Opportunities for One Health Integration of Community Animal and Community Health Workers

Ethiopia Scenario Workshop Report

February 6-8, 2023

Women Vaccinators Trained by VSF-Germany in Afar

"*They're basically living the idea of One Health. Their lives depend on their cattle, their health depends on the cattle and the environment… This One Health idea is the best idea to address pastoralist healthcare in the region*."

Community OH Scenario Workshop Participants

Vétérinaires Sans Frontières Germany

Ethiopian Veterinary Association

VÉTÉRINAIRES SANS FRONTIÈRES SUISSE
member of VSF International

USAID FROM THE AMERICAN PEOPLE

Tufts University | Cummings School of Veterinary Medicine

Acknowledgement

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Workshop Objectives

One Health (OH) is an active area of discussion and innovation at the international and national level and most strategic planning on the adoption of One Health has focused on these higher levels of government. At the same time, changes at the community level are taking place through local interventions and the involvement of the non-governmental actors. The objective of this workshop was to discuss the current situation in the One Health Sectors (Health, Animal Health and the Environment) in Ethiopia at all levels, acknowledge challenges and changes, and develop a consensus road map on the way forward to the implementation of One Health that includes the community level in areas prone to humanitarian emergencies. The goal was to maximize benefits for both normal and emergency contexts through the selection of strategies that are appropriate across the spectrum of development and emergency needs. Flexible models that could quickly be adapted to respond to a humanitarian crisis while reinforcing resilience and enhancing coping mechanisms over the longer term are needed.

The purpose of the scenario workshop included developing lessons learned on service delivery and One Health at the community level and discussion of the way forward to strengthen access to and integration of human health, animal health and environmental services. Selected representatives and stakeholders from different sectors (e.g., health, agriculture and livestock, environment) and with different roles (e.g., Community Animal Health Workers (CAHWs), Health Volunteers (HVs), local implementing partners, Woreda/Zona/Regional and Federal Governmental Officials, technical advisors) were invited. The meeting focused on three areas prone to repeated emergencies visited by the study during the site visits (South Omo in SNNP Region, Borana in Oromia Region and Afar Region). The intent was to keep the meeting small but have representatives of the full range of stakeholders. It is hoped that this will encourage open communication across sectors and levels.

Among other areas, the workshop sought to capture participants' views on:

- The strengths and challenges in current community human, animal health programs and environmental interventions *under normal (non-emergency) settings*
- The strengths and challenges in current community human and animal health programs *in the context of emergency response*
- The appropriate activities for implementation of community health and community animal health workers
- Ways to reinforce resilience and reduce the risk of future emergencies
- The impact of incentive systems on service availability and implementation
- Ways forward to build synergy, collaboration or integration of community health and animal health programs

The environment continues to play an increasing role as a driver of emergencies and health impacts. The role of environmental interventions in mitigation of emergencies is also evolving. Participants were interested to fully include the environmental dimension in the workshop discussions, including impacts on communities in the area as well as suggested steps forward.

Ethiopia has been exposed to chronic emergency situations in which the delivery of humanitarian interventions often overlaps with the provision of longer-term development assistance. Participants were asked to work through different response options considering this scenario and were facilitated to explore the impact of different policy options as well as various outcomes based on their suggested actions. The scenario workshops generated new insights among the participants including the study team and led to alignment by stakeholders on a set of action points outlining the way toward a strengthened One Health approach to community-level health interventions. Lessons and insights were captured as products for inclusion in the project's deliverables with the intent of broadening the impact of the workshop beyond the host location.

Workshop Results

Setting the Scene: Highlights from the Project Presentation

The project presentation described the objectives, activities and outputs of the *Opportunities for One Health Integration of Community Animal and Community Health Workers* study. The opportunity was taken to interactively define One Health with the participants and achieve a common understanding of the nature of One Health approaches. The current issues and status of the adoption of One Health in countries in the region was described. Thereafter, the presentation highlighted key aspects of the context of service delivery in Ethiopia noting how events over the past several decades had shaped delivery of One Health services and the depth of need. The persistent drought and climate change challenges were noted. Aspects such as levels of dependency, needs and expectations as well as people's ingenuity and business acuity in the face of adversity were discussed.

Figure 1: A health volunteer in Benatsemay participating a proportional piling exercise

SNNP Region

Figure 2: One of the first CAHWs in Ethiopia vaccinating for rinderpest circa 1993.

During the field visit preceding the Scenario Workshop, the project team visited and interviewed stakeholders from several communities at Omorate, Hammer, Benatsemay and Weytu. These include members of the communities, elders, CAHWs, HVs, Health Extension Workers (HEW), and representatives of the Health, Animal Health and Environmental Protection Departments. New OH platforms had just started meeting but had not initiated concrete activities.

In Omorate, there was a strong example of a community-based veterinary practice with one Animal Health Assistant working with and supervising 52 CAHWs. The AHA operated a pharmacy and the CAHWs visited the shop to

resupply their kits. It was an excellent example of a public-private community partnership (PPCP).

All groups practiced varying levels of transhumance. CAHWs tended to move with the cattle camps and provide service in remote areas as well as villages. HV mainly served villages and were only reported to visit cattle camps by one of the 4 communities, the Dasenech.

Other than in Omorate, it was reported that there were not enough livestock drugs in government clinics and farmers were buying them from informal markets, where drugs are reportedly of poor quality.

It was suggested that to have HV who would join camps, the candidates needed to be selected from cattle camps. It was generally agreed HV should provide basic medicines as well as test and treat malaria. Communities requested community-based veterinary practices with CAHWs and CAHWs and HV be integrated into one network.

Oromia Region (Borana)

In Borana, the field visit included two sites that participated in the HEAL project with multi-stakeholder innovative platforms (MSIP), a form of OH community committee. These were along the main road to Moyale due to security concerns at the time the project started. We also included sites away from the road that did not participate in the project. The field interviews noted very different situations across the sites.

Figure 3: Dead cattle in the Isiolo area of Kenya in February 2023 taken days before the Ethiopia Workshop. These are grazing areas used by the Borana of Ethiopia.

The MSIP was a diverse group that included a broad range of kebele elites. Everyday community members also attended discussions but usually did not speak. The program was reinforcing and resupplying clinics. The project focus seemed to be on village infrastructure and those who operated or managed the infrastructure. The program also involved the existing CAHWs in the community.

In the sites away from the road, the kebeles in 2 different woreda were visited. It was interesting to find the Health Posts in one woreda had no basics medicines, while Posts in the next woreda had limited supplies. This was due to differences in the ways woredas managed their budgets and supply systems. In the Health Posts with no drugs, HEW gave advice but sent patients to private providers. They told them where to buy and how much to pay. Similarly, in areas not served by the NGO, AHAs had limited or no veterinary inputs. Supplies had to be purchased in town at market cost, plus the cost of transport and about a day of travel time.

The Borana communities reported that they could occasionally obtain health care from the Posts they passed while moving with the cattle. But this was rare. There was no access to health care in cattle camps. Borana move up to several hundred kilometers and reported reaching Isiolo in Kenya.

Afar Region

Figure 4: CAHW trainee describing Anthrax

The first community-based animal health workers were trained in Ethiopia in the Afar Region in 1994. At that time, Afar had only one veterinary team for the whole region. These CAHWs eradicated Rinderpest (RP) from the remote regions of Afar.

Unlike in the other regions visited, the site visit found that there was no OH Platform in Afar and limited awareness of One Health in general. However, in discussions, there was a high level of interest. The study had the opportunity to interview women trained by VSF to act as community-based vaccinators. They worked against payment for the vaccination. They reported that herders were purchasing vaccination and they were interested in pursuing the activity. They had encountered some problems with credit and were learning how to manage credit requests. The women reported that local health facilities were poorly supplied and that they preferred to go to private health suppliers when they were able to pay.

Figure 5: Afar elder addressing a focus group discussion

Local animal health assistants (AHA) were actively engaged with the community but reported that their posts had no resources. Community Animal Health Workers were described as having become ‘project-based’ by the AHA. This is an appropriate observation for CAHWs who have lost their initiative and entrepreneurial spirit as a result of inappropriate support payments from development and relief programs, and highlights the importance of incentives based on the quantity of services delivered.

Participant's Overview of Current One Health Institutions in Ethiopia

One of the unifying observations of the participants was that their regions were characterized by recurring emergencies and limited access to services. The scarce availability and low quality of services in rural areas was also a common theme among the comments.

Participants shared that there are good examples of OH collaboration among the three departments at the kebele level. The OH discussions are just starting, but useful. In some areas CAHWs, HV and Health Extension Workers (HEW) get the message out to make vaccination a success. There are no workers focusing on the environment, but having the Environmental Protection Department participate in OH discussions is advancing the topic.

It was noted that revolving funds were a go-to approach in the past, but that these had not been sustained. Now, there is more interest in voucher systems and cash payments.

It was noted that government policies existed for the promotion of public-private-partnership solutions, but that these were not moving forward. Participants reported that there are 120 empty animal health posts in the country.

CAHWs exist in many locations but their training and organization differs between locations and the era of the training. Many are not active due to weak supervision, mentoring or a sustainable system of resupply.

Health volunteers exist mainly in towns and villages but as a rule do not venture out into the grazing areas. As most are not trained to treat illness, the participants saw little value in the current type of HV visiting grazing camps. Participants noted that they were not trained as extensively or for as long periods as CAHWs.

The Community-based Health Insurance (CBHI) scheme was a frequent topic and discussion was generally positive. The scheme was seen as a tool to raise health awareness, service utilization and help maintain stocks. In more urban areas, members can receive subsidized medicines from Red Cross pharmacies and go to the Health Clinic for advice. On the other hand, infrastructure and participation is lower in rural areas and operationalization differ a lot across regions. The scheme, for example, has not been embraced by the pastoralist communities of Somali Region.

Participants noted that times were changing with the wider availability of cell phones and motorcycles. Now, it does happen that individuals contract private health practitioners and HVs to send or bring medicines and help to remote camps. Local innovation is leading to the development of private outreach services.

Options and Opportunities for One Health Innovation

The Emergency Cycle

Participants did not distinguish normal development periods as distinct from emergencies. Rather, they described a cycle of recurrent emergencies that requires one holistic strategy with flexible approaches that could be adapted to the stage in the cycle. Figure 6 presents the conceptual framework of one of the working groups. Interestingly, there is no normal development period.

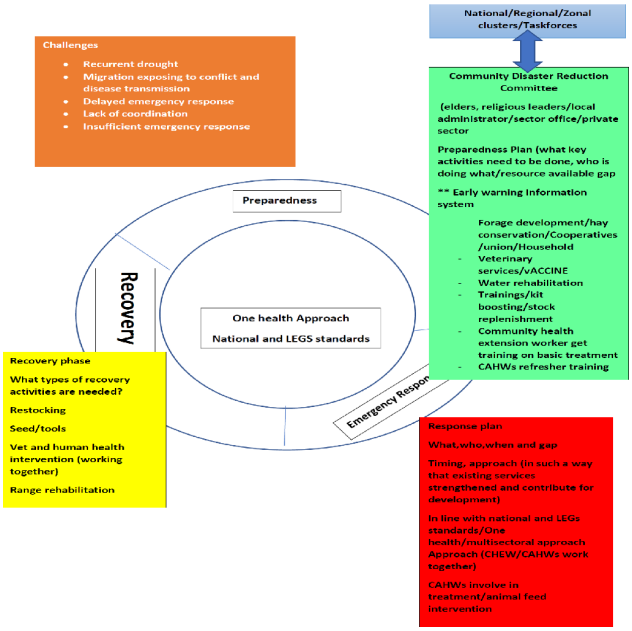

Figure 6: The SNNP Group diagram for the Emergency Condition

OH Integration and Community Worker Roles

Participants identified the shortage of services in rural areas and cattle camps as a priority problem. Throughout the discussion, there was agreement that the community workers needed to be able to address basic human health needs with actual interventions to save lives. The discussion highlighted the need for practical solutions, mainly to address the issues of accessibility. Environmental protection was described as a neglected area in the past and as an issue to address in the move to OH integration.

The discussion tended to maintain separate CAHWs and Health Volunteers and to promote their integration into one network, with the addition of environmental protection roles and under the supervisions on community OH Units. It was noted that CAHWs and HV could take on human health treatment roles, if they were trained as the CAHWs are to treat animals.

Considerable attention was given to the sustainability of the approach. The meeting focused on commercialized systems of resupply such as the

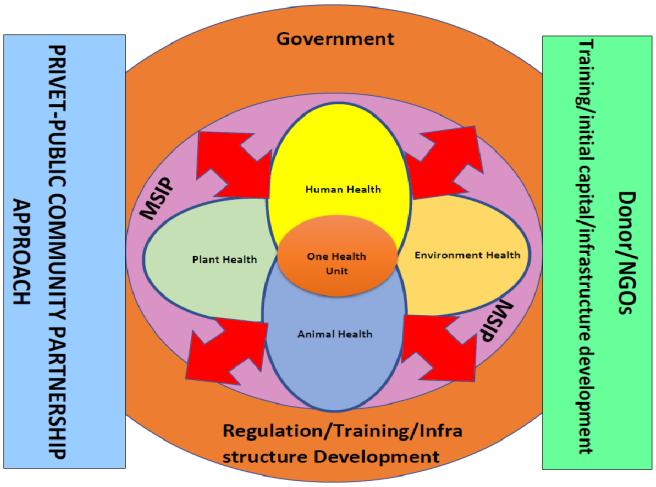

Figure 7: The SNNP group diagram of OH with public-private-community partnerships complementing donor and NGOs investment

veterinary practice in Omorate as approaches that could create sustainable access to basic health services.

Public Private Community Partnerships

The regional groups worked separately but were largely aligned on developing a focus on PPCP. The SNNP group produced Figure 7 above. Note that the two poles supporting the OH transformation are donors and NGOs on one side and PPCP on the other. Boxes 1 and 2 present the inputs from the Borana group on approaches to incentivizing and sustaining OH access in rural areas.

BOX 1: Ways to promote Public-Private Community Partnership (PPCP)

- Mapping the private practitioner's potentials
- Arranging a regular meeting with the private practitioners (both human and animal health)
- Inviting them in special training carried out by the regional expertise especially in pharmaceuticals (to have updated knowledge both in human and animal health)
- Engaging them in veterinary service practices, i.e., means NGOs will provide the financial budget needed for the initial startup business and on the other side the private practitioners will arrange for procurement process and provide input supply – and use the kebeles CAHWs and experts from the woreda. This approach would be useful for human health as well.
- Encouraging the best performer among the practitioners with reward
- Arranging awareness creation events on OH via local mass media

BOX 2: Impacts (advantages) that PPCP can provide:

- Greater trust in government and private parties
- Reduced business risk and increased opportunities for the private sector
- Improved public health
- Solutions to societal issues
- Stronger regional economy

Recommendations on the Way Forward

"We've been having these discussions for decades that their services are weak, but with these recurrent emergencies, we need to design 'emergency interventions' that are sustainable - we have to incorporate these existing markets for services. Often during an emergency, we give things away and cripple local businesses. Now we live in emergencies all the time, and this old system of emergency management creates financial emergencies for these small economies. So how do we use PPCPs to incorporate them into response?"

Workshop Participant

Gaps in the current system

The participants indicated that insufficient OH coordination, limited involvement of the private sector and poor communication between the OH sectors (health, animal health and environmental protection) and the community had led to gaps in access to both human and animal health services. The lack of access was most acute in the cattle camps, followed by the villages and kebele. They noted that the quality of services was their top concern and that both the quality and availability of drugs was insufficient. The meeting noted that trained human resources, transport, logistics and infrastructure were insufficient. Continuing emergency gaps were note in terms of access to water, feed and cross-border coordination of humanitarian responses. The participants indicated that there was a poor enabling environment due to weak policies, regulation and commitment from decision-makers.

Solutions to enhance integration

Introduction

The meeting advocated for a OH service approach where community workers were integrated in one service delivery network supervised by a OH unit that includes human, animal and environmental needs that incorporated public-private-community partnerships. In general, the meeting advocated for community animal health workers and an updated human health worker model with enhancements over the health volunteer approach. These two types of staff would be cross trained on shared tasks and jointly trained on tasks that required a close degree of coordination like response to zoonosis.

The meeting recommended that decision-makers and service-providers needed greater awareness of the realities at community-level in terms of the limited availability of services, vaccinations, and medicines. The involvement of existing OH-sector professional associations will also need to enhance their awareness and become involved in solutions.

Service Delivery Systems

Community Worker Services:

- Workers organized as OH networks under a community OH Unit
- Linkages to private sector through PPCP
- Cross and joint training on human and animal health
- Providing basic animal and human health, agricultural services and inputs
- Utilize vouchers, cash payments, and subsidies, etc.
- Health and animal health service include
    - Treatment of illness
    - Vaccination
    - Preventative health care
    - Surveillance and reporting

The starting point is to map existing CAHWs, HVs, Traditional Birth Attendants (TBA) and Traditional Healers.

- Public-private-community partnerships could be used to support: Voucher system
- Management of the supply of drugs, medicines, and other inputs
- Contractual service agreements
- One Health Approach
- Government and donor assist with initial investments and capacity building for private sector suppliers and management systems.

Sources of incentives for OH Workers that should be developed:

- Quantity-based payments per service rendered
- Basic salary and per diem for formal employees
- Other financial incentives
    - Concessions on land and infrastructure access
    - Linkage with formal and informal financial services, including microfinance, and creation of an enabling environment for investment.
    - Tax relief for work in rural areas
    - Cost sharing and risk sharing with community employees
- Additional trainings and professional development
- Insurance schemes linked to the delivery of services for both human and livestock health
- Government and donor assist with initial investments and capacity building in the expansion of community based OH programs to underserved areas and communities.
    - Selection and training of individuals from cattle camps for both human and animal health services
    - Evaluating current selection criteria and training systems for community workers
    - Extension services

- Mobile outreach with One Health focus on more complex and referral health needs
    - Complementing community workers

    - Teams composed of human health, veterinary health and environmental health workers
    - Issues of cost and sustainability
    - Explore PPCP to deliver outreach

Capacity Development

There was a consensus that implementation of the integrated OH network will be facilitated by general skills and capacity development for front-line workers on:

- Multi-sectoral One Health collaboration and integrated service delivery
- Emergency management and preparedness
- Approaches to public-private-community partnerships (PPCP) for input supply and services value chains for both human and animal health needs

Community workers: The workshop produced one unified list of skills and capacities for basic human, animal and environmental health community workers that included:

- Prevention, control, treatment of human and animal disease, animal husbandry, animal welfare, pediatric care and parasite control for both animals and humans

They also advocated for gender-inclusive trainings that focused on small livestock and young animal care and husbandry and human health and women's health.

Environmental sector: For capacity building on environmental protection and natural resource management the meeting recommended resource mapping and mobilization, reporting and surveillance, risk mapping, and resource management and access.

Private sector: The workshop specifically recognized the need for skills and capacity development for the private sector including:

- Business management practices
- Public-private-community partnership
    - Especially for the management of Input supply and value chains
- Refresher on technical issues
- One Health

Learning, research & development

The group agreed on the importance of monitoring the performance of the proposed approach to promptly identify challenges to address and lessons to leverage. The process will require the following:

- Clear Monitoring & Evaluation processes
- Internal and external bodies involved in the monitoring and evaluation
- Joint multi-sectoral MEL
- Monitoring and evaluation of Cross-cutting issues, including Gender and Inclusion

Impact

Analysis of the impact of the proposed approach will need to take into consideration the following:

- Effects on service access
- Effects on service quality
- Environmental effects
- Effects on livelihoods
- Economic effects
- Effects on overall health
- Impact on sustainability
- Effects of an incentive system

Annexes

Annex 1: Workshop Approach

The scenario workshop brought together representative professional and community OH stakeholders from the national, state and local levels. The Health, Animal Health and Environmental sectors were included. The workshop was participatory in nature and utilized largely on facilitated group discussions and brainstorming sessions to map the way forward. The bulk of the workshop involved participants dividing into breakout groups to decide as a team how to respond to One Health scenarios in both normal and emergency contexts.

The Scenario Workshop Implementation Guide was provided to participants either before or at the start of the workshop to help orient expectations and the discussion.

Opening Plenary

Each Scenario workshop was opened by Ministry Officials and the local non-governmental agency host. Thereafter, the participants introduced themselves and a discussion of the participants expectations for the meeting was held. This led to a joint statement of the workshop objectives defined by the organizers and participants.

The project team gave one interactive presentation at the workshop's opening to introduce the project, the nature of One Health and the status of One Health globally, and to set the scene for discussions.

The presentation explored the difference between the concepts of community interventions and community-based interventions in interactive discussion and suggested that both approaches can be appropriate depending on the context. A program that recruits community members as employees, pays salaries and defines tasks is an example of a community activity. To be community-based the program would need to empower the community as a partner in the design, management, and support of the program. Most interventions combine aspects of the two approaches and fall somewhere on a spectrum of options.

The distinctions between collaboration and integration and collaboration approaches to One Health was discussed. It was noted that most OH programs were initiated as collaborations where representatives of separate Ministries came together on a part time basis in OH platforms to discuss joint programs. The platforms were not empowered to make decisions or given their own budget. Increasingly, countries are moving beyond this model to create OH platforms with dedicated staff, decision-making roles, and budget allocations.

Many participants were previously familiar with One Health as a concept, though this was the first exposure for others.

Plenary and Group Discussions

Thereafter, the participants described and analyzed the existing human, animal and environmental systems and services present in the country both in normal times and in an emergency context. This included the types, selection, training, roles, supervision and incentive systems of community workers in both normal and emergency contexts.

Thematic discussions were conducted on a range of topics relevant to the sustainability accessibility and integration of services under the OH umbrella. These topics included:

- Collaboration between One Health stakeholders vs. integration of One Health services
- Approaches to integration of community services with the following examples given:
    - Networking existing workers in a shared system
    - Cross-training existing workers to provide support/provide services across specializations
    - Moving to OH workers with integrated roles.
- The role and range of services offered by community workers
- Examples of public-private-community partnerships and future trends
- Incentives for workers ranging from stipends, retention of partial payments for services to voucher systems
- Transhumant communities and access to services

The plenary developed an overview of public-private-community partnerships and their application to community health model. Importantly, a distinction was drawn between the question of who pays for services and the mechanisms established for delivery of services. Examples were discussed were private service providers participated in the management of vaccination or the logistics of pharmaceutical supplies, but the public sector supported all costs.

Sessions examined approaches to integration and whether a shared network, shared responsibilities or cross-trained staff makes would lead to a wider One Health operationalization and impact in Ethiopia.

Once the thematic discussions were completed, the meeting shifted to the scenario sessions where the considerations raised in the thematic discussions were synthesized into an overview of the way forward for OH services at the community level. The approach was taken that development to emergency settings were a continuum which required flexible systems that needed to be capable of adapting to immediate conditions while supporting long term development. In all countries where the scenarios workshops were held, emergencies related to climate, security and economic conditions were a significant, if not the predominant, reality. All workshops stressed the importance of moving forward with development while meeting emergency needs.

Closing remarks were offered by representatives of the various ministries, NGOs and communities, as well as by workshop organizers. The detailed agenda is included in Annex 2.

Annex 2: Agenda

Morning DAY 1: Opening and Setting the Scene

- Formal Opening
- Introductions
- Short Objectives Presentation
- Community OH Integration Presentation with Highlights of Field Assessments (Tufts)
- Stakeholder discussions – What would they like to get from the Workshop?
- Community vs. community-based workers

Afternoon DAY 1: Interactive and Breakout Discussion

- Current National Community Levels Systems
    - Animal Health
    - Human Health
    - The Environment
    - One Health in the National Context
- The strengths and challenges in current community human, animal health programs and environmental interventions other community health and animal health services *under normal (non-emergency) settings*
- The strengths and challenges in current community human and animal health programs and other community health and animal health services *in the context of emergency response*
- Feedback from the Health, Animal Health and Environmental Departments

Morning DAY 2: Interactive and Breakout Discussion

- Approaches to integration
    - One network with different staff specializations
    - Selected shared responsibilities
    - Cross training of staff
- Appropriate activities for implementation of community health and community animal health workers
- Mobile vs village-based services
- The impact of incentive systems on service availability and implementation
- Comments on the discussion from the
    - Ministry of Health,
    - Ministry of Agriculture and
    - The Environmental Commission
    - One Health Platform

Afternoon DAY 2: Non-Emergency Scenario

- Scenario under non-emergency conditions
    - Introduction
    - Group Assignments
    - Discussion
    - Group Presentations
    - Debrief
    - Synthesis

Morning DAY 3: Emergency Scenario

- Scenario under emergency conditions
    - Introduction – Selection of emergency contexts for discussion
    - Group Assignments
    - Discussion
    - Group Presentations
    - Debrief
    - Synthesis

Afternoon DAY 3: Closing Session

- Synthesis
- Recommendations and Action Points
- Brief Closing Remarks
    - Ministry of Health,
    - Ministry of Agriculture and
    - The Environmental Commission
    - One Health Platform
- Closing

Annex 3: Participants

Overview of Participants

A wide range of stakeholders were represented in the workshop. These include representatives from the government, professional associations, international agencies and organizations at the national, regional and zonal level, as well as frontline service providers and volunteers at the community level. The detailed list of participants, with designation and institution, is reported in the table below.

- Ministry of Health - Chairperson of the National OH Steering Committee
- State Minister for Livestock Resources Sector)/MoA representative
- Representative of National Ministry of Health
- Director Generals of Agriculture, Animal Health, Tourism

- Director of Donkey Sanctuary Ethiopia and President of the EVA
- Ethiopian Veterinary Association

- Regional Community Climate Change Activists
- Regional Animal Health Team Leaders
- Natural Resource Managements
- FAO Representatives (One Health Focal Point)
- Representatives of VSF Suisse and Germany

- Epidemiologists
- Communications Specialists
- Public Health Specialists
- Climate Specialists

- Cattle Camp Leaders and Elders from Borana and South Omo
- Community Animal Health Workers
- Private Veterinary Practitioners
- Human Health Volunteers

Detailed list of participants

	NAME	POSITION	ORGANISATION
1	Jeffrey Mariner	Principal Investigator	Tufts University
2	Gaia Bonini	Research Associate	Tufts University
3	Micol Fascendini	Public Health Consultant	Tufts University
4	Berhanu Amare	GHS Epidemiologist	US-CDC
5	Dr. Elias	One Health Specialist	FAO-ECTAD
6	H.E Dr. Fikru Regassa	State Minister of Livestock Sector Development	Ministry of Agriculture (MoA)
7	Dr. Yohannes Girma	Advisor to the state minister	Ministry of Agriculture (MoA)
8	Dr Sisay Getachew	Director, Veterinary Public Health Directorate	Ministry of Agriculture (MoA)
9	Mr Wandimnew Abrei	Senior expert	Environment, Forest and Climate Change Commission
10	Mr Akleweg M.	Team lead, Primary Health Care	Ministry of Health (MoH)
11	Dr. Feyissa Regassa	Chairperson of National OH Steering IHR Focal Point	Ministry of Health (MoH) EPHI
12	Darsema Guluma	Advisor, One Health	Ministry of Health (MoH) EPHI
13	Fisseha Getachew	Head of Veterinary Public Health	Ministry of Health (MoH) EPHI
14	Dr. Yilkal Kebede	General Manager of EVA	Ethiopian Veterinary Association (EVA)
15	Dr Gewado Ayledo	Animal Health Expert	Ethiopian Veterinary Association (EVA)
16	W/ro Sihine Demeke	Finance – cashier-admin assistant	Ethiopian Veterinary Association (EVA)
17	Dr Bojia Endebu	President EVA	Ethiopian Veterinary Association (EVA)
18	Dr. Wesinew Adugna	Head of Programs	VSF Suisse
19	Dr. Fisseha Abenet	Program Development & Quality Manager	VSF Suisse
20	Mr. Temesgen Abebe	Regional Project Manager	VSF Suisse
21	Mr. Jarso Jaldesa	Borana Coordinator	VSF Suisse
22	Dr. Merkeb Belay	Country Program Manager	VSF Germany

	NAME	POSITION	ORGANISATION
23	Dr. Werkineh Woyinte	Project Manager, South Omo	VSF Germany
24	Mr Anteneh Hailu	Project Manager, Afar	VSF Germany
25	Nuresa Mirkena	Senior expert	South Omo Zone
26	Mamo Lophere	Community Animal Health Worker	Dassenech Woreda
27	Gedo Yerbur	Private Veterinary Practitioner (PVP)	Dassenech Woreda
28	Tadele Gema	Community Leader	Hamer-Woreda
29	Dore Ayke	Public health volunteer	Hamer Woreda
30	Modo Eriya	Cattle Camp leader	Ngangatom Woreda
31	Dr Qasim Guyo	Livestock Health Development Coordinator	Zonal NRM & Agriculture Office
32	Jarso saara	Family & Public Health Coordinator	Zonal Health office
33	Dr Golo Dabasa	Coordinator	Regional Veterinary Laboratory
34	Guyo Qala	Community Leader	kebele administrator & one health volunteer
35	Galgalo Dalacha	NRM & Environment Management office	Rangeland and Environment Management Expert One Health Volunteer
36	Arero Golo	Community & Cultural Institution	Camp and rangeland Council Leader
37	Galgalo Malicha	Health center	Bokola Health Center Deputy Head Bokola One Health Unit Member
38	Seid Ahmed Alhadi (Dr)	Regional Agriculture Bureau	Epidemiologist
39	Seada Ali Abuboker	Regional Health Bureau	NTD Focal Person
40	Kedo Abdulkadir Ali	Woreda PADO	Women Vaccinator
41	Mohammed Omer Ali	Community leader	Community Leader
42	Amina Aden Kamil	Health Office	Health Extension Worker

Annex 4: Participant Workshop Evaluation

Participant Feedback Form

Opportunities for One Health Integration of Community Animal and Community Health Workers

South Sudan Workshop

Title: _____

Location: _____

	Strongly Disagree/Bad				*Strongly Agree/Good*
1. I gained valuable knowledge/information during this workshop.	1	2	3	4	5
2. The workshop was well organized.	1	2	3	4	5
3. The workshop was well-paced within the allotted time.	1	2	3	4	5
4. The workshop offered active learning opportunities.	1	2	3	4	5
5. The workshop pertains to my job/career/role in my community.	1	2	3	4	5
6. I have a better understanding of One Health than before the workshop.	1	2	3	4	5
7. I have a better understanding of how animal health and the environment affect human health.	1	2	3	4	5
8. I have a better understanding of existing health services within South Sudan than before the workshop.	1	2	3	4	5
9. I have a better understanding of gaps in service in existing health service in South Sudan.	1	2	3	4	5
10. I have a better understanding of community-based health than before the workshop.	1	2	3	4	5
11. I have a better understanding of how community-based health workers can aid in emergency response.	1	2	3	4	5

12. I have a better understanding of the role gender plays in One Health in South Sudan.	1	2	3	4	5
13. I have a clear understanding of how to achieve the goals discussed in the workshop.	1	2	3	4	5
14. Overall, I rate this workshop…	1	2	3	4	5

Summary of Feedback from Participants

Participant feedback was collected at the conclusion of the workshop. The response rate was 49% with 19 participants sharing their feedback through the provided Participant Feedback Form. Based on previous experience in South Sudan, more time was spent to explain the form and translators were asked to assist the non-English speakers to fill-out the form. All forms were filled in properly and included in the analysis.

Overall, participants rated the workshop good and stated to have gained valuable knowledge (95%). According to the majority, the workshop was well organized (89%), well-paced within the allotted time (100%) and offered active learning opportunities (89%). About 90% of participants agree that the workshop pertained to their job or role in the community. After the workshop, a very good proportion of participants agreed to have a better understanding of One Health, of how animal health and the environment affect human health, of the community-based health system (79%) and of how this can aid in emergency response (84%). Three fourth of participants declared to have a better understanding of the role gender plays in One Health in South Sudan. The majority of participants (89%) stated to have a clear understanding of how to achieve the goals discussed in the workshop.