

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

South Sudan Community One Health Scenario Workshop Report

October 26-28, 2022



***“I want to see a One Health system with people living in the community trained on all three of these systems.”***

Participant commenting on the need for community workers trained in One Health – human, animal and environmental health.



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# Workshop Objectives

One Health is an active area of discussion and innovation at the international and national level. Most strategic planning on the adoption of One Health has remained within the 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 agencies.

The objective of this workshop was to discuss the current situation in the One Health sectors (human health, animal health and the environment) at all levels, acknowledge challenges and changes, and develop a consensus road map on the way forward to the One Health integration of health structures at the community level. The goal was to maximize benefits in both normal and emergency contexts through the selection of strategies that, where appropriate, span the spectrum of development and emergency needs. The goal was to develop flexible models that could quickly be adapted to the delivery of humanitarian interventions while reinforcing resilience and enhancing coping mechanisms of the longer term.

South Sudan has experienced a series of chronic emergencies over the last 40 years largely driven by war, climate events and climate change. The delivery of humanitarian interventions has taken place within the context of longer-term development needs. There were opportunities where appropriate relief strategies led to enduring development achievements with positive impacts on the resilience of communities. For example, during the war for independence, emergency funding was used to build a national system of community-based animal health that ultimately eradicated rinderpest from the region.

Participants were asked to work through response options and explore their impact. 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

## Participant Workshop Goals

On the first day, participants were asked to describe the outputs they would like to see from this workshop. Goals ranged in scope from establishment of a national One Health system in South Sudan to more specific actions at the community level.

Participants hoped to answer questions like, "Do we have a One Health structure? How do these ministries work together? What is their channel of communication? Who is responsible to

whom? All the way from the top ministries to the grassroots community level. What activities have been successful so far and what are the challenges?”

Largely, participants hoped to gain a better understanding of what One Health is, the current level of adoption of One Health strategies within South Sudan’s health systems and at what level, and how One Health could more intentionally be integrated into the country’s health and environment structures.

## Setting the Scene: Highlights from the Project Presentation

South Sudan has a rich experience in community animal health. Extensive networks of Community Animal Health Workers (CAHWs) were established during the war for independence which eradicated rinderpest from the country. The Ministry of Health launched a community health program, the Boma Health Initiative (BHI), in 2017 that was operationalized by the Health Pooled Fund (BHI) in 2019. The CAHW and BHI programs are very different.

Observations from the project site visits in Bor and Bentiu were shared. The key points were:

- Selection criteria for CAHWs included their willingness to move with cattle and CAHWs were usually present at cattle camps
- Boma Health Workers (BHW), equivalent to the Community Health Workers (CHW) in other context, were selected from villages and assigned a visit schedule to specific households in the village. Most BHW were not accustomed to life in the cattle camp nor the transhumant practices of the communities. BHW did not provide services in camps.
- CAHWs were encouraged to earn incentives from their work and adopt entrepreneurial practices in the spirit of public-private-community partnerships. They often continue to work in the absence of external support.
- BHWs were paid a minimal allowance (usually by non-governmental organizations) and were not allowed to collect money for services provided. However, the allowances were often insufficient to cover travel costs associated with their visit schedules. The program appeared to be dependent on external support.

One focus of the discussion was around which sectors in South Sudan are in the most need of health care, be it animal or human services (Table 1).

**Table 1: Proportional Piling Exercise on One Health Services in Villages and Cattle Camps for the Bor Stakeholder Consultation**

**Where are human health services needed?**

	<b>Village</b>	<b>Cattle Camp</b>
<b>Group 1</b>	36%	64%
<b>Group 2</b>	80%	20%
<b>Group 3</b>	75%	25%
<b>Average</b>	64%	36%

**Where are human health services available?**

	<b>Village</b>	<b>Cattle Camp</b>
<b>Group 1</b>	80%	20%
<b>Group 2</b>	100%	0%
<b>Group 3</b>	95%	5%
<b>Average</b>	92%	8%

**Where are animal health services available?**

	<b>Village</b>	<b>Cattle Camp</b>
<b>Group 1</b>	45%	55%
<b>Group 2</b>	30%	70%
<b>Group 3</b>	30%	70%
<b>Average</b>	35%	65%

Table 1: The scoring was done by three independent breakout groups during a Stakeholder Meeting held in Bor town. Although the overall need in the camps (36%) was scored as less than the villages (64%), availability of health services had an average score of only 8% in the camps. The ratio of access to need in the camp was 0.25 whereas it was 1.44 in the village. The meeting agreed that the scoring indicated that the greatest *unmet* need for human health service was in the cattle camps.

Information from the field was also shared on stakeholders' views on how to bridge service gaps. There was a clear preference for cross-training existing health structures rather than merging health and animal health workers into One Health workers (Table 2). Participants felt that existing programs were successful at what they were intended to do and that merging them could endanger the successes. Cross-training and empowerment of CAHWs in cattle camps to cover the same health activities as BHWs was seen as an important step forward.



Figure 1: Group work during the workshop

**Table 2: Bor Stakeholders Preferences for Approaches to One Health Integration and Meeting Need in Cattle Camps**

	<b>BHW → CBHW</b>	<b>Cross Train CH &amp; CAHW</b>	<b>CHHW &amp; CAHW</b>
<b>Group 1</b>	40%	60%	0%
<b>Group 2</b>	30%	70%	0%
<b>Group 3</b>	40%	60%	0%
<b>Average</b>	37%	63%	0%

Table 2: The options discussed and scored by the Bor stakeholder consultation were 1) moving away from the current employment model to a community-based approach for Boma Health Workers (CBHW), 2) Cross-training and empowering CAHWs and BHWs to work across species and 3) merging CAHWs and BHWs into a form of One Health workers. Participants preferred that the two current types of community workers be maintained but empowered to cover the full range of activities.

In site visits, cattle camp participants without formal education had drugs on hand for treatment of major livestock diseases (several trypanocides and antibiotics) and clearly and accurately described the purpose, delivery route and dosage for each drug. In terms of CAHW candidate selection criteria, cattle camp stakeholders viewed the current criteria, which does not include the completion of school, largely used in the selection of CAHWs as a principal reason for the program's success. One respondent in Bentiu clearly articulated:

**“If you train school leavers, they will not stay.”**

The group had already demonstrated that the ability to read and write was not required to recognize drugs and know their proper use, provided the appropriate training. This is true for both CAHW and health workers.

## Participant's Overview of Current One Health Institutions in South Sudan

The country of South Sudan, at the time this workshop was conducted, did not have an approved national One Health platform or tripartite agreement. Ministers of Health did have knowledge of a working One Health agreement document that had been in circulation for some time, but at that point, it had not yet been officially adopted.

One Health structures are in place under various NGO programmatic activities, but Community Animal Health Workers remain the largest contributors to One Health action at the community level and the largest gap in human health services remains in the cattle camps.

Discussion of mobile clinics revealed that when implemented the option was popular. However, participants stressed that the mobile clinic approach was expensive and not sustainable. Other foundational methods were needed to assure basic services.

CAHWs from Bentiu indicated that the purview of the BHI is not made clear to them in the field and that better coordination at the community and payam level is needed. The CAHWs currently have no crossover with BHWs, and are constantly asked if they have human medicine to offer.

The participants from the field noted that if such an initiative could be properly formed, it would be helpful to the communities. In fact, initially, the funding NGO gave them first aid and basic human drug kits including paracetamol, anti-diarrheal and antibiotics, but these were no longer provided

Lack of personnel working on environment issues was raised several times. The perception was that the oil industry is largely unregulated and uncontrolled contamination was a problem. Flooding of the oil fields was raised repeatedly as a health risk.

It was interesting to note that when the Advisor to the Minister of Health, who was one of the senior architects and champions of the BHI, was told about CAHWs at a side discussion during the workshop his response was "Oh, we have that here?"

### **Boma Health Initiative**

BHWs are working in the community.

- Treating some diseases
  - Diagnosing and treating malaria in children only
  - Diagnosing and treating acute watery diarrhea (with ORS)
  - Diagnosing pneumonia
  - In some areas, may also be treating intestinal worms
- Creating awareness



- Referring people from community to the health facility for health issues outside of their scope
- Maternal health counselling
- Doing surveillance activities

A document exists with exact guidance

- Per Boma, 3 people work on BHI:
  - Mobilizer
  - One person that treats children
  - One person that addresses maternal/child health issues
- BHI is a national government program, managed by the Ministry of Health
  - BHW and BHW supervisors are paid a modest stipend
  - Considered employees reporting to the Ministry of Health

After discussing the characteristics of a community-based program, the meeting participants recognized that the approach was largely top down and that the BHW were largely employees supervised by the Ministry rather than community-based employees. One of the State Directors General of the Ministry of Health observed that the program was described by his ministry as community-based, but it was actually a community-level extension of the Ministry.

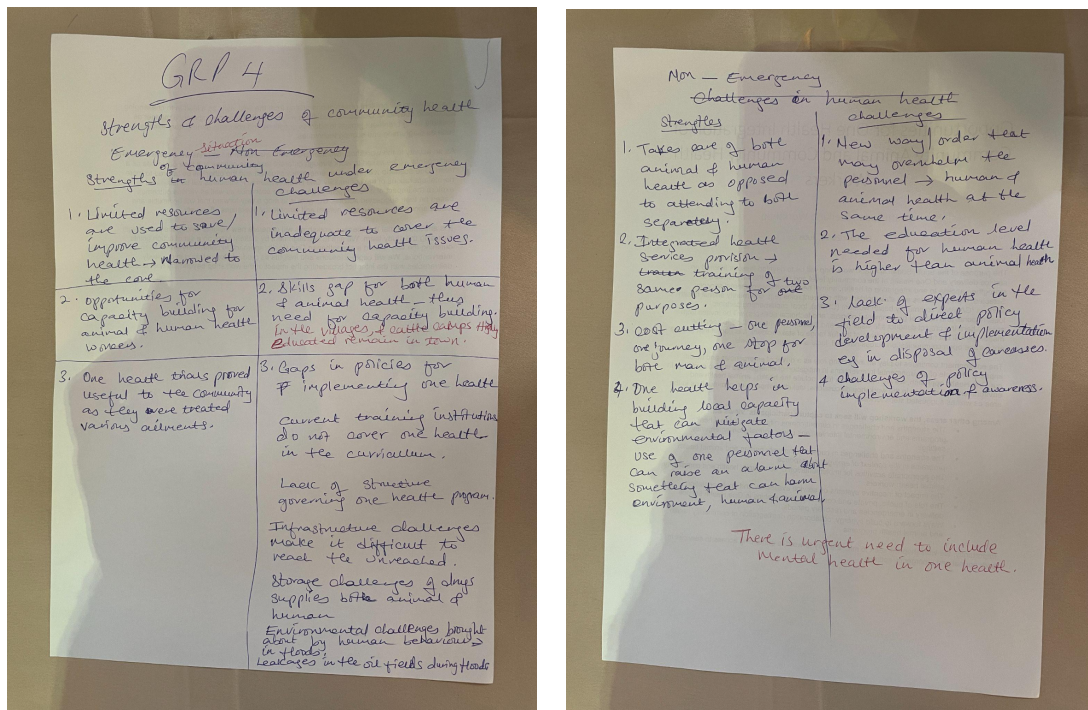


Figure 2: Group work on advantages and disadvantages of community health services in emergency situations

## Advantages & Disadvantages of One Health Services at Community Level

The advantages and disadvantages of offering One Health services at the community level were discussed among participants. The points for each that were brought up are listed below:

### **Advantages of One Health:**

- Communication between sectors
- Faster detection of outbreaks
- Faster response to outbreaks
- Greater cost effectiveness in shared activities
- Wider community uptake
- Easier supervision of the activities
- Increased impact on mental health –  
For example, drought causes anxiety for cattle owners and financial loss impacts mental health

### **Challenges of One Health:**

- Insufficient financial resources
- Lack of policy and guidelines
- Lack of political commitment and will
- Lack of budget allocation
- Silos: Current lack of collaboration between sectors
- Lack of trained human resources
- Gaps in training at the institutional level - no integration at training level

The challenges to One Health reflect the lack of One Health capacity development and empowerment of the approach in South Sudan. Note the lack of integrated One Health training was identified at early stages in the consultation.

## The Development to Emergency Context

The participants indicated the advantages and challenges to One Health approaches in emergencies:

### **Advantages of One Health in Emergencies:**

- Easier to respond together
- Easier mobilization and awareness creation
- Greater overall impact
- Greater efficiency in health delivery
- Access to services possible during emergency

### **Challenges of One Health in Emergencies:**

- Lack of infrastructure
- Instability of roads/transport
- Need is very extensive, expansive and expensive
- Insecurity and safety for responders
- Limited resources to cover broad health issues in humans and animals
- Skills gap for both humans and animals - need to build more capacity in terms of human resources, especially community personnel in villages and cattle camps
- Formally trained personnel stay in towns and don't return to the villages
- Gaps in policy
- Gaps in training at the institutional level - no integration at training
- Storage facility challenges and cold chain
- Mental health challenges - escalated by environmental issues
- Oil fields during floods - risk to environment, humans and animals

The advantages of a One Health approach are all related to advantages of a combined response. *On the other hand, many challenges identified by the participants in this exercise appear to relate to any intervention, regardless of if a One Health approach was taken.* The responses identified the need for more trained community workers, as those with formal training don't wish to return to the rural areas.

## Recommendations on the Way Forward

***“I want to see a One Health system with people living in the community trained on all three of these systems.”***

### An Integrated One Health Network at the Community Level

The discussion developed into a consensus that one network of integrated community-based workers was needed. There was a clear consensus that both Animal Health and Boma Health Workers were needed, and the environmental health roles should be addressed.

Participants concurred that a national One Health policy and platform were important for sustained integration on One Health application at the community level. Therefore, an agreed-upon action point was to address OH policy at the national level.

### Implement Community-Based Health Workers



*Figure 3: Group discussion*

Much discussion surrounded the idea of community employees vs. community-based initiatives. The current gap in human health at the community level should, in theory, be served by the Boma Health Initiative, which places health workers with basic training in bomas (villages) within each payam (county). In reality, however, cattle camp communities, those at the greatest medical need, are not serviced by Boma Health Workers.

To offer them these much-needed services, it was agreed that someone from that community should be trained in basic human health care and remain in their community to provide these services. This has been very successful in South Sudan in terms of Community Animal Health, and participants thought that the model should be recreated for human health.

When asked if it would be more reasonable to cross-train the existing Community Animal Health Worker in basic human health, some thought that the skills were not transferable, while some agreed that this level of integration would behoove One Health initiatives particularly in terms of disease surveillance. This view contrasts with the stakeholder response in Bor where there was

full consensus on having two categories of workers while shifting Boma Health Workers to a community-based model.

## Provide Integrated Health Trainings

Currently, Boma Health Workers are trained only to diagnose and treat a handful of human diseases and are otherwise mandated to refer patients to the nearest clinic. While there was some discord over whether a higher level of education is necessary to treat humans than animals, it was overall agreed that Community Animal Health Workers could indeed add human health training to their toolkit, at least in the capacity that Boma Health Workers have done.

Boma Health Workers (under the Boma Health Initiative, put forth by the South Sudan Ministry of Health), are currently only responsible for the following health considerations:

1. Diagnosing and treating uncomplicated malaria in children under-5 with ACT
2. Diagnosing uncomplicated pneumonia in children under-5, some regions allow provision on antibiotics, most refer to clinic
3. Diagnosing acute watery diarrhea in children under-5 and providing Oral Rehydration Solution
4. Providing maternal health education and counselling, but not assisting labor and delivery (refer to hospital)
5. Creating awareness on WASH initiatives and available resources at nearest clinics

To move forward at the policy level, decision makers could either expand the existing Boma Health Initiative to include trainings for community-based health workers selected from the cattle camps or potentially offer trainings to Community Animal Health Workers as a One Health cross-training. Compensation should also be addressed as CAHWs are paid for their services by the community and in some cases provided stipends by NGOs while BHWs are subsidized by the Ministry of Health.

## Community One Health in Emergencies

The meeting stressed that the primary gap to be addressed was the lack of health services in the cattle camps. The consensus solution was aligned with the recommendations for non-emergency periods. Two types of community-based workers, CAHWs and community health workers that were cross-trained and closely integrated in one network were needed. Thus, development and emergency interventions on One Health should be channeled to creating a One Health network of truly community-based Animal Health and Health Workers. The appropriate response in emergencies is to train and mobilize CAHWs on health interventions while initiating community-based BHWs.

## Conclusion

The following consensus points should be highlighted:

- The BHI has created access to human health services in the sedentary communities of South Sudan.
- The human health sector had limited awareness of the successes of community-based animal health in South Sudan and have limited awareness of the situation in the cattle camps. Engagement of the health sector will be important to establishing systems that can respond to health emergencies.
- The way forward is to establish one integrated system to support BHW and Community Animal Health Workers.
- The BHI needs to incorporate community-based approaches to selection of trainees, include cattle camp populations, and include the communities in the systems of support and supervision of BHWs to enhance the sustainability of the program.



*Figure 4: Workshop group photo*

# Annexes

## Annex 1: Approach

The scenario workshop brought together representative professional and community One Health 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's 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 One Health programs were initiated as collaborations where representatives of separate Ministries came together on a part time basis in One Health 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 One Health 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 One Health 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 One Health 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 models. Importantly, a distinction was drawn between the question of who pays for services and the mechanisms established for delivery of services. Examples were discussed where 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 impact in South Sudan.

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 One Health services at the community level. The first scenario session addressed One Health implementation at the community level in a development context. The second scenario session looked at how the One Health system could be mobilized to address humanitarian emergencies. In some cases, break groups considered specific emergencies such as the current flooding in Bentiu, South Sudan.

In all countries where the scenarios workshops were held, emergencies related to climate, security and economic conditions were a chronic and significant, if not the predominant, reality. All workshops stressed the importance of moving forward with development while meeting emergency humanitarian needs and identified that creating these systems will increase



resiliency and could reduce the need of repetitive and long-lasting international aid. The approach was taken that development in emergency settings are a continuum which required flexible systems that needed to be capable of adapting to immediate conditions while supporting long-term development initiatives.

Closing remarks were offered by representatives of the various ministries, NGOs and community representatives, as well as by workshop organizers.

The detailed agenda is included in Annex 2.

## Annex 2: Detailed Agenda

	Oct. 26	Oct. 27	Oct. 28
9:00 AM	Formal Opening	Discussion of Approaches to Integration	Presentation of the Health, Animal Health and Environmental Dignitaries
9:30 AM	Introductions		
10:00 AM	Objectives of the Workshop	Appropriate activities for implementation of Community Animal and Community Health Workers	Scenario under emergency conditions
10:30 AM	Community One Health Integration Presentation	Mobile vs village-based services	Discussion of emergency scenario
11:00 AM	Stakeholder Objectives	The impact of incentive systems on service availability and implementation	
11:30 AM	Community- vs Community-based Workers	Presentation of the Health, Animal Health and Environmental Dignitaries	
12:00 PM	Lunch	Lunch	Lunch
12:30 PM			
1:00 PM	Overview of Current National Community-level Health Systems	Presentation of the Health, Animal Health and Environmental Dignitaries	Synthesis
1:30 PM			
2:00 PM	Strengths and challenges of current community human, animal health programs and environmental interventions under normal (non-emergency) settings	Scenario under non-emergency conditions	Recommendations and Action Points
2:30 PM			
3:00 PM	Strengths and challenges of current community human, animal health programs and environmental interventions under normal (non-emergency) settings	Discussion of Scenario	Brief Closing Remarks from Health, Animal Health and the Environment Departments
3:30 PM			
4:00 PM	Presentation of the Health, Animal Health and Environmental Dignitaries		Closing from Project Team
4:30 PM	Closing	Closing	Closing

# Annex 3: Participants

## Overview of Participants

A total of 39 participants attended the South Sudan workshop. Participants were key stakeholders at the national, regional and community levels of human, animal and environmental health. Representatives from the national government, ministries of health, agriculture and environment, as well as their regional counterparts were accounted for, as well as representatives from existing community human and animal health structures, representatives of various non-profit organizations operating in this space and professionals from the human, animal and health fields.

Participants from the community level included Community Animal Health Workers, Cattle Camp leaders and chiefs. Community representation throughout the workshop was paramount to ensuring that ideas captured would work for stakeholders at the community level, though language barriers did hinder their participation in discussion to some extent.

Organizers would like to note that participation from national-level stakeholders was largely impacted by the promise of sitting fees. Originally, requests for sitting fees were declined, however were later offered in the hope of increasing representation from national stakeholders.

### Organizations Represented:

1. USAID South Sudan mission
2. Tufts University
3. Vétérinaires Sans Frontières - Germany
4. Vétérinaires Sans Frontières - Suisse
5. Vétérinaires Sans Frontières - Canada
6. World Vision International

### National Government:

1. South Sudan Ministry of Health
2. South Sudan Ministry of Agriculture
3. South Sudan Ministry of Livestock
4. South Sudan Ministry of Environment

### Variety of Stakeholders Represented:

- Cattle camp leaders
- Cattle camp chiefs
- Community Animal Health Workers
- National Ministers of Health, Agriculture, Livestock & Fisheries
- State Ministers of Livestock, Fisheries and Tourism
- Gender & protection specialists
- Directors General of Agriculture, Livestock, Fisheries & Tourism
- Veterinarians
- Epidemiologists
- Communications specialists
- Boma Health Workers
- County Health Directors
- Public Health specialist

	<b>Name</b>	<b>Location</b>	<b>Title</b>
1	Alier Riak	Bor	CAHW
2	Philip Chol	Bor	CAHW
3	Peter Parach Deng	Bor	CAHW
4	Peter Alier Angok	Bor	CAHW
5	Daniel Deng Alier	Bor	VSF-G Field Assistant
6	Alier Michael Nhial	Bor	CHW
7	Duop Roam	Bor	SMOH
8	Gen Numthony Guk	Bor	DG
9	Chol Grutnyin	Bor	APM
10	Daniel Khor Majoic	Bor	Clinician
11	Dr Secondo Costa Lual	Juba	VSF-G Senior Health Specialist
12	Willie Rono Tuimising	Juba	VSF-G Country Director
13	Daniel Nonda	Juba	CPM
14	Paul Padiet	Juba	Communication Officer
15	William Deng Kuron	Juba	MOH BHI
16	Rose Muragui	Juba	VSF-G Gender & Protection
17	Basilica Modi	Juba	USAID Senior Health Specialist
18	Catherine Konga	Juba	VSF-G Vet Supervisor
19	Patrick Lino	Juba	VSF-Canada Vet Officer
20	Lutana Musa	Juba	DG
21	Guya Noel	Juba	WVI
22	Frances Kamman	Juba	VSF-Suisse
23	Rumbe Samuel	Juba	WVI - DI Protect Director
24	Michael Otto	Juba	VSF-G Livestock Specialist
25	Richard Sebit	Juba	VSF-Suisse Vet
26	Dr Pinyi Nyimol	Juba	DG Preventive Medicine
27	Dr Agol Kwai	Juba	CVO MLF
28	David Deng Chol	Juba	Coordinator BHI
29	Aluma Ameri Araba	Kapoeta	Vet
30	John Mut Peach Mayian	Unity	Vet
31	John Gatmai Chiok	Unity	Vet
32	James Tunguar Ruay	Unity	Minister
33	Jal Kuol	Unity	CHD Director
34	Wadar Yak	Unity	DG
35	Johnson Bol	Unity	DG MARF
36	Ruai Rambang Robert	Unity	Supervisor
37	John Bigar Machar	Unity	PHC
38	Duol Biem	Unity	DG
39	Angelina Nyakama	Unity	VSF-G CAHW

# 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 77% with 30 participants sharing their feedback through the provided Participant Feedback Form. One form was not filled-in correctly (i.e., each question received two answers in the 5-point Likert scale) and was thus excluded from the analysis. Overall, participants rated the workshop good (90%) and stated to have gained valuable knowledge (93%). According to the majority, the workshop was well organized (80%), well-paced within the allotted time (83%) and offered active learning opportunities (89%). Over three quarter of participants (77%) 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 (80%), of how animal health and the environment affect human health (70%), of the community-based health system (76%) and of how this can aid in emergency response (83%). However, only 55% of participants declared to have a better understanding of the role gender plays in One Health in South Sudan. The majority of participants (83%) stated to have a clear understanding of how to achieve the goals discussed in the workshop.

Nevertheless, facilitators noted that the structure of the feedback form was not well understood by all participants. Either another method of feedback collection should be used in future workshops, or facilitators should take more time to explain the form and feedback scale prior to distributing the form. Facilitators would like to note that this confusion likely skewed the results of participation feedback and general response to the workshop in situ was extremely positive.