

Report of the ninth meeting of the WOAH ad hoc group on Community animal health workers (CAHWs)

Paris, March 2024

12, rue de Prony 75017 Paris, France T. +33 (0)1 44 15 18 88 F. +33 (0)1 42 67 09 87 woah@woah.org www.woah.org

Executive summary

The ninth meeting of the CAHWs ad hoc group (henceforth referred to as "the Group") took place virtually on March 26th and 27th 2024.

A total of 9 experts were able to be present for this virtual meeting of the Group. They were welcomed by the Group chairperson Dr Nandipha Ndudane, the WOAH Secretariat (Dr Xyomara Chavez, Dr Johan Oosthuizen, Ms Sonia Fèvre and Dr David Sherman) and a representative of VSF International (Dr Alexia Rondeau).

The Organisation welcomed again the Ohio State University team led by Dr Armando Hoet, who joined the meeting on Day 2.

At this meeting, the WOAH Secretariat presented the final results of the field consultations. These were carried out by external experts, with the aim of reviewing WOAH draft curriculum and comparing it to their existing CAHWs curricula, via a Curriculum Matrix Tool (CAM) and an online survey. The results were presented by Dr Oosthuizen and Dr Chavez, respectively.

Thanks to this, the Group finalised the content of the CAHWs competency-based curriculum, following the feedback from the field consultations.

The Ohio State University presented an analysis made on the core competencies and CAHWs functions identified by the Group. It was suggested to review the core competencies as some of them were not relevant to certain CAHWs functions. The Group was then invited to provide relevant feedback on this matter, on a voluntary basis.

Finally, the WOAH Secretariat reminded the Group that those who volunteered will be contacted soon to start the process of developing the guidelines for CAHW trainers to enhance their effective use of the competency based curriculum.

Dr Ndudane, ended the 9th meeting by congratulating the Group for their contributions, efforts and unconditional commitment to this project throughout the last year.

1. Welcome and opening remarks

Ms Barbara Alessandrini, Dr David Sherman and Dr Nandipha Ndudane welcomed the Group. WOAH congratulated and appreciated the work done by the Group.

2. CAHWs project progress (January 2024 – March 2024)

Dr Johan Oosthuizen presented the results of the Curriculum Alignment Matrix tool, used to compare the WOAH CAHW curriculum against curricula from various WOAH Members. This tool, tailored specifically to the learning outcomes for Community Animal Health Workers (CAHWs), was utilised by a total of five countries, who willingly participated in this exercise. Additionally, a desktop analysis of the Somali curriculum was incorporated as part of the comprehensive analysis.

From the African region, contributions came from Ethiopia, Nigeria and Somali. Meanwhile, from the Asian region, Heifer (India), Cambodia, and the Indian ASCI curriculum also provided valuable inputs for the final analysis.

The final presentation with the results can be accessed by clicking on this link.

Dr Chavez also presented the results of the online survey addressed to relevant stakeholders in CAHWs training, for the purpose of gathering their anonymous feedback on of WOAH's CAHWs draft guidelines.

The detailed report is under Appendix 3 of this document.

3. <u>AHG group discussion: Task to review together → CAHWs competency-based curriculum</u> <u>document</u>

Following the feedback received from numerous sources, the Group finalised the content of the competency-based curriculum for CAHWs. Following WOAH's internal rules, this document will be reviewed by WOAH's Secretariat before submitting it for review and approval to WOAH Director General.

4. Way forward

- The Ohio State University, partner of Phase 2 but also engaged on the latest stages of Phase 1 of this project to help promote the uptake and application of the Guidelines through an online tool, suggested that the current core competencies should be reviewed as some of them are not considered "core" for some of the functions gathered from the feedback of VSF International's literature review and from the CAHWs questionnaire. The Group agreed to provide relevant feedback.
- The Secretariat informed that the members of the Group who volunteered to contribute to the development of the trainers guidelines will be contacted after Easter holidays.
- The Secretariat also informed that we are working together with WOAH Communications Department to develop a communication strategy for the dissemination of the guidelines.

5. End of meeting

As this was the last meeting of the Group, WOAH gave a heartfelt acknowledgement for their constant support, engagement and professionalism to each member of the meeting.

Appendix 1

Ninth meeting of the WOAH ad hoc Group for the development of competency and curricula guidelines for community-based animal health workers (CAHWs)

March 26-27, 2024 | 8.30AM - 11.30AM (CEST)

Virtual session via Zoom

AGENDA ITEMS Chairperson: Dr Nandipha Toyota Ndudane

Day 1: Tuesday 26 March

- <u>Item 1</u> Welcome from WOAH, introductory remarks and adoption of agenda | Barbara Alessandrini and Nandipha Ndudane (10 minutes)
- Item 2 CAHWs project progress: January 2024 March 2024 | Xyomara Chavez and Johan Oosthuizen (time as needed, until 10AM)
 - Updates on field consultations: online survey results and CAM tool exercises

• Q&A

~ Short pause (10 min) ~

- Item 3 (ctd) CAHWs project progress: January 2024 March 2024 | Xyomara Chavez and Johan Oosthuizen (60 minutes)
 - Updates on field consultations: CAM tool exercises
 - Q&A
- **Item 4** AHG group discussion: Task to review together | All (time as needed)
 - CAHWs competency-based curriculum document
- Item 5 Closing of Day 1 | Nandipha Ndudane (5 minutes)

Day 2: Wednesday 27 March

Item 6 Recap of Day 1 | Nandipha Ndudane (5 minutes)

- Item 7 (ctd) AHG group discussion: Task to review together | All (time as needed)
 - CAHWs competency-based curriculum document

~ Short pause (10 min) ~

- Item 8 Way forward | David Sherman and Armando Hoet (60 min)
 - Discussion around core competencies and CAHWs functions
 - Facilitators guidelines
- Item 9 Closing of Day 2 | Nandipha Ndudane and David Sherman (10 minutes)

Appendix 2

Ninth meeting of the WOAH ad hoc Group for the development of competency and curricula guidelines for community-based animal health workers (CAHWs)

March 26-27, 2024 | 8.30AM - 11.30AM (CEST)

Virtual session via Zoom

AGENDA ITEMS Chairperson: Dr Nandipha Toyota Ndudane

LIST OF PARTICIPANTS

MEMBERS OF THE WOAH AD HOC GROUP

Dr Robyn Alders Senior Consulting Fellow Chatham House Global Health Agriculture Skill Council of India Programme, UK Honorary Professor, National University AUSTRALIA Robyn.Alders@anu.edu.au

Dr Satender Arya Chief Executive Officer INDIA Australian ceo@asci-india.com

Dr Dilip Bhandari Senior Director of Programs Heifer International UNITED STATES Dilip.Bhandari@heifer.org

Ms. Elise Le Bihan Head of the PRISME training platform Co-Director CIRAD FRANCE elise.lebihan@cirad.fr

Dr Mamta Dhawan International consultant INDIA drmamtadhawan45@gmail.com

Dr Tim Leyland Lifestock Inc. Ltd **NEW ZEALAND** tjleyland@yahoo.com Mr Chris Bartels Founder Animal Health Works MONGOLIA chrisb@animalhealth.works

Dr Nandipha Ndudane **CAHWs Chairperson** Principal Tsolo Agriculture and Rural **Development Institute** SOUTH AFRICA sgqanyaza@gmail.com

Dr Véronique Renault Regional Manager for South East Asia **AVSF** LAOS v.renault@avsf.org

THE OHIO STATE UNIVERSITY PARTICIPANTS

Dr Armando Hoet Director, Veterinary Public Health Program USA hoet.1@osu.edu Dr Amanda Berrian Associate Director VPH Program USA berrian.4@osu.edu **Dr Andrea Bessler** VPH Resident & Project Manager Ethiopia and Cambodia

Dr Alice Oliveira Matos VPH Resident, CAHWs Project Manager

VSF-INTERNATIONAL PARTICIPANT

Dr Alexia Rondeau CAHWs project manager VSF International BELGIUM a.rondeau@vsf-international.org

WOAH SECRETARIAT

Dr David Sherman Workforce development Programme coordinator Capacity building department d.sherman@woah.org Dr Xyomara Chavez CAHWs project manager Capacity building department <u>x.chavez@woah.org</u> Dr Johan Oosthuizen CAHWs project consultant Capacity building department j.oosthuizen ext@woah.org

ADDITIONAL WOAH PARTICIPANTS

Ms Barbara Alessandrini Head Capacity building department b.alessandrini@woah.org

Ms Sonia Fèvre

Workforce development Programme manager Capacity building department s.fevre@woah.org

Appendix 3

Final results of WOAH's online survey: Feedback on WOAH's draft competency-based curriculum for CAHWs of relevant experts involved in CAHWs training

The World Organisation for Animal Health, in collaboration with Vétérinaires sans Frontières International (VSF-Int), launched a project entitled 'Strengthening the enabling environment for community animal health workers (CAHWs) through development of competency and curricula guidelines'.

In order to review training programmes for community animal health workers from around the world and develop guidelines for their competencies and curricula, WOAH has implemented a dedicated ad hoc group in charge of developing these guidelines. WOAH acknowledged that a throughout revision of these guidelines is necessary and needs to be performed by training providers for CAHWs (including training institutions, NGOs, humanitarian agencies, international organisations).

The objective of this survey is to gather anonymous feedback from intended users on the proposed draft competencybased curriculum content and format.

Results

A total of 21 anonymous responses were gathered following the identification of relevant experts involved in CAHWs training. These experts received the draft competency-based curriculum prior to filling the online survey, and were informed that they needed to review the document thoroughly before submitting their feedback.

The majority of feedback received came from experts who had working experience with CAHWs in the Asia and the Pacific region (67%), followed by Africa (33%) and lastly Middle East (5%) (Figure 1).

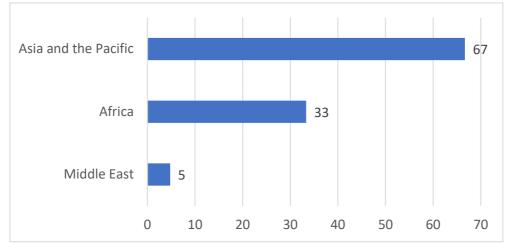


Figure 1: Regions in which respondents have had experience with CAHWs training programmes (%)

From those 21 responses, 33% responded that they are currently working on NGOs, and the same percentage corresponds to those working on Other entities. Among this category, we observed responses such as: Academic, research and technology training, private institutions, funded projects on development, private AH business, university and donor. 19% of respondents work on training institutions while 14% work on international organisations. (Figure 2).

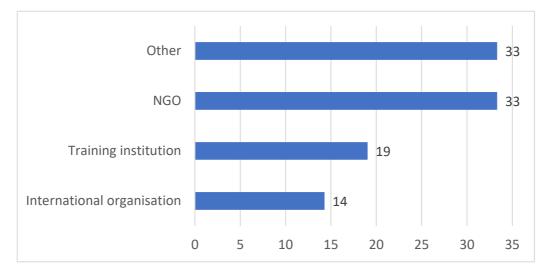


Figure 2: Type of institutions respondents are currently working in (%)

The issue of usual duration of CAHWs training was asked. From 18 respondents who said were aware of training providers delivering CAHW training in their countries, 28% mentioned the training lasted less than 2 weeks, 50% mentioned the training lasted between 2 and 4 weeks, 17% mentioned the training lasted between 1 and 3 months, and 6% mentioned the training lasted more than 3 months.

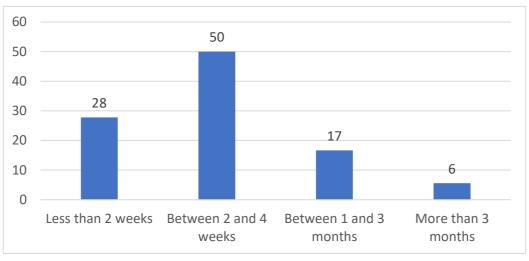


Figure 3: Usual duration of CAHWs training (%)

Regarding the content of the draft competency-based curriculum developed by the ad hoc group implemented by WOAH, from those same 18 respondents, the following similar content per module was observed¹:

13 of them provided similar content as our Module 1: Community Animal Health Workers scope of work

- "Introduction for rules"
- "Regulation"
- "Do's and Don'ts for CAHW"
- "Legal framework of State/country"

¹ Some of the observations may be biased as WOAH Secretariat could only refer to the responses given in the survey, and crossed it with the existent content in the draft guidelines. Since most of the responses given were only titles, their content could not be verified.

- "Position of the Community Animal Health Worker (CAHW) in the animal health system "
- "Getting started"
- "The roles of CAHWs as extension agent"
- "Role of community health worker"
- "Cross cutting issues: gender, environmental issues, conflict resolution (agent of change and social transformation)"
- "Gender equity"
- "Dos and Do Nots"
- "One health initiatives"
- "Why project arrange this training, what are the benefits and contributions to their community as well as country?"
- "Introduction to CAHW Training" (repeated 3 times)

7 of them provided similar content as our Module 2: Basic Principles of Animal Health

- "Primary health care"
- "Animal body (anatomy) and its functions (physiology)"
- "Principles of Animal health: Healthy and sick animals"
- "Identification of different body parts of animal and poultry"
- "Symptoms of healthy and sick animals and poultry"
- "Identifying points of dairy and beef breeds"
- "Artificial insemination and Breed development"
- "Basic Anatomy, Physiology and Management of Livestock"
- "Animal body organs, systems and functions of normal animal
- "Healthy and unhealthy animals"
- "Diseases diagnosis"
- "Overview of features of a healthy/normal animal- normal behaviour"

11 of them provided similar content as our Module 3: Basic Principles of Animal Health

- "Animal welfare"
- "Animal husbandry"
- "Animal husbandry (breeding, shelter, feeding and nutrition)"
- "Improved housing"
- "Strategic feeding and nutrition"
- "Breeding management, selective breeding"
- "Introduction to Animal Welfare, Rights and Clinical Examination"
- "Different breeds of animal and poultry"
- "Animal and poultry housing feeding and nutrition management"
- "Housing, feeding (Concentrate and Forage)"
- "Basic Anatomy, Physiology and Management of Livestock"
- "Livestock management includes housing, breeding and care, and general cattle husbandry practices"
- "Livestock feeds with its classification and sources"
- "Importance of concentrate feed and green roughage and factors to be considered during the selection of feed for cattle"
- "How to calculate feed rationing for individual animals in the herd and advice for farmers on adequate nutrition"
- "Importance of improved fodder and high-yielding fodder cultivation techniques"
- "Herd health, welfare and rights"

7 of them provided similar content as our Module 4: Basic Clinical and Husbandry Procedures

- "Restraining different species of animals"
- "Clinical examination"
- "Administration of drugs and vaccines"
- "Dehorning, hoof trimming"
- "Record keeping"
- "Restraining of animals, owner communication, clinical examination, diagnosis of diseases"
- "Deworming, vaccination, first aid treatment, etc."
- "Record keeping of data of treatments, number of animals, diseases and their symptoms."
- "Routine Health Management Practices (hoof trimming, drenching/deworming, dipping, cleaning shelters, milking"
- "Principles of Animal Health: Clinical examination and diagnosis; animal restraining; record keeping"
- "Drug administration: injections (IM, SC, O, etc)"
- "Animal restraining"
- "Minor surgery and use of equipment"
- "Introduction to Animal Welfare, Rights and Clinical Examination"
- "Keep records of treatment as well as farm records"
- "First Aid"
- "Knowledge of the methods of administration of drugs (oral, S/C, I/M, I/V, etc.)."
- "Common diseases and treatment"

11 of them provided similar content as our Module 5: Basic Animal Diseases Management

- "Common diseases (parasitic, bacterial, viral, fungal)"
- "Other symptoms/holistic management of diseases (wound, tympani, diarrhea, constipation, colic)"
- "Animal healthcare"
- "Zoonotic diseases"
- "The most important animal diseases that affect livestock in Yemen"
- "Causes, transmission and control of diseases"
- "Introduction to Veterinary Vaccines"
- "Knowledge about the bacterial, viral, fungal, Parasitic, and protozoal diseases of cattle (including treatment procedures)"
- "The nutritional deficiency and metabolic diseases (including treatment procedure)"
- "Types of diseases of animals and their causes"
- "Common Diseases and Treatment"

1 of them provided similar content as our Module 6: Sampling Procedures

• "Overview of samples, sampling procedure and sample handling"

6 of them provided similar content as our Module 7: Veterinary Medicinal Products

- "Veterinary Medicines"
- "Introduction to vet techniques, drugs and vaccines"
- "Responsible use of drugs" (non-core unit)
- "Waste management practices"
- "Vet Drugs, Vaccines and Equipment"
- "Introduction to veterinary drugs"

- "Introduction to Drugs handling and storage"
- "Introduction to Vaccine handling and storage"

7 of them provided similar content as our Module 8: Basic Animal Diseases Management

- "Disease surveillance, sanitary and phytosanitary engagement"
- "Biosecurity measures"
- "Isolation, traffic control, sanitation, disposal of carcass and wastes, use of footbath, etc."
- "Surveillance and Monitoring"
- "Causes, transmission and control of diseases"
- "Diseases surveillance and Reporting"
- "Introduction to disease surveillance, outbreak investigations and reporting"
- "Prevention control and treatment of poultry diseases"
- "Vaccine and vaccination management"
- "Disease reporting and business management"

2 of them provided similar content as our Module 9: Keeping food safe

- "Role of animal protein for public health"
- "Awareness generation on global issues regarding AMR, public health, food safety"

5 of them provided similar content as our Module 10: Engaging with the community

- "Communication and coordination skills"
- "Community animal health worker facilitation skills"
- "Introduction to community dialogues techniques"
- "Business skills-How to charge for treating"
- "Economic importance of animal and poultry rearing"
- "Types of women entrepreneurship and development process"
- "Relation between women empowerment and women entrepreneurs"
- "Increase capacity of communication and networking with relevant stockholders of WLSP"

6 of them provided similar content as our Module 11: Running a sustainable service

- "Extension, business skills, marketing"
- "Establishing marketing system"
- "Workshop with sellers and buyers"
- "Training on entrepreneurship"
- "Business plan, cost benefit analysis"
- "Cost recovery and business management"
- "Vaccine preservation transportation and administration, got and shiv rearing and farming management"
- "Business Plan"
- "Increase knowledge and skill in the business development plan"

Some suggestions were also made, to be taken into account either in the competency-based curriculum or the facilitators guidelines:

- "Health calendar"
- "One health, one welfare and AMR"
- "collaboration with other stakeholders like forest and human medical departments"
- "Dentition"
- "Veterinary tools"
- "Good Occupational and Personal Hygiene"
- "Field practical and consolidation"
- "Trainee assessment and CAHWs launching"
- "Inclusion issues"
- "Scientific & profitable livestock rearing"
- "Mobile Veterinary services to establish Farmer's connectivity platform"

In that regard, from all the respondents of this online survey (21), 95% of the respondents said a facilitator guideline will add additional value to their trainers and to the guidelines, against a 5% indicating not knowing (Figure 4).

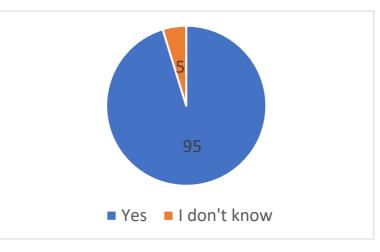


Figure 4: Percentage of total respondents to the question "Will a facilitators training guide add additional value to your trainers and to the guidelines?"

Respondents were also asked to suggest other tools, documents or resources that may be needed for a successful implementation of the guidelines. The following propositions were made:

- "The seasonal calendar on animal production and preventive health management process"
- "Training facility close to the communities, trainer with excellent facilitation skills for adult learning, training manuals, live animals for practical work, extension packages, field work, basic laboratory, recording sheets, pharmaceuticals"
- "Standard uniform CAHW training curriculum and adoption of it by the country."
- "Development of pool of trainers for conducting training"
- "Practical training for CAHW applying Adult Learning Principles"
- "Documents in local languages"
- "Basic resource and equipment support and incentives"
- "Refresher training for CAHWs
- "Legally inclusion of CAHWs into government's fold (under the guidance of local vets)"
- "Regional documents developed by local resource bodies/ NGOs and different department"

- "More details on module 1"
- "WOAH curriculum guidelines for VPPs"
- "CAM tool exercises and field assessment tools"
- "Close collaboration with veterinary colleges to jointly use training resources and instructors"
- Practical session should be increased
- Flip Chart, Qualified Veterinarian and Model farm demonstrations
- "The formal feedback from respective departments of the organization who are involved with similar training and preparing guidelines. In the case of Bangladesh, the Department of Youth Development, Department of Livestock (DLS), Agriculture Training Institute under the Board of Technical Education of Bangladesh Government, etc."
- "Video documentary, success case study, seeing and believing, participatory tools and technique where every individual will have scope to learning by doing."
- "Pictorial Booklets for field level/ remote settings/ Audio/ radio recordings in local dialects"
- "Trainees Handbook as well as Trainees Work book, Record Keeping Templates"
- "Flip chart, audio visual, learning bhai by demonstration practical implementation, field visit, knowledge sharing, group discussion and brainstorming."
- "Housing, feeding, artificial of insemination, fodder cultivation etc should be included this guidelines."
- "Apply this guideline to some trainees and analyze its outcome."
- "Engagement of private organization, NGOs, Donors and recognition of government entity, may be laws, and legislation"
- "There is absence of online / use of technology. Giving a tablet with pre-loaded sessions, theory + video will help in bridging the digital gap and use technology for learning."
- "* Technology tools* Policy document from the Government bodies that regulate CAHW trainings in-country* Adaptation in training manuals"
- "Live Animals for practical demonstrations"

Respondents also provided suggestions of other tools, documents, or resources that may be helpful for them to assess their current training program in alignment with the proposed WOAH Guidelines:

- "Cross check with the existing country regulations and laws"
- "Pre- and post-training assessment, continued monitoring and needs assessment, refresher courses based on the needs and continuing education and professional development schedules."
- "Assessment of CAHWs by government authorized competent authority."
- "Certification of CAHW under government's fold based of the training assessment."
- "Collaboration with local Animal Husbandry Department"
- "Equipment, diagnostics, and other surveillance technology."
- "Simulation exercises for common disease prevention and outbreak prevention"
- "The existing CAWs training guidelines"
- "National VPP training curriculum"
- "If there is a SBCC guideline for front-line workers of the DLS, FAO, LDDP -a project of DLS- Bangladesh or INGOs or NGOs then It would also help to the trainers to identify the determinants of behavior of trainees and recipients."
- "Performance assessment tools to identify knowledge, skills and attitudinal gap."
- "Have a Pool of Training of Trainers for CAHWs (or renown facilitators)"
- The WAOH curriculum. The Nigeria Training Hanbook need to align with WOAH. When CAHWs Nigeria handbook were developed, WAOH curriculum was not in existence
- Flip chart, audio visual, learning bhai by demonstration practical implementation, field visit, knowledge sharing, group discussion and brainstorming.

- Need training module, Some book, Journal, chart, feeding charge, honorarium etc, training aids etc.
- "Collaborative works (Disease surveillance, Livestock census, Survey, etc.) and strong rapport with government offices in their respective community.Need database of animals owners and animal census, ICT base solution for instance; televet services. In addition, Networking with universities for the second layer of veterinary service by CAHW"
- Field training, practical session in farm, pharmacy, diagnostic center, related industries
- Repeated training and evaluation of trainee, Feedback from farmers that are connected with CAHWs
- One health approach, Disease surveillance etc
- "*Focus Group Discussions amongst stakeholders* Short quizzes* Questionnaires"
- Technology, questionnaires, interviews and competitions or quiz's

In regards to the use of the WOAH Guidelines provided, respondents were asked if they would be able to assess in their programs all the proposed learning outcomes. The following answers were obtained:

- "The guideline gives a wonderful outline of the training modules/contents to assess my proposed learning outcomes. Modules such as a full package of extension and factsheets, a public-private partnership covering sanitary and phytosanitary mechanisms etc would have been beneficial as tools to profit both the CAHWs and the communities they serve."
- "Partly yes. I can do but the learning outcomes (LO) are partially defined in the existing training guidelines."
- "Yes, because our survey-based opinion will be on boarded in the guidelines."
- "Yes through evaluation/ feedback sessions"
- "The WAOH Guidelines is more comprehensive. Which calls for a review of the Country (Nigeria) guidelines."
- "Yes, applying principles of adult learning theory"
- "Extended training program is need for better assessment"
- "Yes I will be able to assess all learning outcomes. As a CAHW training facilitator, I am directly involved in the development and design of training tools (such as; powerpoint presentations, training templates, etc.) used to convey the training modules to CAHW trainees in simple language, in addition to facilitating farm practical for CAHWs during training. With this experience, I am able to objectively assess the scope of my training programs in comparism with the WOAH guidelines."
- "YES; I am able to leverage my experience in facilitating CAHWs training, in addition to my familiarity with the training modules, to objectively compare and contrast the learning outcomes."
- Yes, except for Food safety and disaster management by CAHW

Based on the current curriculum respondents use, they were asked to provide 2 or 3 examples of how they assess/evaluate some of the learning outcomes proposed:

- "Evaluate the knowledge, Alignment with laws, Basic need of farmers"
- "Written test of CAHW with MCQs and descriptive questions; Practical clinical skills on the field while CAHWs work: field observations; Records of CAHW including their incomes from their services; Assessment in refresher training "
- "Through visits to the CAHWs villages and evaluate their workers by checking the work records"
- "Through practical assignment evaluation; Through interactive sessions aiming to address specific questions; By reviewing their report quality"
- "To assess by knowing the level of knowledge of the trainees and the level of support and then output; to assess physically in the field or any event that outcome has impacted at least three criteria: 1) Self-motivated by CAHW and Known and committed to adopting, 2) Shared with other and waiting to adopt,3) At least tired one time whether successful or failed"
- "Q&A Pre and post evaluation."

- "By communicating with upazila livestock office, perform activities with field stuffs by getting feedback then refresher training course to gether, increase knowledge and solving the problem.é
- "Teaching Strategies: Lectures, assignments, individual/group projects, group discussion, Q-card and Flash card discussion, audio-visual display, hands on training, web-based resources, feedback etc. Assessment Strategies: Quiz/class test, presentation, group/individual assignment, final exam, class attendance etc."
- "Knowledge by test, Capability of communication with GO-NGO and Private entity; Ability to use ICT services"
- "It depends on the particular learning area and duration as well. Also, their training needs assessment"
- "- I administer Pre-test and Post-test to participants, containing questions that are in alignment with the core learning outcomes of the training.- I engage the CAHWs in Focus Group Discussions (FGDs)"

In regards to the comprehensiveness of the WOAH Guidelines as compared to the current CAHWs curriculum of all 21 respondents, 48% of them said that the WOAH guidelines are comprehensive, 43% mentioned that they were very comprehensive and 10% said that they were fairly comprehensive (Figure 5).

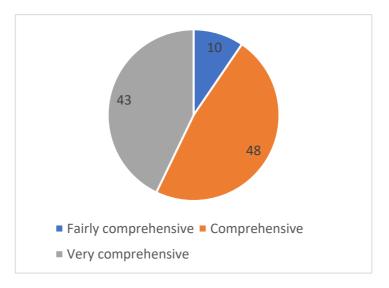


Figure 5: Percentage of comprehensiveness of WOAH guidelines against respondents' current CAHWs curriculum

In comparison to all respondents' previous or current curriculum/training material, respondents were asked if they found the WOAH guidelines for training CAHWs more, less or equally user-friendly (easy to understand, easy to find topics and themes, easy to relate competencies to curricula, etc.). We obtained the following responses:

- "Starting with a proper selection criteria of the CAHWs and outlining the important topics in an easily readable way, WOAH's guideline gives a friendly material. The organizational structure of the CAHWs system in the animal health services, a holistic approach of disease management, animal welfare, extension packages etc would have made it even more viable."
- "WOAH guidelines for training CAHWs are more used friendly and comprehensive because it has systematically covered multiple important courses in addition to the usual courses, for example, traceability, one health (AMR and zoonosis), obstetrical manipulations, sample submission, surveillance activities, slaughtering and food processing, continuous professional development, legal framework, etc. Five freedom of animals/five domain model of animal welfare/animal behaviors can be added to the curriculum to sensitize humans towards animals to help reduce human-animal conflicts."
- "It is more advance than my previous one. Generally, no cognized curriculum for CAHW in Bangladesh, it depends on individual expert or organization."

- "Need more extensive program for easy understand to Livestock Service Provider that they can easily deliver to others"
- "Yes, in terms of presentation: easy to understand, easy to find topics and themes it is user friendly and well laid out. But i think it's too much - U have put the burden of what is Animal Husbandry Ministries work and paid govt. servant work on the CAHW - Who are entrepreneur + service fee based. Why will they carry that burden of work / responsibility? Its too too comprehensive. Please understand these are poor semiliterate people - they have to fend for their families and their day-to-day struggles are much harder. Its too much information for them."
- "Yes, This curriculum/training materials guideline would help to identify the appropriate topic for targeted CAHW as well as provide standard training for livestock sector development by their services."
- "(...) Although, I noticed some competencies had too many learning outcomes grouped as one. For example; for competency 3.1.2: In some of the indices listed, CAHWs are only able to identify but not advise (E.g. In the curricula I currently use, CAHWs are not trained to advise on transportation, except cold-chain management and transportation of vaccines). "
- "(...) However, I believe some learning outcomes are muddled up together into one, hence making it difficult to objectively measure the outcomes. For example," [*incomplete response*]

It was also important to have feedback from respondents in case they thought there were any elements of content or format that should be removed or significantly reworked from the WOAH guidelines. The following answers were provided:

- "Preventive management chart should introduce according to country seasonality"
- "Give less emphasis on sampling on the initial training of CAHWs (probably better to give this at a refresher course)"
- "Husbandry is repeated under modules 3 and 4"
- "Module 2 and module 5 can be mixed as they are both covering basic animal health and diseases"
- "One health need more details"
- "Minimize the number of contents or make groups as per country specific"
- "Improve on Animal Welfare Mainstreaming across most sections"
- "Integrate other cross cutting issues: age and disability inclusion, protection especially women/ female CAHWs; Integrate peace/ social inclusivity; relevant for conflict settings."
- "I think AMR should be discussed as competency on its own and adapted to community-level context just like One Health is"
- "Under the 'Performing Basic Clinical and Husbandry Procedures' unit, I am of the opinion that the outcome ' Apply appropriate obstetrical manipulations for normal deliveries, including understanding the signs of dystocia' should be reworked. Obstetric procedures are best taught with the aid of practical, and there may be challenges involved in doing this during the training duration of two weeks."
- "Food safety is under the role of veterinary surgeons, CAHW should be reporting that to vet. Supervisors"

It was also observed that 100% of respondents believed that the importance of practical skills development should be more explicitly indicated in the WOAH guidelines.

Respondents provided the following answers when asked how can the WOAH guidelines better emphasise practical training:

- "by Hands on training and involving CAHW to work under veterinarians as internship and practical attachment"
- "Having live animals around, the tools for clinical examination, field visits including vaccination, deworming and treatment campaigns are great to harvest practical skills."
- "More practical hand-on training for CAHW in the field"
- "Support of vets in the field"

- "Refresher trainings for CAHWs after an inter-phase of practice in the field."
- "Focus of diagnostics/ examinations"
- "Application of tolls for data collection and surveillance"
- "Simulation Exercises"
- "Field oriented example-based discussion. Real case sharing by community participants"
- "Through practical sessions at the end of the training with linkages with government/ NGOs/ private actors."
- "This can be done by allotment of more time for practical sessions than theorical classes"
- "First this looks very top-down curriculum. Have you actually sat down with the CAHWs and Communities and especially the women farmers and the marginalized farmers to ask what do they need? For better practical training -a tieup with Vet Universities should be done and also CAHW should be attached to their nearest / biggest vet hospital for an internship with stipend."
- "In my opinion WOAH can highlight the competencies that require more hands-on training in the guidelines. For instance, competencies relating to animal husbandry, sampling, VMPs, etc. can have specific instructions that require a greater percentage of practical than classroom teaching."
- "The WOAH guidelines can prescribe a training model that entails 70% practical or hands-on training, and 30% classroom activities."
- "By sending the CAHW for internship to clinics and abattoirs"

Regarding how well do the WOAH guidelines address the specific needs and challenges of the communities where CAHWs will be working, 29% of all respondents indicated "very well", 43% indicated "well", 24% mentioned "normal" and 5% of them said "not well" (Figure 6).

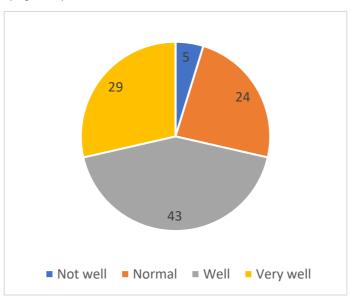


Figure 6: Percentage of effectiveness of WOAH guidelines for addressing communities specific needs and challenges

To complement the previous question, respondents were also asked to share if there were aspects of the WOAH guidelines that they believe could be further tailored to be more community-specific. The following suggestions were made:

- "Country rules and laws should be included and tailored"
- "It should always depend on and adapted to the types of animal health service providers, the nature of the herders (agrarian, pastoralists) and animals they raise, geo-topographical differences and climatic variations. So, it is hard to say anything right now"

- "Course on biosecurity measures can be increased as it is one of the important tools for prevention of disease transmission and would help reduce disease outbreak as well as the cheapest: One Health perspectives AMR, zoonosis, etc."
- "Little more on animal welfare to sensitize humans towards animals"
- "More emphasis on emerging issues like AMR/AMUs, Disease spill over, One health, sample collection, food safety etc."
- "There could be further tailoring with follow up assignment"
- "Need to emphasize on inclusion issues as mostly small holders' farmers are women. Also context based approach to align with believes, values and social norms."
- "Reflect a broader sense of different types of livestock"
- "Handling drugs and vaccines at community level as well as managing wound at same level."
- "Yes, but need to emphasize practical training
- "Yes, To increase CAHW's skillness, training duration minimum 6 months, to be more practical
- "This cannot be a stand-alone approach to make a difference. You must understand the whole system needs to reform. Are veterinary doctors and VPP uptodate in their knowledge and competencies? How many know how to collect sample and package sample? and do they have they right equipment and ingerdients /reagents? are there labs to do testing? Suppose CAHW collects very basic Faecal Sample Does nearest Hospital have a microscope to test? The next you write about is also deworming campaign again is that not wrong? should we not be doing strategic deworming? Forget about blood test. Where will they send urine / feed?"
- "Population disease management and Disaster management competencies."
- "Module 8"

Regarding the core competencies identified in the WOAH Guidelines, 95% of respondents agreed with this selection, against a 5% who did not. This person who disagreed provided the following feedback:

"While i agree with some of the competencies but not all my major disagreement areas are:

- This appears as a standalone document to be used by NGOs or Govt. for quality check of CAHW.
- To me it does not appear to be a document to be used for larger policy advocacy issues.
- It has a very elitist / European / Bookish approach- Have you seen the govt. allocation of funds for AHD ? My suggestion will be: if you want to make a golden book / principles this is great!

But if you want to do real work - real practical difference in field - in animals' lives and in communities who are dependent on them in their lives - make a shorter /crisper / skill-based thing.

There should be parallel learnings from human health sector. There should be dialogue at human - vet health professionals even for competencies before you tell CAHW should be aware and work towards that."

Regarding the overall layout and presentation of the WOAH guidelines, 48 % of all respondents found it very user-friendly, 33% found it user-friendly and 19% gave a neutral response.

On the same note, they were asked to provide feedback on how to improve the clarity and user-friendliness of the guidelines. The answers were as follows:

- "The guideline should indicate the step of certification for CAHW according to knowledge for basic services"
- "I suggest the regulatory frameworks and code of conduct elements be parts of the additional competency."
- "Outcome indicators could be less for applications as well as evaluations."
- "More practical sessions"
- "Strengthening of country legal framework for CAHWs"
- "Add more examples to subjects"
- "Add specific examples of various countries so that everyone can match with the ideas and new learning "
- "Methodologies will be selected based on the ability of the participants."
- "Use of pictorials/ audio recordings in the local languages"

- "The suggested CAHWs Handbook should have lots of pictures to show CAHWs some classical diseases conditions, or way to restrain animals"
- "Feeding, Feeding, Artificial insemination, etc should be included."
- "It will be more understandable if it is translated/written in the respective mother language."
- "Experts from country and abroad are needed to implement the CAHW guidelines fruitfully."
- "In Bangladesh aspects, this training should be permitted and registered by Department of Livestock Services and Bangladesh Veterinary Council. The scope and role of CAHWs should be cleared."
- "Please add different stakeholders in livestock "
- "While i agree with some of the competencies but not all my major disagreement areas are:
- This appears as a standalone document to be used by NGOs or Govt. for quality check of CAHW.
- To me it does not appear to be a document to be used for larger policy advocacy issues.
- It has a very elitist / European / Bookish approach- Have you seen the govt. allocation of funds for AHD ?
- My suggestion will be: if you want to make a golden book / principles this is great!
- But if you want to do real work real practical difference in field in animals' lives and in communities who are dependent on them in their lives make a shorter /crisper / skill-based thing.
- There should be parallel learnings from human health sector. There should be dialogue at human vet health professionals even for competencies before you tell CAHW should be aware and work towards that."

Taking into consideration the respondents' experience, they were asked if they anticipate any challenges in implementing the WOAH guidelines in their training programmes:

- "Language issues."
- "Time and timely implementation"
- "Participants don't like to invest more time in the training session.
- "Their existing mindset."
- "Yes, academy qualification of the participants should be considered, leadership development, women participants may be preferred, training must be practical oriented."
- "Unit 5.5. Basic supportive care and treatment. Treatment words should be omitted for management because a registered vet can do the treatment. Otherwise, it is contradicted the Bangladesh Veterinary Council Act."
- "No specific Legislation of the country for CAHW"
- "In Bangladesh aspects, getting Bangladesh veterinary council approval and working in the field with this short term training is a challeng."
- Veterinary professional organizations might be opposing.
- "I anticipate challenges in the implentation of competencies regarding*Gender sensitive communication and service delivery; this may be due to existing traditional and cultural norms and beliefs.*Population and Disease Management; this may be due to bureaucratic bottlenecks and legislations that do not recognize the role of CAHWs."
- "While i agree with some of the competencies but not all my major disagreement areas are:
- This appears as a standalone document to be used by NGOs or Govt. for quality check of CAHW.
- To me it does not appear to be a document to be used for larger policy advocacy issues.
- It has a very elitist / European / Bookish approach- Have you seen the govt. allocation of funds for AHD ?
- My suggestion will be: if you want to make a golden book / principles this is great!
- But if you want to do real work real practical difference in field in animals' lives and in communities who are dependent on them in their lives make a shorter /crisper / skill-based thing.
- There should be parallel learnings from human health sector. There should be dialogue at human vet health professionals even for competencies before you tell CAHW should be aware and work towards that."

Taking into consideration the respondents' experience, they were asked if they anticipate any challenges in assessing learner proficiency with regard to the WOAH Guidelines:

- "We would need to club the outcome indicators and phase-wise assessment of indicators could be done."
- "Yes, as many of the CAHWs are less literate, especially in the lowland areas. And they face language barriers."
- "Facilitator's language proficiency (local language, where it is applicable) and practical knowledge of the respective field"
- "During session it is good but to apply the learning everybody not equally interested."
- "Selection criteria of the learner should be followed efficiently."
- "Yes. Workers may be introduced in society as a Vet doctor, which will create a misconception among the society/farmers as well as with Vet."
- "Yes, recognition of government, or professional association"
- "In Bangladesh aspects, getting Bangladesh veterinary council approval and working in the field with this short term training is a challeng."
- "Skills are easier to measure over theory/health discourse. It should be very clear what is expectation from CAHW?Ex. Vaccination + Cold Chain of Vaccination, so a CAHW should be able to give ex. sub cutaneous injection correctly and the vaccine should be at correct temperature. Finally biomedical waste should be deposited back. A CAHW may demonstrate this but speaking skills / expression through speech/writing is limiting for this cadre. A women may not talk or describe about signs and symptoms of the disease, but she understands it and does vaccination. "
- "Yes, the way the outcomes are stated in mostly lumpsum manner, makes it difficult to assess specific competencies."

Taking into consideration the respondents' experience, they were also asked if they anticipate any challenges in sustaining the training programme which may have utilised the WOAH guidelines. The following answers were given from those who said "Yes":

- "yes, the Bangladesh laws according to Bangladesh Veterinary Council, treatment is being prohibited by CAHW, and also do not permit by laws, but they are exist and they are being needed"
- "Overall, there is no issue of sustaining the training program in the guideline as long as one is ready to adapt it based on the local factors and contexts."
- "Apply the new learning at field level."
- "Yes, Coordination and technical support of upazila livestock office, GO-NGO collaboration should be increasedstuck off hisilla"
- "It is needed to add time-based review policy."
- "Communication skills and Facilitation skills of CAHW"
- "In Bangladesh aspects, getting Bangladesh veterinary council approval and working in the field with this short term training is a challeng."
- "100 %. Continuous Knowledge and Skill Upgradation is a cross sectional issue cutting through the whole Livestock domain even if we limit our scope for discussion. Unless there is a sustained training right from colleges and Animal Husbandary department it wis going to fall back."

From all respondents, 90% of them agreed that the WOAH Guidelines are organised in such a way that the content can be readily adapted to suit the training needs of their own country situation, 5% did not know and another 5% disagreed.

Considering the respondents' expertise in training CAHWs, they were asked if they have recommendations for adapting the WOAH guidelines to better suit the needs of their organisation or the communities they serve:

- "the training curriculum should be endorsed by country govt."
- "Considering the types of animal health service providers, the nature of the herders (agrarian, pastoralists) and animals they raise, geo-topographical differences and climatic variations, WOAh guideline needs to be adaptable."
- "We will need to strengthen the surveillance and diagnostics and to club the number of outcome indicators for better adaptations."
- "It should be tailored to suit specific requirements of the place it is used. One size fits all may not work."
- "Better to think of translating the guidelines into local languages."
- "Adolescents (boys/girls, or practitioners) could be the right training recipient"
- "Note for facilitator to customize based on he projects and context need."
- "Integrate other cross cutting issues: age and disability inclusion, protection, conflict sensitivity, accountability to affected populations etc. Animal welfare, One Health/ AMR should strongly be emphasized."
- "I strongly recommend the development of the other 3 Documents (Trainer guide, Trainee Handbook and Trainee Work Book) that will be used side by side the Guidelines."
- "A number of animal health workers exist in Union level. Most of them should be trained up for better services, women workers should be prepared for better service."
- "It is adaptable but needs correction in the animal treatment part. More quacks will be developed, and the community will suffer them. We should be aware of it."
- "Need to add local veterinarian"
- "Oh 1. WOAH should talk to respective Govt. get them onboarded. 2. Dedicated fund allocation should be advocated for.3. Channels for sharing should be explored.4. Agriculture Skill Council of Respective countries this should also be onboarded.."
- "If government agrees on it then will work better."
- "* Advocacy and stakeholders engagement with facilitate effective adaptation of the guidelines* A re-Training of Trainers (TOT)* Liaison with the national body responsible for regulating the CAHW training* Ensuring state government and local government buy-in* Refresher training for existing CAHWs*Community-level advocacy and sensitization"
- "WOAH should work with VSB and trainers organizations to adapt the WOAH guideline for country specificity through an adaptation workshop, the adapted guideline is then used to review the existing curriculum and manuals for CAHWs training in Nigeria, approved by the VSB for use by training providers"

Finally, we also asked respondents to provide any other relevant feedback or questions:

- "The curriculum should be shared with govt related institutions and collect feedback from them to smooth introduction and alignment"
- Let's see how it works!
- "What is your plan to address inclusion, diversity and equity issues??"
- I'm ready and available to play any active and major role on CAHW implementation in Nigeria or any country or at WOAH level, having developed the Training documents (CAHWS approved Curriculum, Trainer's Guide, Trainees Hand Book and Trainee's Work Book) for Nigeria's Veterinary Statutory Body as Consultant, with special funding from UK-AID in 2017."
- "I like to know the selection criteria CAHWS for training, male worker may be selected for animal health and women for poultry. Training duration? It must be minimum 15 days and refreshers course after every 6 month."
- "Treatment by workers is very alarming. I would like to know about the guideline in Europe and America for such types of workers. It may conflict with veterinary professionals."
- "Yes, it will be great to know more about this exercise. It is a very good attempt and kudos to you for initiating this. I hope my critical comments help to progress this endeavor further as i think this beginning is not an end in itself. All the best. I will be happy to contribute more if required. Thanks"

- "Thank you for being allowed me to contribute to excellent guideline development for CAHW. Because I have been working on the capacity building of CAHW in Bangladesh for around 16 years."
- "Thank you for the opportunity. It would be a delight to get feedback from the WOAH team after the finalization of all inputs, as regards the lessons learnt."

Conclusion

The feedback obtained from this survey was very useful to the ad hoc group for finalising the content of the WOAH Guidelines for CAHWs. The majority of the information gathered was very similar to the content already included in this said document. However, some constructive suggestions were also made for the ad hoc group to consider. It is important to highlight that WOAH as a standard-setting organisation, does not have an influence on policy making strategies of their Members. It is up to them to establish proper legislation and regulation of CAHWs, in case they consider necessary their inclusion within the veterinary workforce. The WOAH Secretariat has also added this information in the Guidelines, among others, for the sake of clarification.