One Health for
Humans, Environment,
Animals and Livelihood

# STANDARD OPERATING PROCEDURES FOR THE ONE HEALTH UNIT (OHU)

Revised version – July 2023

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

**Swiss Agency for Development
and Cooperation SDC**

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## ACRONYMS

| | |
|---|---|
| Amref | Amref Health Africa |
| AHT | Animal Health Technician |
| ASALs | Arid and Semi-Arid Lands |
| CAHW | Community Animal Health Worker |
| CBHI | Community-Based Health Insurance |
| CBON | Community-Based Observatories Network |
| CDR | Community Disease Reporter |
| CHV | Community Health Volunteer |
| CHW | Community Health Worker |
| CO | Community Observers |
| COHU | County One Health Unit |
| DA | Development Agent |
| DDDM | Data Driven Decision Making |
| EHO | Environmental Health Officer |
| (OH4)HEAL | (One Health for) Humans Environment Animals and Livelihoods |
| GDP | Gross Domestic Product |
| HDA | Health Development Army |
| HEW | Health Extension Worker |
| HHA | Household Health Agent |
| IDP | Internally Displaced People |
| ILRI | International Livestock Research Institute |
| MEAL | Monitoring Evaluation Accountability and Learning |
| MSIP | Multi-Stakeholder Innovative Platform |
| MUAC | Mid-Upper Arm Circumference |

| | |
|---|---|
| NOHSC | National One Health Steering Committee |
| NRM | Natural Resource Management |
| OH | One Health |
| OHIS | One Health Information System |
| OHTF | One Health Task Force |
| OHU | One Health Unit |
| PWD | People with Disability |
| PLW | Pregnant and Lactating Women |
| PRM | Participatory Rangeland Management |
| RHT | Rangeland Health Technician |
| SOP | Standard Operating Procedure |
| TWG | Technical Working Group |
| VSF-Suisse | Vétérinaires Sans Frontières Suisse |
| ZDU | Zoonotic Disease Unit |

# 1.  INTRODUCTION

## 1.1 CONTEXT

There are almost 270 million pastoralists living in Sub-Saharan Africa, who rely on livestock production and support between 10-44 percent of their countries' Gross Domestic Product (GDP)[1]. Pastoralists live in arid and semi-arid lands (ASALs), that are often characterised by fragile ecosystems, frequent extreme weather events and poor infrastructure[2]. Nomadic pastoralism is well adapted to these harsh environments where vegetation and natural resources are the primary source of nutrition for livestock and play a central role in local livelihoods and income. Mobility allows nomadic pastoralists to access rangeland resources in different areas in different seasons and, hence, to maximise livestock productivity[3].

Nomadic pastoralists are among the most hard-to-reach communities. Due to their mobile way of life and dispersal over vast geographical areas, they have often been neglected in national policies and excluded from essential service provision. Yet, pastoralist communities are amongst the most vulnerable to disease (especially zoonoses), climate-related disasters (e.g., drought, flooding), famine and conflict (e.g., over resources). Access to services – defined in terms of availability, accessibility, affordability, adequacy, and acceptability – is limited, and the scattered and mobile nature of communities is a challenge for service providers. Innovative approaches are therefore needed to enable pastoralists to access and utilise the services they need. Given the intimate relationship that they have with their livestock and the ecosystem they both depend on, One Health is a suitable approach to delivering better services.

## 1.2 OVERVIEW OF HEAL PROJECT AND HEAL MODEL FOR INTEGRATED SERVICE DELIVERY

### 1.2.1 AIMS

The One Health for Humans, Environment, Animals and Livelihoods ("OH4HEAL" or simply "HEAL") project aims to improve the access to quality human and veterinary health services and sustainable natural resources management in vulnerable communities in (agro)pastoral areas of Ethiopia, Kenya and Somalia.

The HEAL project aim is achieved by:

- Engaging (agro)pastoral communities in defining sustainable, demand-driven and needs-based One Health Units (OHU)
- Implementing context-specific and cost-effective service delivery models

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[1] FAO (2018) Pastoralism in Africa's drylands. Rome, Italy. Available at: https://www.fao.org/documents/card/en/c/CA1312EN

[2] Lamuka, P.O. et al. (2017) "Camel health management and pastoralists' knowledge and information on zoonoses and food safety risks in Isiolo County, Kenya," Pastoralism, 7(1). doi:10.1186/s13570-017-0095-z.

[3] Gammino, V.M. et al. (2020) "Health services uptake among nomadic pastoralist populations in Africa: A systematic review of the literature," PLoS Neglected Tropical Diseases, 14(7). doi:10.1371/journal.pntd.0008474.

- Providing evidence to policymakers and investors on OHUs as a solution for service delivery to (agro)pastoral communities

The HEAL project is informed by the close relationship between pastoralists, their livestock and their environment. This insight and understanding provide the basis to apply the One Health approach to tackle the challenges of access, use and management of essential services and inputs.

### 1.2.2 HEAL MODEL FOR INTEGRATED SERVICE DELIVERY

The HEAL project promotes an integrated service delivery intervention through three collaboration platforms, recognised as the "core interventions" (figure 1):

- *One Health Unit (OHU)*, collaboration platform for frontline service providers and community-based actors
- *Multi-Stakeholder Innovative Platform (MSIP)*, collaboration platform for community members
- *One Health Task Force (OHTF)*, collaboration platform for government departments

As depicted in figure 1, the three collaboration platforms (OHU, MSIP, OHTF) work together to establish and maintain a new service delivery model that ensures that pastoral communities can access and utilise essential health services for their families and their livestock and implement improved natural resource management. Continuous communication and open dialogue are maintained between the OHTF and the MSIP to ensure the collective and functional governance of the OHU. The OHTF coordinates with the OHU to ensure that services are jointly planned and delivered in line with the national policies and strategies, as well as local development plans and priorities. The MSIP coordinates with the OHU to ensure the community oversight of services provided.
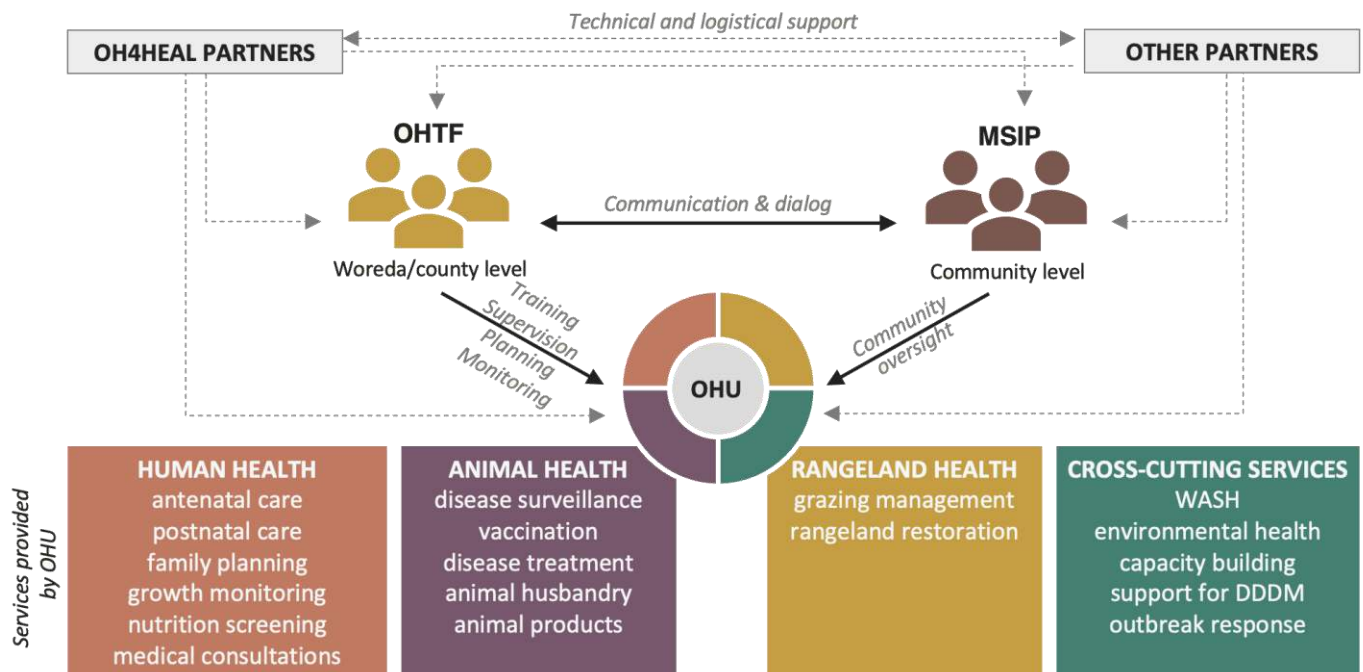


*Figure 1: Visual depiction of the three collaboration platforms of the HEAL project, their relationship with each other, and the services delivered by the OHU*

### 1.2.3 GUIDING PRINCIPLES

The core guiding principles that govern the planning, implementation, and monitoring of the OHU are reported below:

- **Integration** of human and animal health care delivery, rangeland and environmental health services, including natural resources management and weather-related services

- **Alignment** of partners' activities with those of the national/regional priorities and plans

- **Partnership** between implementing parties across sectors and at all levels, building on existing actors and networks

- **Enhanced accessibility and utilisation** of essential services, with special attention to children, women, elderly, and vulnerable groups in the communities (e.g., returnees and internally displaced people, IDPs)

- **Contextualisation** of the OHUs to the specific needs in each district/country

- **Collection of evidence and lessons learned** from small-scale interventions at the village level, to support data driven decision making (DDDM) on the refinement and scaling of services at the district/county level and to influence the development of policies at the national and regional level.

Taken together, these principles aim to make human, animal, rangeland and environmental health services available, accessible, affordable, adequate, and accepted by women and men in local communities.

### 1.2.4 HEAL PARTNERS

The project was designed and is being implemented by a Consortium of three organisations led by Vétérinaires Sans Frontières Suisse (VSF-Suisse) and including Amref Health Africa (Amref) and International Livestock Research Institute (ILRI).

**VSF-Suisse** is the animal health technical lead and operates field offices in Ethiopia (Dawa zone of Somali Region and Borana Zone of Oromia Region) and Somalia (Gedo Region).

**Amref** is the human health technical lead and operates field offices in Ethiopia (Liben zone of Somali Region) and Kenya (Isiolo and Marsabit counties).

**ILRI** is the rangeland health, training and research technical lead and supports the implementation of rangeland activities through Research Officers deployed to Ethiopia and Kenya via host agreements with the other consortium partners.

In line with the bottom-up, context-specific, evidence-based, and transdisciplinary approach, the HEAL partners collaborate with communities, local authorities, and local actors, including both public and private service providers, to support operationalisation of the OHU as the service delivery model among pastoral communities.
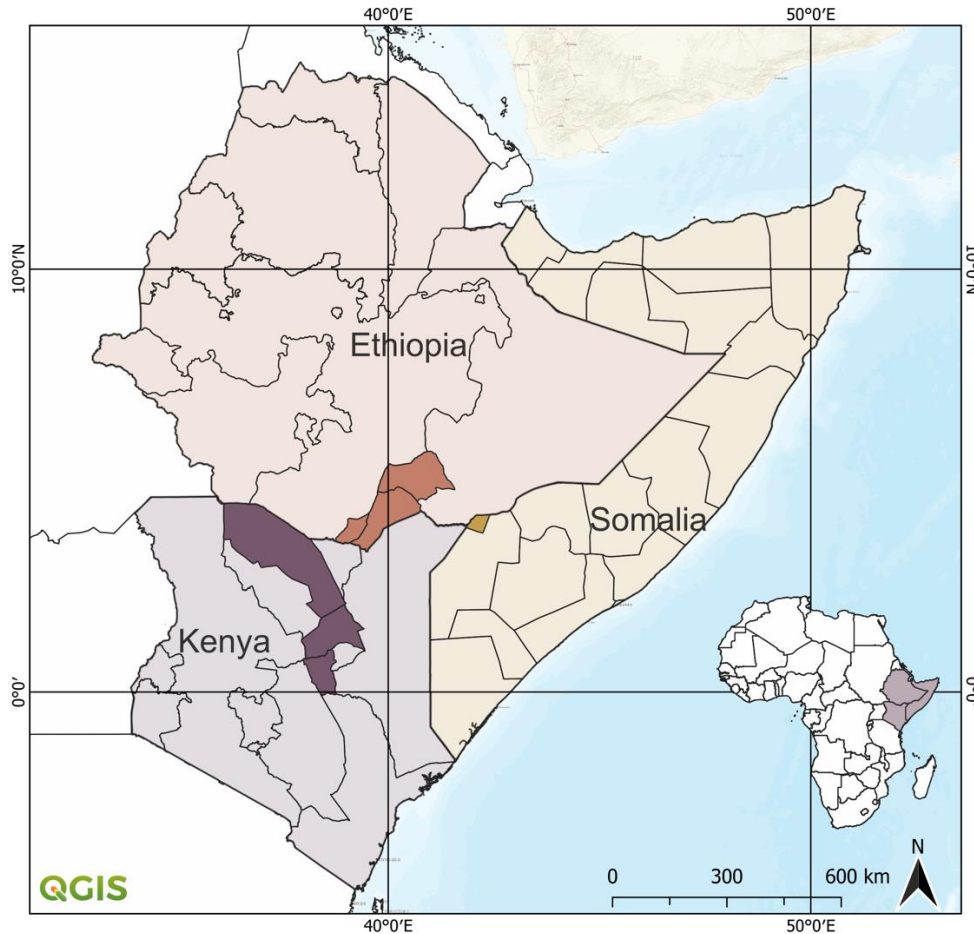
*Figure 2: Area of intervention of the HEAL Project (as of August 2023)*

## 1.3 PURPOSE AND SCOPE OF THE SOP

This Standard Operating Procedure (SOP) provides guidance for the establishment and delivery of high-quality, effective, efficient, and uniform OHU services across different sites in a sustainable manner with duty bearer's ownership.

All actors involved in the preliminary actions within the HEAL project participated in the development of the standards. In-depth and continuous discussions were held and maintained with key informants from the livestock, health and environment departments in the targeted districts; Amref-piloted OHU teams and staff, users, community representatives, health workers and development partners were interviewed to collect their perceptions and feedback on the One Health activities run in their areas of residence; field missions and supervision activities were conducted to observe service delivery and collect relevant information throughout the process.

The development of the SOP has considered the health and veterinary service delivery system, as well as the rangeland health and environmental management system in each context of intervention and has used best practices collected across the region to define minimum inputs and standard services. The SOP provides a general guidance for setting-up and running the OHUs in the region, as well as country-

specific indications to comply with the different systems existing in the three target countries (Ethiopia, Kenya, and Somalia).

Within the framework of HEAL, this SOP is intended to guide the OHUs in providing uniform essential health services using an integrated, One Health approach. These integrated services target vulnerable communities in pastoral and (agro)pastoral areas and people residing in remote locations with difficult or no access to health and veterinary facilities as well as rangeland health and environmental management services. These standards are applicable to all new and already existing OHUs in the intervention areas of the HEAL project and may be adopted and adapted to new areas by other partners.

The SOP is a living document that will be amended and improved over time as more evidence on good practice becomes available. The first version of the document was released during the Inception Phase (August 2020), capturing mainly inputs coming from Amref experience in Ethiopia and Kenya. It was however soon understood that the SOP lacked guidance for the proper integration of rangeland health and environmental management services into the OHU. A partners' exchange workshop was thus held in May 2021, with the goals of sharing experiences and lessons learnt across all HEAL sites; gaining a shared understanding of the local contexts; discussing the integration of the rangeland and environment component; and supporting the harmonization of procedures for the operationalization of the OHUs. The partners exchange workshop resulted in the establishment of a Technical Working Group (TWG), assigned with the task of analysing the applicability of the SOP and revising the standards of operations accordingly. The TWG is responsible for monitoring the delivery of the agreed standards and for providing recommendations and technical support to the field teams. The TWG is also authorised to periodically review and revise the SOP, as needs emerge at least every three years.

The document is organised in six chapters. Chapter 1 (this chapter) introduces the HEAL model for integrated service delivery with its core components and guiding principles. Key definitions used in the SOP are presented Chapter 2. Chapters 3 to 5 describe the structure, step-by-step establishment process, relevant MEAL indicators and main actors of the OHU, MSIP and OHTF, respectively. An overview of services delivered by the OHU, including information on the logistics and procurement processes and financing, is provided in Chapter 6.

A few annexes are attached to the SOP. These present other elements of the HEAL project that integrate into the core interventions (OHU, MSIP and OHTF) and reinforce the operationalisation of One Health at the community level, expanding its scope and reach. These are reported in the annex as they are not implemented across all project locations yet. However, the HEAL partners strongly recognise their value and are looking for further resources to introduce them in all locations.

## 2.   KEY DEFINITIONS USED IN THIS SOP

**One Health**

One Health is an "integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals, and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and inter-dependent"[4]. Within the framework of HEAL, One Health is operationalised through supporting coordination, collaboration, communication and capacity building between service providers, communities, and government stakeholders towards the goal of improving health service delivery and rangeland health in pastoral areas.

**Frontline service providers**

Frontline service providers are qualified staff engaged in the delivery of health services to humans and animals and in the management of natural resources. They are responsible for providing integrated services through the OHU working together and supporting each other to ensure that the health threats at the human, animal and environment interface are collectively discussed and tackled. Frontline service providers include a wide range of professionals and paraprofessionals which have different names in the countries of HEAL operation but have similar qualifications and provide the same services (table 1).

*Table 1: Frontline service providers in the three countries of HEAL operation*

| Sector | Ethiopia | Kenya | Somalia |
|---|---|---|---|
| Human | • Health Officers<br>• Registered Nurses | • Clinical Officers<br>• Registered Nurses | • Clinical Officers<br>• Registered Nurses |
| Animal | • Animal Health Technician (AHT) | • Animal Health Technician (AHT) | • Animal Health Technician (AHT) |
| Environmental | • Natural Resource Management (NRM) Officer<br>• Environmental Health Officers (EHO) – under the Ministry of Health | • Natural Resource Management (NRM) Officer<br>• Environmental Health Officers (EHO) – under the Ministry of Health | • Natural Resource Management (NRM) Officer<br>• Environmental Health Officers (EHO) – under the Ministry of Health |

**Community based actors**

Community-based actors are members of the community, usually selected by the village leader to receive specific training and carry out agreed tasks in the village. Community-based actors are usually the health focal points in their community and are mainly involved in preventive and promotive services. They provide a link to the health and veterinary facilities, and rangeland management institutions. They can be involved in surveillance, data observation, discussion and dissemination, education and

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[4] Adisasmito, W.B. *et al.* (2022) 'One Health: A new definition for a sustainable and healthy future', *PLoS pathogens*, 18(6), pp. e1010537–e1010537. Available at: https://doi.org/10.1371/journal.ppat.1010537.

awareness activities and referral to health facilities. They can be members of the OHU and the MSIP and play a pivotal role in mobilising the community around health threats, and guiding discussion of issues at local level. Community-based actors include a wide range of volunteers, and they have different names in the countries of HEAL operation but provide the same or similar services (table 2).

*Table 2: Community-based actors in the three countries of HEAL operation*

| Sector | Ethiopia | Kenya | Somalia |
|---|---|---|---|
| Human | • Health Extension Workers (HEW)<br>• Health Development Army (HDA) | • Community Health Volunteers (CHV) | • Community Health Workers (CHW) |
| Animal | • Community Animal Health Workers (CAHW) | • Community Disease Reporters (CDR) | • Community Animal Health Workers (CAHW) |
| Environmental | • Development Agents (DA)<br>• Rangeland Health Technician (RHT)[a] | • Rangeland Health Technician (RHT) [a] | • Rangeland Health Technician (RHT) [a] |
| One Health | | • Household Health Agent (HHA) | |

[a] Rangeland Health Technicians are a new community-based actor being piloted in select sites by HEAL (see Annex 2).

**Environmental health**

Environmental health is "a branch of public health that is concerned with monitoring or mitigating those factors in the environment that affect human health and disease" (Oxford English Dictionary). Within the framework of HEAL, this definition is expanded to include the effects of the environment on animal health and disease.

In pastoral rangelands this includes (but is not limited to):

- Infectious diseases affecting livestock, wildlife, and/or people which are sensitive to weather and climate patterns (e.g., malaria, Rift Valley fever, anthrax) or other environmental conditions (e.g., tick-borne diseases)
- Infectious diseases and parasites that are spread through the environment (e.g., echinococcosis, hook worm) or through poor environmental hygiene and sanitation practices (e.g., improper carcass disposal)
- Environmental hygiene (environmental health, water, and sanitation) including regulation, management, and development of rangelands/water points to avoid contamination/pollution, management of waste, including sewage and manure, solid waste and plastic.

**Rangeland health**

Rangeland health is "the degree to which the integrity of the soil, vegetation, water and air as well as the ecological processes of the rangeland ecosystem are balanced and sustained," with 'integrity' defined as the "maintenance of the functional attributes characteristic of a locale, including normal variability," (Pyke et al. 2002).

In pastoral rangelands, rangeland health includes the ability of a rangeland to provide the feed base needed to sustain healthy and productive livestock, and to provide ecosystem services to greater society, on a long-term sustainable basis. Within the framework of HEAL, rangeland health is recognised to contribute to human and animal health through providing nutrition and livelihood support, which in turn builds resilience against disease and improves wellbeing and welfare.

**Integrated health services**

Integrated health services "respond to the needs of individuals and populations and deliver comprehensive good-quality services throughout the life course through multidisciplinary teams who work together across settings and use evidence and feedback loops to continuously improve performance"[5]. Within the framework of HEAL, multidisciplinary teams include service providers and community-based actors in human, animal, environmental and rangeland health, working collectively to ensure that, in pastoral systems, healthy people can derive their livelihoods from healthy livestock, in a sustainably managed environment.

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[5] WHO (2018) Integrating health services Brief. Technical series on primary health Care. Geneva, Switzerland. Available at: https://www.who.int/docs/default-source/primary-health-care-conference/linkages.pdf

# 3. OHU

## 3.1 WHAT IS IT?

The One Health Unit[6] is a service delivery model that promotes the meaningful integration and provision of human, animal, environmental and rangeland health services at the grassroots/village level to address the issue of access to essential health services (availability, accessibility, affordability, adequacy, and acceptability). In the long term, the OHU promotes the universal access to health and sustainable development.

The OHU provides preventive and curative health services to humans and animals, incorporating improved rangeland health and sustainable natural resource management. It supports education and awareness on cross-cutting issues, with special attention to child and maternal health, hygiene, animal husbandry, nutrition, water and sanitation.

The OHU is also a useful tool to improve surveillance, promoting the early identification of health and environmental hazards, the prevention and control of disease outbreaks, and the monitoring of risk factors and malnutrition patterns that could inform the decision-making and improved programming based on real community needs. Information collected through the OHU and shared with local concerned authorities facilitates the surveillance of hazards and impacts to human, animal, and environmental health and trigger an immediate integrated response.

Outcomes and lessons learnt inform the establishment of the OHU at a wider scale, supporting the recognition of the new service delivery model at national and regional level.

### 3.1.1 MOBILE, STATIC AND MIXED MODELS

The OHU can be mobile, static or a mix of both delivery modes:

- **Mobile OHU** – frontline service providers move along pastoralist/livestock routes, according to a monthly schedule discussed and agreed upon by the MSIPs and the OHTF analysing the data produced and disseminated through an integrated data information system. The mobile OHU provides integrated human, animal, rangeland and environmental health services, changing sites every day and responding to the needs of the population in a certain site/location[7].

- **Static OHU** – in selected/specified villages or contexts, the frontline service providers work side by side in one common facility (e.g., human/animal health post, water source or any other village gathering site). They meet on a regular basis to discuss cases, analyse the data produced through the integrated data information system, identify possible connections to address health threats

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[6] The phrase 'One Health Unit' is used in this SOP to indicate the new service delivery model proposed by the HEAL project to increase the accessibility and utilisation of integrated (animal, human, environmental and rangeland) health services among pastoralist communities in Africa. Nevertheless, it is worth mentioning that the proposed integrated service delivery model could take different names in different contexts. In particular, the HEAL partners acknowledge that the terminology 'One Health Unit' could create confusion in Kenya, where the collaboration platform for government departments at the regional level is named 'County One Health Unit (COHU)'. In this case, 'One Health outreach' is the preferred terminology for the OHU.

[7] The words 'site' and 'location' are used in this SOP to describe the geographical target area of the OHU. This could be the *kebele* or *woreda* in Ethiopia, the *ward* in Kenya and the *village* in Somalia.

at the community level, and plan any integrated intervention accordingly. Joint planning, intra and inter-referral linkages across thematic sectors remain essential elements of the static OHU mode, even when services cannot be provided from the same common facility.

### 3.1.2 TARGET USERS

In line with the scope and objectives of the HEAL project, the main users of the OHUs include:

- Pastoral and agropastoral communities who are usually neglected by the national systems that provide essential services and who have difficulty accessing and affording health care. Special attention is given to:

  − Specific community groups challenged by inadequate availability and accessibility to basic human and veterinary health services and unfavourable environmental conditions

  − Vulnerable communities affected by drought, floods, disease outbreaks and conflicts, and temporarily not able to access the services from the existing national system

  − Hard-to-reach areas and particularly vulnerable groups, including women and children, elderly, people with disabilities (PWD) and IDPs that may be severely affected by the lack of essential services

- Livestock and domestic animals reared by pastoral communities

- Rangelands and environments that are accessed by pastoral communities, and which provide essential ecosystem services

As per the participatory approach promoted by the HEAL project, the terminology 'users' has been selected to underline the active role played by beneficiaries throughout the project phases and, especially, through the planning, delivery, and monitoring of services.

## 3.2 COMPOSITION OF THE OHU

The OHU is staffed with an integrated team of frontline service providers and/or community-based actors representing the different sectors of concern (health, livestock/agriculture, environment). Depending on the context, the OHU requires:

- At least one Health Worker (clinical officer and/or nurses/midwife/nutritionist) from the local Health Office or referral Facility to provide the health services to children and adults

- At least one Animal Health Technician from the local Livestock Office or any public/private veterinary facility to provide preventive and curative services to animals and herds

- At least one Natural Resource Management Officer or Environmental Health Officer from the local office

- At least one Community Expert or Social Mobilizer to maintain a close link with the MSIP and ensure a continuous provision of health education activities

- At least one but preferably several community-based actors (HEW/CHW, CAHW/CDR and DA/RHT, where they exist), involved in mobilizing the community and guiding the discussion around weather and environmental health threats and events

The team also includes a driver in the case of mobile OHUs. Service providers are all selected and appointed by the local government from the existing government service providers pool, in close coordination with the OHTF. Community-based actors are usually selected by the local communities in close collaboration with the local government.

Prior to the deployment of the OHU, the frontline service providers are trained. HEAL has developed a specific training package operationalising One Health in pastoral settings which includes three modules:

1. Principles and application of One Health
2. Gender, Culture and One Health
3. Operationalisation of One Health in HEAL sites.

## 3.3 ESTABLISHMENT

All OHU models (i.e., static, mobile, or mixed delivery mode) provide health, veterinary, rangeland and selected environmental health services to priority community groups and hard-to-reach pastoral areas that are challenged by inadequate access to services and unfavourable environmental conditions.

The procedure for establishing the OHU is as follows:

a) *Map the resources and elements in each district[8]*, outlining livestock routes and major natural resources/landmarks in the district/area. The map should include information regarding population data (for both humans and livestock), rangeland, water points, market, road access, potential risk areas (e.g., human and animal disease, conflict etc), IDP sites, settlement site, health facilities, animal health posts, pharmacies and agrovet stores, water stations, landmarks in dry and rainy season. The mapping exercise is reviewed periodically as informed by the season or other factors and the maps are used to guide the path, structure, and calendar of community interventions.

b) *Create/enhance the MSIP at the local level* (see Chapter 4) *and organize multi-sectoral/multi-stakeholder participatory workshops*, involving representatives of the local authorities and health/vet professionals to review the findings of the mapping exercise and discuss in detail the structure and key elements of the OHU. The MSIP ensures that all population groups are well represented, including men and women, youth, IDP, government and private actors.

c) *Create/enhance the OHTF at the district level* (see Chapter 5), to support and supervise the planning and monitoring of the OHU services, promote a constant gathering of evidence to guide the subsequent adaptation and scaling of the proposed approach.

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[8] The word 'district' is used in the SOP to describe the local administrative level where the OHU develops. This is the *woreda* in Ethiopia, the *sub-county* in Kenya and the *district* in Somalia.

d) *Select the service delivery model that best suits the target area/clusters*, using the criteria to choose between the mobile or static approach or a mix of the two (see section below).

e) *Provide capacity building and training to the OHU staff in collaboration with technical experts and local sector offices.* Once trained, OHU staff (i.e., frontline service providers supported by community-based actors) engage in human and livestock disease surveillance, provision of essential health and nutrition services, rangeland health and natural resource management, community mobilization and demand creation activities, integrated control and management of zoonoses, monitoring of weather and environmental parameters and related hazards. Details of services provided by the OHU are reported in Chapter 6.

### 3.3.1 SELECTION OF MOBILE, STATIC OR MIXED MODELS

A key feature of the proposed OHU delivery model is its flexibility and adaptability to the local context. Based on the community needs and resources available in each selected village, OHUs are organised in either a static or mobile service mode or consist of a mixed approach.

Considerations when choosing between the static, mobile or mixed delivery model include:

- Existing human and animal health, rangeland health and environmental management system within the target district or sub-county

- Availability of existing and functioning human and/or animal health facilities in the target sites to provide basic health services

- Availability of the minimum number of staff, basic infrastructure, supplies, and equipment required to ensure the delivery of quality health services and rangeland activities

- Already organised mobile health and/or veterinary services in the target area and opportunity to integrate the One Health approach into them

- Availability of private health/veterinary actors in the target area and their willingness to participate/contribute to the new delivery mode

- Number and capacity of frontline service providers to respond the community needs

- Type of health, veterinary, rangeland and environmental services required by the community groups and hard-to-reach pastoral areas

- Type, extent, and seasonality of occurrence of livestock and human diseases in the area

- Presence of relevant natural resources and features that can cause hazards (e.g., rivers, forests)

- Geographical size and accessibility of the target sites, throughout and in specific times of the year

- Proportion of the population in the target area that are settled

- Proportion of the population that have difficulties in accessing the existing human, animal, rangeland, and environmental health system

- Acceptance and preference expressed by local communities regarding different delivery modes

- Cost, environmental impact, and sustainability of the different delivery modes

## 3.4 MAINTENANCE

### 3.4.1 GOVERNANCE

The OHUs serve the needs of the communities and fit within the structure of the government. The governance of the OHU is a shared responsibility of the local government (through the OHTF) and the local community (through the MSIP).

The OHTF provides overall steering and support by:

- appointing the OHU coordinators and supervising them, including staff performance evaluation and training

- approving and providing supplies

- ensuring good relationship between the communities and the OHUs

- addressing any challenge and provide any other support the OHUs require

The MSIP provides oversight on the activities of the OHUs by nominating five of its members (at least two men and two women) to be the contact persons between the OHU coordinators and the community. Regular meetings (at least quarterly) are organised to review the OHU activities at the community level and discuss areas for improvement. MSIPs regularly capture minutes of their discussion and action points. Minutes of these meetings are made available to the OHTF, and issues of concern further discussed to collaboratively identify suitable and sustainable solutions.

### 3.4.2 DAY TO DAY MANAGEMENT

The OHTF appoints three coordinators (representing the human, animal, and environmental sectors) to coordinate the OHU. These are responsible of:

- coordinating service provision (including times, locations and, when needed, prices)

- supervising the work of the various service providers, to ensure quality and accountability

- overseeing the reception and stock taking of the OHU supplies

From these three coordinators, one person is asked to provide overall coordination, on a rotational basis.

The day-to-day management of the OHU requires the following steps:

a) *Plan services to be delivered by the OHU*. Develop detailed workplans and schedules on a monthly basis, ensuring that all target/catchment areas (and selected priority areas/sites and groups) in the district are covered. Share, discuss and validate schedules and activity plans with relevant local departmental authorities.

b) *Prepare the necessary logistic, supplies and equipment for the OHU*. The community-level service provision requires supplies, equipment, and drugs.

c) *Communicate with the target sites*. The structure and schedule of the OHU are regularly communicated to target communities, engaging community-based actors and MSIP members in communication and mobilization of the public.

d) *Conduct field intervention and/or mobile activities*. The OHU team:

- Guides the delivery of services and education and conducts surveillance activities through either mobile or static services:

    – In the case of the static OHU, frontline service providers work side by side, if possible, in one common facility (e.g., Health Centre, Health Post and/or Animal Health Post), to plan and deliver routine health services to the catchment community

    – In the case of the mobile OHU, a vehicle moves across livestock routes and designated out-post to provide health services to the pastoral communities, according to the monthly schedule discussed through the MSIPs and agreed with local counterparts.

- In the event of the detection of diseased cases, suspected outbreaks, or reporting of environmental health hazards, the OHU coordinates with the local authorities and supports a coordinated response, moving to the affected area, collecting, and reporting data, and providing the required service.

- In the selected sites, the MSIP closely works or meets with the OHU team and frontline service providers to discuss cases, identify possible local health problems, analyse weather and environmental hazards, and suggest possible actions to address them at the community level. Community-based actors lead the discussions provide the opportunity to analyse the root causes of events and identify feasible sustainable solutions to address them.

- During service provision, the OHU teams make every effort to preserve privacy and confidentiality for patients undergoing examination and treatment and maintain strict infection control practices.

e) *Establish a referral mechanism*, to ensure a link with the existing facilities and local system is always maintained. The OHU may need to refer patients to a higher level of care for advance services, lab investigations and follow up of acute and chronic diseases, and for therapeutic management of chronic conditions. The referral procedures employ the referral forms foreseen within the national referral system and guidelines.

f) *Prepare a Monitoring Plan* to support the proper running and support of services through OHUs (refer to Chapter 6 for further details):

- Services provided are recorded using standard formats and registers developed for the purpose. When possible, digital formats will be used to facilitate the data collection and improve its accuracy.

- Services provided, outcomes and challenges encountered during activity implementation are monitored using a set of indicators and tools developed and agreed with all actors involved.

- Quarterly supportive supervision meetings are conducted to review the performance of the service delivery model. The HEAL partners participate in these activities to document the lessons learnt (what worked well, what did not work well and why) and capitalize on the best practices to share within the region.

## 3.5 ROLE OF HEAL PARTNERS WITH RESPECT TO OHU

The HEAL project supports the establishment and maintenance of the OHU. This is done in close coordination and cooperation with the OHTF, to ensure the ownership and sustainability of the new delivery model. Roles and responsibilities of the parties are discussed and clarified at the beginning of the project, to ensure each party understands its role in supporting the establishment and maintenance of the OHU.

The HEAL partners support the operationalisation of the OHU by:

- Providing technical and logistical support to carry out the planned OHU activities

- Supporting the preparation and planning of the OHU and contributing financially to its setting-up and running in the first phase of the project. Financial support is mainly in terms of fuel and allowances for the OHUs frontline service providers (as prescribed by national guidelines).

- Supporting the organisation of training activities and workshops for frontline service providers and community-based actors, in close collaboration with the OHTF

- Supporting the procurement and distribution of basic medical equipment, essential drugs and vaccines required to set-up the OHUs, and assisting the OHTF to gradually take responsibility of the procurement process to ensure the sustainable running and management of the new service delivery model

- Supporting the multisectoral collaboration, monitoring and supervision activities and review of performances of the OHUs in each of the project locations

- Sharing challenges and lessons learnt during the operationalisation of the OHU to promote the culture of using the evidence for planning, adapting, and scaling the new service delivery model.

## 3.6 RELEVANT MEAL INDICATORS

The performance of the OHU is monitored through key indicators at the outcome and the output level (table 3). More details of the monitoring processes applied in the HEAL project can be found in the project MEAL Framework.

*Table 3: Key Performance Indicators to monitor the OHU performance*

| Hierarchy level | Indicator |
|---|---|
| OUTCOME | • % Functional OHUs, where functional refers to OHU that are staffed, exercise joint planning for OH service, have the necessary equipment and supplies including drugs and provide OH service in either of the three approaches (mobile, static, and mixed model) |
| OUTPUT | • Number of health professionals with increased capacities on public health management and service delivery<br><br>• Number of OHUs established |

# 4. MSIP

## 4.1 WHAT IS IT?

The Multi-Stakeholder Innovative Platform (MSIP) is the collaboration platform for community members. It is a community-based infrastructure that includes men and women from local communities representing different groups of the society (including, but not limited to local authorities, service providers, traditional and religious leaders) and sectors (including, but not limited to Health, Agriculture and Livestock, Environment, Education, Women and Social Affairs), and other key actors from the public and private sectors.

The MSIPs are engaged in continuous and open dialogues, aimed at stimulating a collective problem analysis process and the identification of solutions to overcome priority challenges and threats. Through the MSIP, community members engage in the discussion of data regarding livestock densities and movements, disease risk and outbreaks, pasture, rainfall, temperature, water access, and any other health threat. The MSIPs play a key role in designing, implementing, and monitoring sustainable, demand-driven, and need-based integrated health services in their locations.

## 4.2 COMPOSITION OF THE MSIP

The MSIP is usually composed of about 15-20 people, selected by the community itself ensuring a good balance in gender, occupation, and qualification among members. HEAL advocates for an equal representation of women and men, but the percentage may change across locations. MSIPs are usually composed of traditional and religious leaders, service providers, traditional healers, teachers/educators, businessmen/women, representatives from the local rangeland institution[9]. MSIP members are trained on the concept of One Health, leadership and management; if possible, specific training activities (e.g., financial saving and management, community awareness, disease surveillance) are organised to enhance the skills and competences of the group members and promote their active engagement in community-based interventions.

### 4.2.1 DEDICATED ROLES

The MSIP members select and appoint a Chairman and a Secretary. The Chairman is responsible for:

- Maintaining the communication with the OHTF and the OHU

- Coordinating the discussion during the MSIP meetings

- Identifying focal person for specific MSIP and OHU activities.

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[9] A local rangeland institution is a body of residents and users of the rangeland, that is responsible for overseeing and coordinating the planning and regulation of rangeland resources at the local level of a rangeland unit. Local rangeland institutions can be formal or informal; they can be based on traditional or customary institutions or systems, government institutions or systems, other institutions or systems, or a combination of these.

The Secretary is responsible for:

- Keeping the minutes of the MSIP meeting

- Supporting the Chairman in organising regular MSIP meetings

- Keeping the contact details of all MSIP members.

Depending on the location and specific context of each site, other MSIP members can be appointed with specific roles and responsibilities. In the Amref-led HEAL locations, for example, a few community-based actors are assigned the role of Community Observer (CO) for the Community-based Observation Network (CBON). CO are responsible for:

- Measuring daily weather variables (rainfall and temperature)

- Observing and recording valuable data about impact, traditional observations and actions to take

- Guiding the discussion within the MSIP and with the community at large to support decision-making processes.

More details on the CBON and the CO are reported in Annex 1.

## 4.3 ESTABLISHMENT

The establishment of the Multi-Stakeholder Innovation Platform (MSIP) is a process that takes place through consecutive critical steps to ensure effective engagement of local authorities, traditional leaders, and all key groups in the community. The process follows the good practices described in the *Manual for Innovation Platform Facilitators*[10] and the *Innovation Platform practice briefs* issued by ILRI[11]. Where possible, the MSIP should not be established from scratch but rather developed from an established and functional group that has a good reputation in the community. The procedure for creating/enhancing the MSIP is as follows:

a) *Organise preliminary meetings with district line ministries* (at least the Health, Livestock, and Natural Resource Management departments), to present One Health and discuss the importance and benefits of a multi-disciplinary multi-stakeholder approach to collectively identify and address community health and health-related problems. Mapping the already existing local infrastructures helps in identifying groups in the community that could benefit of a more comprehensive approach (see section above).

b) *Organise meetings at the community level,* to engage local administration, traditional local leaders, existing community groups and the community at large on the One Health approach and HEAL project. Introduce the concept of a multi-stakeholder platform and the role that the MSIPs can play

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[10] Lema Z. (2014). *Manual for innovation platform facilitators in Africa RISING Ethiopia sites*. Nairobi, Kenya: ILRI. Available at: https://cgspace.cgiar.org/handle/10568/56720

[11] The Innovation Platform practice briefs help guide the design and implementation of innovation platforms. The series consists of 12 briefs and was developed by ILRI, drawing on experiences of the CGIAR Challenge Program on Water and Food, several CGIAR centers and partner organizations. The practice briefs are available at: https://cgspace.cgiar.org/handle/10568/33667

in guiding the operationalisation of One Health at the community level. Explain how to establish/reinforce the MSIP, its role and responsibilities, and its composition.

c) *Task local communities with identifying women and men* who can well represent and commit to lead their community toward a participatory approach to health. Suitable candidates are identified and selected keeping in mind the goal of having a good balance in terms of gender, experience, and qualification among the different MSIP members. People identified as MSIP member are verified and confirmed by both the local administration and the local communities

d) *Provide training to MSIP members* on One Health and the MSIP management.

## 4.4 MAINTENANCE

The MSIP meets on regular basis. Meetings usually happen on a monthly basis, though their frequency differ between locations and depends on the local needs and plans defined by the MSIP itself. A clear agenda is defined for each meeting, issues discussed, and actions decided collectively are reported in a minute and signed for endorsement by all MSIP members.

## 4.5 ROLES AND RESPONSIBILITIES OF MSIP

The MSIP is responsible for:

- Taking the lead in problem identification and prioritization particularly in the sectors of livestock and human health, environment, and livelihoods

- Identifying, discussing, and proposing potential solutions to the identified problems

- Escalating issues that are beyond their capacity to the local government for action

- Taking the lead in facilitating the implementation of the identified local solutions by actively engaging the community

- Collaborating with the OHTF in the management of the OHU, identifying local needs and supporting the organisation of service delivery and field activities requiring community participation

- Coordinating, communicating and disseminating information related to the OHU and the project to the entire community

- Acting as entry points to the community for the assessments, community dialogues and participatory studies

- Encouraging community participation in the OHU activities

- Providing a conflict resolution platform for the community

## 4.6 ROLE OF HEAL PARTNERS WITH RESPECT TO MSIP

The HEAL partners support the establishment of the MSIPs, or the reinforcement of any similar multi-stakeholder, community-based structure, and their operations for the first few months by:

- Supporting the management and facilitation of the first meetings

- Supervising the community-led discussions

- Providing basic supplies that help the organisation of meetings and community initiatives (e.g., stationery for group meetings, hygiene kits, t-shirts, and non-financial incentives).

## 4.7 RELEVANT MEAL INDICATORS

The performance of the MSIP is monitored through key indicators at the outcome and the output level. These are reported in table 4 below.

*Table 4: Key Performance Indicators to monitor the MSIP performance*

| Hierarchy level | Indicator |
|---|---|
| OUTCOME | • % Functional MSIP, where functional refers to MSIPs that have regular meeting schedule, meet as per the schedule, deliberate and identify issues pertaining to their communities, follow up its implementation and document it in minutes |
| OUTPUT | • Number of MSIPs established<br>• % Women MSIP members<br>• % OHU identified needs addressed, where the latter refer to issues that came out of the discussion of MSIPs at Kebele/village level |

# 5. OHTF

## 5.1 WHAT IS IT?

The One Health Task Force (OHTF) is the collaboration platform for government departments at the local level. The OHTF oversees the organisation and delivery of services via the OHU and guarantees the monitoring of its performance in collaboration with the HEAL partners. The OHTF communicates, coordinates, and collaborates with the MSIPs to ensure that services provided respond to the needs identified by the community. By taking increasing ownership and responsibility, the OHTF ensures the sustainability of the OHU and its gradual incorporation into government services.

## 5.2 COMPOSITION OF OHTF

The OHTF is usually composed of 5-7 people, including representatives from the government administration and technical departments at the local level. The composition of the OHTF mirrors the structure of the One Health committee at the national level. At a minimum, it includes representatives from the core line ministries (Health, Agriculture and Livestock, Environment and Natural Resource).

If deemed necessary by the OHTF and the MSIPs, other government stakeholders and departments can be called to support the management of the OHU. The list of stakeholders depends on the local and temporal needs of each project locations. This may include, but not be limited to:

- Officers and representatives of the Education Department
- Officers and representatives of the Meteorological Department
- Officers and representatives of the Disaster Management Department
- Officers and representatives of the Water and Sanitation Department
- Representatives of local and international NGOs and CBOs working in the area
- Representatives of the departments responsible for emergency management
- Representatives of other concerned departments (e.g., water, hygiene and sanitation, education)

### 5.2.1 DEDICATED ROLES

The OHTF is usually chaired by the representative of the Local Administration which oversees the planning, implementation and monitoring of all humanitarian and development activities within the district. However, different arrangements can be made across the different locations in respect of the structures and mandates of the local government. The OHTF appoints a Secretary to support the organisation of meetings, preparation and sharing of meeting minutes. The Secretary should be a rotational role that is assigned to different department after an agreed period.

## 5.3 ESTABLISHMENT

Across the host countries, national multi-sectoral bodies have been established to promote the institutionalization of One Health such as the National One Health Steering Committee (NOHSC) in Ethiopia, the Zoonotic Disease Unit (ZDU) in Kenya and the One Health Technical Working Group (OHTWG) in Somalia. Similar multi-sectoral One Health government bodies exist or are expected to be established at sub-national level. When already existing, HEAL partners will engage them in the design, management, and supervision of the OHU; when not established yet, the project will encourage and support their establishment and ensure they guide the management of the OHU.

The procedure for creating/enhancing the OHTF depends on whether a multi-sectoral coordination platform for the local government department exists or does not exist in the area of intervention.

If a similar structure already exists, the HEAL project will coordinate with it to ensure that the operationalisation of the OHU is included in its mandate and integrated in the strategic One Health plans at local level. The procedure is as follows:

a) *Meet the multi-sectoral coordination structure* to present the HEAL project, introduce the concept of the OHU and the value and benefits of the new service delivery model to pastoral communities.

b) *Jointly design the plans to operationalise the OHU* by analysing and discussing requirements to ensure its local adoption in the catchment area.

c) *Agree on roles and responsibilities of each partner* to ensure the OHU is jointly operationalised at the community level, following this SOP.

In the event a multi-sectoral coordination platform for the local government does not exist, the following steps can support its establishment:

a) *Assess the One Health framework at the national level* to verify whether there is a National One Health Committee, understand what its mandates are and explore any plans to cascade the same structure at the sub-national level

b) *Meet the line ministries at the national level* to discuss the plans for establishing similar structures in the area of interventions and receive their guidance on how to proceed

c) Following the national recommendations and rules, *engage the local department in establishing the OHTF* and then follow the three steps reported above to present the HEAL project, introduce the concept of the OHU and the value and benefits of the new service delivery model to pastoral communities.

The steps reported above have been followed to establish the OHTF in the target woredas of Ethiopia, through the full involvement of the NOHSC; and the County One Health Unit in the target counties of Kenya, through the full involvement of the ZDU.

## 5.4 MAINTENANCE

The OHTF meets on regular basis, usually at least once a month to ensure close supervision and support to the OHU. However, the frequency of the meetings depends on the local context and may vary across locations. Ad-hoc meetings can also be organised in the event of issues or problems identified at the community level and requiring an immediate action.

## 5.5 ROLES AND RESPONSIBILITIES OF OHTF

The following are the main tasks and responsibilities of the OHTF:

- Discuss objectives, structure, and organisation of the OHU, and support the preparation of its calendar and movement plans

- Discuss progress and performance of the OHU during the coordination meetings and follow up assigned action plans

- Scale up the OHU service modality to all district catchment areas

- Assign necessary technical expertise who participate and support the OHU

- Support the capacity building and on-job training of frontline service providers and community-based actors engaged in the OHU, through training activities and participatory workshops

- Coordinate the integrated response to disease outbreaks, notifying the concerned authorities at higher level, communicating to partners and coordinating the response in the community

- Ensure the monitoring and supervision of the OHU activities on the field

- Guiding the collection and analyse of evidence regarding the added value of the OHU, as new service delivery model in pastoral communities

- Provide inputs for policy guidance and recommendations on OHU and One Health strategic issues in general to concerned policy makers in the context of pastoral community

- Facilitate the mobilization of financial and technical support, within the public sector and other relevant stakeholders for the establishment and implementation of the OHU

- Advocate for the One Health agenda and the added value of an integrated service delivery model at all levels through meetings, workshops, and symposiums

- Represent their appointing sectors, consult, and provide feedback to relevant authorities

- Keep the collaboration and communication alive among the key sectors, actors, and initiatives on One Health at both district/county and regional level

- Mobilize and build cohesion among the existing and emerging One Health initiatives, and lay a firm foundation for future inter-sectoral One Health operations in the area

## 5.6 Role of HEAL partners with respect to OHTF

The HEAL project supports the establishment of the OHTF or its reinforcement, where a similar structure is already in place. In particular, the HEAL partners:

- Promote and support the signing of a Memorandum of Understanding (MoU) to facilitate the highest-level collaborations and integrations and minimize the traditional silos present between concerned departments

- Support the organisation of the first meetings and the set-up of clear communication structure for a smooth information flow among concerned departments

- Facilitate the training and mentoring of OHTF members to ensure basic OH concepts and role and responsibilities of the multi-sectoral coordination mechanism is well understood and appreciated

- When necessary, provide basic supplies that help the arrangement of meetings and the communication system (e.g., stationery and non-financial incentives).

## 5.7 Relevant MEAL indicators

The OHTF is expected to:
- Discharge the 4Cs roles (communication, coordination, collaboration and capacitating MSIPs) to ensure that services provided respond to the needs identified by the community. This requires the community to be engaged so they can play an active role in influencing service provision and take part in decision-making processes

- Take increasing ownership and responsibility of the OHU and its gradual integration into public services. Among other things, this requires allocation of budget by the local government.

The performance of the OHTF is monitored through key indicators at the outcome and the output level. These are reported in table 5 below.

*Table 5: Key Performance Indicators to monitor the OHTF performance*

| Hierarchy level | Indicator |
|---|---|
| OUTCOME | • Proportion of HEAL target sites with people participating in and influencing public service provision, decision-making and budgets in their localities |
| OUTPUT | • Number of OHTF meeting conducted<br><br>• Number of meetings between the OHTF and the MSIP conducted<br><br>• Number of actions taken by the OHTF (e.g., needs assessment, planning of community interventions, implementation of measures, monitoring activities) |

# 6. OPERATIONALISING THE INTEGRATED HEALTH SERVICE DELIVERY MODEL

## 6.1 SERVICES DELIVERED

The human-animal-environment interface is complex and requires holistic responses across three sectors (human, animal, environment). Consistent with this, the OHU provides a wide range of services, including services that are specific to each sector as well as services that require input from all three sectors (described as 'cross-cutting'). Through the combination of sector-specific and cross-cutting services, the OHU aims at addressing the health threats at the human-animal-environment interface, promoting a collaborative approach to their timely identification and collective management.

Figure 3 summarises the services provided by the OHU; these are described in detail in the following sections. The diagram shows that communication, coordination, collaboration, and capacity building between sectors (4 C's) are central to the integrated service delivery model and are key to operationalizing One Health within the framework of HEAL. As part of the integrated healthcare model, frontline service providers are directly responsible for the delivery of services according to their own disciplines and are required to collaborate and communicate with other disciplines to ensure coordinated delivery of these as well as cross-cutting services. They jointly plan OHU activities and provide health education conveying messages on human, animal, rangeland and environmental health in one gathering.
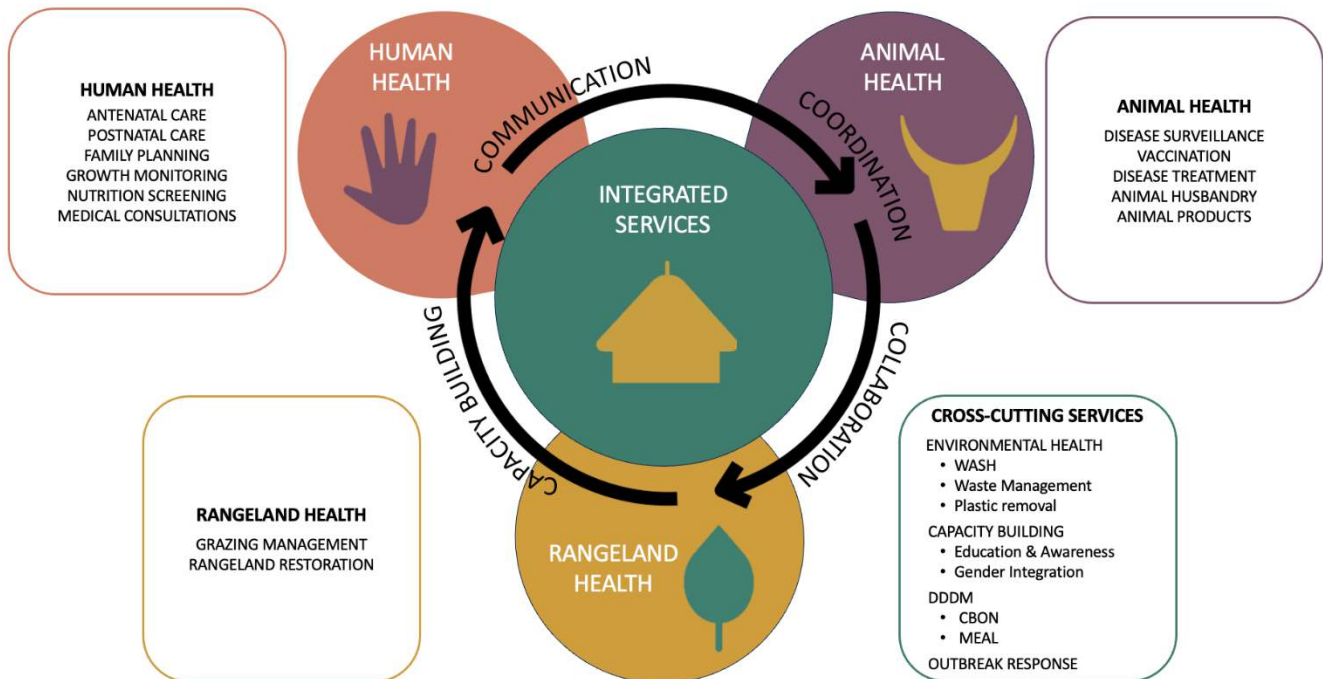


*Figure 3: Diagram of the services provided by the OHU*

### 6.1.1 HUMAN HEALTH SERVICES

Specific human health services are provided by Health Workers, Health Technicians, and qualified staff, specialised in clinical and public health. Services include the following:

- Medical consultation for common acute illnesses and chronic diseases, through clinical examination and dispensing of required medications

- Referral of complicated cases to higher level of care

- Vaccination as per prevention/treatment calendar

- Ante-natal and post-natal care for pregnant women and referral of all pregnancies, especially women at high risk for complication

- Family planning services, through counselling of women of reproductive age on various modern contraceptive methods for them to make an informed choice

- Growth monitoring of under-5 children and recording in the child's growth monitoring chart

- Nutritional screening through measurement of mid upper arm circumference (MUAC)

- Administration of Vitamin A and treatment of parasitosis (deworming) for both Pregnant and Lactating Women (PLW) and under-5 children

- Health and nutrition education on relevant and selected topics, including exclusively breast feeding and complementary feeding, balanced diet, personal and family hygiene and sanitation, health seeking behaviour, and basic community preventive measures

- Surveillance of disease outbreaks and support to the coordinated response

### 6.1.2 ANIMAL HEALTH SERVICES

Specific animal health services are provided by Animal Health Technicians and qualified staff, specialised in veterinary medicine and animal health. Services include the following:

- Animals' vaccination as per prevention/treatment calendar

- Curative services for infectious and non-infectious livestock diseases

- Education of livestock owners on animal husbandry, animal feeding, handling of animal products, and isolation of sick animals

- Surveillance of animal disease outbreaks and support to the coordinated response

### 6.1.3 RANGELAND HEALTH SERVICES

Specific rangeland health services are provided by qualified staff (see below), specialised in natural resource management and/or participatory rangeland management (PRM). These services operate

primarily at the landscape level (i.e., they extend beyond woreda/district boundaries at the scale of local rangeland institutions, and sometimes beyond) and aim to improve the capacity of local communities to sustainably manage the health of rangeland ecosystems over the longer term. Where PRM is being used, it is recommended to follow the process described in the guidelines published by ILRI[12].

Specific rangeland health services include the following elements of PRM:

- Facilitate data collection, mapping of resources, planning and prioritisation, and documentation to support implementation and monitoring of Participatory Rangeland Management (PRM)

- Facilitate communication between neighbouring communities (especially local rangeland institutions), government and OHU staff to ensure relations are maintained and mobility guaranteed when pastoralists move with their livestock from their local area into and out of the rangeland unit

- Build capacity of local rangeland institutions to develop rangeland management plans (RMPs), establish rules and by-laws, form committees, and prioritize and undertake activities

While PRM operates over the large scales of local rangeland institutions (~1,000 km$^2$ on average), additional rangeland health services are provided to bolster the progress of PRM at scale over the long term. These include:

- Assist local rangeland institutions to enhance their grazing management system (e.g., traditional seasonal resting, creation of reserves such as for droughts, short-resting ('spelling'), heavy or light grazing, wet season rotation) and to conduct intensive rangeland restoration in small portions of rangelands that are moderately degraded (e.g., short-resting ('spelling'), removal of dense shrubs and other invasive species, prescribed fire, re-seeding) consistent with the relevant RMP

- Sensitize pastoralists to the rules and by-laws of the rangeland unit for the management of rangeland natural resources to improve local adherence

- Train pastoralists to improve awareness on the prevention of rangeland degradation, rangeland restoration, and invasive species and poisonous plants.

Note: It may take longer to integrate rangeland health into the OHU, particularly when there is no participatory or community-based rangeland management system in place, and where there are limited or no existing service providers or community-based actors with the required skills. In recognising this limitation, HEAL is piloting a new community-based actor, Rangeland Health Technicians (RHTs), in selected sites who will have a dedicated rangeland health role (see Annex 2).

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[12] Flintan, F. and Cullis, A. 2010. Introductory guidelines to participatory rangeland management in pastoral areas. USA: Save the Children. https://cgspace.cgiar.org/handle/10568/99430.

### 6.1.4 CROSS-CUTTING SERVICES

The frontline service providers and community-based actors engaged in the operationalisation of the OHUs collaboratively plan and deliver a wide spectrum of cross-cutting services, including (but not limited to) the following.

- Water and sanitation, including the regulation, management and development of water points

- Manure, waste, and sewage management

- Education and awareness events, mainly focusing on zoonotic infectious diseases, rational use of antimicrobial drugs, personal and environmental hygiene, food preparation and handling, water and sanitation, natural resource management and gender roles

- Management of wildlife and wildlife-human conflicts

- Observation, monitoring, and dissemination of human health, animal health, rangeland, and weather-related data

- Community-led and expert-supported discussions to encourage the collaborative analysis and interpretation of weather-related data to inform decision-making processes

- Timely identification of potential animal and human communicable disease outbreaks and emergency assessment to support the planning of cross-sectorial coordinated response in collaboration with local authorities

- On-the-job training of frontline service providers and community-based actors

- Gender integration across the different OHU services

## 6.2 EQUIPMENT AND SUPPLIES

The OHU requires a basic package of essential materials (equipment, drugs, and vaccines) to provide the required livestock and human disease control and prevention services. The list of essential items is country specific and includes painkillers and antipyretics, antibiotics, multivitamins and anthelmintic drugs, syringes, gauzes, and personal protective equipment.

## 6.3 LOGISTICS, RESOURCES MANAGEMENT AND PROCUREMENT

Different supply chains for human and animal health products are in place in the different countries. In line with the guiding principles, the OHU aligns and integrates with the supply chain present in each country, adapting it as per the service requirements. Depending on the country's regulation, the support from HEAL project falls on either of the two approaches below:

a) Animal and/or human health supplies are procured by the local authority and distributed in advance to the catchment health facility or health post. The OHU team is responsible for

maintaining stock records at the facility and onward movements in case of mobile OHUs. In case of stock outs, the local authority is responsible for the replenishment through the established supply chain.

b) HEAL supports the existing government-owned supply chain system to function without interruption when the country faces procurement issues that can affect the smooth running of the OHUs. This might embrace trainings, mentorship and supportive supervision focusing on stock management and continuous replenishment and, when necessary, the procurement of emergency stocks of supplies to address sudden shortages. If responsible for procurement HEAL partners always use the country's approved specific list of equipment and supplies. The procurement process also needs to follow the principles detailed below for both the pharmaceutical products and medical equipment.

### 6.3.1 PHARMACEUTICAL PRODUCTS

- *Procure the most cost-effective drugs in the right quantities*. All pharmaceutical products must be procured based on the specific country's essential drugs list to make sure that only the most cost-effective drugs are purchased. Procedures support the accurate estimation of supplies quantities, ensuring continuous access to the products without accumulating excess stock.

- *Select reliable suppliers of high-quality products*. It is imperative to ensure that reliable suppliers of high-quality products are (pre-) selected, and that active quality assurance programmes involving both surveillance and testing are implemented.

- *Ensure timely delivery.* The project makes sure that procurement and distribution systems guarantee timely delivery of appropriate quantities to the health facilities/health posts.

- *Achieve the lowest possible total cost*. The procurement and distribution systems ensure the achievement of the lowest possible total cost, considering four main components of the actual purchase price of drugs: i) hidden costs due to poor product quality, poor supplier performance or short shelf-life; ii) inventory holding costs at various levels of the supply system; iii) operating costs; and iv) capital loss by management and administration of the procurement and distribution system.

### 6.3.2 MEDICAL EQUIPMENT

- *Necessity*: The level of necessity (and benefit to healthcare providers and patients) plays a major role in determining whether or not to purchase medical equipment.

- *Use Value*: How much use the project is likely to get out of a piece of equipment. If the equipment is useful at the outpost and spare the patients being referred to a different location, then it is considered very useful.

- *Testing and Reviews*: Before purchasing new equipment, the project ensures that it has undergone proper testing and that it is has been favourably reviewed and endorsed by credible and reliable sources including the country health authorities.

- *Service and Support*: Most medical equipment needs servicing and therefore the project makes plans to ensure that the OHU team gets support should the equipment malfunction or fail.

- *Cost*: Because of the high cost of medical equipment, this can be a determining factor. Even if the project has budget to purchase equipment, need, use value, and ongoing expenses need to be considered before making a purchase.

## 6.4 FINANCING

### 6.4.1 PROJECT CONTRIBUTION

The HEAL project contributes technically and financially to the establishment and running of the integrated health service delivery model. The project supports the design of the conceptual model and its adaptation to the different contexts of the target locations across the three countries. It supports the collection and analysis of data to promote its refinement and adoption at wider scale. It supports the documentation of results and challenges to inform the development of strategic documents and policies. In phase 1, the HEAL project provides financial inputs and assets to set-up and maintain the delivery of integrated services through the OHUs. It organises training activities for community members, service providers and local authorities to support the establishment and maintenance of the three collaboration platforms (i.e., MSIP, OHU and OHTF) responsible for the delivery of the integrated health services. These financial inputs are expected to decrease as government and communities take increasing ownership.

### 6.4.2 GOVERNMENT CONTRIBUTION

The government contributes to the integrated health service delivery model through the OHTF which oversees the organisation and delivery of services via the OHU and guarantees the monitoring of its performance. The government contribution is currently mainly in terms of human resources who are appointed to the OHTF and OHU and who are responsible of delivering the integrated health services to the communities. The government supports the capacity development of service providers and, when necessary, engages in building infrastructures to make the services more accessible. Depending on the location, the government contributes to the integrated service delivery model by procuring drugs, vaccines, and medical supplies for the OHUs. It is envisioned that the government will gradually take full responsibility of the financial support to the integrated service delivery model, recognising its value in pastoral areas and integrating its establishment/maintenance costs in the local public budgets.

### 6.4.3 COMMUNITY CONTRIBUTIONS

The community contributes to the integrated health service delivery model through the MSIPs which actively participate in the design, implementation, and monitoring of the model in their locations. Communities contribute to the prevention and control of communicable disease by engaging in awareness campaigns and cleaning days and building public latrines. In some areas, the MSIP collects monthly money contributions from its members that are used to support individuals and families from

the community in case of emergency and to generate income to diversify their livelihood. It is envisioned that the community will gradually increase its contribution to the sustainability of the integrated health service delivery model also by participating to its costs either through user fees discussed and agreed at the community level, or through community insurance schemes or financing mechanisms.

### 6.4.4 INSURANCE SCHEMES

In Ethiopia, the Community-Based Health Insurance (CBHI) is an emerging initiative for providing financial protection against the cost of illness and improving access to quality health services for low-income rural households who are excluded from formal insurance schemes. The stage and level of CBHI coverage varies across target locations with some regions, such as Oromia, being already well-covered by the scheme and others, such as Somali region, where the scheme has not started yet. HEAL partners are committed to working closely with local governments to assess the available schemes and identify those most suited to the local contexts and support their gradual uptake at the community level.

In Kenya, through the Primary Healthcare Strategic Framework (2019-2024), a number of health financing models have been identified, and counties are at liberty to pick any of the proposed models or come up with their own based on their socio-demographic and economic dynamics. For OHU services, the following revenue mobilization are currently under consideration:

- *Co-payments or cost-sharing by individuals:* These may be introduced for specialized PHC services since special groups are already exempted (children under 5 years, pregnant mothers, 60 years old and above). The scheme needs to be discussed and agreed with the community and local authorities

- *Institutionalize community PHC zones or community units' income generating activities* to raise funds to facilitate community accessibility to health care, e.g., green houses for horticulture, community livestock auctions, community water vending, community goods wholesalers and retailers. Each activity requires community participation and resource mobilization at all levels

## 6.5 RELEVANT MEAL INDICATORS

The delivery of integrated health services through the OHU is monitored through key indicators at the outcome and the output level. These are reported in table 6 below.

*Table 6: Key Performance Indicators to monitor the delivery of integrated health services performance*

| Hierarchy level | Indicator |
| --- | --- |
| OUTCOME | • % Increase in the number of people accessing health services, where health services refer to OPD, ANC and Vaccination<br><br>• % Increase in livestock vaccination coverage<br><br>• % Disease outbreaks jointly identified and managed by human and veterinary health service providers |

|  |  |
|---|---|
|  | • Hectares of land under improved rangeland management practices |
|  | • Satisfaction level on OH services received, where satisfaction refers to the level to which the OH services provided are responsive to the needs of the community |
| OUTPUT | • Number of patients utilizing health services, where the latter refers to OPD, ANC, vaccination (PENTA3 and TT2) and MUAC |
|  | • Number of animals that received animal health services, where the latter refers to both curative and preventive services |
|  | • Number of livestock keepers who gained access to animal health services |
|  | • % Change in rangeland management capacity level of Rangeland Management Institutions (RMIs) |
|  | • Number of PRM plans being implemented |

# ANNEXES | OTHER ELEMENTS OF THE HEAL PROJECT

## ANNEX 1 | THE COMMUNITY-BASED OBSERVATORY NETWORK

### WHAT IS IT?

Community-based Observation Networks (CBONs) are a grassroot initiative that TriM has envisioned and developed in collaboration with partner organisations since 2016. Its primary objective is to empower local actors and communities living in unserved areas, especially those vulnerable to climate change, by actively engaging them in the monitoring and understanding of weather patterns and their impacts on their immediate surroundings. The CBON aims to enhance the community's capacity to make climate-informed decisions, enabling them to effectively adapt and respond to the evolving weather patterns and their associated consequences.

The CBON is a key element of the HEAL project. During the project Inception Phase, they have been tested in the North Horr sub-county (Kenya) and expanded in Phase 1 to the bordering Isiolo county and to Filtu woreda in Ethiopia, leveraging the lessons learnt and adapting processes and procedures to the local needs and context.

Composed of several teams of dedicated community members (Community Observers, COs), these networks form a vital link between scientific knowledge and traditional wisdom. Each team is responsible for maintaining a manual weather station strategically positioned within their target territory, allowing them to collect accurate and localized weather data. Additionally, the COs are trained to observe and report other weather-relevant parameters such as impacts to health or natural resources.

Thanks to the 3Map Information Management System (IMS) developed by TriM, the teams are connected to other teams through online communication and can share their collected data and observations in a common database, to create a reliable repository of information over time. Moreover, they regularly interact with their local communities in order to: (i) reflect about collected data and shared information, (ii) collect additional information about traditional weather signs or impacts, (iii) discuss actions that have to be taken or are taken as a consequence of weather impacts, assess the outcomes of these actions and record this information in the shared database for future reference.

### ESTABLISHMENT

TriM assists and guides the HEAL partners in co-designing and co-creating the CBON system. Through meetings and workshops with relevant stakeholders (e.g., National Meteorological Institute, Drought Management Authority, Agricultural, Livestock and Environment Offices), TriM and HEAL partners support the identification of key questions and the data needed to generate relevant information. These are then used to co-design the tools and processes to address the collectively identified questions. A data collection form is developed on this basis and designed to include weather/climate data, traditional observations, related impacts and actions taken. Manual weather stations, equipped with rain gauges and thermometers, are installed in the selected locations enabling the daily collection of weather data

(rainfall and temperature). To ensure accurate, complete and timely data collection, COs are selected, trained and provided with the data collection tools and smartphones.

The main steps of this phase are as follows.

a) *Stakeholder mapping*: to identify existing initiatives, main actors and weather stations.

b) *Engagement of main local partners*: to engage and agree on key roles and elements of the system with the main local actor/partner.

c) *Kick-off meeting*: to know partners and main actors of the project, clarify the purpose of the initiative and define next steps jointly.

d) *Training of Trainers*: to ensure key project team members and future trainers have a basic understanding of weather and climate observations and their integration in people-centred early warning, know how to take weather measurements and collect and report data, draft database structure, understand and co-design the CBON, develop the training of COs.

e) *Participatory workshop with local stakeholders*: to engage stakeholders, discuss the objectives of the CBON and define database structure, establish collaboration channels and methodology, identify locations of weather stations (e.g., health facility, schools), create consensus on the COs requirements and engagement rules.

f) *Procurement of weather stations' equipment and Installation of weather stations*: to ensure weather stations are properly equipped following the existing national standards, correctly installed and handed over to the COs teams.

g) *Recruitment/engagement and Training of COs teams*: to ensure that the COs are highly motivated, understand their role and are capable to perform their tasks. TriM ensure remote coaching and guidance to trainers, supporting the training development and providing Weather teams' manuals

h) *Creation of the Spatial Database (SDB) and of the digital survey forms for data collection, configuration of the tools for management, access, visualisation and analysis of data*: to convey the elements discussed in the co-design workshops in the development of a coherent digital tool and to customise 3Map to serve the project objectives.

i) *Design and development of feedback tools*: to co-create a range of appropriate tools (maps, dashboards, bulletins) to timely share collected data with relevant stakeholders and support the participatory interpretation of weather-related scientific information with traditional/local observations at community level.

j) *Prepare smartphones*: to ensure smartphones can be used with the 3Map.

k) *Inception*: to ensure that the weather teams start data collection immediately after the training.

After completing the start-up phase, the system starts running, with the routine collection, analysis, interpretation and dissemination of data. The COs, HEAL partners, main local actors and TriM work closely to support communities and other stakeholders to take informed decisions.

The following steps ensure the maintenance of the system in the long term.

a) *Measurement and recording of data*. COs measure rainfall and temperature daily and record the data on paper-based registers and 3Map together with geotagged data about other variables, decisions made and any other relevant impact. Data can be registered daily on the smartphone/tablet and uploaded less frequently (weekly), in case of network difficulties. All data collected at the community level are recorded in the cloud database through the mobile application, transformed into meaningful information, made accessible online through user-friendly visualisations (maps, tables, sketches) and shared through instant messaging with the stakeholders and partners. A notification of data upload is shared with the CBON and other stakeholders through the Telegram chatbot.

b) *Data quality check and data cleaning*. Data recorded by the COs are checked and cleaned on a fortnightly basis. This is crucial to ensure consistency, accuracy, and timeliness of collected data and reporting tools. Feedback is shared with the project team and the COs. Initially this activity will be conducted by TriM experts and the HEAL partners. Progressively, it will be handover to local authorities involved in the implementation of the CBON.

c) *Integration of additional data and elaboration of monthly summaries/bulletins*. 3Map allows an easy integration with secondary data from other existing databases/platforms to support intersectoral analysis. This allows transforming a variety of data into usable information to support decision-making at different levels. TriM experts elaborate and disseminate monthly summaries about accumulated rainfall, average max and minimum temperature, traditional/local indicators, seasonal decisions, likely hazards and impacts for the season, and extreme events. Such monthly summaries can significantly complement other official bulletins, by adding detailed data at local scale.

d) *Review and reflection sessions with stakeholders*. The project team and the COs conduct monthly/seasonal participatory discussions with community members and local authorities to reflect on the weather-related issues of the period, the seasonal decisions taken and, the usefulness and meaningfulness of developed feedback tools. They reflect on the information generated by 3Map, the one coming from local institutions and the one shared by elders and local experts. The discussion of the three kinds of information aim to identify a weather pattern (including differences and similarities with past ones), its consequences and possible actions to take. The periodical interpretation of information during community discussions increases people's confidence in the power of complementing traditional knowledge with scientific data to inform decisions and increase preparedness. Additional community-based Decision Support Tools (DST) (such as paper-based forms, flipcharts and tables, or monthly summaries to be included into the paper weather registers) can also facilitate the access and use of scientific data

from community members. The DST has to be tested in the field through participatory discussions. The field staff is periodically guided by TriM experts before and after each discussion. The outcomes of the discussions help to validate the forms for data collection, understand the usefulness of the information shared and assess the most appropriate risk indicators and DST to support community members to make informed decisions.

e) *Supportive supervisions*. HEAL partners conducts regular supervisions to COs and weather stations to provide feedback, guide and motivate them in their work, and address challenges.

f) *Provision of continuous technical support and maintenance of the digital tools*. TriM provides adequate guidance and supervision to the project staff about:

- maintenance of the weather stations

- identification of issues and strengths of data measurement and data collection

- data interpretation and dissemination

- use of the mobile application to collect weather, geographical and hazards/impacts data

- use of the web application to access, manage, visualize the data

TriM ICTs experts provides a monthly maintenance service to guarantee the regular functioning of the system and ensure automatic periodic backups of the database. TriM conducts field missions to provide technical assistance and ease connection with project team, COs and other partners.

g) *Revision of the digital forms and update of the feedback tools*. Forms and feedback tools are revised by TriM experts on the basis of the input received by the project team during participatory discussions with relevant stakeholders. The revision of the tools aims to improve the quality, meaningfulness and usefulness of collected data.

### ROLES AND RESPONSIBILITIES OF CBON

The weather teams are integrated in the MSIP. At least two COs are identified and trained in each MSIP to ensure the smooth running of the CBON. In particular, the COs are responsible to:

- Measure daily weather parameters

- Collect information on traditional weather signs, other relevant parameters, and events (i.e., natural disasters, seasonal and environmental change)

- Record daily data in the weather logbook and with 3Map mobile application

- Promote a participatory discussion within the MSIP and with the community at large to support decision making through the analysis and interpretation of the collected data

## ROLES OF HEAL PARTNERS WITH RESPECT TO THE CBON

The HEAL Environmental Focal Person (EFP) will be the field staff expert in charge of coordinating and facilitating both the establishment and maintenance of the CBON. The main duties of the EFP are:

- Periodically check the quality (completeness, appropriateness, meaningfulness and usefulness for the community) of the data collected by the COs

- Interact with the COs in order to improve the quality of the data collected

- Stimulate the reflection and the discussion on the data

- Regularly visit the communities and the weather stations

- Organize monthly Reflection Session with the MSIP

- Regularly interact with COs on the dedicated Telegram chat group

- Engage local communities and other actors

- Regularly interact with TriM staff about major results and activities organized in the field

### WHAT ARE THEY?

Rangeland Health Technicians (RHTs) are a new community-based actor that is being piloted in select HEAL sites. They mirror the role of community health workers (CHWs) and community animal health workers (CAHWs)/community disease responders (CDRs) and are responsible for the provision of specific rangeland health services including advising on grazing management, rangeland restoration, tree preservation and management, prevention and removal of invasive species, growing fodder trees, removing poisonous plants for livestock and other natural resource management issues. The RHTs provide assistance on non-technical aspects of rangeland management, notably community governance, relations with neighbours, traditional systems, and government. The RHTs support the residents and users of a rangeland and their local rangeland institutions to improve rangeland health through Participatory Rangeland Management (PRM).

### ESTABLISHMENT

The procedure for establishing the RHTs is as follows:

a) *Identify suitable women and men candidates for the RHT role.* Selection criteria include that they are:

- a pastoralist
- a member of the local rangeland institution
- a resident of the local area
- literate
- knowledgeable on rangeland plants, invasive species, ecosystems, and effects of management; interested in improving range management
- well respected locally by local residents.

b) *Conduct interviews.* Interviews are conducted by ILRI Field Officers with the local rangeland institution to identify the best candidate for each rangeland. The process should be promoted well, partly to be more competitive, increasing the local profile of the position and the likelihood of better results.

c) *Provide training to RHTs* on areas of rangeland degradation, invasive species, rangeland restoration, grazing management, awareness creation; monitoring data collection and dissemination; and the non-technical elements of PRM.

### MAINTENANCE

Backstopping and support for RHTs is provided by the HEAL partners (see below) in collaboration with the leadership of the local rangeland institution.

Financing RHTs generally follows the local model used for CAHWs/CDRs. Options for creating financial sustainability of RHTs are being piloted, including providing assistance to establish indigenous tree nurseries from which RHTs can sell seedlings.

### ROLES AND RESPONSIBILITIES OF RHTS

Rangeland Health Technicians (RHTs) work with the other frontline service providers (community-based actors) in the OHUs to:

- Provide information and raise awareness on rangeland health issues such as invasive species, favourable grass species, poisonous plants as part of a coordinated campaigns in this regard.

- Respond to questions and challenges raised by community members and/or other members of the OHU on rangelands health issues.

- Assist in the mobilisation of community members for rangelands health related activities such as bush clearing.

- Carry out monitoring of trends and changes in rangeland health such as rangeland degradation, increase of invasive species or other.

- Support local rangeland institutions to implement Participatory Rangeland Management (PRM) to improve large-scale rangeland management, through assisting with data collection, mapping of resources, planning and prioritisation, documentation, and community implementation of management plans.

- Assist with communication between neighbouring communities (especially local rangeland institutions), government, and OHU staff.

- Support local rangeland institutions to monitor, report, and disseminate information relevant to rangelands and OH. This information may include general livestock densities and movements in line with RMPs, pasture and water availability, and any outbreaks of conflict or infectious disease.

- Contribute with other OHU staff to the collection and dissemination of information on livestock densities and movements, disease risk and outbreaks, pasture, rainfall, temperature, water access, wildlife-human conflict risk, and any other hazards.

- Attend quarterly, annual, and other important meetings of the local rangeland institution(s) and record the minutes if required, and attend all significant workshops, community discussions (e.g., with neighbouring communities), and MSIP meetings and presentations.

### ROLES OF HEAL PARTNERS WITH RESPECT TO RHTS

ILRI field officers provide immediate local supervision to RHTs, with oversight provided by national and senior ILRI research staff.