sourcing** from certified manufacturers and **delivery** to the point of sale (veterinary practice or pharmacy, retail outlet),
- **the adequate storage** (both at the point of sale and at the CAHW levels),
- and **the correct administration** to animals.

In this respect, the availability of adequate **cold chain storage** must be carefully considered, as many veterinary medicines and vaccines require cool or cold temperatures to maintain efficacy. At CAHW level, **coolers and ice packs** (and, ideally, a thermometer for temperature control) should be part of the equipment provided. This cold chain equipment should be chosen so that it can be easily renewed at local level, and opportunities for mutualisation with the human health sector should be explored where possible.



7

ENSURING THE FINANCIAL SUSTAINABILITY OF THE PROGRAMME

CAHWs are local animal health service providers who, depending on the context, may operate in the private and/or the public sector.



PRIVATE SECTOR ACTIVITIES

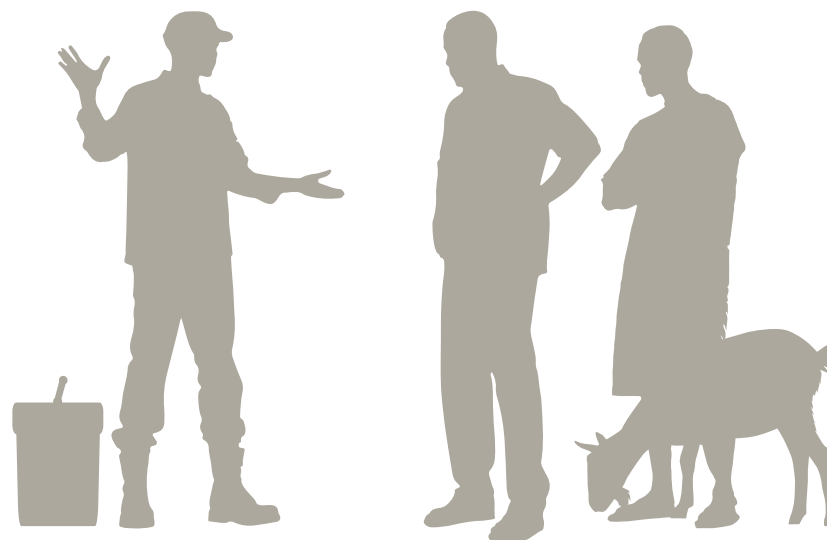
The sustainability of CAHWs operating in the private sector relies on the following key elements:

- 1 Livestock keepers need to understand **the benefits of soliciting qualified animal health service providers and using quality veterinary medicinal products** over self-proclaimed actors and medicines of unknown origin, particularly in the context where the latter are readily available (Vetwork UK, 2019) ([Pillar 6](#)). The value of **strategic preventive measures** such as vaccination (less costly in the long term for livestock keepers) and **good husbandry practices** in improving animal health and community livelihoods should be explained and promoted. Awareness-raising campaigns help build livestock keepers' confidence and increase their adherence to CAHW services. For these campaigns to be fruitful, CAHWs need to be adequately trained in animal husbandry and production and in approaches to lead participatory community meetings with livestock keepers (Pil, 2023; Ndayikeza & Nimbona, 2023).
- 2 **Livestock keepers must cover the cost of the routine (=non-emergency) health services provided by the CAHWs for their animals** (voluntary vaccinations, treatments, deworming, basic care, etc.) ([Pillar 2](#)). This payment whether in cash or in kind enables CAHWs to recover their operating costs (replenishment of supplies, renewal of equipment, cost and depreciation of the means of transport) and to make a profit that they consider satisfactory.

3 To maintain and develop livestock keepers' demand for CAHW services, **community awareness-raising and information activities** need to be organised on a **regular** and **ongoing basis** - not just at the start of the programme. CAHWs, through their community roots, must be the central actors in raising awareness. Involving their supervisor, livestock keepers' associations, local authorities and public veterinary services is also important, as it helps to strengthen CAHWs legitimacy and credibility to livestock keepers. These awareness-raising activities must cover animal health topics of local interest and ensure that all the relevant local actors⁸ have a good understanding of the CAHW programme (how it works, its benefits, the roles and responsibilities of each actor). Depending on the topic, the target audience may vary (sedentary livestock farmers, pastoralists, women, young people) and the venue, timing and approaches to be used will need to be adapted.

4 **CAHWs must be responsible for their own supply of veterinary medicinal products** (and for replacing their equipment). However, at the start of the programme, it may be necessary to support the CAHWs as they build buy-in from livestock keepers, for example through **a system of gradual recovery of costs**: CAHWs may receive their first tranche of medicines free of charge and be gradually required to make a contribution towards subsequent replenishments (e.g. up to 50% of the cost) until they have to bear the full cost of the medicines. Overall, it should be borne in mind that the CAHW activity is generally a sideline to another income-generating activity.

5 CAHWs and their supervisors need the adequate **skills and tools for basic business management** (costing, marketing, communication, etc.). Capacity building should therefore be planned at both levels.



6 **Project or programmes that provide free services to livestock keepers** (by paying salaries to CAHWs or by providing free veterinary medicinal products to CAHWs and/or livestock keepers) **hinder the development of the private sector**. Livestock keepers get used to free services, and CAHWs get used to being paid regardless of the number and type of services provided. Once the project is over, livestock keepers are reluctant to pay and the CAHWs haven't had the opportunity to develop their entrepreneurial skills.

7 In an emergency context, livestock keepers may have lost everything and may not be able to pay for access to CAHW services. The use of **vouchers**, recommended in the [LEGS Handbook](#) allows to support vulnerable populations without competing with private initiatives already in place (see box "[CAHWs in emergency responses](#)").

⁸ Livestock keepers, livestock keepers' associations, local authorities (elected representatives, mayors, community leaders), market operators, local public veterinary services, etc.



CAHWS IN EMERGENCY RESPONSES



Research has shown that the free provision of CAHW services and medicines during an emergency can undermine the local market for animal health services: livestock keepers are less willing to pay for services they received free of charge during the emergency, and CAHWs are less willing to buy medicines that were provided free of charge. As a result, service providers such as private veterinary practices/pharmacies and CAHWs go out of business, leaving all stakeholders worse off than before the emergency. By using market-based mechanisms such as **vouchers and cash transfers** as advocated in the LEGS Handbook (LEGS, 2023), disaster-affected livestock keepers have the means to pay their CAHWs, and therefore CAHWs have the means to pay their private veterinary practices/pharmacies.

In this way, emergency programmes keep the local market for animal health services alive and ensure that it is healthy and vibrant once the emergency is over and humanitarian aid is no longer needed.

Any emergency interventions should focus on planning for timely delivery of clinical veterinary care which can include developing inventories of existing CAHWs and other service providers, mapping and assessing the local veterinary medicinal products supply chains and the provisional partners. Planning can also involve ensuring that the veterinary workforce is prepared to participate in responses during emergencies.

Ideally a network of CAHWs will already be in place. However, in an emergency, new CAHWs can be trained in very specific skills, adapted to the needs of the emergency, so that they can provide the most critically needed services during the acute phase. After that, the remainder of the standard initial training can be provided, so that these community workers can be granted official status where appropriate and be called “CAHWs”. **Humanitarian partners should plan to provide a full initial training to CAHWs before completion of a project, to avoid leaving these animal health workers in the field in non-compliance with national regulations.**

CAREER PROGRESSION OPPORTUNITIES

CAHWs may be offered **opportunities to develop their roles and responsibilities**. They may, for example, become CAHW assistant trainers or act as mentors to newly trained CAHWs at a very local level, to complement and relieve the supervisor. Some CAHWs may also diversify their services over the years, offering artificial insemination, animal feed, animal marketing (thus providing a guaranteed market for livestock keepers) and even agricultural inputs (seeds, etc.).

Care should be taken to ensure that this diversification is in line with their defined activities and that these additional activities do not distract them from their primary role as local animal health service providers. In certain contexts, and in accordance with the provisions made by the national Veterinary Statutory Body, **CAHWs meeting a certain number of requirements could even consider a career upgrade and become VPPs.**

CAHW COOPERATIVES/ASSOCIATIONS

In some countries, CAHW networks have organised themselves into **cooperatives or associations**. These groupings can offer several advantages: experience sharing on difficult cases, organisation of joint training courses, information sharing on animal health events in their area, request for support in the event of over solicitation, pooling of certain expensive equipment, etc. (Seng et al, 2024). When organised and structured, CAHWs can also increase their capacity for action (group purchase of products/equipment, access to credit from financial institutions, representation in discussions with other animal health professionals, etc.). To avoid any competitive relationship, these initiatives should work in synergy and complementarity with the supervising veterinarian or VPP.

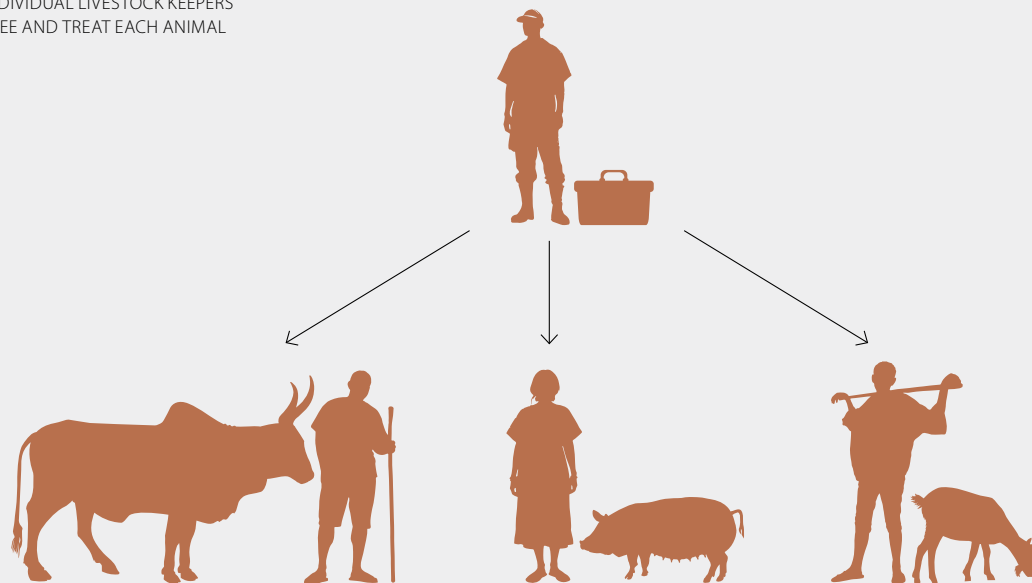


SERVICE CONTRACTING BETWEEN LIVESTOCK KEEPERS, CAHWs AND THEIR SUPERVISOR

Traditionally, the CAHW is called in by an individual livestock keeper to see a sick animal and it is generally expected that the CAHW will administer a treatment to that animal. A fee is charged for the service, which includes the intervention and the medication administered. In this model, the CAHW's income (and that of the private veterinary practice or pharmacy where applicable) is closely linked to the sale/administration of veterinary medicinal products. In some cases, this can lead to over-selling and over-administration of medicines and leaves little room for CAHWs to develop their offer of preventive services and advice.

One innovative and promising model consists in setting up a collective contract between livestock keepers (brought together in a professional organization, group or cooperative), CAHWs, and their supervisor (private vet or VPP). These three stakeholders work together under an agreement: together, they define a global package of animal health services based on the needs of livestock keepers. Through payment of annual fees – which can vary according to the size of the herd – livestock keepers can access these services throughout the year, making it easier for them to use the advisory and preventive services offered by CAHWs. Grouping livestock keepers together and pooling services can also facilitate the organization of health activities of collective interest (e.g. access to unsubsidized vaccinations, disease screening and diagnostics, implementation of control measures in the event of a health emergency). Some groups even supported the establishment of an insurance system including a compensation plan in the event of mortality (Lavigne Delville, p.61, 2006).

THE CAHW IS CALLED IN BY INDIVIDUAL LIVESTOCK KEEPERS TO SEE AND TREAT EACH ANIMAL



A COLLECTIVE CONTRACT BETWEEN LIVESTOCK KEEPERS AND A CAHW, FOR A PACKAGE OF ANIMAL HEALTH SERVICES



PUBLIC SECTOR ACTIVITIES

Alongside their private activities, CAHWs may be called upon by local public veterinary services to carry out missions of public interest in their area, such as **animal census, vaccination campaigns or disease surveillance and reporting**. In these contexts, CAHWs are particularly important awareness-raisers to explain the benefits of national disease prevention and control programmes to members of their communities.

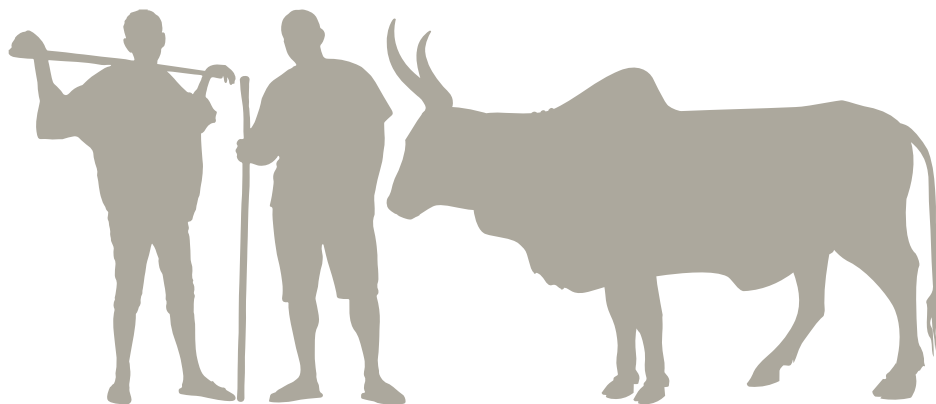
In most cases, CAHWs do not receive compensation from the public veterinary services for carrying out these activities. However, in contexts where the private veterinarian or VPP carries out public service activities under a service contract with the Veterinary Services (for example through the sanitary mandate), CAHWs that are members of the network receive remuneration for their participation. This is the case for annual and compulsory vaccination campaigns in some countries (Pil, 2023). **The establishment of a public-private partnership between the public veterinary services, the private veterinarian/VPP and the network of CAHWs therefore increases the capacity of public veterinary services to safeguard animal health across the country.**

Regarding the role of CAHWs in disease surveillance at community level, several points need to be considered:

- 1 CAHWs must perceive the benefits of their reporting at community level.** It is common to see that CAHWs report information on disease outbreaks in their area to the veterinary authorities, without any action being taken. If public officials do take action in the field following a report (whether for sampling, advice or the supply of inputs), CAHWs will be more motivated to report because they will see that their report generates a response and reduces the impact of the disease in their communities. Entrusting surveillance missions to CAHWs is therefore only relevant if the local or national surveillance system is functional, with a clearly defined chain of command and sufficient resources to investigate reports in the field and in the laboratory.

- 2** CAHWs may face challenges to in-person reporting due to their remoteness and lack of transportation options. In those contexts, **the use of information and communication technologies can facilitate and enhance the timeliness of disease reporting** (Ikiror, 2020).

- 3** When they report a suspected disease, CAHWs are in a **potentially conflictual position** (loyalty to their community, accountability to the veterinary authorities). Livestock keepers may put pressure on the CAHW not to report an incident for fear of being subjected to restrictive health measures (culling, restrictions on livestock movements, closure of markets), often without any compensation being provided. To avoid this situation, it is vital that livestock keepers are made aware of and convinced of the collective benefit of disease surveillance and that CAHWs fully understand the importance of their role in the surveillance system and the consequences of reporting or not reporting an animal health event.



NOTES

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RECOMMENDATIONS FOR IMPROVING THE SUSTAINABILITY AND QUALITY OF SERVICES PROVIDED BY CAHWS

The aim of this handbook is to guide future private, public or CSO initiatives in the design and implementation of a CAHW programme that will offer quality, affordable and accessible services to livestock keepers in underserved areas.

For these programmes to be a success, an enabling institutional framework needs to be in place and applied. In countries where CAHWs are needed, decision-makers must address the issue of the **roles and responsibilities of CAHWs** and develop a **regulatory framework for their scope of work, training and accountability**, in complementarity with the national veterinary and veterinary paraprofessional workforce.

Based on the 7 pillars discussed in this handbook, recommendations have therefore been formulated for:

- Veterinary Statutory Bodies;
- National Veterinary Services and line Ministries;
- Private, public or CSO initiatives planning to train and deploy CAHWs;
- Donors and financial partners planning to support CAHW programmes.



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FOR VETERINARY STATUTORY BODIES

A Veterinary Statutory Body (VSB) is an autonomous entity responsible for examining, certifying, registering and sanctioning animal health service providers in a country. In English, it is generally referred to as the “Veterinary Board” or “Veterinary Council”⁹. The VSB plays a key role in controlling the quality of the services provided by CAHWs. The recommendations below will help guide VSBs in building a national activity and training framework for CAHWs:

- 1 Define the **authorised and prohibited activities** of CAHWs and **how these activities are to be supervised**. This set of activities should be determined through a consultative process with all relevant stakeholders, considering the field realities and the preferences and needs of livestock keepers.
- 2 Define **training standards** for CAHWs, specifying the **minimum selection criteria** (Pillar 3), **the minimum training content and skills** to be acquired, **the training techniques** to be adopted and **the training assessment methods** (Pillar 4) to harmonise CAHW training across the country. WOAH Competency and Curricula Guidelines for CAHWs and the Guide for trainers of CAHWs can help design such training framework. Existing CAHWs that do not meet these requirements could be given a refresher course so that they can be authorised to continue their CAHW activities if they wish to do so. Ideally, private, public or CSO initiatives planning to train CAHWs would have to demonstrate that they meet these requirements to be authorised to train them. The VSB should provide for means of control to ensure that these initiatives comply with these requirements (for example, via the single window, see below). Finally, the curriculum should be reviewed every 5 to 10 years to adapt the training to the new challenges of animal production and health.
- 3 Define the **objectives and modalities for continuing education** (who is responsible, what actions are possible, how to evaluate the achievement of objectives) (Pillar 4). Where continuing education is accessible and systematically offered to all CAHWs at national level, the renewal of CAHWs’ licence to practise could be made conditional on their successful participation in continuing education activities.
- 4 Define the criteria, minimum standards and minimum skills required to become a **CAHW trainer**, set up a **training of trainers** (supported by a trainer’s guide, teaching materials, etc.), and maintain a **register of trainers certified and authorised** to train CAHWs in the country. This will help harmonise CAHW training (Pillar 4).
- 5 **Issue a licence to CAHWs** that meet national training, assessment and supervision requirements, and provide for sanctions in the event of professional misconduct, up to the withdrawal of the licence. The licence materialises and guarantees the quality of the services provided by CAHWs to livestock keepers. This authorisation should therefore be valid for a clearly defined period and geographical area.

⁹ In countries where the VSB is not yet created, these recommendations could be addressed to any relevant entity of the line Ministry.

FOR NATIONAL VETERINARY SERVICES AND LINE MINISTRIES

National Veterinary Services and line Ministries (which perform a regulatory function and ensure compliance with the veterinary legislation) may not have a clear picture of the number and geographical distribution of CAHWs in their country. The following recommendations propose concrete actions to address this issue:

- 1 Set up a **national database of active CAHWs authorised to operate**, with their location and the identity of their supervisor, to facilitate their management and monitoring. This database should be compiled locally (with the supervisor, local authorities and public veterinary services) and sent up to central level. It should be updated each year (removal of inactive CAHWs, addition of newly trained CAHWs) to plan future training needs and improve coverage where needs are identified. The use of mobile applications can facilitate the establishment and update of this database. In countries where CAHWs are recognised and registered by the Veterinary Statutory Body, this responsibility could fall to the Registrar of the VSB.
- 2 Study the feasibility of creating a **single window to regulate training and deployment of new CAHWs**. This could be a committee formed within the VSB or an entity within the relevant Ministry/department. This single window would gather information on the training and supervision requirements, the minimum kit composition requirements, and the current distribution of active CAHWs. Each private, public or CSO initiative planning to train CAHWs in an area would have to demonstrate, based on a local context analysis ([Pillar 2](#)) and a census data on existing active CAHWs, that more CAHWs are needed in order for their training to be approved. If CAHWs numbers in the area are revealed to be sufficient but the service coverage is still deemed inadequate, these initiatives should identify the contributing gaps and redirect their support accordingly (e.g. through upskilling, networking with local

suppliers to access equipment and veterinary medicinal products, linkages with saving solutions and access to credit, etc.). **To be authorised to train/strengthen CAHWs, private, public or CSO initiatives would therefore have to comply with the requirements established at national level.** Alongside this highly centralised single window, regular meetings with local stakeholders should be organised to include them in this central decision-making process. Pending the creation of this single window, regular **national meetings with private, public and CSO initiatives and donors** will help improve coordination between actors on the ground.

- 3 **Formalise institutional recognition of CAHWs at national and local level.** At national level, advocate to policy and law makers for the **inclusion of CAHWs in the relevant laws, acts, decrees and policies**. At local level, veterinary authorities should be involved in organising and validating CAHW training (e.g. through issuing the licence to practise, ideally in collaboration with the VSB), overseeing the elaboration of the **agreement** with the supervisor, and providing **visibility materials**, so that CAHWs can be considered as full members of the national animal health system. Local veterinary authorities (in collaboration with the supervisor) should also formalise the exit of CAHWs from the programme in the event of dropout or dismissal, to avoid continuation of activities in the informal sector which can confuse livestock keepers ([Pillar 5](#)).



- 4** Given the limited resources available to public veterinary services, encourage the **privatisation of veterinary services**:
- **Clarify the authorised and prohibited activities for the private and public sectors** (for example in the law regulating the veterinary profession) to end informal competition from local public veterinary services that provide paid services to livestock keepers in addition to their official duties. This unfair competition is detrimental to the development of the private sector in general and to the sustainability of CAHW services in particular. Ensure that this legal framework is enforced, with sanctions if necessary.
 - **Develop Public-Private Partnerships** (e.g. through the sanitary mandate or the use of vouchers) that ensure a smooth handover of animal health service delivery to private practitioners. Incentivize the creation of approved private veterinary practices or pharmacies managed by trained and qualified vets or VPPs, for instance through **tax incentives or access to credit**.
 - Ensure that the **roles and responsibilities** of private practitioners in animal health service provision are **acknowledged at both central and local level**. This can include a range of sensitization activities, particularly with local veterinary officers in the field.
 - Create a system for **monitoring private actors' activities** (regulatory role of the government or Veterinary Statutory Body, accountability of the private sector to public veterinary services and livestock keepers). Clearly define the roles and responsibilities of the private practitioner and the local public veterinary services in the CAHW programme and provide for penalties in the event of non-compliance with the rules laid down by either party.
- 5** **Strengthen the disease surveillance system at national and local level**, to be able to follow up on reports made by CAHWs:
- Formulate a **clear policy on the provision of animal health care and veterinary medicinal products by projects and donors**, particularly in humanitarian contexts, and ensure that this policy is applied. Provision of free or heavily subsidised care and products hampers all private sector development initiatives and confuses livestock keepers ([Pillar 7](#)).
 - Formalise the role of CAHWs in the statutes and procedures of the surveillance system.
 - Create a mechanism that allows CAHWs to report syndromic information (e.g. via a portal in a mobile application) and a section in the national/local animal health database to collect information reported by CAHWs.
 - Design protocols to analyse the information/reports generated by CAHWs and decision trees at local and/or national level to determine the actions to be taken based on this analysis, such as disease investigations, sampling, intervention plans (treatments, vaccination and other disease control options such as market closures, etc.).



FOR PRIVATE, PUBLIC AND CSO INITIATIVES PLANNING TO TRAIN AND DEPLOY CAHWS

- 1** Care must be taken **not to set up parallel systems** but rather to integrate CAHWs into existing local service supply chains:

 - Perform a **complete analysis of the local context and an assessment of animal health service needs** ([Pillar 2](#)). Encourage the **strengthening of existing actors** (CAHWs, VPPs or vaccinators where appropriate), rather than training new ones.
 - **Prioritise quality over quantity**: training more CAHWs is often not the answer to a high rate of inactive CAHWs (Hoots, 2022). Analyse the factors underlying this high drop-out/inactivity rate and implement the appropriate measures to address it ([Pillar 2](#)).
 - **Link trained CAHWs to animal health service providers in the area** (such as vets and VPPs) for ensuring their supervision, continuing training and supply of equipment and veterinary medicinal products: **create synergies rather than competition**.
- 2** Coordinate with the relevant authorities to **clearly understand and apply current legislation and training and practice requirements for CAHWs** (national training programme, licensing, etc.). Plan comprehensive minimum training for CAHWs so that they can be granted official status where appropriate.
- 3** **Secure support from central authorities towards the CAHW initiative and involve local veterinary authorities in implementing the programme**. For public initiatives, this is part of the process, but some private or CSO initiatives do not always act in consultation and coordination with the local veterinary authorities. This is detrimental to the institutional recognition (formal or informal) of CAHWs in the field, and therefore to their sustainability.
- 4** **Formalise the collaboration (roles, responsibilities, area of operation) between CAHWs and their supervisors** - the latter assuming the liability for the quality of the services provided by these CAHWs. Clarify in the agreement the risks and obligations of supervisors should there be malpractice involving the CAHWs they collaborate with. Consider clear and realistic supervisory arrangements and take advantage of ICTs to facilitate field supervision and reporting to local veterinary authorities ([Pillar 5](#)).
- 5** Consider **community-based savings groups and revolving funds, mobile savings and money transfer applications, and access to local microcredit financial institutions** for the purchase and renewal of equipment, veterinary medicinal products and means of transport ([Pillar 6](#)).
- 6** Consider the importance of implementing activities **gradually and over a long period** in the planning and funding of a programme:

 - Allow sufficient time and budget to implement **awareness-raising activities** on a sustained basis over a long period (before the training of CAHWs and during their operation), as they create and stimulate livestock keepers' demand for CAHW services (Pil, 2023). Highlight the benefits of high-quality animal health services and veterinary medicinal products and the value of using strategic preventive measures, while stressing the risks associated with using poor-quality services and/or products ([Pillar 7](#)).
 - Allocate sufficient time to the **participatory design of the system**, which must meet livestock keepers' needs (identification and prioritisation of needs, CAHW selection, programme operating modalities, roles and responsibilities of the actors involved). Time is necessary to give all stakeholders the opportunity to express their needs and take part in decision-making ([Pillars 1](#) and [2](#)).



- Consider the critical importance of **sequencing training and using participative training approaches**: prefer the quality of learning to the quantity of training provided (favour sequenced or interval training over an extended period, competent trainers, community facilitators, local designers, etc.) ([Pillar 4](#)).

7 Consider creating **CAHW associations/cooperatives** in coordination with their supervisor to promote the sustainability of their services and offer CAHWs prospects for professional development (diversification of services, personal development and capacity building) (Seng et al, 2024) ([Pillar 7](#)).

8 Consider innovative models to animal health service provision such as **service contracting between a group of livestock keepers, CAHWs and their supervisors**. This economic model based on annual fees facilitates livestock keepers' access to animal health services and can stimulate their demand for preventive and advisory services ([Pillar 7](#)).

9 For CSO initiatives, design an **exit strategy that promotes CAHWs sustainability**:

- **Reconsider the support strategy of providing services free of charge to livestock keepers and paying salaries to CAHWs**. Once the project is over, these CAHWs may be confronted with livestock keepers who are reluctant to pay for services they previously received free of charge. Instead, from the very start of the project, raise awareness of the need for livestock keepers to contribute financially to cost recovery to benefit from animal health services in the long term.

Make candidate CAHWs aware of the fact that this activity is a sideline whose remuneration depends on their level of activity and efforts made (performance-based incentive system) ([Pillar 7](#)).

- **Rethink the provision of free equipment, veterinary medicinal products and transport**. Redirect the support strategy towards the creation or strengthening of local supply networks such as private veterinary practices/pharmacies that will ensure reliable access to veterinary equipment and medicinal products over the long term ([Pillar 6](#)).
- **Plan from the outset who will be responsible for the ensuring supervision and continuing training of CAHWs** once the project has ended. Involve these actors from the start of the project to ensure a smooth transition ([Pillar 5](#)).

10 **In emergency situations, follow the guidelines and standards established for the provision of animal health services in the LEGS Handbook**. Use market-based mechanisms such as the provision of vouchers or cash to disaster affected livestock keepers so that they can pay CAHWs for their services. CAHWs should not be paid by NGOs implementing projects. Market-based mechanisms ensure that the local animal health system, including private veterinary practices/pharmacies, CAHWs, VPPs, and veterinarians stay in business and aren't out competed by NGOs and other actors distributing free goods and services ([Pillar 7](#)).



FOR DONORS / FINANCIAL PARTNERS

- 1** Recognise that **establishing sustainable CAHW services depends on the time** allocated to the design, implementation and monitoring/evaluation stages of the programme:
- **The active participation of the community (and their willingness to pay for CAHW services) requires the implementation of a broader community development approach** to build their trust and facilitate their ownership of decisions. This can take more time and effort when the community has had a previous bad experience with animal health services or if they are used to free services.
 - **Involvement and participation of national and local veterinary authorities** are important to ensure the institutional sustainability of the programme, but this process can take time.
 - For the monitoring and mentoring of CAHWs to be effective and sustainable, **supervisors need to benefit from long-term, personalised support** (capacity building at start-up, access to financial services, monitoring of coaching performances during the first few years, etc.).
 - Finally, **a sufficient budget should be set aside to conduct impact assessment of CAHW interventions** on animal morbidity and mortality and on livestock keepers' incomes, to assess the effectiveness of the programme. These studies provide essential information for reorienting the programme's strategy and refining future approaches (Nalitolela & Allport, 2002; Bartels et al., 2017).

- 2** **Support the development of private practices/pharmacies** for the initial supply and replenishment of quality veterinary medicinal products and equipment. These structures, when managed by a private veterinarian or a VPP, are particularly appropriate for ensuring the long-term monitoring and mentoring of CAHWs ([Pillar 5](#)).

- Support the creation of these private structures by facilitating their **access to loans**, for example through microfinance institutions.
- Provide training for vets and VPPs managing a pharmacy in good practices **for the supply, storage and dispensing** of veterinary medicinal products, and in **finance and management** ([Pillar 6](#)).

- 3** **Rethink the support strategy aimed at replenishing CAHWs' kits with equipment and veterinary medicinal products in response to a low level of activity.** CAHWs should be responsible for replenishing their kit. Moreover, this additional support does not generally improve their activities, nor does it enable them to respond more effectively to livestock keepers' needs (Pil, 2023). Instead, the factors underlying this inactivity should be analysed (inadequate training, poor access to inputs, livestock keepers' inability or unwillingness to pay) and support should be redirected accordingly (e.g. through funding continuing training, community awareness-raising campaigns, and building technical and commercial linkages with local partners (suppliers, supervisors, local microfinance institutions)).



CONCLUSION

Private, public or CSO initiatives, Veterinary Statutory Bodies, National Veterinary Services and line Ministries, donors and financial partners: we all have our share of responsibility in ensuring an enabling environment for CAHWs. This handbook provides critical guidance for planning and managing quality and sustainable CAHW programmes, operating in synergy with the existing animal health workforce. Countries where CAHWs do not benefit from a regulatory framework yet are encouraged to take ownership of the recommendations included in this handbook and take the relevant policy actions to ensure appropriate training, supervision and legislation for CAHWs, for the purpose of ensuring quality services to livestock keepers and the veterinary profession.



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