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# Animal health resource centres: operation and management guidelines

Mamusha Lemma, Hiwot Desta, Solomon Gizaw and Barbara Wieland  
International Livestock Research Institute



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*Patron: Professor Peter C Doherty AC, FAA, FRS*

*Animal scientist, Nobel Prize Laureate for Physiology or Medicine—1996*

Box 30709, Nairobi 00100 Kenya

Phone +254 20 422 3000

Fax +254 20 422 3001

Email [ilri-kenya@cgiar.org](mailto:ilri-kenya@cgiar.org)

[ilri.org](http://ilri.org)

*better lives through livestock*

ILRI is a CGIAR research centre

Box 5689, Addis Ababa, Ethiopia

Phone +251 11 617 2000

Fax +251 11 667 6923

Email [ilri-ethiopia@cgiar.org](mailto:ilri-ethiopia@cgiar.org)

*ILRI has offices in East Africa • South Asia • Southeast and East Asia • Southern Africa • West Africa*

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# Introduction

The Health of Ethiopian Animals for Rural Development (HEARD) is an EU-supported project which is jointly implemented by the Ministry of Agriculture (including regional bureaus of agriculture and livestock development), the International Livestock Research Institute (ILRI) and the Ethiopian Veterinary Association (EVA) in Amhara, Oromia and Somali regions.

The purpose of the project is to increase sustainable livestock productivity and improve the marketing of livestock products. In line with the HEARD project intervention framework, ILRI and EVA jointly work to strengthen the competencies (knowledge, skills and attitudes) and incentives for veterinary service providers to deliver better and rationalized animal health services. Continuous professionalization of animal health service providers through a variety of learning activities is essential to improve the quality of animal health services.

In Ethiopia, animal health service providers have limited access and skills to use digital tools to access and use new animal health information and knowledge. Indeed, many people involved in animal health service provision do not know where to look for animal health information. As local-level animal health service providers are the main sources of information and knowledge for livestock keepers, their capacity to access and use information and knowledge using digital tools is critical for improving animal health services in the country.

While the digital infrastructure is increasingly expanding in Ethiopia, animal health service providers are not well linked to different knowledge sources, such as livestock research and global web-based knowledge resource platforms. One way to address this gap is by establishing animal health resource centres (AHRCs) which are knowledge hubs that enable animal health service providers to have access to and use new animal health knowledge and information and to promote a culture of learning and organizational knowledge management.

Drawing upon the Agricultural Knowledge Centres (AKCs) experience of the Livestock and Irrigation Value Chains for Ethiopian Smallholders (LIVES) project, the HEARD project supported district-level partners to establish new or refurbish existing knowledge centres. Based on a functionality assessment of existing agricultural knowledge centres (Berhanu, Desta and Gizaw 2019), the project upgraded functioning LIVES-supported knowledge centres to also act as AHRCs and established new ones in areas where they are most needed.

Experience from the LIVES project shows that effective management and utilization of knowledge centres requires capacity development of partners in the form of training, coaching and self-study materials.

# Purpose and users of the guidelines

The AHRC management guidelines focuses on the people, process and technology aspects of resource centres. It aims to offer guidance for partner institutions on promoting, managing and using the resource centres in a sustainable way.

The guidelines are accompanied by a sequential training and coaching plan for AHRC managers to address both technology, people and process aspects of AHRCs. The training and coaching plan enables AHRC managers to interact with each other, face-to-face and virtually, and become part of a group of AHRC managers, which promotes exchange of ideas on how to address challenges and improve use of AHRC facilities and services.

# Overview of LIVES experience in agricultural knowledge centres

While there was an enabling environment and opportunities for the utilization of the knowledge centres in some project sites, there were also many challenges related to access to resources, attitudes, organizational culture, and capacity in the sites. The LIVES experience has shown that AKC managers are the driving force for the success of the knowledge centres. However, at times, they struggled because of various limitations.

The following were some of the challenges identified in AKCs in the LIVES project:

- Lack of regular internet access due to non-payment of subscription fees.
- Poor internet connection.
- Allocation of AKC rooms and computers for regular office use due to space shortage.
- Disagreements between agriculture and livestock development offices over ownership and use of the knowledge centres.

Despite these challenges, the AKC managers played a key role in promoting the value of the centres, creating demand for knowledge, and improving individual, team and organizational learning culture. The support given by institutional leaders to the AKC managers was also an important factor in the success of the knowledge centres.

The management of AKCs involves technology, people and processes aspects. Many of the problems with the knowledge centres were related to people and process problems. The lesson from these challenges for the HEARD project is to focus on organizational factors, such as ownership, leadership and vision of institutions leading the AHRCs; the capacity of AHRC managers; and the motivation and learning culture of users (partner staff and other users).

# Purpose and functions of animal health resource centres

AHRCs are shared venues that are meant to provide animal health service providers and other livestock experts with access to digital facilities in order to facilitate easier access to new animal health knowledge and information and effectively manage organizational knowledge resources.

The purpose of AHRCs is to create access to and utilization of external information and knowledge on animal health services. AHRCs enrich the documentation, sharing and learning capacity of animal health service providers through the provision of diverse and relevant reading and audiovisual materials and equipment. The AHRCs aim to improve the knowledge sharing, knowledge adaptation and knowledge utilization culture and capacity of animal health service providers by increasing the availability and accessibility of animal health knowledge and information.

The expectation is that functional AHRCs can enhance the effectiveness of animal health service providers by improving the availability, access to, and sharing of knowledge and information from the HEARD project and other knowledge sources. This improved access to new knowledge and information is expected to enhance the professionalization of animal health service providers, which will translate to improved animal health service delivery.

While the purpose of the AHRCs is to support animal health service providers, it is necessary to facilitate and expand the use of the centres by other departments of livestock offices or other district sectors. Interested livestock keepers and private livestock businesses can also use the resource centres. It may be necessary to devise a fee-based use arrangement to diversify and sustain the use of AHRCs.

This requires upgrading AHRCs in the long-run to serve as multipurpose resource centres by expanding their online reading and audiovisual material collection so that it serves the needs of other sectors. This can increase the value proposition of the AHRCs as district resource centres and finance offices can be convinced to allocate adequate funds to the centres.

## Animal health resource centre services and facilities

AHRCs are equipped with digital devices to aid the capturing, storage, translation and sharing of knowledge by animal health service providers. The use of these facilities enhances the digital literacy and capacity of animal health service providers. In this digital age, the ability of animal health service providers to find, evaluate, and create content using various digital tools is an essential skill.

Some of the functions of AHRCs include providing:

- Online access points where animal health service providers access information and knowledge, share reports, and network with experts and knowledge sources through the internet.
- Informal and formal meeting venues to enrich the knowledge sharing, team learning and skills development experience of animal health service providers.
- Training venues for small-group livestock keepers with audiovisual materials.
- Mini-libraries where animal health service providers consult knowledge resources to upgrade their knowledge and information to develop training or extension materials.



- Documentation and audiovisual facilities where organizational reports, training resources or animal health materials can be stored and managed.
- Facilities for disease outbreak reporting and vaccination services database.
- Training venues for animal health service providers and other experts using online resources. (For example, smart TVs in the AHRCs can be connected to digital devices both for displaying PowerPoint presentations and online resources, and to the internet for accessing information in real time).
- Digital technology training venues for other district sectors using the digital devices and equipment in the centres.
- Digital learning platforms for continuing professional development of animal health service providers. AHRCs can be used to facilitate interaction where animal health service providers and others can work together. This service may need to be facilitated by a learning institution to keep learning lively, bring in new topics and alert users on new findings and materials.

## Benefits of animal health resource centres

The accessibility of new knowledge and information is enhanced when the knowledge and information is consolidated and can be obtained from a single source. AHRCs can create such access points for animal health service providers and other users.

Some of the benefits of AHRCs include:

- Providing access to computers, audiovisual equipment and the internet.
- Familiarizing animal health service providers with digital tools and improving their digital skills to access, share and use knowledge.
- Providing access to the internet improves communication by making it easier for animal health service providers to share reports and documents by email and online. It also facilitates their networking with researchers, experts, and friends to get technical support and information.
- Increasing access to online and offline knowledge and information.
- Creating learning opportunities by allowing users to attend online courses, discussion platforms and consult knowledge platforms.
- Supporting the development of organizational culture that supports knowledge sharing and learning by serving as venues for animal health service providers to meet and share knowledge and experience on a regular basis. This improves group learning and promotes a knowledge sharing culture among animal health service providers.

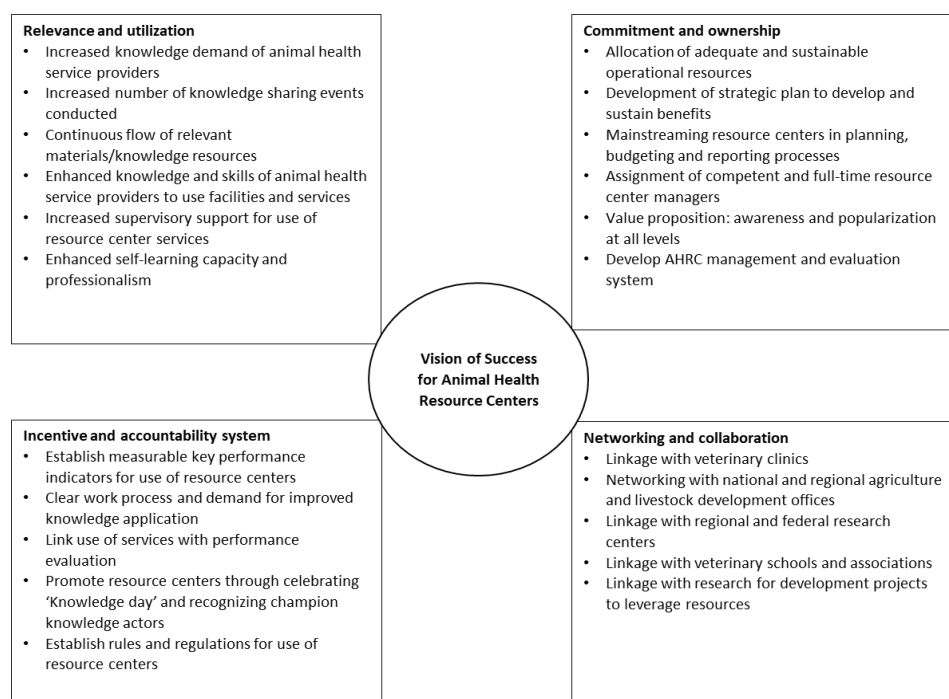
# Setup of animal health resource centres

The AHRCs have been established in the HEARD project districts to strengthen the knowledge management capacity of project partners and ensure sustainability of project outcomes.

The AHRC establishment process has the following steps:

- **Assessing functionality of existing AKCs previously supported by the LIVES project.** Using developed assessment instruments, existing AKCs were assessed through telephone interviews and field visits. Recommendations for renovating existing AKCs and/or establishing new ones with a focus on animal health were made based on the findings and the needs and commitment of partners (Berhanu, Desta and Gizaw 2019).
- **Consultation with project partners and articulation of the need for resource centres.** Project partners must be convinced about the relevance of AHRCs and also show commitment to financially support established resource centres to ensure their sustainability.
- **Defining a vision of success for the resource centres.** The institutions leading the AHRCs must articulate what they hope to achieve through the AHRCs and what success of the resource centres would look like.
- **Allocation of adequate space for AHRCs and equipping the centres with necessary digital devices, furniture and knowledge products.** The institutions leading the AHRCs must provide an appropriate venue or space to host the centres and the project equips these spaces with the necessary digital tools, audiovisual equipment, and online and offline materials.
- **Assigning AHRC managers.** Based on criteria agreed between partners and the project, the institutions leading the AHRCs should assign full-time managers for each AHRC.
- **Promotion and awareness creation about AHRCs.** Popularizing AHRCs at the leadership level creates a sense of purpose and accountability for the management and utilization of the resource centres.

Figure 1: Vision of success for animal health resource centres



# Accessibility and utilization of animal health resource centres

The use of AHRCs can be influenced by factors such as resource centre characteristics, organizational characteristics, and user characteristics.

## Animal health resource centre characteristics

This is the technology aspect of AHRCs. Physical condition can influence accessibility, attractiveness and utilization of resource centres. AHRCs should have the following characteristics:

- Be in an accessible location
- Maintain cleanliness
- Have enough working spaces
- Have adequate ventilation
- Be well lit
- Have a well-functioning digital infrastructure
- Provide adequate and relevant materials and services

## Organizational characteristics

This is the process aspect of AHRCs. Ownership and leadership by the institutions managing the AHRCs is key to create an enabling environment and accountability system to promote organizational norms and knowledge culture that support learning and sharing among users.

Effective utilization and management of AHRCs requires the following organizational conditions:

- Mechanisms to promote, manage and utilize AHRCs such as time of use, terms of use, incentives for exemplary use, consequences for misuse, assignment of full-time managers, etc.
- Promoting the value proposition of AHRCs in team meetings.
- Supporting AHRC managers and recognizing users that best use the centres by the management.
- Creating incentives and accountability mechanisms to increase utilization through demand creation.
- Motivating and supporting users to acquire, store, share and use knowledge to improve individual, team and organizational performance.
- A clear strategy to develop and integrate AHRCs in mainstream organizational activities and processes including allocation of adequate operational budgets.
- Digital devices and furniture of the AHRCs not to be moved out of the centres.

- Encouraging experts to use the AHRC resources and facilities productively and responsibly.
- Encouraging opening/access to AHRCs every day during and after working hours.

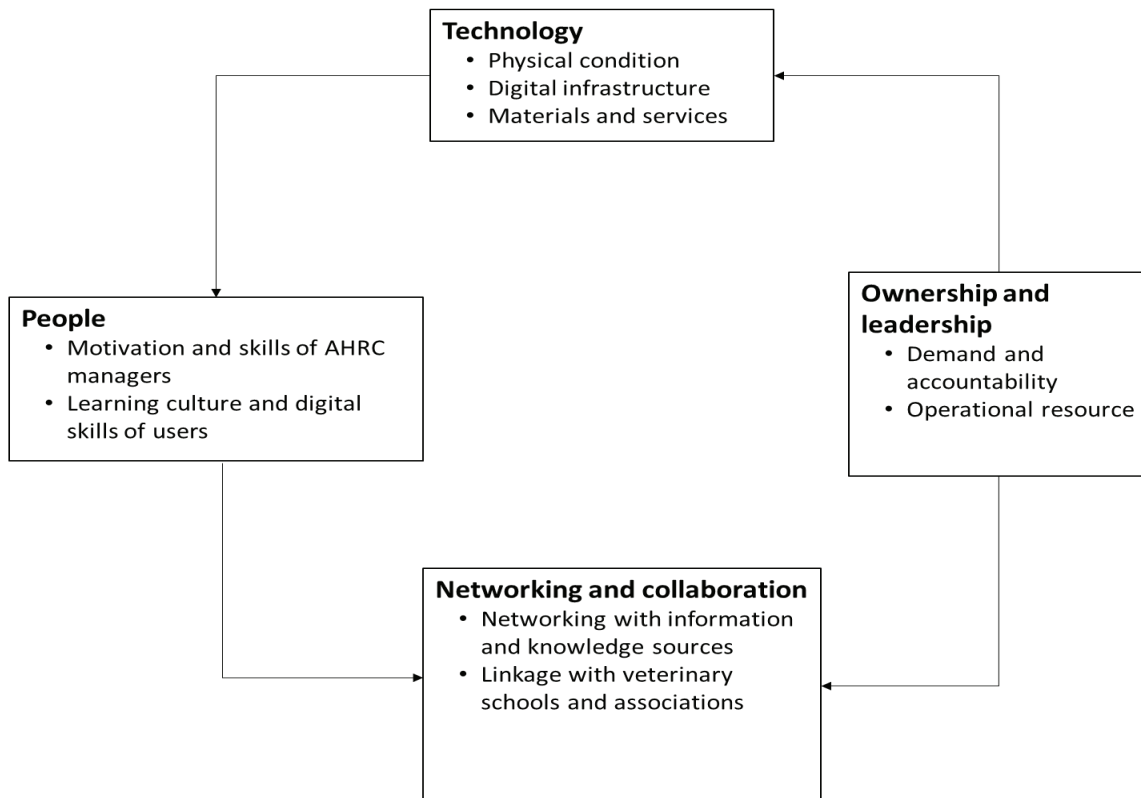
## User characteristics

This is the people aspect of AHRCs. User characteristics can influence utilization of resource centres. Individuals may differ in their knowledge-seeking and learning behaviour, digital skills and personal development goals. Some individuals can be knowledge champions who can promote the use of resource centres.

The following user characteristics can influence the utilization of resource centres:

- Demographic characteristics such as age, education and gender.
- Information-seeking and learning behaviour.
- Attitude, motivation and learning culture.
- Capacity to access, curate, share and use knowledge.
- Digital literacy and experience (presence or absence of basic digital skills).

Figure 2: Factors influencing operation and utilization of animal health resource centres



# Responsibility and competency of animal health resource centre managers

## Roles of animal health resource centre managers

Motivated AHRC managers with good digital skills and good management support are critical for the effectiveness of AHRCs as knowledge access points/hubs. Their work plays a significant role in improving AHRCs users access to new knowledge and information.

The skills capacity of AHRC managers influences their management of the resource centres to ensure the optimal utilization of AHRCs. It is important that AHRC managers have good understanding of the purpose, functions and services of AHRCs as well as digital and interpersonal skills.

Some of the roles of AHRC managers include:

- Based on a developed monitoring format, keeping record of user profiles.
- Assisting users to access knowledge and information from various sources.
- Creating linkages with digital knowledge platforms.
- Promoting the value proposition of the resource centres.
- Creating awareness among animal health experts and office leaders about the services and benefits of AHRCs.
- Celebrating a 'Knowledge day' with recognition of champion users.
- Organizing training support for users to develop digital skills.
- Receiving feedback from users and improving AHRC services accordingly.

Table 1: Role descriptions of animal health resource centre managers

AHRC manager tasks	Description of tasks
Promote and create demand for AHRC facilities and services	<ul style="list-style-type: none"><li>• Popularize relevance and usefulness of AHRC services using various ways, such as celebration of a 'knowledge day' where active users are recognized/rewarded</li><li>• Work with management and like-minded experts to promote AHRCs in meetings, field days and training events</li><li>• Display information about AHRCs on noticeboards, in offices, farmer training centres (FTCs) and other appropriate venues</li><li>• Organize popularization meetings and skills-based training events in digital tools/AHRC facilities</li><li>• Work with management to promote and mainstream AHRC services with resource commitment</li></ul>
Properly maintain AHRC facilities and services	<ul style="list-style-type: none"><li>• Keep AHRC facilities clean and safe</li><li>• Properly catalogue and shelve reference and audiovisual materials</li><li>• Properly file soft copy materials</li></ul>

AHRC manager tasks	Description of tasks
Properly monitor and keep records of AHRC use	<ul style="list-style-type: none"> <li>• Develop user registry books and monitoring format</li> <li>• Record number and type of users and type/purpose/duration of use</li> <li>• Analyse and report on the utilization of AHRC facilities and services</li> <li>• Develop tools to obtain feedback from users and management</li> <li>• Hold interviews with users and produce human interest stories to demonstrate the relevance and usefulness of AHRC services and mobilize institutional support for the sustainability of the AHRCs</li> </ul>
Broker access to knowledge and information	<ul style="list-style-type: none"> <li>• Identify and categorize information and knowledge needs of users</li> <li>• Organize training in accessing information using different websites</li> </ul>
Identify and capture knowledge	<ul style="list-style-type: none"> <li>• Identify and create linkages with various sources of information and knowledge (research centres, non-governmental organizations (NGOs), private sector and public organizations) to continually resource AHRCs</li> <li>• Access training and audiovisual materials from various sources, including purchases and subscriptions</li> <li>• Access and post knowledge portals and web links</li> </ul>
Facilitate and support users to generate and share knowledge	<ul style="list-style-type: none"> <li>• Support users to document meetings, workshops, training and other events and store documents in the AHRCs</li> <li>• Support users on the operation of AHRC digital devices to access and share knowledge</li> <li>• Arrange regular team learning and sharing meetings in the AHRCs</li> <li>• Organize seminar series for users to share experiences and lessons</li> <li>• Organize regular training sessions on knowledge management tools and methods</li> </ul>
Develop use rules and regulations	<ul style="list-style-type: none"> <li>• Develop AHRC service rules and regulations and have them endorsed/promoted by leaders/managers in meetings</li> <li>• Post the use rules and regulations in the wall of the AHRC room</li> <li>• Set agreed AHRC service hours</li> <li>• Establish AHRC management committee to plan, budget and evaluate performance</li> </ul>

## Required capacity of animal health resource centre managers

AHRC managers need skills to discharge their responsibilities effectively. Assigning competent and full-time AHRC managers is a key success factor for enhancing the relevance and utilization of the resource centres.

AHRC managers should have the following competencies:

- Basic understanding of knowledge management concepts, processes and tools.
- Basic knowledge of organizational learning and characteristics of learning organizations.
- Digital skills (basics of operating systems, computer networking, troubleshooting tips, operation of digital cameras and TV, use of social media platforms, browsing the internet, document sharing, storage and retrieval of data, etc.).
- Interpersonal communication and facilitation skills.
- Lobbying, advocacy, storytelling and influencing skills.

- Networking and relational skills.
- Record keeping and documentation skills.
- Resource mobilization skills.
- Coaching and mentoring skills.
- Strategic planning skills.

# Sustainability of animal health resource centres

- Ensuring the sustainability of AHRCs requires a behavioural change in the animal health extension service, which needs to recognize its role as a knowledge broker and facilitator of knowledge transaction.
- Linkage and networking of AHRCs with a wide range of information and knowledge sources is key to ensure continuous flow of adequate and relevant information and knowledge. The existence of diverse and relevant reference and audiovisual materials will encourage users to regularly visit the AHRCs.
- Institutions leading AHRCs should have a clearly articulated vision and sustainability strategy to mobilize required resources (budget and materials) for internet subscription and maintenance and upgrading of the centres.



# Monitoring checklist for animal health resource centres

Use the following checklist, and adapt it as necessary, to monitor utilization of the AHRCs and analyse trends of use overtime.

- Type and purpose of use
- Type of users (gender, age range, discipline, position, sector, etc.)
- Time and duration of use
- Trend of use overtime
- Cleanness and handling of equipment and furniture
- Skills to operate and use digital devices and facilities
- User feedback
- Use of digital/smartphone cameras to record field events and illustrate reports
- Management support to AHRC managers
- Motivation, innovativeness and resourcefulness of AHRC managers
- Knowledge resource acquisition
- Internet connectivity level
- Change in learning and networking culture and practice of users
- Learning and personal development opportunities created
- Perceived and real benefits of resource centres
- Allocation of adequate operational resources
- Management attitude, support and ownership of resource centres
- Institutional mechanisms to promote and reward utilization of resource centres

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