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**OH 4  
HEAL**

One Health for  
Humans, Environment,  
Animals and Livelihood



# Operationalizing One Health in pastoralist settings

## Module 1: Principles and applications of One Health

### FACILITATOR GUIDE



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
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## About HEAL

The Arid and Semi-arid areas of the Greater Horn of Africa are among the areas in Eastern Africa frequently affected by natural and man-made disasters. These areas are therefore vulnerable to recurrent drought and other emergencies such as outbreaks of infectious diseases. They are characterized by inadequate access to basic services, inadequate infrastructure, and increased competition for resources. The HEAL project is based on the assertion that, despite the huge challenges that have hit the Horn of Africa in recent years, its people, livestock, and natural resource base provide a firm foundation upon which to improve livelihoods and increase resilience. Pastoralist communities depend on the close interlinkages between rangeland, livestock, and human health. This insight and understanding provide an ideal basis to apply a One Health approach to tackle one of the key bottlenecks for pastoralists which is access to necessary services and inputs.

The HEAL project is building on this foundation by supporting a bottom-up approach that is participatory, context-specific, coordinated and integrated to reshape service delivery in the form of One Health Units (OHUs). These units will facilitate a combination of services from different disciplines in a meaningful way and will thus facilitate interactions and coordination between governmental departments, private service providers and communities. Their aim is to sustainably strengthen human, livestock and rangeland health services and support communities to develop sustainable strategies to cope with changing environments and threats related to climate change.

The HEAL project focuses on selected pastoralist areas of Ethiopia, Somalia, and Kenya, which share some common characteristics in terms of climate, culture, population dynamics and challenges related to these. These countries have strong cross-border dynamics and are also linked in their historical context.

<b>Consortium partners:</b>	<ul style="list-style-type: none"> <li>• Vétérinaires Sans Frontières Suisse (VSF-Suisse; Lead)</li> <li>• Amref Health Africa</li> <li>• International Livestock Research Institute (ILRI)</li> </ul>
<b>Implementation sites:</b>	<p>VSF-Suisse managed sites:</p> <ul style="list-style-type: none"> <li>• Moyale woreda of the Somali region (Ethiopia)</li> <li>• Miyo and Moyale woredas of Oromia region (Ethiopia)</li> <li>• Beled Xaawo and Dollow districts of Gedo Region (Somalia)</li> </ul> <p>Amref Health Africa managed sites:</p> <ul style="list-style-type: none"> <li>• Filtu woreda of the Somali region (Ethiopia)</li> <li>• Marsabit and Isiolo counties (Kenya)</li> </ul> <p>ILRI: working in all project sites</p>

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## Acronyms

AFROHUN	African One Health University Network
AMR	Antimicrobial Resistance
AMREF	African Medical and Research Foundation
APHA	American Public Health Association
CAP	Community Action Plan
CDC	Centers for Disease Control and Prevention
COVID-19	Corona Virus Disease of 2019
DDDM	Data Driven Decision Making
FBO	Faith Based Organization
HEAL	(One Health for) Humans, Environment, Animals and Livelihoods
ILRI	International Livestock Research Institute
MSIP	Multi-Stakeholder Innovative Platform
NAPHS	National Action Plan for Health Security
NDMA	National Drought Management Authority
OHHLEP	One Health High-Level Expert Panel
OHU	One Health Unit
OIE	Office International des Epizooties
PAR	Participatory Action Research
PCVA	Participatory Vulnerability and Capacity Assessment
PE	Participatory Epidemiology
PHAST	Participatory Hygiene and Sanitation Transformation
PRA	Participatory Rural Appraisal
PRM	Participatory Rangeland Management
RVF	Rift Valley fever
SEAOHUN	Southeast Asia One Health University Network
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization
WOAH	World Organization of Animal Health

# Introduction

This facilitator guide is intended to help trainers deliver **Module 1: Principles and Applications of One Health** of the HEAL training package. The Unit aims to develop the capacity of learners with respect to the core knowledge, skills, and attitudes required to practice a One Health approach to address animal, human and environmental health challenges in pastoralist settings in Africa. The Module has both theoretical and practical sessions. A complete grasp of the content will take five days of training time (see training schedule in [Annex 1](#)).

## Training objectives and intended learning outcomes

The training objectives of this Module are to:

- discuss the key principles of One Health and its application in pastoralist settings;
- introduce participants to systems thinking and discuss its relevance to One Health;
- discuss the process of data-driven decision making and how it can be used in One Health;
- identify effective approaches for multi-sectoral collaboration and coordination in One Health; and
- examine key concepts in community engagement in One Health.

By the end of the Module, learners will be able to:

- use the principles and approaches of One Health to address issues affecting human health and livelihoods, animal health and welfare, and rangeland and environmental health in pastoralist settings;
- apply systems thinking to better understand problems at the ‘human-animal-environment interface’;
- collect, analyze, and disseminate information to a diverse range of stakeholders engaged in One Health for effective, data-driven decision making;
- apply effective practices to collaborate and coordinate with different sectors; and
- engage communities in identifying challenges related to the interdependency between human, animal and environmental health in pastoralist areas and develop strategies for addressing them

## Module content

- Overview of One Health principles
- Systems thinking in One Health
- Data-driven decision making in One Health
- Multi-sectoral collaboration and coordination in One Health
- Participatory community engagement in One Health

## Training program overview

The training program is meant to guide you on how you can sequence and time the learning activities to deliver the Module. Depending on specific context (such as time or group size), you can adapt it to suit to your training options. [Annex 1](#) provides a suggested training schedule for this Module, however you may choose to deliver the training over a longer period e.g., one day per week with each week dedicated to a particular topic. [Annex 2](#) includes a training checklist to help you prepare to deliver the training.

# Training approach and process

## Before you deliver the Module

It is important that you familiarize yourself with adult learning approaches before delivering the Module. The delivery of the Module will adopt experiential, problem-based and reflective learning approaches. Adult learning is enhanced when training participants define their learning goals and expected utility of the lessons learned. Before the training, you should encourage participants to define their learning objectives and how they will apply the knowledge and skills from the training. It is expected that participants will be motivated and responsible for their own learning when they know what they are expected to do and what standards they are expected to achieve.

You will apply active training methods throughout the training process. Learning management tools such as learning logs and reflections on learning experiences can ensure that learners work actively and reflect on key lessons and insights and relate these to their work and life experiences throughout the training process. Reflection questions allow learners to pause and reflect from time to time on what they have learned, relate it to their experience, and think how they can apply it in their work.

Before the training, you must read and understand the participant material and familiarize yourself with the step-by-step instructions to deliver the learning activities contained within this facilitator guide.

## Adult learning principles and applications

As a training facilitator, you should understand learning theories and adult learning principles to give context for the instructional activities and processes that will be used to deliver the Module. Active learning theories and adult learning principles will be contextualized and applied in the development and sequencing of learning activities and processes to deliver the learning topics of the Module.

Some principles, guidelines, and applications are shown below:

**Emphasize benefits of learning.** Adult learners need to know how the training relates to their immediate work and will help them reach their goals.

- Have each participant develop learning goals (expected learning achievements) for the training to direct their attention and action. Participants are likely to apply training when they have a clear understanding of what knowledge and behaviors are required after the training to improve work performance.
- Encourage participants to write down specific actions (learning responsibility and intention to apply learning) that they will take in response to the training.

**Create a supportive learning environment.** Convey respect for individuals and the belief and value in the learning process. Draw on previous experiences of participants.

- Call each participant by name throughout the training
- Listen to each person's questions and viewpoints
- Always be courteous and patient

- Assure individuals that mistakes are part of the learning process
- Encourage participants to support one another in the learning endeavor
- Ensure that the physical space is as comfortable as possible

**Make training content coherent and relevant.** Begin with the basic and build on each part in sequential order when presenting training content. Learning activities and materials should be designed based on learning objectives and work context of participants and address their needs and training expectations. Be sure that content and activities can be applied to participants' real-life situations.

- Provide an overview of the intended learning outcomes
- Relate each new topic to previous topics
- When presenting new material, present overall concept first
- Provide examples of concepts that are relevant to participants' work.

**Thinking, feeling, and acting.** Learning is more effective when it involves thinking (knowledge), feeling (emotions), and acting (doing). Learning objectives, content, activities, and materials must address different learning domains and styles.

## Training methods

Not all people learn the same way; there are many different learning styles. Individual learning styles are influenced by personality, education, experience, culture, and sensory and cognitive preferences. The training uses a variety of participatory methods including plenary and small group discussions, role plays, and case studies. These activities are designed to elicit and build on participants' experiences and knowledge, promote discussion and reflection on key issues, provide hands-on practice of content learned, and help participants learn from each other.

Catering to different learning styles requires varying the training methods. Puzzles, problem-solving exercises, questions, and writing activities are ways to keep participants focused on tasks. Watching video demonstrations (seeing), listening to audio (hearing) and participating in hands-on exercises (doing) are ways to diversify activities.

The choice of training methods depends on the learning domain (knowledge, attitudes, and skills) and the learning style of participants (visual, auditory, and kinesthetic). Engage participants in small groups for tasks requiring interaction using, for example, role-play and problem-solving activities. Delivery of information and overviews can be done in large groups using PowerPoint presentations.

Examples of training methods used in the HEAL training package include:

- Small group discussions
- Brainstorming
- Interactive presentation
- Role-plays
- Case study analysis
- Interactive audio-visual materials

**Using small groups in a training environment.** Small group work is good for sharing ideas, collaborative problem solving, and complementary skill sets. You can use different techniques to break participants into small groups. Depending on the number of groups you wish to form, you can count participants or ask them to count out loud, for example, 1-5 if you wish to form 5 small groups. If the group composition is important, then you can form groups comprising people from different sectors, gender balance, or roles. The ideal group size is 4-6 people. If the group is too small, it is more difficult to generate ideas. If the group is too large, there is a chance some people will become passive. Leave a group together if they can achieve their objective. Change the group only if they are unable to work together. Give clear, detailed instructions for exercises. Provide guidelines on how to proceed through each exercise. Put the instructions in writing if the exercise is complex.

**Using role-plays as a training method.** Role-plays are a great way to act out a problem situation for the purpose of further discussion, analysis and problem-solving. The basic method is as follows:

- *Identify an issue.* Before a role-play, gather participants and introduce a hypothetical issue they may encounter during their work. Make sure participants clearly understand the problem you are trying to address and what you want to accomplish during the activity. You can also engage participants in a discussion to help them think about the issue and consider what they might do in the situation.
- *Describe a specific scenario.* Choose a scenario for your participants to act out. Describe it thoroughly, providing specific details to make the role-play session as realistic as possible. Consider using scenarios that participants might experience in their work.
- *Assign roles.* Once you have established a scenario, assign roles to participants for the various characters involved in the scene.
- *Have participants act out the scenario.* Ask participants to act out the scenario and create different strategies for resolving the situation. As the facilitator, you can suggest a variety of strategies for handling situations or have participants develop innovative solutions and actionable plans on their own.
- *Reflect and provide feedback.* The discussion can help participants gain a deeper understanding of the social dynamics that relate to the work situation and how they can address it in a real-life situation.

## Structure and sequence of learning activities

This facilitator guide provides you with structured learning activities to facilitate logical progression of learning. Learning logically progresses from simple to complex concepts and generalizations. For this, learning activities and processes need to be presented in logical sequence so that learning is meaningful and enhanced. While there is flexibility in how the learning activities are presented, the structure below is generally followed to develop instructional activities in this facilitator guide:

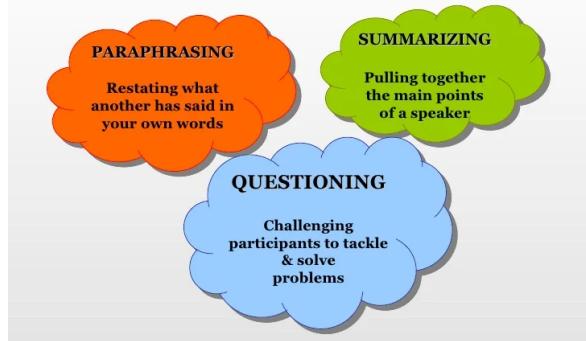
- Activity title
- Activity introduction
- Challenge scenario or problem situation to put the learning activity into context and create motivation for learning. Adult learners need appropriate level of challenge to learn. For example, having them to work on a case study, problem scenario, etc.
- Brainstorming ideas to identify and build on previous knowledge of participants
- Group activities (case studies, role-plays, videos) to develop skills, critical thinking or influence attitudes followed by group presentations and reflections.
- Introducing new knowledge building on previous knowledge through interactive presentations

- Learning integration and reinforcement through summary of main learning points and messages
- Review questions to aid learners to extend and connect the learning with real-life situations

## Facilitation tips

- Create an engaging learning environment. Adults learn in context and by activity. Make the learning process engaging and meaningful by building on their experiences and connecting the learning with their work context.
- Question. Use appropriate level of challenge and questions to help participants reflect on their learning experience and connect it with their work.
- Listen deeply. Suspend your own perspective and judgement to truly understand participants' thoughts and feelings.
- Practical sessions. Describe how practical activities would be organized (tasks, reflection questions, reporting back in plenary, etc.)
- Clarify/validate/probe
- Summarize and synthesize the main learning points and messages

### 3 keys to effective facilitation



## Monitoring learning progress

Tips for monitoring the learning process during training events:

- Prepare and display intended learning outcomes and agenda for each training day.
- Use feedback groups, recap sessions, and satisfaction rating charts (mood meters) to monitor and document learning progress and get feedback from participants.
- Summarize what has been covered in each training day. Review daily objectives and agenda written on the flipcharts.
- Review participants' feedback and address major issues.
- Display flipchart results on the wall of the training room. Date and number the flip charts for easy documentation.
- Take pictures of flipchart results, small group discussions and presentations to illustrate the training process and outputs in the training report.

Reflection and feedback gathering methods can be used to obtain feedback from participants and learn about their reactions to the learning content and process. You can use methods such as self-learning management tools, recap and reflection sessions, question/feedback board, mood meter and end of training survey to measure learning, get feedback, and enhance meaningful engagement and application of lessons.

Place flipchart papers titled ‘Feedback/question/comment’ on the walls of the training room and encourage participants to provide feedback and comments, ask questions, etc. during the training.

**Learning logs.** At the beginning of a training event, encourage participants to keep learning logs and daily reflections to promote a deeper level of learning and insight-making. Suggest to the participants that they should keep a daily reflection of their learning experience, key learning points, and ideas about how they will apply the learning. This will ensure participants’ self-organization and ownership of the learning process to enhance their learning experience and increase the chance of learning application.

### Self-learning management tools

Daily learning logs and reflections: “key take away messages” – “the moral of the story”

- **Key ‘lessons’ and insights:** What did I “learn”? What is in it for me? What does make sense to me?
- **Connection and application :** How will I use/apply the lessons and insights in my work? How will it make me a better course designer/writer?
- **Learning reinforcement needs :** What do I need to know more about, and how can I achieve this?



### Training follow-up action plans

Training follow-up action plans help provide participants with mentoring support to implement the knowledge and skills acquired during the training, continue the learning process, and assess training outcomes.

At the end of a training event, have participants develop action plans to put the knowledge and skills gained from the training into action. It is important to identify opportunities and constraints for knowledge and skills application and devise strategies that support participants to apply the training.

Allocate sufficient time for action plan development, presentation, and feedback at the end of a training event. It is a good practice to have supervisors/officials attend presentations of action plans to signify recognition and commitment to follow-up on the action plans.

# Day 1. Opening, participant introduction and overview of One Health principles

## Overview

Day 1 will be devoted to setting the scene and creating an engaging environment for the training. The opening and introductory session allows participants to get acquainted with each other, to discover commonalities they share, and to begin the networking process. The day will also engage participants in understanding basic principles of One Health. You will use active learning methods to help participants explore definitions of 'health' and the interconnectedness between human, animal, and environmental health. You will then guide them through some key principles of One Health to set the scene for further learning and practice of One Health. You will use active learning methods to explore participants' understanding of the application of One Health in pastoralist areas.

## Training objectives and intended learning outcomes

The training objectives of this topic are to:

- discuss how different disciplines conceptualize health;
- identify the key principles of One Health;
- explore ways in which humans, animals and the environment interact;
- highlight key features of common zoonoses;
- discuss factors contributing to antimicrobial resistance; and
- provide examples of the links between environment and human/animal health

By the end of the topic, learners will be able to:

- define One Health and identity its key principles;
- identify the sectors and disciplines which contribute to One Health;
- recognize the importance of the 4 C's in operationalizing One Health; and
- describe the benefits of and challenges arising from the connectedness between human, animal, and environmental health, and provide relevant examples.

## Learning content

- Definition of health;
- Definition of One Health;
- Interconnectedness between human, animal and environmental health

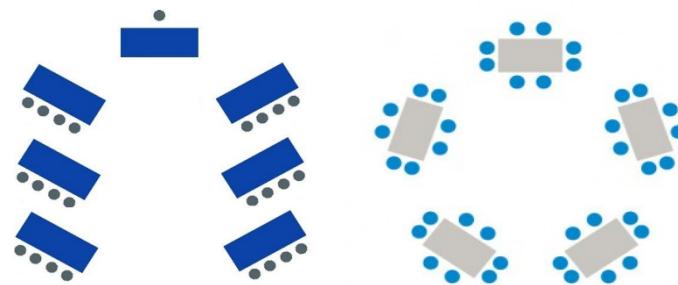
## Learning methods and materials

- Group discussion
- Picture/video analysis
- Street theater
- Think-pair-share
- PowerPoint presentation

## Getting started: Room setup, participant introduction, objectives and learning management



**Seating arrangements.** The physical environment in a training room can make or break active learning. No room setup is ideal but there are many options to choose from. Chairs and tables can be easily rearranged to create different setups. The type of seating arrangement you choose depends on your goals, activities, and space and furniture available. Examples of good seating arrangements include using tables evenly spread out throughout the training room.



Encourage participants to sit with people that they don't know and that (possibly) come from other departments/sectors to promote multidisciplinary collaborative analysis, learning and action during the training.

**Pre-training preparation.** Before you start the training, write training objectives, intended learning outcomes, training agenda, ground rules and pedagogical principles on flipchart papers and display them on the wall of the training room. Writing these on flipchart papers provides a visible reminder of what participants hope to gain from the training. This can also help focus the training and give participants a baseline from which to evaluate the training once it is complete.

**Participant introductions.** What happens in the start can set the tone for the rest of the training process. There are different ways for participant introductions depending on the size of the group and space availability and time. Use appropriate exercise for participant introductions.

Write the following on a flipchart paper. Give participants 10 minutes to introduce and interact one another.

- Go around and meet a participant whom you do not know.
- Introduce yourself. Share your experience as a One Health practitioner.
- In plenary, share what you have learned about your partner.

You could also ask participants to stand in a circle in or outside the training room. Using a taking object, such as a paper ball or something else, you can start introducing yourself and throw the ball to any participant. The participant catching the ball introduces him/herself and throws it to another participant until all participants introduced themselves.

**Learning expectations and intention to apply lessons.** Write down the following tasks on a flip chart and ask participants to identify their expectations from the training and how they would apply the learning in their workplace.

- Individually, write down two to three learning expectations and one intention to apply the lessons.
- In small groups, share your learning expectations and intention to apply the lessons.
- Agree on two to three learning expectations and intentions to apply the lessons as a group.
- In the plenary session, share your group learning expectations and intentions to apply the lessons.

Then, in a plenary, ask groups to share their learning expectations and intention to apply the lessons.

Write down expectations and intention to apply the lessons on a flip chart and keep it in the training room.

Ask participants to reflect on whether expectations are being met as the training progresses.

**Learning outcomes and didactic principles.** Using flipchart paper or PowerPoint, share the training objectives and intended learning outcomes. Go through the participants' learning expectations against the training objectives to manage expectations. Explain the training approach to set expectations for active participation and sharing during the training.

Write and explain the below didactic principles on a flipchart:

- Ownership of the learning process and self-guidance
- Co-creative learning process
- Appreciation as a basic attitude
- Learning from and with each other
- Experiential and reflective learning

Explain that the training will use experiential, problem-based, reflective, and collaborative learning approach and that participants will draw on their experiences and reflect on and connect new learning with their work situations.

**Program overview.** An overview of the training program lets participants know what to expect. Distribute the training program and go through it highlighting break times.

**Ground rules.** Ask participants to identify what they could do to meet their learning expectations. Write down ground rules on a flipchart and tell participants that these will guide group interaction and time management for the duration of the training.

### Examples of ground rules:

- Be punctual
- Be prepared
- Respect the views of others. Every idea counts
- Phones on silent mode
- No side conversations
- Active participation
- Keep an open mind
- Build connections

**Self-learning management.** Encourage participants to maintain a record of their key learning points and how they will apply the learning throughout the training to enable them to stimulate a deeper level of learning and insight-making.

The participants can pick key learning points by asking themselves the following reflective questions at the end of each session or day:

- What did I learn today?
- How will I use the lessons in my workplace?
- What do I still need to know more about?

**Conduct a pre-training assessment.** Distribute the pre-training self-assessment tool in **Annex 3** and ask participants to assess the level of their knowledge and skills before the training. Ask them to be as objective as possible in their assessment as it will help them monitor their learning performance in the training. Aim to analyze the data and present the results during the recap session.

Explain that the purpose of the pre-training self-assessment is to:

- provide participants with an idea of the level of knowledge and skills they already have before the training, and how well they have performed in each training topic at the end of the training
- provide facilitators with an idea of the different levels of knowledge and skills among the participants and help them devise ways to cater for individual learning differences
- establish a baseline to measure the level of learning achievement of training participants at the end of the training course

## Learning activities

### Activity 1: The meaning of 'health' in different contexts



Note to facilitator: Before discussing One Health, it is important for participants to be able to clearly articulate what health means in the context of humans, animals, and the environment. This enhances participants' appreciation and ability to conceptualize the challenges that arise from the interaction between humans, animals and the environment, and their impact on air, water, and soil/rangelands.

Before the session begins, write '*Health*' on a flip chart.

Facilitate a discussion on the meaning of "*Health*" according to different disciplines/sectors i.e., health of human, animals, and the environment.

**Reflection questions:**

- Does '*health*' mean the same thing when applied to humans, animals, and the environment?
- What are the common characteristics of a healthy person/animal? What are some examples of an unhealthy person/animal in your woreda/district?
- What does a healthy/unhealthy environment look like?

Use active listening skills and highlight similarities and differences in responses by different participants and between different disciplines/sectors.

**Using PowerPoint**, give a presentation on the definitions of health. Mention that health means different things in different disciplines but there are some similarities. Encourage participants to reflect on these definitions and how well they aligned with (or did not align with) the ideas they generated in the brainstorming activity.

## Activity 2: The meaning of One Health

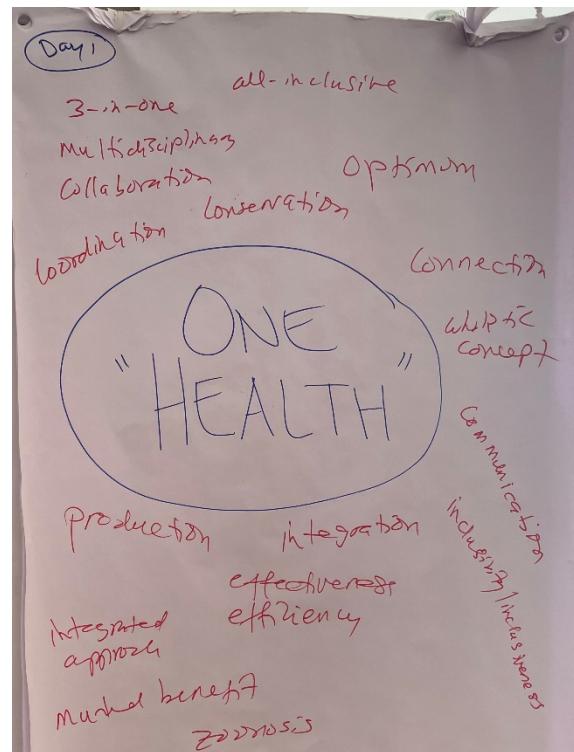


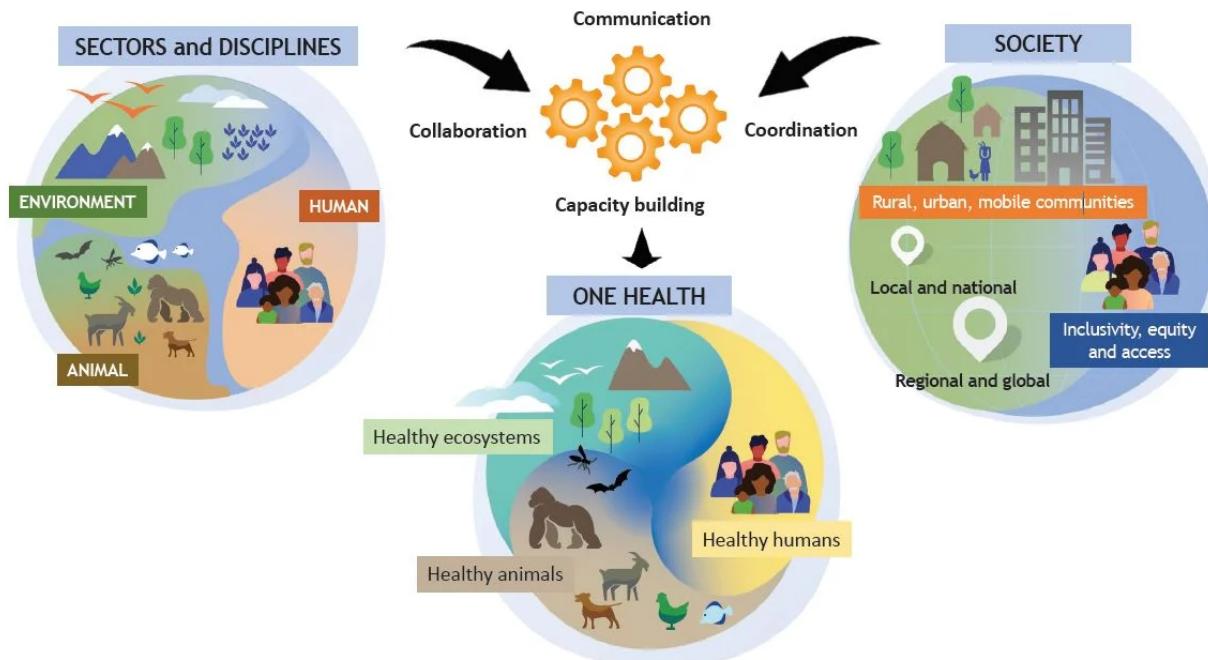
**30 minutes**

On the same flip chart add 'One' above '*Health*' so it reads '*One Health*'. Draw a circle around '*One Health*'.

Ask the participants what comes to mind when they see or hear the word '*One Health*'. Ask them to use key words or phrases only. Capture these on the flip chart.

Then, distribute/display the picture below. In groups of 4-5 people, ask participants to discuss how the image enhances their understanding of the meaning of '*One Health*'.





**Using PowerPoint**, give a presentation on the definition of One Health. Emphasize the following points:

- One Health recognizes that the health of humans, animals and the environment is interconnected and therefore requires an integrated intervention approach
- One Health is operationalized by enhancing collaboration and coordination between sectors (areas of activity), disciplines (branches of knowledge), and different groups in the society (communities, policymakers, and researchers)
- One Health is not a new concept, but it has become more relevant as societies deal with complex problems like newly emerged infectious diseases (e.g., COVID-19) and climate change

### Activity 3: Recognizing the trade-offs of human-animal-environment interaction

30 minutes

Ask participants to form groups of 4-6 and distribute copies of the photos in **Annex 4**. Ask each group to consider the photos and discuss the following questions.

Discussion questions:

- What do you see in the picture?
- What benefits can come out of the interaction seen in the picture?
- What potential risks/dangers can result from this interaction?

**Using PowerPoint**, present each photo and ask each group to present their findings. Ask participants from other groups if they have anything further to contribute on each photo. Give a summary on the key points. Emphasize that:

- Humans and animals share the same resources. They breathe the same air and often use the same water.

- Humans and animals are both affected by resource scarcity (which is compounded by global climate change)
- There are many benefits arising from human-animal interaction e.g., food (milk, meat, eggs), hides and fiber for clothing, transportation, draught power, social status, social support
- These benefits come with risks e.g., zoonoses, injuries
- Men/boys and women/girls have different roles within the household which affect how they interact with animals
- Children often keep pets (or are attracted to free-roaming animals) and hence are also in close contact with animals

#### Activity 4: Zoonoses



To begin, ask participants what diseases come to mind when the word ‘zoonoses’ is mentioned. Ask if they think zoonoses are a big problem in their woreda/district.

Then, divide participants into 4 groups and allocate them to one of the below zoonotic diseases.

Zoonoses:

- Rabies
- Rift Valley fever
- Brucellosis
- Anthrax

Ask them to develop a short ‘street theater’ performance to educate community members on the key features of the disease including:

- Clinical signs in people and animals
- Method(s) of transmission from animals to people
- Methods of prevention and control

The theater performance should be suitable for community members who have primary level education.

Note to facilitator: There is a tendency for technical experts to use technical language (jargon) which is not suitable for use when discussing zoonoses with communities. Encourage participants to use lay terms and step outside their usual roles e.g., technical expert takes on role of community member, non-expert takes on role of expert. This will foster mutual learning and ensure that all participants have an opportunity to acquire knowledge as part of the group discussions leading up to the street theatre performance. Be attuned to the depiction of experts as ‘superior’ to community members during the performances and invite participants reflect on how this may come across.

Ask each group to give their theater performance in a plenary session.

Then, ask the audience to identify the key features that were depicted in the theater performance and if there were any important details that were missing or that they disagreed with.

Record the key features of each disease on a flip chart.

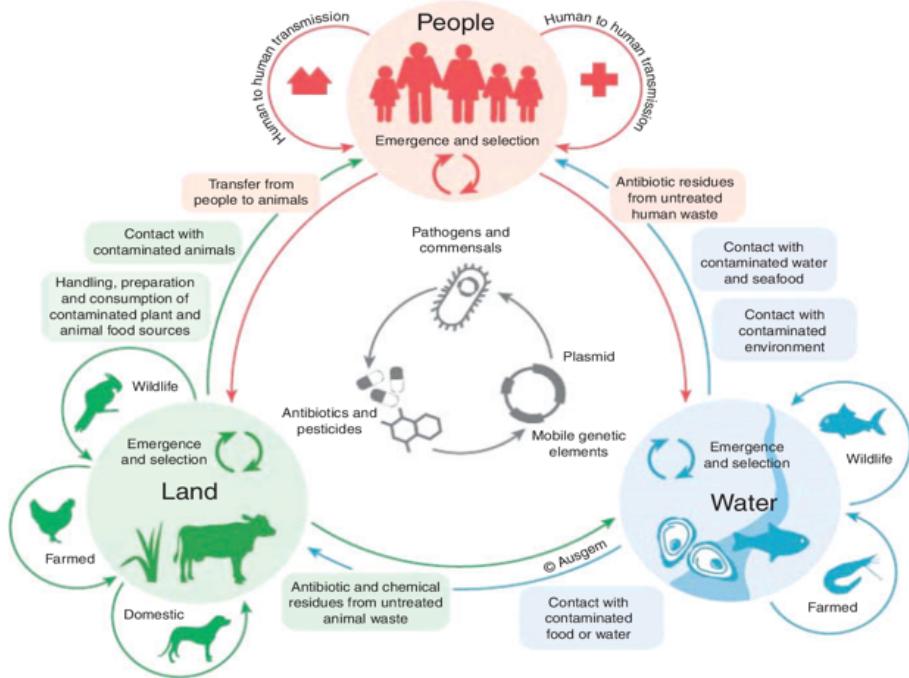
**Using PowerPoint**, give a presentation on the selected zoonoses. Emphasize that human behaviors are often the reason why people become infected with zoonoses. Mention that men/boys and women/girls can be exposed differently to zoonotic diseases due to their different roles in livestock management and handling of animal source foods.

### Activity 5: Anti-microbial resistance (AMR)

 30 minutes

Ask if any participant has heard of anti-microbial resistance (AMR). Ask them what they understand by the term.

Then, distribute/display the picture to the right. In groups of 4-5 people, ask participants to discuss how the image enhances their understanding of the anti-microbial resistance.



Discussion questions:

- What did you learn from the image?
- How does the image help you understand AMR?
- What is the implication for antibiotic use in pastoralist areas?

Ask groups to their responses. On a flipchart, write down their responses and highlight the main points.

**Using PowerPoint**, give a summary presentation on antimicrobial resistance. Emphasize that AMR is a process which happens naturally over time in all microbes that are exposed to antimicrobial agents (i.e., bacteria exposed to antibiotics, parasites exposed to anti-parasitic drugs, viruses exposed to anti-viral agents). It relates to the overuse, misuse (e.g., wrong antimicrobial agent, over-/under-dosing), improper disposal and counterfeiting of antimicrobial agents – all of which accelerate the resistance of microbes. AMR is a problem in both human health (e.g., hospital) and animal health (e.g., veterinary clinic, farm) settings. Resistant organisms and genes can be spread from humans and animals through the environment, including in water, soil, and air.

## Activity 6: Environmental and rangeland health (optional)



Note to Facilitator: This activity is optional and may be skipped if time is short. The issue of water scarcity is addressed in case studies later in the training.

Divide participants into 2 groups. Ask each group to discuss the questions below. Provide flipcharts and encourage the groups to use diagrams and pictures to summarize their discussion.

Discussion questions (Group 1):

- What is the water situation like in your woreda/district?
- How do humans and livestock impact on the quality of water?
- In what ways does water scarcity contribute to health and nutrition problems in humans and animals (are the problems the same or different?)

Discussion questions (Group 2):

- What is the condition of the grazing lands in your woreda/district?
- How do humans and livestock impact on the condition of the grazing lands?
- How does the condition of the grazing land impact the health and nutrition of humans and animals?

In plenary, invite groups to share their results.

**Using PowerPoint**, give a presentation on water scarcity and overgrazing. Emphasize that water and pasture scarcity can lead to health problems in both humans and animals. Shared use of water points can result in contamination with animal manure and chemicals which cause diarrheal illness and other problems in people. Pasture scarcity – caused by water scarcity and/or overgrazing – can cause animals to consume poisonous plants which they might otherwise avoid. The need to move animals over larger distances to access water and pasture means that food resources such as milk are not available within the household. Further, as animals become malnourished, they become less productive and milk production drops. Lack of milk within the household contributes to child malnutrition.

## Activity 7: Summary of main learning points and messages



Bring the day to a conclusion by asking participants to watch Video 1 in **Annex 5** titled “What is One Health? From concept to action.”

Ask them to identify the main learning points and messages from Day 1 that were reinforced in the video.

Then, ask if any principles from Day 1 were overlooked.

## Day 2. Systems thinking in One Health

### Overview

Day 2 will be devoted to the application of systems thinking to One Health. You will use active learning methods to aid participants' understanding of systems thinking and the skills and attitudes needed to think about complex problems from a systems perspective.

### Training objectives and intended learning outcomes

The training objectives of this topic are to:

- discuss the common attributes of systems;
- present the social-ecological system as a basis for systems thinking in One Health;
- describe key concepts in systems thinking and how it relates to One Health; and
- foster attitudes and skills needed for systems thinking

By the end of this session, learners will be able to:

- describe the features of 'systems';
- describe the key characteristics of socio-ecological systems;
- describe the fundamental concepts in systems thinking;
- identify skills and attitudes for systems thinking in One Health; and
- apply systems thinking to solve problems at the human-animal-environment interface

### Learning content

- What are systems?
- What is systems thinking?
- Skills and attitudes for systems thinking in One Health

### Learning methods and materials

- Illustration
- Picture/video analysis
- Group discussion
- Case study analysis
- PowerPoint presentation

### Learning activities

#### Activity 1: Recap and daily agenda

 30 minutes

Note to facilitator: There may be a tendency for participants to simply recall or remember information (surface learning). Reflection stimulates deeper learning by supporting learners to move beyond simply remembering facts towards being able to explain and relate ideas and concepts (understanding). Encourage participants to reflect on what the training topics mean and how they can use the knowledge from the training in their work.

There are different ways of doing a daily recap. One way is to use a feedback team. Participants may volunteer to provide daily recaps and feedback on the training content and process. Feedback teams are useful ways to co-manage the training process and use participants' creativity in providing feedback and capturing lessons. If you opt for using feedback teams, make sure that they are clear with the task.

Another way is to use reflection questions. You can use this in different ways to add interactivity.



3 key **lessons** you learnt (new knowledge and insights) and how you will apply the lessons



2 **questions** you have that need to be addressed



1 **feedback** you have on the training content and process

Ask participants to reflect on and document their key lessons from the previous day individually. Then, in plenary, ask them to share their responses.

On a flipchart, write down the daily recaps and highlight the main points. Know that daily recaps are useful ways of summarizing key lessons and engaging participants in reflective practices to deepen their learning experiences, enhance reflection and increase learning application.

After you have completed the recap, introduce participants to the new topic by sharing the schedule for the day and intended learning outcomes.

## Activity 2: What is a system?



60 minutes

To begin the activity, ask participants to share ideas on what comes to mind when they hear the word 'system'. Encourage them to think about the common attributes of systems rather than simply examples of systems. Capture these on a flip chart.

Give each person a blank piece of paper. Ask them to draw a picture that they think represents a system (that in their opinion could be understood by a community member).

Collect the drawings and group into common themes paying attention to whether the illustration depicts:

- Human-made systems, e.g. health system, judicial system
- Natural systems, e.g. ecosystem, cardio-vascular system
- Combination of the two, e.g. where humans are interacting with natural resources in the context of rangeland or water management

Invite participants to look at the drawings. Point out the diversity of examples and highlight the common themes above.

Then, ask participants to watch Video 2 in [Annex 5](#) titled “What is resilience?”

Then, facilitate a group discussion on the main points in the video.

Discussion questions:

- What is a social-ecological system?
- What does ‘resilience’ mean?

**Using PowerPoint**, give a summary presentation on systems in the context of One Health. Mention that the interdependency between humans, animals, and the environment can be conceptualized as a socio-ecological system where human components and processes interact with natural components and processes through complex feedback loops. Use examples that participants can relate to (e.g., visible changes to the environment as a result of human activity).

### Activity 3: Case study on socio-ecological systems



90 minutes

Divide the participants into groups of 4-5 and distribute copies of the case study in [Annex 6](#) titled “Environmental pollution in Karatu District Arusha Tanzania”.

Ask participants to discuss the following questions in groups. Provide flipcharts and encourage participants to use diagrams to summarize their discussion.

Discussion questions:

- What health impacts are described – in humans, animals, and the environment?
- What processes and components make up the “human-subsystem” described in the case study?
- What processes and components make up the “natural-subsystem” described in the case study?
- What evidence is there in the case study that the “human-subsystem” and “natural-subsystem” are interlinked?

Ask participants to share their responses in plenary session.

Summarize the discussion on a flip chart.

In plenary, ask participants if they can identify similar examples from their own woreda/district – which demonstrate the interaction between human and natural systems. Use probing questions to identify components and processes of the “human-subsystem” and the “natural-subsystem” and the specific feedback loops that exist between them. See the figure in the case study in [Annex 6](#) for examples of components and processes.

### Activity 4: Introduction to systems thinking



Ask participants to watch Video 3 in [Annex 5](#) titled “Systems thinking: a cautionary tale (cats in Borneo).”

Ask participants to reflect on the questions below as they watch the video.

Discussion questions:

- What problem(s) were depicted in the video? Why did they arise?
- What were the consequences?
- What was the solution?
- How might thinking of the problem from a systems perspective have avoided the problem(s)?

Ask participants to share their reflections in plenary.

Then, ask participants to watch Video 4 in [Annex 5](#) titled “Systems thinking!”

Facilitate a group discussion on the main points in the video.

Discussion questions:

- What is systems thinking?
- How is systems thinking different to “conventional” or “linear” thinking in the context of health interventions?
- What does it mean to “zoom out”?
- What are leverage points?

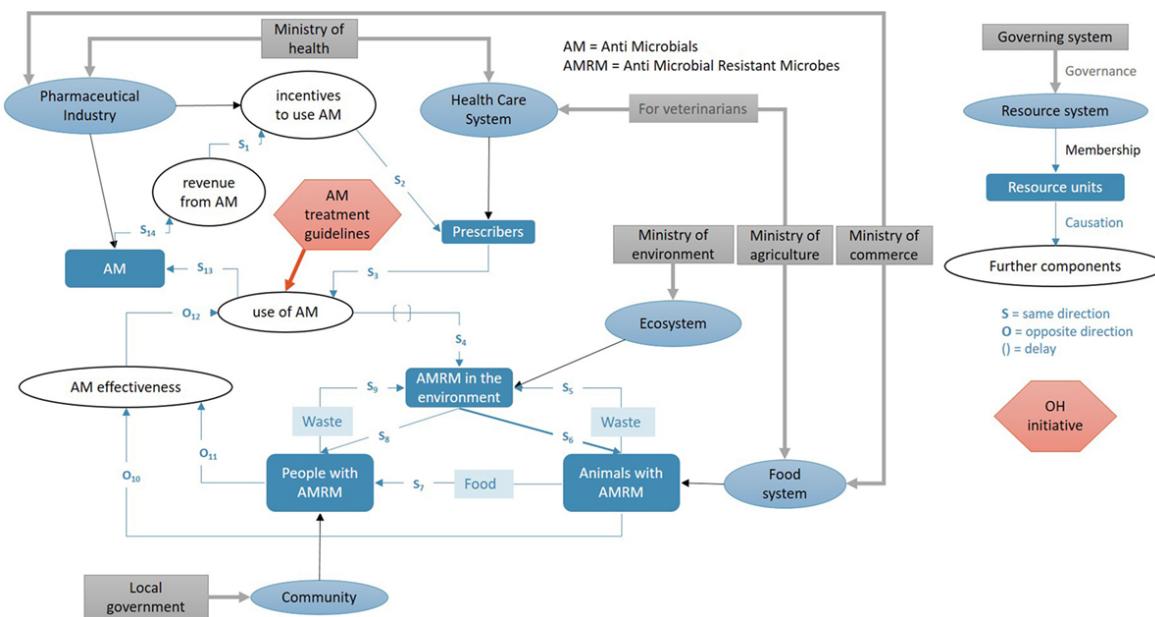
**Using PowerPoint**, give a summary presentation on systems thinking. Explain that systems thinking is relevant to One Health as it is a framework or philosophy that enables practitioners to develop a broader understanding of the factors which contribute to health problems and how decisions taken in one part of the socio-ecological system may impact other parts. Applying a systems thinking approach to problems can reduce the likelihood of unintended consequences.

### Activity 5: Applying systems thinking to a One Health problem



Show the picture below. Explain that the figure depicts the relationship between different components of a system which influences the development of antimicrobial resistance (AMR). This

includes components such as actors (e.g., government, healthcare system, prescribers) and resource units (e.g. antibiotics) as well as processes (e.g., policies, guidelines) which link the components. The shape labelled “AM treatment guidelines” is an example of a One Health initiative that targets a particular leverage point i.e., use of antimicrobials (AM).



Divide the participants into groups of 6-8 people and ask them to draw a system map similar to the above for a different One Health problem they have encountered recently in their woreda/district. Ask them to consider the human and ecological components (e.g., institutions, resource units) that influence/are influenced by the problem; the human and ecological processes (e.g., policies, practices, flows) that link the components and the direction of this influence. Ask them to identify potential leverage points.

If groups are finding it difficult to come up with an example, suggest one of the following:

- Rabies outbreak in humans
- Anthrax outbreak in livestock
- Wildlife die-off due to unknown causes
- Response to drought
- Pollution of community water source
- Increased malnutrition rate in children aged under-5 years

Ask each group to present their systems map in plenary.

### Activity 6: Skills and attitudes for systems thinking in One Health

15 minutes

Ask participants to form groups of 4-5 participants and reflect on the skills and attitudes needed to practice systems thinking.

Note to Facilitator: We will revisit knowledge, skills, attitudes, and values for competent One Health practitioners throughout the training. Consider laying the groundwork for these discussions by elaborating on the meaning of knowledge, skills, attitudes, and values as follows:

- Knowledge refers to our cognitive ability to retain and process information. It is the condition of being aware of something (facts, patterns, or concepts) e.g., able to describe the meaning of One Health
- Skills refers to the physical ability to perform an activity or task satisfactorily e.g., communicate effectively with people from different backgrounds
- Attitudes refer to a way of thinking or feeling about something or someone. Attitudes may be positive, neutral or negative and originate from our values, that is, the guiding principles we use to distinguish right from wrong, fair from unfair etc. Attitudes are often reflected in a person's behavior (how they act) e.g. appreciate contributions of different disciplines.

Discussion questions:

- What skills and attitudes do you need to apply systems thinking to One Health problems in your woreda/district?
- How different are these skills and attitudes from the usual skills and attitudes you use in your workplace?
- How can you develop these skills and attitudes?

Ask each group to share their reflections in a plenary session.

Summarize the points on a flipchart.

**Using PowerPoint**, give a presentation on skills and attitudes for systems thinking in One Health. Emphasize that systems thinking requires us to “zoom out” and see the “big-picture”. It also requires us to not only recognize the different parts of a system but also to see relationships between the different parts. This often means seeing the complexity of a problem and not reducing it to a simple “X causes Y therefore if we fix X then problem Y will disappear” mentality. Systems thinking also requires bringing perspectives together so that a more holistic understanding of the problem can be achieved. Taking a long-term approach is essential to complex problems that require a systems approach.

### Activity 7: Summary of main learning points and messages



Revisit the learning outcomes and summarize the main points. Ask participants if they have any questions which have not been addressed.

# Day 3. Data-driven decision making in One Health

## Overview

Day 3 will be devoted to the role of evidence in making informed decisions. You will use active learning methods to aid participants' understanding of data-driven decision making.

### Training objectives and intended learning outcomes

This training objectives of this topic are to:

- discuss the role of evidence in decision-making;
- discuss the steps of DDDM;
- explore DDDM in practice;
- discuss how to formulate answerable questions;
- describe considerations for data collection and analysis; and
- discuss strategies for communicating results to stakeholders and implementing and follow up

By the end of this session, learners will be able to:

- list the steps of DDDM;
- formulate key questions that can be answered with data;
- describe important considerations for data collection and analysis; and
- make recommendations based on data

### Learning content

- What is data-driven decision making?
- Steps in DDDM

### Learning methods and materials

- Video analysis
- Case study analysis
- Group discussions
- PowerPoint presentations

### Learning activities

#### Activity 1: Recap and daily agenda

 30 minutes

Start the day with a recap of the previous day sessions. Ask participants to mention at least one key message learned from the previous day sessions. Use probing questions to create further discussion into the key messages. Summarize the key messages on a flipchart. Place the flipchart on the wall at the corner of the classroom, where participants can easily see them and internalize during the day.

After you have completed the recap, introduce participants to the new topic by sharing the schedule for the day and intended learning outcomes.

### Activity 2: What is evidence?



To begin the session, facilitate a discussion on types of data and information sources used by different sectors. Capture these on a flip chart under the headings of “human”, “animal”, “environment”. Then, ask participants to identify types of data and information used by pastoralists. Capture these under the heading “pastoralists”.

**Discussion questions:**

- What types of data and information sources do human, animal and environment sectors use to make decisions about programming?
- What types of data and information sources do pastoralist communities use to make household decisions?

Wrap up the discussion by highlighting that the different sectors and pastoralists use data to inform their decisions.

Then, show Video 5 titled “Evidence-informed policy” or Video 6 titled “Data driven decision making” in [Annex 5](#).

**Note to Facilitator:** Video 6 uses the example of GBV (gender-based violence) programming. While the video is generalizable, you should use your judgement as to whether the video is appropriate to show in the training context.

Facilitate a discussion on evidence.

**Discussion questions:**

- What do you understand by the terms ‘*data-driven decision making*’ or ‘*evidence-informed decision making*’?
- What is the alternative to evidence-informed decision making?
- What is evidence? What are some different words for ‘evidence’?

**Using PowerPoint**, give a brief presentation on DDDM including the benefits of using DDDM and the steps involved. Explain that other terms for data-driven decision making include: evidence-based decision making, evidence-based practice, evidence-informed policy or similar.

### Activity 3: Case study on DDDM



Ask participants to form small groups of 4-6 people and distribute copies of the case study in [Annex 6](#) titled “Community-Based Observatories Network (CBON) in the framework of the HEAL project”.

Ask the groups to discuss the following questions.

#### Discussion questions:

- Can you identify the 4 main steps of DDDM in the development of the CBON as described in the case study?
- What data is collected as part of the CBON? How is it collected?
- What challenges and problems might you anticipate in the implementation of data collection and analysis stages?
- Who are the stakeholders in the CBON? How are key findings communicated to stakeholders?
- Which elements contribute to effective participation of local communities?

Then, in plenary ask each group to share their responses. Highlight the main points from the plenary discussions.

#### Activity 4: Turning questions into answers



**90 minutes**

**Using PowerPoint**, give a brief presentation on formulating key questions and collecting and analyzing data.

Then, divide participants into the same groups as for the system mapping activity the previous day.

Ask them to brainstorm how they would implement the first 2 stages of DDDM i.e., formulating key questions and collecting and analyzing data in the context of the problem they selected for the systems mapping exercise. The below questions can be used to stimulate discussion. Provide flipcharts and pens so each group can record their discussion.

Note to facilitator: Emphasize the need for alignment between the question and the data, i.e. the question should be formulated so that it can be answered with data, the data collected should be necessary to answer the question. Check that the question is clear before groups move on to subsequent steps. If groups propose data that does not answer the question as stated it is often a sign that the question is not the one they want the answer to!

#### Discussion prompts:

- Identify and define the problem by writing out an answerable question
- Identify the types of data that are needed to answer the question
- Identify how data will be collected (or if it is already available how it will be located) – consider location, time
- Identify who will collect the data (or if it is already available how it will be shared)

Then, ask participants to walk around the flip charts and read what the other groups have done. Ask them to write down 1 piece of feedback (question or comment) on a sticky note and leave it on the flip chart for the group to consider after the feedback session.

## Activity 5: From recommendations to action and follow-up

 **60 minutes**

**Using PowerPoint**, give a presentation on communicating results to stakeholders and implementation and follow-up of key findings/recommendations.

Then, ask participants to re-form the same groups. Ask them to discuss the feedback received by others and make modifications as needed. Then, ask them to brainstorm how they would implement the remaining 2 stages of DDDM i.e., communicating results to stakeholders and implementation and follow up. The below questions can be used to stimulate discussion. Provide flipcharts and pens so each group can record their discussion.

Ask participants to form groups of 3-4 people, to discuss the following questions

- Who are your key audiences?
- What methods will you use to convey the key recommendations?
- How will they use the information?
- Who will implement the recommendations and follow-up on progress?

In plenary, ask each group to summarize the feedback they received and how they incorporated it (or not). They should then share their discussion on communicating with stakeholders, implementation and follow up.

Ask participants to vote on the best plan and discuss whether it is something they should consider implementing in their woreda/district.

## Activity 6: Summary of main learning points and messages

 **15 minutes**

Revisit the learning outcomes and summarize the main points. Ask participants if they have any questions which have not been addressed.

# Day 4. Multi-sectoral collaboration and coordination in One Health

## Overview

Day 4 will be devoted to the topic of multi-sectoral collaboration and coordination in the context of One Health. You will use active learning methods to explore participants' experiences with collaboration and deepen their understanding of the transdisciplinary approaches demanded of One Health.

## Training objectives and intended learning outcomes

The training objectives of this topic are to:

- critical reflection on experiences with collaboration;
- highlight the value of multi-sectoral collaboration and coordination in One Health;
- discuss some of the challenges with multi-sectoral collaboration
- discuss key concepts on teamwork;
- foster attitudes and practices that support collaboration across sectors; and
- discuss approaches for conflict resolution in the workplace

By the end of this session, learners will be able to:

- define the concepts of collaboration, coordination, teamwork, team building, conflict, and conflict resolution;
- describe different types, attributes, benefits, and challenges of collaboration;
- discuss the factors influencing success of collaboration and teamwork;
- identify sources of conflicts in the workplace; and
- use conflict management techniques to resolve disputes.

## Learning content

- Definition of collaboration and coordination
- Types of collaboration
- Benefits of and challenges to collaboration and coordination in One Health
- Keys to successful collaboration and coordination
- Skills and attitudes for effective collaboration

## Learning methods and materials

- Group discussion
- Case study analysis
- Panel discussion
- Gallery discussion
- Picture/table analysis
- Role plays

## Learning activities

### Activity 1: Recap and daily agenda

 30 minutes

Start the day with a recap of the previous day sessions. Ask participants to mention at least one key message learned from the previous day sessions. Use probing questions to create further discussion into the key messages. Summarize the key messages on a flipchart. Place the flipchart on the wall at the corner of the classroom, where participants can easily see them and internalize during the day.

After you have completed the recap, introduce participants to the new topic by sharing the schedule for the day and intended learning outcomes.

### Activity 2: Experiences with collaboration and teamwork

 60 minutes

To introduce the topic, invite participants to share their experiences with collaboration and teamwork. Use probing questions to add depth to their responses.

Probing questions:

- What was the reason for the collaboration?
- Who was involved in the collaboration?
- Did the other people have similar or different backgrounds to their own? (Consider gender, culture, education, technical skills)
- Did it work well or were there challenges?
- What factors contributed to success/failure?

On a flipchart, write down and highlight any similarities in experiences across participants.

### Activity 3: Case study on collaboration and coordination

 40 minutes

Ask participants to form small groups of 4-6 people and distribute copies of the case study in [Annex 6](#) titled “Drought in arid zones of Kenya, 2021”.

Working in groups, ask the participants to discuss the questions below.

Discussion questions:

- What do you see in the pictures?
- What were the main problems caused by the drought? Consider impacts on humans, animals, and the environment.
- What sectors were involved in addressing these problems?

- How did sectors collaborate to address the problem? How did they coordinate to address the problem?
- Is it the same or different when there is a drought in your woreda/district?

Note to facilitator: In case participants need clarification on the difference between collaboration and coordination, collaboration means “to work together towards a common goal” whereas coordination means “to work separately towards a common goal”.

In plenary, ask groups to share their results.

On a flipchart, write down and highlight the main points.

**Using PowerPoint**, give a presentation on the different types of collaboration. Explain that collaboration is said to be both interdisciplinary and transdisciplinary i.e., One Health practitioners collaborate with people outside their sector/discipline, sharing knowledge and resources and promoting integrated approaches to health challenges (interdisciplinary collaboration) and One Health practitioners engage stakeholders and society at large using participatory approaches in order to identify and implement solutions to health challenges (transdisciplinary collaboration). Emphasize that both collaboration and coordination are needed to operationalize One Health.

#### Activity 4: Benefits and challenges to collaborating with other sectors



40 minutes

Select three participants, ideally one from each sector (human health, animal health, environmental health) to constitute a panel. Give each panelist a chance to answer the questions below.

Questions to the panel

- How does your sector benefit from collaborating with other agencies/organizations?
- What are the challenges to working collaboratively with other sectors in your workplace/community?

Then invite participants to ask questions to the panelists.

Summarize the panel discussion points on flipcharts.

Ask if participants who weren't on the panel have any further points they wish to raise.

**Using PowerPoint**, give a presentation on the benefits of and challenges to collaboration and coordination in One Health. Emphasize that collaboration and coordination are considered key to operationalizing One Health because they:

- Increase access to resources
- Make more efficient use of resources
- Enhance accountability
- Enhance sharing of knowledge and technology
- Stimulate innovation
- Creates lasting relationship

- Promote sustainable development

Point out that there can also be challenges to working in multidisciplinary teams which include:

- Territorialism and competition due to power imbalance across disciplines/sectors and segments of society (e.g., culture, gender, social class)
- Potential for misinterpretation due to differences in terminology
- Perceptions that disciplinary expertise is not understood, acknowledged, or valued
- Reverting to 'siloed' approaches because they are perceived to be easier or faster

### Activity 5: Keys to successful collaboration and coordination



In small groups of 4-6 people, ask participants to brainstorm the keys to successful collaboration and coordination.

#### Discussion questions

- What factors influence successful collaboration and coordination between sectors?
- What approaches can we use to enhance collaboration and coordination between sectors?

When they are done discussing, ask each group to share their findings in plenary. Summarise the common points on a flip chart.

**Using PowerPoint**, give a presentation on the keys to successful collaboration. Emphasize that beyond having strong technical skills in their discipline, One Health practitioners need skills in communication, negotiation, and conflict resolution to achieve successful collaboration with people of different technical backgrounds and across different groups of society and sectors. The way they work as a team (e.g., shared vision, shared leadership, open communication, joint decision-making, joint planning, learning together) and foster trust between parties is also key to successful collaboration and coordination.

### Activity 6: Stages of group development



Distribute copies of the table in [Annex 7](#).

Ask participants to individually respond to the questions below, then discuss their responses in pairs.

#### Reflection questions:

- How does Tuckman's stages of group development help you understand group dynamics?
- Can you relate to these phases from your own experiences with teamwork? How? Give examples.
- What approaches can we use to enhance team building?

Invite pairs to share their reflections.

Summarize the discussion on flipcharts.

**Using PowerPoint**, give a presentation on teamwork and team building in One Health. Emphasize skills and attitudes that contribute to effective teamwork, such as:

- Have a clear understanding of your roles and the roles of other disciplines (and respect these professional boundaries)
- Develop working methods and procedures which are well understood and practiced by each team member
- Develop good relationships by being open, understanding, and willing to help each other
- Develop ways of measuring and recognizing your team's achievements, and success

### Activity 7: Conflict and conflict resolution



Tell participants that you are now going to discuss conflict and conflict resolution in the workplace.

Ask for 2 volunteers who are willing to act out a scenario.

Provide volunteers with a copy of scenario A in **Annex 8** on interpersonal conflict. Allow them some time to plan how they will act it out.

**Note to Facilitator:** Consider adapting the scenarios to factor in the cultural background and gender of volunteers. Use names that are relatable to participants but avoid using names of people in attendance.

After they act out the scenario facilitate a group discussion using the questions below.

Discussion questions:

- What was the conflict in this scenario?
- How did the characters respond?
- What did you like and not like about how the characters handled the conflict?
- How would you have handled the same conflict if it happened in your life?

Following the discussion, explain that this is an example of *interpersonal conflict*. Such conflicts typically arise due to conflicting ethics, beliefs, and values. These differences in opinions should be discussed openly so that a solution can be reached. Both people should have an opportunity to share their viewpoint and listen to the other person's viewpoint. Perhaps the reasons for their behavior are not what it seems? (e.g., Samuel might be dealing with difficult situation at home). Both people should speak with respect and not out of anger. If a resolution is not possible between them, then the matter should be escalated to a supervisor. In raising it with a supervisor, Michael should mention the tension and seek actions to reduce it.

Then, ask for 3 more volunteers who are willing to act out another scenario.

Provide volunteers with a copy of scenario B in **Annex 8** on miscommunication and allow them some time to plan how they will act it out.

After they act out the scenario facilitate a group discussion using the questions above.

Following the discussion, explain that this is an example of *miscommunication*. Michael places the blame on Daniel, who feels personally attacked. It is common for people to react defensively when they feel attacked. Defensive responses are a mechanism of self-protection; by shifting the attention to the faults of the other person, it makes the person who feels attacked feel better about themselves in that moment (i.e., reduces shame). Defensive behaviors are reduced when people feel secure in their group identity, respected, and valued. Sally can help the situation by emphasizing respect and value for Daniel, even if she disagrees with his views or actions. She can also help by suggesting that they learn from this situation; they should take more time to plan adequately and communicate consistently with the community.

**Using PowerPoint**, give a presentation on conflict management. Emphasize that conflicts are a normal consequence of human interaction. Present the 5 main techniques for resolving conflicts. Ask participants to reflect back on the scenarios and briefly discuss which techniques might be most appropriate to resolve each scenario.

Note to Facilitator: During the discussion the distinction between assertive and aggressive communication may come up. Assertive communication is about standing up for your beliefs, values and needs in a respectful, non-threatening way. In contrast, aggressive communication happens when people put themselves first at the expense of others. It can involve more threatening behaviors like using confrontation and intimidation to get your way.

### Activity 8: Summary of main learning points and messages

 15 minutes

Revisit the learning outcomes and summarize the main points. Ask participants if they have any questions which have not been addressed.

# Day 5. Participatory community engagement in One Health

## Overview

Day 5 will be devoted to the topic of participatory community engagement in One Health. This topic builds on the previous topic where trainees learned that transdisciplinary collaboration in One Health involves participatory approaches that engage multiple levels of stakeholders, including the community, academia, and government. You will use active learning methods to help participants' identify the stakeholders in One Health initiatives as well as deepen their understanding of the skills and attitudes needed for effective participatory community engagement.

## Training objectives and intended learning outcomes

The training objectives of this topic are to:

- identify the main stakeholders in One Health;
- identify appropriate approaches to community engagement depending on the goal;
- discuss levels of participation and approaches to community engagement; and
- identify some attitudes, skills and tools for effective community engagement

By the end of this session, learners will be able to:

- describe the key actors/stakeholders in One Health;
- describe the meaning of community participation and identify approaches used to engage community in One Health initiatives;
- identify participatory skills, tools, and methods, and appreciate why they are important in participatory process management; and

## Learning content

- Actors/stakeholders engages in One Health
- Meaning of community engagement
- Approaches to community engagement
- Levels of participation
- Attitudes, skills and tools for effective participatory engagement in One Health

## Learning methods and materials

- Brainstorming
- Video analysis
- Think-pair-share
- Group discussion
- PowerPoint presentation

## Learning activities

### Activity 1: Recap and daily agenda

 30 minutes

Start the day with a recap of the previous day sessions. Ask participants to mention at least one key message learned from the previous day sessions. Use probing questions to create further discussion into the key messages. Summarize the key messages on a flipchart. Place the flipchart on the wall at the corner of the classroom, where participants can easily see them and internalize during the day.

After you have completed the recap, introduce participants to the new topic by sharing the schedule for the day and intended learning outcomes.

### Activity 2: Actors/stakeholders in One Health

 30 minutes

**Using PowerPoint**, briefly recap of the meaning of transdisciplinary collaboration. Emphasize that transdisciplinary collaboration goes beyond interdisciplinary collaboration, to include participatory approaches that engage multiple levels of stakeholders, such as the community, academia, and government. Explain that the focus of the day is about stakeholder engagement.

Then, in plenary, invite the participants to share their understanding of the below terms:

Keywords for discussion:

- Stakeholder
- Actor
- Community

Write down the agreed definition of stakeholder, which should be something along the lines of '*a person, group or organization who has an interest in a program's outcome*' or '*a person, group or organization who is responsible for or affected by a decision*'.

Write down the agreed definition of community, which should be something along the lines of '*a community is a group of people who are brought together by something in common, such as cultural background, shared experience, and geographic location*'.

**Using PowerPoint**, give a presentation on the key actors and stakeholders in One Health.

### Activity 3: Meaning of community engagement

 30 minutes

To set the scene, ask participants to watch Video 7 in **Annex 5** titled "What is community engagement?"

Then, in plenary, discuss the below questions.

**Discussion questions:**

- What do you understand by the term ‘community engagement’?
- What are the benefits of community engagement?

Capture the key discussion points on a flip chart.

**Using PowerPoint**, give a presentation on the meaning of community engagement, benefits of engaging communities in One Health initiatives and the different approaches to community engagement. Emphasize that each approach is distinct, and one is not of a higher order than the other. Not all communities at all times are capable or interested in owning an initiative. Depending on the scenario it may make sense for organizations/authorities to lead a One Health initiative. Conditions for community-led approaches are met when there is shared community concern, a sense of responsibility and a desire to act. Over time, One Health initiatives should aim to empower communities so that they can take control of their own health and well-being, and that of their animals and surrounding environment. This ensures that initiatives will be sustainable.

#### **Activity 4: Levels of public participation**



Before the session begins, write ‘Inform’, ‘Consult’, ‘Involve’, ‘Collaborate’ and ‘Empower’ on separate index cards.

Ask participants to form small groups of 4-6 people. Ask them to discuss the below terms and put them in order from more passive to more active participation by communities.

**Keywords for discussion:**

- Inform
- Consult
- Involve
- Collaborate
- Empower

**Using PowerPoint**, give a brief presentation on the goals of community engagement.

Then, distribute copies of the table in **Annex 9**.

Ask participants to reflect on the questions below.

**Reflection questions:**

- How does the spectrum of public participation help you understand community engagement?
- How do you think the spectrum of participation and approaches to community engagement align?

- For each level of participation: identify one example of a One Health problem or challenge that would be best addressed using the stated level of participation. Be specific about the methods you would use to engage communities for the stated goal.

Ask each group to record their examples on a sticky note (1 example per sticky note).

In plenary, ask each group to share their reflections on the first 2 bullet points. Record the discussion on a flipchart.

Then, place the index cards on the ground (in order: ‘Inform’, ‘Consult’, ‘Involve’, ‘Collaborate’ and ‘Empower’). Ask each group to place their examples on the relevant card. Facilitate a discussion on each example to ensure the goal and methods are correctly aligned with the stated level of participation.

### **Activity 5: Attitudes, skills, and tools for effective participatory engagement (optional)**

 **30 minutes**

At this point in the training, participants may be eager to wrap up. If time and energy permits facilitate a brainstorming session on the attitudes and behaviors that contribute to effective participatory engagement. Alternatively, you can proceed with Activity 6 and conclude the training.

**Using PowerPoint**, give a presentation on skills and tools needed for effective participatory engagement. Emphasize that One Health practitioners need to adopt specific attitudes and behaviors that are conducive to participatory processes. They also need to have some tools and methods to support participatory engagement. Participatory tools and methods are the means by which community engagement and participation are translated into implementation. They are specific activities designed to provide a structured approach to encourage joint analysis, learning and action.

### **Activity 6: Putting it together: learning integration and reinforcement**

 **45 minutes**

Begin with a recap of training objectives and topics covered using flipchart outputs.

Review daily recaps/reflections supplementing them with action messages to reinforce learning, reflection, and application.

Review feedback/question/comment boards and discuss questions that have been left open/unaddressed.

Ask participants to review how far they have achieved their learning outcomes/expectations.

If applicable, in small groups, ask participants to review their learning logs and identify key lessons and how they can apply them in a One Health context. In the plenary, ask groups to share their results. On a flipchart, write down the key lessons and their applications. Highlight the main points.

Review the self-assessment questions in the participant material and highlight the main points.

**Using PowerPoint**, provide a summary of key learning points and message. Emphasize that One Health is a *way of working* that is founded on the recognition that human, animal, and environmental health is inter-dependent. Systems thinking is needed to solve complex problems that stem from this inter-dependency, with awareness that decisions taken in one part of the system (or sector) can impact other parts of the system (or sector). Thus, evidence is needed from multiple sectors to inform better decisions. One Health is operationalized by nurturing collaboration and coordination between sectors, and engages many stakeholders, including communities, toward the goal of achieving healthy humans, animals, and ecosystems. One Health practitioners need strong technical skills to contribute their disciplinary expertise to multi-sectoral teams. Practitioners also need a range of interpersonal “soft” skills to work effectively across sectors and with people of different backgrounds.

## Activity 7. Action plan and evaluation



15 minutes

In groups by woreda/district, encourage participants to make action plans to apply the training. Explain that action plans are a commitment to applying the training and serve as the basis for providing mentoring support.

Provide flipcharts and markers so each group can record their action plans.

Ask groups to place their flipcharts on the walls of the training room.

Ask participants to review and vote on the best action plan and discuss whether it is something they should consider implementing in their woreda/district.

Then, distribute the end of training survey in **Annex 10** and ask participants to provide feedback on the training content and process.

Finally, close the training program with positive energy.

## Further reading

Laing, G. et al. 2023. Advancing One Health: Updated core competencies. CABI One Health. CABI International. <https://www.cabidigitallibrary.org/doi/10.1079/cabionehealth.2023.0002>.

Mehta-Bhatt, P. and Nyangaga, J. 2011. Pedagogy and adult training: A trainer's manual. ILRI (International Livestock Research Institute), Nairobi, Kenya.  
[https://cgspace.cgiar.org/bitstream/handle/10568/5403/TrainersManual\\_content.pdf](https://cgspace.cgiar.org/bitstream/handle/10568/5403/TrainersManual_content.pdf)

Partners in Health. 2011. Training of Trainers: A manual for training facilitators in participatory teaching techniques. ACME Books, Inc. <https://www.pihi.org/practitioner-resource/training-of-trainers>

## Annexes

### Annex 1. Training schedule

Time	Activities	Objectives
<b>Day 1. Opening, introduction and overview of One Health principles</b>		
8:30-9:00am	Registration	Keep participant record
9:00-10:00am	Opening and introduction	Create conducive learning environment
10:00-10:30am	Health break	Facilitate networking and interactions
10:30-12:00pm	Activity 1. The meaning of 'health' in different contexts  Activity 2. The meaning of One Health  Activity 3. Recognizing the trade-offs of human-animal-environment interaction	Discuss how different disciplines conceptualize health  Identify the key principles of One Health  Explore ways in which humans, animals and the environment interact
12:00-1:30pm	Lunch break	Facilitate networking and interactions
1:30-3:00pm	Activity 4: Zoonoses	Highlight key features of common zoonoses
3:00-3:30pm	Health break	Facilitate networking and interactions
3:30-4:30 pm	Activity 5. Antimicrobial resistance  Activity 6. Environmental and rangeland health	Understand factors contributing to antimicrobial resistance  Provide examples of the links between environment and human/animal health
4:30-4:45pm	Activity 7. Review and reflection	Integrate and reinforce learning

Time	Activities	Objectives
<b>Day 2. Systems thinking</b>		
8:30-9:00am	Activity 1. Recap and daily agenda	Stimulate deeper learning Manage expectations
9:00-10:00am	Activity 2. What is a system?	Discuss the common attributes of systems Present the social-ecological system as a basis for systems thinking in One Health
10:00-10:30am	Health break	Facilitate networking and interactions
10:30-12:00pm	Activity 3. Case study on social-ecological systems Activity 4. Introduction to systems thinking	Reinforce learning on social-ecological systems
12:00-1:30pm	Lunch break	Facilitate networking and interactions
1:30-3:00pm	Activity 5. Applying systems thinking to a One Health problem	Describe key concepts in systems thinking and how it relates to One Health
3:00-3:30pm	Health break	Facilitate networking and interactions
3:30-4:30 pm	Activity 6. Skills and attitudes for systems thinking	Foster attitudes and skills needed for systems thinking
4:30-4:45pm	Activity 7. Review and reflection	Integrate and reinforce learning

Time	Activities	Objectives
<b>Day 3. Data-driven decision making for evidence-based practice in One Health</b>		
8:30-9:00am	Activity 1. Recap and daily agenda	Stimulate deeper learning Manage expectations
9:00-10:00am	Activity 2. What is evidence?	Discuss the role of evidence in decision-making Discuss the steps of DDDM
10:00-10:30am	Health break	Facilitate networking and interactions
10:30-12:00pm	Activity 3. Case study on DDDM	Explore DDDM in practice
12:00-1:30pm	Lunch break	Facilitate networking and interactions
1:30-3:00pm	Activity 4. Turning questions into answers	Discuss how to formulate answerable questions Describe considerations for data collection and analysis
3:00-3:30pm	Health break	Facilitate networking and interactions
3:30-4:30 pm	Activity 5. Communicating results to stakeholders	Discuss strategies for communicating results to stakeholders and implementing and follow up
4:30-4:45pm	Activity 6. Review and reflection	Integrate and reinforce learning

Time	Activities	Objectives
<b>Day 4. Multi-sectoral collaboration and coordination in One Health</b>		
8:30-9:00am	Activity 1. Recap and daily agenda	Stimulate deeper learning Manage expectations
9:00-10:00am	Activity 2. Experiences with collaboration and teamwork	Critical reflection on experiences with collaboration
10:00-10:30am	Health break	Facilitate networking and interactions
10:30-12:00pm	Activity 3. Collaboration and coordination in a drought response Activity 4. Benefits and challenges to collaborating with other sectors	Highlight the value of multi-sectoral collaboration and coordination in One Health Discuss some of the challenges with multi-sectoral collaboration
12:00-1:30pm	Lunch break	Facilitate networking and interactions
1:30-3:00pm	Activity 5. Keys to successful collaboration Activity 6. Stages of group development	Discuss key concepts on teamwork Foster attitudes and practices that support collaboration across sectors
3:00-3:30pm	Health break	Facilitate networking and interactions
3:30-4:30 pm	Activity 7. Conflict and conflict resolution	Discuss approaches for conflict resolution
4:30-4:45pm	Activity 8. Review and reflection	Integrate and reinforce learning

Time	Activities	Objectives
<b>Day 5. Participatory community engagement in One Health</b>		
8:30-9:00am	Activity 1. Recap and daily agenda	Stimulate deeper learning Manage expectations
9:00-10:00am	Activity 2. Actors/stakeholders in One Health	Identify the stakeholder in One Health
10:00-10:30am	Health break	Facilitate networking and interactions
10:30-12:00pm	Activity 3. Meaning of community engagement Activity 4. Spectrum of public participation	Discuss levels of community participation and approaches to community engagement Identify appropriate approaches to community engagement depending on the goal
12:00-1:30pm	Lunch break	Facilitate networking and interactions
1:30-3:00pm	Activity 5. Attitudes, skills and tools for participatory engagement	Identify some skills, attitudes and tools needed for effective community engagement
3:00-3:30pm	Health break	Facilitate networking and interactions
3:30-4:45 pm	Activity 6. Putting it together: learning integration and reinforcement Activity 7. Review, reflection, action planning and evaluation	Sense-making of main learning points and messages Identify actions for applying the lessons Feedback on learning content and process

## Annex 2. Training checklist

Activities	Status (tick when completed)
Study the participant material and the accompanying facilitator guide	
Identify participants (different sectors and gender)	
Invite participants	
Confirm participation	
Arrange training venue	
Produce copies of the participant material (printed, USB)	
Arrange logistics (projector, flipchart stand, flipchart papers, markers, facilitation cards, registration sheets, etc.)	
Invite guest speaker and prepare keynote speech	
Arrange someone for housekeeping activities (such as payments, refreshments)	
Arrange for training documentation (taking pictures, producing report)	
Develop learning monitoring tools (pre- and post-training evaluation, training survey, mood meters)	
Check for room layout before the training starts	
Check the computer audio for video playing	
Write training objectives, intended learning outcomes, training agenda, ground rules, and pedagogical principles on flipchart papers	

### Annex 3. Pre- and post-training self assessment

Content	Level of knowledge and skills				
	Very low	Low	Medium	High	Very high
Key principles underlying One Health					
Systems thinking and its relevance to One Health					
Process of data-driven decision making and how it can be used in One Health					
Approaches to multi-sectoral collaboration and coordination in One Health					
Participatory methods and community engagement in One Health					

## Annex 4. Images of human-animal-environment interaction

**A**



**B**



**C**



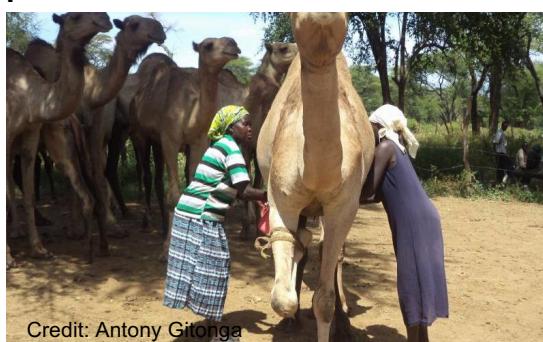
**D**



**E**



**F**



**G**



**H**



## Annex 5. Links to videos

**Video 1: What is One Health? From concept to action**

<https://www.youtube.com/watch?v=Ndfi9QbdXVY>

**Video 2: What is resilience?**

<https://www.youtube.com/watch?v=6A3SJWr4jXE>

**Video 3: Systems thinking: a cautionary tale (cats in Borneo)**

<https://www.youtube.com/watch?v=17BP9n6g1F0>

**Video 4: Systems thinking!**

[https://www.youtube.com/watch?v=GPW0j2Bo\\_eY](https://www.youtube.com/watch?v=GPW0j2Bo_eY)

**Video 5: Evidence-informed policy**

<https://www.youtube.com/watch?v=75djvHfs5pw>

**Video 6: Data driven decision making**

<https://www.youtube.com/watch?v=zDMhRWUsLvw&t=9s>

**Video 7: What is community engagement?**

<https://www.youtube.com/watch?v=Eqwxife716M>

## Annex 6. Case studies

### Case Study: Environmental pollution in Karatu District Arusha Tanzania

Source: African One Health University Network (AFROHUN, 2021)

Karatu district in Tanzania is known for its agricultural activities. People practice irrigation farming. Among the major drawbacks that farmers face are pests. To overcome such problems, farmers indiscriminately use pesticides to protect their crops. This practice has been reported to be associated with many problems affecting humans, domestic and wild animals, and the environment at large. Cases of abortions in humans and animals are quite high in the district and are associated with pesticide poisoning. Skin diseases and infertility are also rampant especially to people working in horticultural farms. Incidences of fish and aquatic bird mortalities especially lesser flamingoes are observed and are all linked with pesticide poisoning. In 2004, up to 45,000 lesser flamingoes died at Lake Manyara, which is being fed by rivers draining from the agricultural fields in Karatu district. Studies have shown high levels of pesticide residues in milk, beef, and eggs of local chickens. A case-control study conducted among pregnant women who go to Mount Meru Hospital in Arusha to deliver their babies showed that they had very high levels of pesticide residues in breast milk and abdominal fats. The newly born babies also had high levels of pesticides in mucous and umbilical blood. Studies further showed high levels of pesticides in water collected from Lake Manyara and different rivers around irrigated farms.

Efforts have been made by the government to overcome the problem. The Tanzania Ministry of Agriculture has been conducting seminars, extension work and restricting use of pesticides including advocating for the integrated pest control systems. However, the problem still exists and is getting worse.

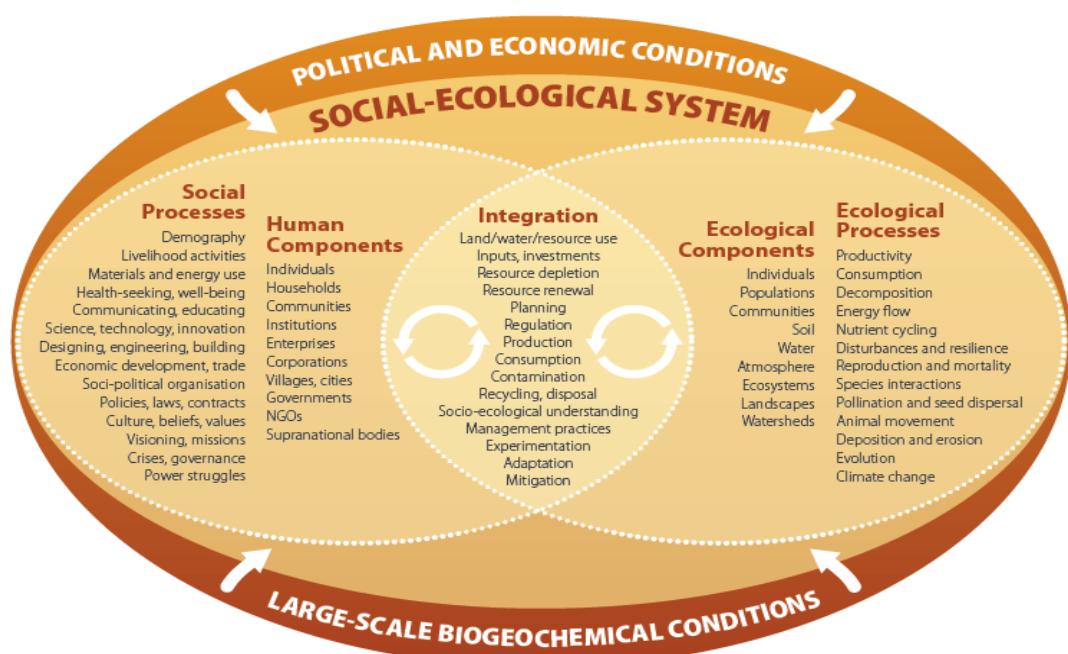


Figure: Schematic representation of a social-ecological system. Source: Lotz-Sisitka et al. (2017)

## Case study: Community-based observation network (CBON) in the framework of the HEAL project (2 pages)

Source: TRiM

Community-based Observatories Networks (CBONs) are a key element in the HEAL project and are founded on data-driven decision-making. They have been initially tested in North Horr sub-county (Kenya) and later expanded to the bordering Isiolo county and Filtu woreda in Ethiopia, leveraging the lessons learnt and adapting processes and procedures to the local needs and context.

CBONs are meant to empower local communities to observe, measure, record and use relevant data for disaster risk reduction and agro-pastoral planning, to ultimately reduce the negative impact of weather-related events and enhance the wellbeing of people, animals, and the environment. Therefore, CBONs are built on community structures, strengthen local expertise, and contribute to the functioning of the Multi-Stakeholders Innovation Platforms (MSIPs). Data-driven decision-making of the CBONs is supported by the use of an Information System called 3Map which includes a mobile and a web-based application, a cloud database and several tools and procedures to co-design and disseminate the final information.

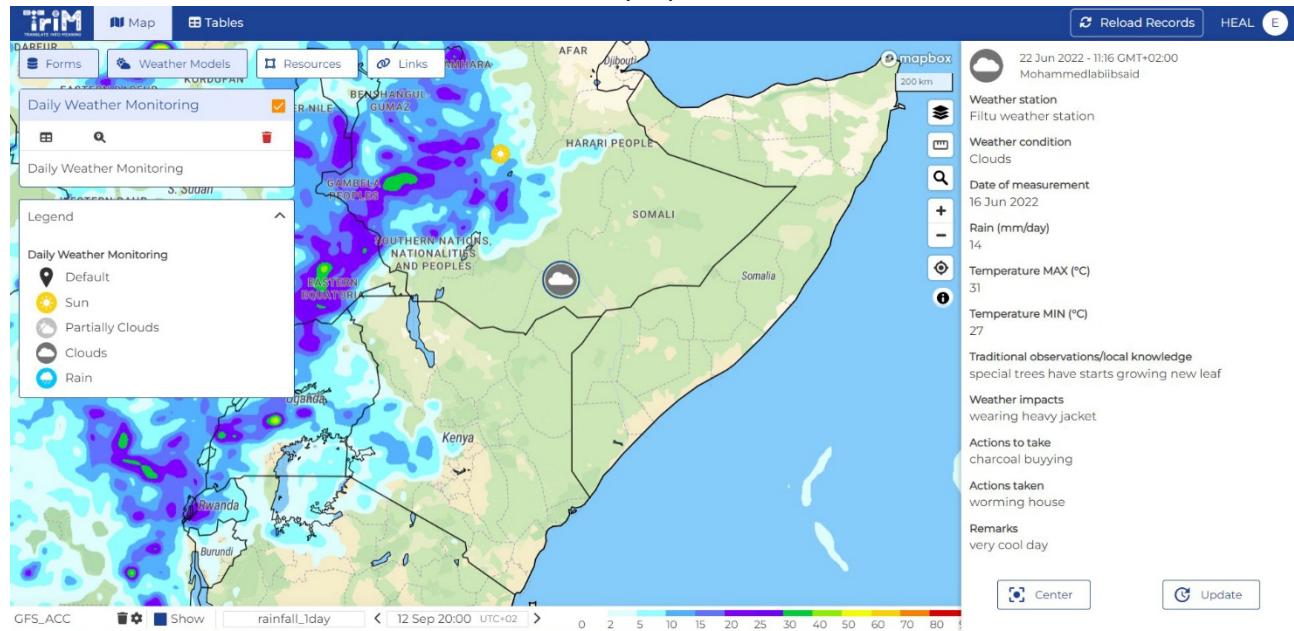
Through the involvement in meetings and workshops of relevant stakeholders, such as the Meteorological Institute, Drought Management Authority, Agricultural, Livestock and Environment Offices and the locally established MSIPs, Amref and TriM supported the identification of key questions and the data needed to generate relevant information. These were then used to co-design the tools and processes to reply to the collectively identified questions. A data collection form was developed on this basis and designed to include weather/climate data, traditional observations, related impacts, and actions taken. Parameters, tools, and processes will be reviewed periodically to ensure they provide the best support for key decisions.

Manual weather stations equipped with rain gauges and thermometers were installed in the selected locations enabling daily weather data (rainfall and temperature) to be collected at village level. To ensure accurate, complete, and timely data collection, community observers were selected, trained, and provided with the data collection tools on paper and smartphones. Rainfall and temperature are collected together with geotagged data about diseases, availability of water and pasture, decisions made and any other impacts on health and natural resources.

All data collected at community level are recorded in the cloud database through the mobile application, transformed into meaningful information, made accessible online through user-friendly visualizations (maps, tables, sketches) and shared through instant messaging with the MSIPs, the One Health Taskforce, the concerned local authorities, the HEAL teams, and other actors. Further, 3map allows easy integration with secondary data from other systems also to support intersectoral analysis. This allows transforming a variety of data into usable information to support decision-making at different levels.

*Continued on next page*

MSIPs and HEAL teams periodically 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 these three types of information focuses on the identification of a weather pattern (including differences and similarities with past ones), its consequences on human, animal and environmental health and possible actions to take. The periodical interpretation of information during community discussions is able to increase people's confidence in the power of complementing traditional knowledge with scientific data to inform decisions and increase preparedness.



## Case Study: Drought in arid zones of Kenya, 2021/2022.

These pictures were taken from the arid zones in Kenya during the 2021/2022 drought which drastically affected the health of humans, animals, and the environment, and needed coordinated efforts to mitigate the adverse consequences. Humans lost livelihoods which affected not only their physical health, but also their psychological and mental health. Livestock health and nutrition was adversely affected, and thousands of animals died. Wildlife lost their grazing lands, and many died.

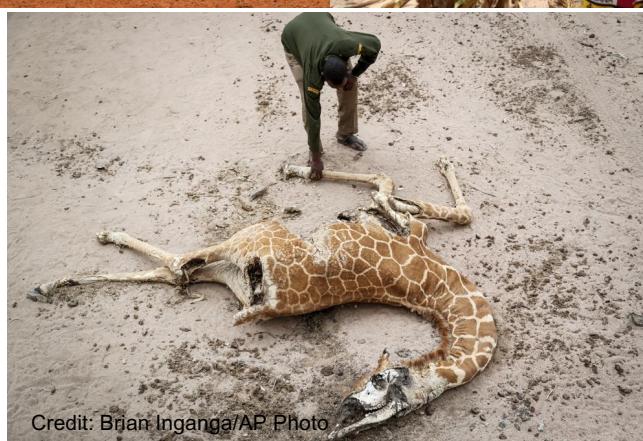
The effects of the drought required joint efforts by different sectors and disciplines to remedy human, animal, and environment suffering. The National Drought Management Authority (NDMA) and the National Coordination Office in the President's Office coordinated the relevant sectors/departments and stakeholders, in joint decision making and action. This included sectors/stakeholders such as water, health, veterinary, wildlife, environment, education, media, and donors, etc. They mobilized services (medical, veterinary, relief, journalism, monitoring), personnel (doctors, nurses, veterinary doctors/technicians, rangeland management staff, water engineers) and commodities (food stuffs, medicine, water distribution vehicles, vaccines, animal drugs, hay) with coordination from NDMA and the National Coordination Office. Decisions and actions were well coordinated to avoid duplication of effort.



Credit: Chris Jackson/Getty Images



Credit: Dong Jianghui/Xinhua



Credit: Brian Inganga/AP Photo

## Annex 7. Tuckman's stages of group development

Characteristic	Forming	Storming	Norming	Performing	Adjourning
Visualization					
Team behaviors					
Performance					
Team behaviors	Team becomes acquainted with each other and establishes ground rules; members treated as strangers	Members start to communicate feelings but still view themselves as individuals; members resist control by leaders and show hostility	People feel part of the team and realize that they can achieve work if they accept other viewpoints	Team works in an open and trusting atmosphere where flexibility is the key; hierarchy is of little importance	Team reviews performance and implements a plan for transitioning roles and recognizing members contributions.
What to expect	Confusion about purpose; high enthusiasm; little agreement; low performance	Conflict and “turf battles”; increasing clarity of purpose; low performance	Agreement and consensus; increasing trust and clarity around roles; increasing performance	Clear vision and purpose; focus on goal achievement; high productivity and efficiency; peak performance	Task completion; feeling good about achievements; disbandment or re-focus of the team on other projects
Role of leader	Team acts independent of leader	Mediation	Facilitation	Delegation	Recognition
Team needs	Strong direction and guidance	Coaching; listening; clarification; compromise	Feedback; training	Recognition	Reward

## Annex 8. Role plays on conflict management

### Scenario A (interpersonal conflict)

Ruth works in a government directorate and loves her job very much. She is hardworking and always delivers assignments on time and with high quality. Her counterpart in another line ministry, Samuel, is a little less committed to his job and often tries to find ways to do the least amount of work. Ruth and Samuel have been requested by the One Health task force in their country to work together to draft a guideline for improving surveillance in the regions. Lately Samuel has not been making any contributions to the document. Out of frustration, Ruth tells Samuel that she will raise the matter with the task force unless he starts providing more input. Samuel gets angry and tells Ruth that he hasn't had time to work on the document because he has been in the field. He tells Ruth that she should not discuss the issue with the task force. Samuel continues not to make any contributions to the document for the next week. Upset with Samuel's behaviour, Ruth decides not to talk to him and works on the guideline by herself.

### Scenario B (miscommunication)

Michael, Daniel, and Sally are part of a team that deliver mobile human, animal, and environmental health services to pastoralists. They are preparing to go to the field the next day. Michael places a call to the community leader and informs them to mobilise the community for 6 local time (12 midday). He tells the others and the driver that they need to leave by 1 local time the next day (6am). The day rolls around, and Daniel is not ready to depart; he is still preparing the materials he needs in the field. The team ends up leaving 3hrs late. By the time they arrive, the community is nowhere to be found. Michael tells Daniel that this is his fault. Daniel reacts defensively and says Michael didn't give him enough notice to prepare. Sally picks up on the tension between Michael and Daniel and wonders what she can do to help the situation.

## Annex 9. Spectrum of public participation



**Increasing level of participation**

	 <b>Inform</b>	 <b>Consult</b>	 <b>Involve</b>	 <b>Collaborate</b>	 <b>Empower</b>
<b>Public Participation Goal</b>	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
<b>Promise to the Public</b>	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.
<b>Example of Tools</b>	Fact sheets, websites, open houses, mailings, social media	Public comment, focus groups, surveys, public meetings	Workshops, deliberative polling	Stakeholder advisory committees, consensus-building, participatory decision-making	Stakeholder Resident juries, ballots, delegated decisions

(Source: Planning for Effective Public Participation, Foundations in Public Engagement, IAP2 International Federation 2016, p.29-30)

## Annex 10. End of training survey

Please rate your level of satisfaction in the training on a 1 to 4 scale.

Training content and process	Rating scale			
	1 Dissatisfied	2 Somehow satisfied	3 Satisfied	4 Highly satisfied
The learning outcomes were practical and relevant for my work.				
The learning outcomes were clearly defined and easy to understand.				
The training content was relevant and useful to my work.				
Training content was well organized with good examples and case studies.				
The methods and materials used to deliver the content were appropriate and effective.				
Emphasis was placed on learning and applying new knowledge and skills.				
The balance between presentations and practical sessions was adequate.				
Adequate time was allotted for practical sessions and discussions.				
Instructional delivery was logical and easy to understand.				
The facilitator(s) used effective examples, illustrations, and cases to enhance learning and reflection.				
The facilitator(s) summarized the main learning points and messages to reinforce learning and application.				
I have gained adequate knowledge and skills and feel more confident to practice One Health.				
I would recommend the training to my colleagues and other people.				
Overall, I rate my satisfaction with the training content and process as:				

What did you like most about the training?

Which content of the training was most relevant for you?

What aspects of the training could be improved?