



--

WOAH Collaborative Centre Reports Activities 2024

This report has been submitted: 4 février 2025 05:19

CENTRE INFORMATION

*Title of WOAHCollaborating Centre	Quality Management Systems
*Address of WOAHCollaborating Centre	Abu Dhabi Agriculture and Food Safety Authority
*Tel:	+97128181410
*E-mail address:	asma.mohammed@ADAFSA.GOV.AE
Website:	www.adafsa.gov.ae
*Name Director of Institute (Responsible Official):	H.E. Saeed Al Bahri Salem Al Ameri, Director General, ADAFSA
*Name (including Title and Position) of Head of the Collaborating Centre (WOAH Contact Point):	Asma Abdi Mohamed Shah, Director and Head of Collaborating Centre
*Name of the writer:	Dr. Shameem Habeeba

TOR 1 AND 2: SERVICES PROVIDED

1. Activities as a centre of research, expertise, standardisation and dissemination of techniques within the remit of the mandate given by WOAHC

Category	Title of activity	Scope
		1. Several bacteria, fungi and viruses



<p>Disease control (true)</p>	<p>1.Isolation and identification of viruses, bacteria, fungi, and parasites and writing the Standard Operating Procedures 3. Primers & Probes bank</p>	<p>were isolated and characterized at the ADAFSA-CC for the purpose of development and validation of diagnostic tests, increasing the scope of analysis, research and publication and vaccine development 2. ADAFSA get the intellectual property for creating the primers and probes bank which consist of 446 vials of primers & probes for different diseases including the sequencing primers, this supports the rapid emergency response and the diseases control</p>
	<p>1. ISO/IEC 17025:2017 VET. LAB QUALITY MANAGEMENT SYSTEM Implementation Training program. 25th -27th June 2024 2. Guidelines for auditing management systems ISO 19011:2018 09/09/2024 3.</p>	<p>1. Provide comprehensive knowledge on the technical demands of implementing ISO/IEC 17025 and understand the requirements for the audit competence of testing and calibration laboratories 2. Provides guidelines for auditing management systems, including quality management systems (ISO 9001) and environmental management systems (ISO 14001). 3. Provide information about adequate validation and verification of the performance characteristics of diagnostic tests for infectious diseases as critical to ensuring that assays are applied and interpreted in a scientifically robust and defensible manner. 4. ADAFSA in collaboration with FAO provided two days on hands training for diagnosis of Brucellosis in camels on August 27-28, 2024. 12 Delegates from Jordan, Bahrain, Saudi Arabia, Qatar, Iraq & UAE participated in this training. This training covered implementation of ISO/IEC 17025:2017 and quality aspects like method validation & internal audits. 5. Enhancing the quality control procedures for diagnosis of gastro-intestinal parasitic diseases targeting staff of private laboratories in Abu Dhabi This training covered quality control programs in fecal microscopy and test method validation, implementation of ISO/IEC 17025:2017 attended by seven trainees. 6. Hands-</p>

Training, capacity building (true)

Principles and Methods of Validation of Diagnostic Assays for Infectious Diseases.25/11/2024 4. Hands On Training on Laboratory Diagnosis of Camel Brucellosis 5. Hands On Training Program- "Laboratory Diagnosis of Gastro-Intestinal Parasitic Diseases in Animals with focus on Quality Assurance Programs" dated 05-08-2024 6. Provided educational training for 21 undergraduate students of United Arab Emirates University, Higher College of Technology, Abu Dhabi Vocational Training Institute. 7. Organization of Proficiency Test 05/07/2024 -Webinar- CIRAD - France 8. Onsite and virtual training workshop on Diagnosis/Therapeutics/Control of Camel Diseases, held on July 3, 2024- Animal Health Institute (AHI) in Addis Ababa, Ethiopia 9. The virtual training workshop on Field Disease Diagnosis in Camels, held on November 11, 2024.-Centre National de Veille Zoosanitaire (CNVZ), WOA Collaborating Centre in Continuing Education and Veterinary Capacity Building, Tunis 10. Parasitology Reference and Teaching kit Preparation for Animal Parasite Ova 11. Educational Aquatic Disease Kit 12. In capacity building for overseas students (visiting scholar) 13. ADAFSA lab staff internal training on quality management

on Training on diagnostic techniques for animal diseases, laboratories safety requirement and quality management system implementation. To share knowledge, technical experience, and consultancy to promote veterinary education. 7. ADAFSA-CC-QMS staff attended webinar to develop expertise on organising PT samples as per ISO/IEC 17043:2023 8. ADAFSA-CC - QMS staff delivered scientific lectures on camel disease diagnosis emphasising quality control procedures of diagnostic tests and provided onsite training to 60 experts in the field of veterinary medicine and animal health, veterinary laboratory technicians, researchers in the Animal Health Institute, Ethiopia. 9. ADAFSA-CC in-collaboration with Tunisian collaborative reference centre for continuous training and capacity building organized a workshop-webinar attended by 130 Specialists and experts in the field of veterinary medicine and animal health, veterinary laboratory technicians, researchers and those involved in the field of camel breeding and production almost from all camel rearing countries. ADAFSA-CC experts delivered 4 scientific lectures for capacity building covering different aspects on diagnosis of camel diseases including bacterial, viral and parasitic diseases. 10. As part of contribution to the knowledge sharing and capacity building, parasite ova suspensions of six different gastrointestinal parasites is prepared by ADAFSA-CC. 11. As part of knowledge sharing, providing reference materials on the aquatic disease diagnosis and teaching, ADAFSA-CC prepared reference kits for five fish pathogens namely *Shewanella putrefaciens*, *Aeromonas hydrophila*, *Monogenea - Capsalids - Benedenia spp* and Sea lice (*Caligus spp*). 12. ADAFSA-CC hosted an overseas PhD student from Algeria

		for a period extended from 8 October to 1st November to conduct the research on: "Characterization of unknown fish parasites within Ergasilidae". 13. Organised Training Workshop in Vet Lab Al Wathba on different topics for the implementation of quality management system in laboratories by each unit heads
Avian diseases (true)	Clinical, pathological, and genotypic analysis of infectious bronchitis virus in broiler chickens in the Abu Dhabi Emirate, United Arab Emirates	The study aims to provide information on the disease and genotypes of IBV within the Abu Dhabi Emirate, which is crucial for optimum IB vaccination and monitoring strategies or designing new vaccines based on local IBV field strains.
Aquatic animal diseases (true)	UKAS accreditation obtained ISO/IEC 17025:2017 for Identification of Bacterial Fish Pathogens using Vitek2 at Genus and or Species Levels	Increase the scope of diagnostic tests and validation of new tests for bacterial fish diseases
Diagnosis, biotechnology and laboratory (true)	<p>1. Validation of diagnostic tests including genome sequencing techniques(for genotyping of Wesselsbron virus) 2. Validation of screening and confirmatory tests for the diseases namely Wesselsbron virus Equine Piroplasmosis, Toxoplasmosis, Neosporosis in farm animals 3. MALDI ToF technology in diagnosis of animal diseases Development of PT Scheme provider procedures 4. Development of PT Scheme provider procedures</p>	<p>1. Increase the scope of diagnostic tests by advanced genomic tests for the detection and confirmation of different pathogens in camel and other farm animals 2. Increase the scope of diagnostic tests and validation of new tests 3. ADAFSA-CC implemented and validated the use of MALDI ToF as an innovative technology in diagnosis of animal fungal and bacterial diseases including Mycobacterium and Nocardia spp. 4. ADAFSA collaborating Centre for Quality Management created twenty-three new procedures for implementation of PT Scheme activities. These procedures covered topics like production, storage & handling of PT samples. Developed competency manual for PT schemes. Other topics like homogeneity, stability, Uncertainty of measurement calculations & report writing were also covered in these procedures.</p>
		1. ADAFSA-CC-QMS organized inter-laboratory proficiency schemes at the

<p>Quality Management (true)</p>	<p>1. Inter-laboratory comparison programs</p>	<p>national and international levels on a variety of diagnostic tests; namely PPR ELISA tests, Trypanosoma spp. microscopy, Trypanosoma evansi by PCR, Camel pox virus by PCR, MERS CoV by PCR, Pasteurella spp. Antimicrobial Sustainability Testing (AST) and microscopic detection of Acid Fast Bacilli bacteria (AFB). Laboratories from UAE, Saudi Arabia, Bahrain, Jordan India, Ethiopia, United Kingdom and France participated in the program promoting the quality assurance program internationally. ADAFSA-CC-QMS conducts this program on a regular basis annually to all interested competent laboratories. ADAFSA participated in annual proficiency testing (PT) schemes, including PT schemes from accredited providers VETQAS for Bacterial diseases in cold water fish Program The center participated in annual proficiency testing (PT) schemes, including the PPR ring trial organized by CIRAD, the aquaculture pathology laboratory's ring trial for shrimp pathogen detection (PCR/RT-PCR), and various PT schemes from accredited providers such as VETQAS, RCPA, RIQAS, and EQAS BioRad.</p>
<p>Quality Management (true)</p>	<p>Proficiency Testing (PT) 17043 accreditation works</p>	<p>WOAH collaborating centre for Quality Management System applied for accreditation of ISO/IEC 17043:2023. ADAFSA lab trained employees, created procedures & systems to fulfil the requirements of ISO/IEC 17043:2023 requirements. United Kingdom Accreditation Services audited the labs for ISO/IEC 17043:2023 accreditation.</p>
<p>Quality Management (true)</p>	<p>Peste des Petits Ruminants- PPR- PT analysis – report</p>	<p>WOAH collaborating centre for Quality Management System conducted cycle of PPR-ab PT scheme in camels and issued final report to participant laboratories. Seven laboratories from Europe, Africa, Middle East & Asia including WOA reference laboratories participated.</p>

TOR 3: HARMONISATION OF STANDARDS

2. Proposal or development of any procedure that will facilitate harmonisation of international regulations applicable to the main focus area for which you were designated

Proposal title	Scope/Content	Applicable Area
Interlaboratory comparison Program on diagnostic tests for Camel Diseases	Quality Assurance Program with national (7 labs) and international (7 labs) laboratories on the diagnosis of: • Trypanosoma spp. by microscopy • Acid Fast Bacilli (AFB) by microscopy. • Pasteurella spp. - AST • Trypanosoma evansi By PCR • Camel pox virus by PCR • MERS CoV by PCR • PPR Virus abs by ELISA	Laboratory Expertise
Interlaboratory comparison Program on diagnostic tests for farm animals	Quality Assurance Program with national laboratories on the antimicrobial susceptibility test (AST) and diagnosis of Pasteurella spp.	Laboratory Expertise
Development of Teaching Kit/Reference Slides for Parasitology and Bacteriology achieved the Intellectual Works Rights Registration under Certificate number: 744-2024 and 775-2024 ,from UAE Ministry of Economy- the Department of Trademarks and Intellectual property	Educational and reference kit for blood parasites and bacteria that infect camels obtained from field samples serve as a reference for parasitic and bacterial diseases of camels, targeting diagnostic laboratories as well as university students, researchers.	Laboratory Expertise Training and Education
Development of Teaching Kit for Animal Parasite Ova- Formalin Fixed Suspensions	Educational kit for gastrointestinal parasites that infect camels prepared from field samples, serve as a reference for parasitic diseases of camels, targeting diagnostic laboratories as well as university students, and researchers.	Laboratory Expertise Training and Education
Developed and validated several diagnostic tests for screening and confirmation of diseases in farm animals, equines.	Serology/PCR test for the diseases namely PPR, FMD, ,Blue Tongue RVF, CCPP, Toxoplasmosis, Neosporosis, Equine Piroplasmosis For Brucellosis , Serology is used for screening purpose and confirmed through bacterial isolation/PCR.	Laboratory Expertise

--

Primers & Probes bank	ADAFSA get the intellectual property for creating the primers and probes bank which consist of 446 vials of primers & probes for different diseases including the sequencing primers, this supports the rapid emergency response and the diseases control	Laboratory Expertise Training and Education
Quarantine Lab activity	Setting up the quarantine center and performing testing activities at newly developed Khalifa Port Abu Dhabi for surveillance of diseases entry point	Laboratory Expertise Health Management

3. In exercising your activities, have you identified any regulatory research needs* relevant for WOA?H?

No

4. Did your Collaborating Centre maintain a network with other WOA?H Collaborating Centres (CC), Reference Laboratories (RL), or organisations designated for the same specialty, to coordinate scientific and technical studies?

Yes

Name of WOA?H CC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
WOA?H Collaborating Centre for Continuing Education and Capacity Building in the Veterinary Domain. Tunisia Centre National de Veille Zoosanitaire (CNVZ)	Tunisia	África	Technical virtual training to enhance quality and capacity building for the diagnosis of camel pathogens.

TOR 4 AND 5: NETWORKING AND COLLABORATION

5. Did your Collaborating Centre maintain a network with other WOA?H Collaborating Centres, Reference laboratories, or organisations in other disciplines, to coordinate scientific and technical studies?

Yes

Name of WOA?H CC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
Ras Al Khaimah Municipality–Veterinary Control and Services Section / Government of Ras Al-Khaimah, United Arab Emirates	United Arab Emirates	Middle East	Morphological and Molecular identification of Sarcocystis spp. in chilled beef from RAK Municipality Abattoir, UAE

--

Liwa College, Faculty of Health and Medical Science, Abu Dhabi , United Arab Emirates	United Arab Emirates	Middle East	To evaluate and compare the efficiency of a local isolated antigen from <i>T. evansi</i> for the detection of Trypanosomosis
Ministry of Health and Prevention, Ministry of Climate Change and Environment, United Arab Emirates	United Arab Emirates	Middle East	UAE AMR National Action Plan
UAE-UK One Health AMR consortium which includes academic, research institutions and government agencies from both UK and UAE at the Federal and Emirate level.	United Arab Emirates	Europe Middle East	Establish a National One Health AMR Biosecurity Consortium aiming to implement a national One Health genomic epidemiological research and surveillance infrastructure focusing on AMR.
A One Health” Study of the Animal and Public Health Significance of Q-fever at the Human-Livestock Interface in the United Arab Emirates In collaboration with United Arab Emirates University (UAEU)	United Arab Emirates	Middle East	To investigate the epidemiology of Q-Fever in animals and human. to investigate the seroprevalence on the <i>C. burnetii</i> infection in camels and abattoir workers, and to detect the DNA of <i>C. burnetii</i> seropositive study subjects in the Al Ain city of the UAE

TOR 6: EXPERT CONSULTANTS

6. Did your Collaborating Centre place expert consultants at the disposal of WOA?H?

Yes

Name of expert	Kind of consultancy	Subject
Dr Abdelmalik Khalafalla	Participant and PPR-GREN Chair	The PPR Global Eradication Program (GEP) 7th Advisory Committee Meeting (hybrid), Rome, Italy, 25-28 June 2024
Dr. Hassan Ishag	Participation of an Expert	Formulating Research roadmap for diagnosis and control Corona viruses- STAR-IDAZ Africa and Middle East Regional Network Oct8-10, 2024

--

Dr Abdelmalik Khalafalla	Participation of an expert	WOAH AD HOC GROUP ON PESTE DES PETITS RUMINANTS, Virtual meeting, 12- 14 November 2024
Zulaikha Alhammadi	Invited speaker	Workshop on the Surveillance, Diagnosis, Control and Prevention of Brucellosis in Arab Countries November 11-14, 2024, in Riyadh, Saudi Arabia.
Asma Abdi Shah	Participation of an expert	Laboratory Twinning Evaluation Workshop
Asma Abdi Shah	Participation of an expert	WHO CoronaVirus Network (CoViNet) Meeting
Dr. Mohammed Albreiki	Invited speaker	STAR-IDAZ Africa and the Middle East Regional Network Meeting - 21 August 2024

TOR 7: SCIENTIFIC AND TECHNICAL TRAINING

7. Did your Collaborating Centre provide advice/services to requests from Members in your main focus area?

Yes

1. Dr. Shameem Habeeba and Dr.Hassan Ishag: - Service Request from Ras Al Khaimah Municipality–Veterinary Control and Services Section on morphological identification and molecular confirmation of parasite cyst on meat
2. Dr. Ghada Abdelwahab – Department of Health (DoH)-Abu Dhabi UAE info note requested on Brucella in animals - from one health perspective to tackle Brucellosis in both human and animals
3. Dr. Hassan Ishag provided a Technical support for an overseas PhD student from Algeria for a period extended from 8 October to 1st November 2024 to characterize unknown fish parasites within Ergasilidae

8. Did your Collaborating Centre provide scientific and technical training, within the remit of the mandate given by WOA, to personnel from WOA Members?

Yes

- a) Technical visit : 10
- b) Seminars : 190
- c) Hands-on training courses: 19
- d) Internships (>1 month) : 1

Type of technical training provided (a, b, c or d)	Content	Country of origin of the expert(s) provided with training	No. participants from the corresponding country

--

A	ADAFSA-CC in collaboration with Salam Veterinary Camel Hospital organized a two day training for GCC countries entitled: The CAMENET-ADAFSA Training Session on Camel Calf Diarrhea in Salam Veterinary Camel Hospital, Saudi Arabia (4th -5th December 2024).	CAMENET-KSA, Oman, UAE, Bahrain, QATAR	10
B	ADAFSA-CC-QMS provided Onsite and Virtual training workshop on Camel Disease Diagnosis to Animal Health Institute Ethiopia July3, 2024	Ethiopia	60
C	Hands On Training on Laboratory Diagnosis of Camel Brucellosis-Serology, Bacteriology, Molecular Detection - dated 27 – 28 August 2024	FAO- KSA, BAHRAIN, UAE, QATAR, IRAQ, JORDAN	12
C	Hands On training on Laboratory Diagnosis of Gastrointestinal Parasitic Diseases in Animals with focus on Quality Assurance Programs” dated 05-08-2024	United Arab Emirates and Oman	7
B	ADAFSA-CC-QMS provided Virtual training workshop on Camel Disease Diagnosis, jointly with Tunisian collaborative reference centre for continuous training and capacity building, held November11, 2024.	Tunisia	130
D	ADAFSA-CC hosted an overseas PhD student to conduct the research on: “Characterization of unknown fish parasites within Ergasilidae”.	Algeria	1

TOR 8: SCIENTIFIC MEETINGS

9. Did your Collaborating Centre organise or participate in the organisation of scientific meetings related to your main focus area on behalf of WOA?H?

Yes

National/International	Title of event	Co-organiser	Date	Location	No. Participants

Internationally	Webinar CIRAD - Organisation of Proficiency Test	WOAH/FAO Reference Laboratory for peste des petits ruminants (PPR) CIRAD, France	2024-07-07	Virtual	15
Internationally	AMR Webinar	ADAFSA – WOAHCollaborating Centre	2024-11-19	Virtual	141

TOR 9: DATA AND INFORMATION DISSEMINATION

10. Publication and dissemination of any information within the remit of the mandate given by WOAHC that may be useful to Members of WOAHC

a) Articles published in peer-reviewed journals:

1

1. Habeeba, S. Bensalah, O.K., Ibrahim, A., Muhairi, S., Al Hammadi, Z.M., Commey, A., Osman, E., Saeed, M., Shah, A.A.M.. (2024), Acaricide resistance in ticks from livestock farms in Abu Dhabi, United Arab Emirates. *Acarologia* 64(1): 138-145. <https://doi.org/10.24349/utkq-zek0>

.

b) International conferences:

1

Poster Presentation:

1. Dr. Ghada Abdelwahab "Antibiotics Resistance in *Escherichia coli* Isolated from Livestock in the Emirate of Abu Dhabi, UAE, 2014–2019"– 4th Annual International Conference of the Emirates Society of Clinical Microbiology (ESCM).

c) National conferences:

1

Oral Presentation:

1. Dr. Ghada Abdelwahab "Overview of AMR in Animal sector - Data of Abu Dhabi-UAE" – AMR Webinar - during World AMR awareness week- organized by ADAFSA- WOAHC Collaborating Centre for Camel Diseases- 19/11/2024

d) Other (Provide website address or link to appropriate information):

2

1. Dr. Shameem Habeeba Published a Popular article -Hydatidosis A Hidden Public Threat in a newsletter of a healthcare company Data Mate Info Solutions Ltd. <https://online.flippingbook.com/view/230946165/>

2. UAE- National AMR Surveillance Consortium: nine (9) articles published in 2024 as a joint effort of the consortium, addressed variety of topics related to AMR.

11. What have you done in the past year to advance your area of focus, e.g. updated technology?

WOAHC collaborating centre for Quality Management System applied for accreditation of ISO/IEC 17043:2023. ADAFSA lab trained employees, created procedures & systems to fulfil the requirements of ISO/IEC 17043:2023 requirements ADAFSA get the intellectual property for creating the primers and probes bank which consist of 446 vials of primers & probes for different diseases including the sequencing primers, this supports the rapid emergency response and the diseases control



12. Additional comments regarding your report: