



World Organisation for Animal Health



GF-TADs for Africa

Contagious bovine pleuropneumonia (CBPP) Standing Group of Experts (SGE) for Africa

Second meeting

23 – 25 July 2024 Lusaka, Zambia



October 2024

Picture credits : <u>Restitution workshop for the mapping study of actions and initiatives contributing to</u> <u>the prevention and resolution of conflicts linked to competition for access to natural resources in the</u> <u>Lake Chad Basin, CAR and DRC - CBFP - Congo Basin Forest Partnership (pfbc-cbfp.org)</u>

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Introduction and background to the meeting

Contagious bovine pleuro-pneumonia (CBPP) or lung sickness in cattle, caused by *Mycoplasma mycoides subsp. mycoides* (Mmm) is truly an African disease, long eradicated from the rest of the world, with few exceptions. The disease represents a considerable burden for cattle owners in many parts of Africa (EMPRES-AH, FAO, 2013), from Senegal and the Gambia in the west through Somalia in the east, and as far south as Namibia and Tanzania.

In October 2021, the <u>10th Regional Steering Committee (RSC)</u> for Africa of the *Global Framework for the progressive control of Transboundary Animal Diseases* (GF-TADs for Africa) endorsed the <u>2021 –</u> <u>2025 Strategic Plan</u>, which targets five TADs, i.e. *African swine fever* (ASF), *Foot-and-mouth disease* (FMD), *Peste des petits ruminants* (PPR), *Rift valley fever* (RVF) and indeed *Contagious bovine pleuro- pneumonia* (CBPP), in addition to the overall strengthening of veterinary services.

The GF-TADs' Standing Group of Experts (SGE) format allows countries with similar socio-economic and epidemiological situations to share information, challenges and best practices, and to discuss regional solutions and approaches to enhancing control. The *Terms of reference* (ToR) of the SGE CBPP for Africa were adopted during the <u>11th Regional Steering Committee (RSC)</u> meeting for Africa, held in June 2022. The ToR of the SGE are presented as **annex 1**. The establishment and launch of SGE CBPP for Africa was undertaken by the WOAH Regional Representation for Africa, in its capacity as the Secretariat of the GF-TADs for Africa RSC, with the support of the Food and Agriculture Organization of the United Nations (FAO) and the African Union (AU-IBAR and AU-PANVAC) via video conference (Zoom platform, in 6 sessions) from 6 – 15 June 2023. The report of this inaugural meeting can be downloaded here : <u>Standing Group of Experts (SGE)</u>.

Objectives and narrative report of the meeting

The second meeting was attended by 2 of the founding member countries (Nigeria and Zambia). The veterinary authorities of Chad and Somalia, as well as the national reference laboratory in Mali could not be invited due to funding constraints. Also present at the second meeting were the African Union Interafrican Bureau for Animal Resources (AU-IBAR) and the Pan African Veterinary Vaccine Centre (AU—PANVAC), the Regional Animal Health Centre for the Economic Community of Central African States (RAHC for ECCAS), the Regional Animal Health Centre for the Economic Community of West African States (RAHC for ECOWAS), the Secretariat of the



Common Market for Eastern and Southern Africa (COMESA), the Secretariat of the *Southern African Development Community* (SADC), FAO and WOAH Regional Representations, FAO and WOAH Experts, the Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture, the International Livestock Research Institute (ILRI), WOAH Reference Laboratories (the *Botswana National Veterinary Laboratory* (BNVL) Sebele, Gaborone, Botswana, and the *Istituto Zooprofilattico Sperimentaledell'Abruzzo e del Molise 'G. Caporale'* in Teramo, Italy), as well one selected regional service laboratories, the *National Veterinary Research Institute* (NVRI), Vom, Nigeria.

Overall, the meeting was attended (in-person) by 27 participants. Simultaneous interpretation was available in French and English. Thirty percent (30%) of attendants were French-speaking and 37% of attendees were women. The list of participants is presented as **annex 2**.

Based on the expected outcomes of this meeting and follow-up activities, i.e. that the SGE - CBPP for Africa would discuss and debate the first topic of the work programme, i.e. **Strategy**, the following agenda was prepared, fostering as much exchange of information and discussion between participants as possible (agenda as delivered, including deletions and <u>additions</u>):

Time Date >	Tuesday 23 July 2024		
08:00 – 09:00	Welcoming and installation of participants		
Session :	Opening		
09:00 – 09:30	 FAO RAF Mamadou Niang WOAH SRR SA Moetapele Letshwenyo AU-IBAR Huyam Salih COMESA Secretariat Providence Mavubi (Director) Yoseph Mamo (Livestock Officer) Republic of Zambia Makozo Chikote (Minister) Charles Maseka (CVO, WOAH Delegate) 		
09:30 – 09:50	Presentation of the terms of reference of the SGE, adopted in June 2022 and outcomes of the inaugural meeting in June 2023 P. Bastiaensen (SRR EA, WOAH, Nairobi)		
09:50 – 10:00	Election of the chair (host-country Delegate) and rapporteur (if not the RSC Secretariat) of the meeting		
10:00 - 10:30	Break and group photograph		
Session :	Introductions and updates		
10:30 – 10:50	Overview presentation: Current status of CBPP and what does CBPP stand for today in Africa? What are the trade implications and the implications for poverty- reduction and wealth creation in Africa. Huyam Salih (AU-IBAR, AU, Nairobi)		
10:50 – 11:10	Updates on the current status of CBPP and CCPP worldwide, with specific reference to Africa, since June 2023 (based on WAHIS reporting). Gregorie Bazimo (WAHIAD, WOAH, Paris)		

11:10 - 11:30	Brief feedback on the STAR-IDAZ (CABI and USDA) research gap analysis exercise on CBPP in Africa, conducted between 26 – 28 June 2023. Mamadou Niang (RAF, FAO, Accra)			
11:30 – 11:50	Brief feedback on the ERFAN CBPP Forum sessions, conducted between 25 October 2023 – 13 March 2024. Massimo Scacchia (IZS, Teramo)			
11:50 – 12:10	Updates on the current common position of CVOs on the proposed revision of the Code chapter on CBPP Hiver Boussini (AU-IBAR, AU, Nairobi)			
12:10 - 12:30	Objectives, focus/theme (Strategy) and expected outputs of the meeting Akiko Kamata (NSAH, FAO, Rome)			
12:30 - 14:00	Lunch break			
Session :	Focus on Strategy : rationale for national strategic plans			
14:00 - 14:30	The case put forward by Zambia (co-host)			
	Charles Maseka (Delegate / CVO, Lusaka)			
14:30 - 15:00	The case put forward by Nigeria			
	Columba Vakuru (Delegate / CVO, Abuja) Janada Danladi (Principal Veterinary Officer, Abuja)			
15:00 - 15:30	Discussion, led by the chair			
15:30 - 16:00	Break			
16:00 - 17:30	Open discussion in two groups (English and French)			
	 Question 1 : How would a national strategy deal with AMR ? Question 2 : What would a validation process look like ? 			
17:30 - 17:40	Brief presentation of the rapporteurs on the outcomes of the group discussions			
17:40 - 18:00	Final discussion, led by the chair			

Time Date >	Wednesday 24 July 2024		
09:00 - 09:10	Brief presentation of the main rapporteur and chair on the recurring challenges and issues raised in discussions, as well as solutions.		
Session :	Focus on Strategy : rationale for (sub)regional strategies or implementation modalities		
09:10 - 10:30	Securing political buy-in for the fight against CBPP at COMESA.		
	Yoseph Mamo (COMESA Secretariat, Lusaka)		
	How are RAHCs positioned to support the implementation of (sub)regional or continental strategies?		
	Baschirou Moussa Demsa (RAHC, ECCAS, N'Djamena)		
	Hassane El-Hadj Adakal (RAHC, ECOWAS, Bamako)		
	Controlling CBPP within a cluster of countries with similar challenges		
	Dominic Kathiya (ICPALD, IGAD, Kabete)		
	Oumar Idriss Al-Farouk (PRAPS, WOAH, Bamako) <u>Online</u>		
	Looking at CBPP as an exotic disease : implementing risk-based strategies and supporting member countries in SADC		
	Gaolathe Thobokwe (FANR, SADC, Gaborone)		
10:30 – 10:50	The potential contribution of regional service laboratories (AHI, NVRI, LCV) Joint presentation, delivered by		
	Maryam Muhammad (NVRI, Vom)		
10:50 – 11:10	The potential contribution of resource partners (AfDB, AOAD, Bilateral donors, BMGF, EU, IsDB, World Bank)		
11:10 - 11:30	Break		
11:30 - 12:30	Open discussion in two groups (English and French)		
	 Question 3 : Possible epi-systems or roadmap approaches Question 4 : What type of governance is suitable for this ? 		
12:30 – 12:40	Brief presentation of the rapporteurs on the outcomes of the group discussions		
12:40 – 13:00	Final discussion, led by the chair		
13.00 - 14:00	Lunch break		

Session :	Focus on Strategy : rationale for a continental strategy			
14:00 – 14:15	The case put forward by FAO : 2030 Agenda through the sustainable transformation of global agrifood systems.			
	Mohammed Shamsuddin (RAF, FAO, Accra) <u>Online</u>			
14:15 – 14:30	The case put forward by the African Union : <i>Livestock Development Strategy for Africa</i> (LIDESA) and the <i>Animal Health Strategy for Africa</i> (AHSA) Huyam Salih (AU-IBAR, AU, Nairobi)			
14:30 - 14:45	Importance of the development process of the Continental Strategy on ASF ————————————————————————————————————			
14:45 – 15:00	Importance of the development process of the Continental Strategy on PPR ———————————————————————————————————			
15:00 - 15:15	The potential contribution of international reference laboratories, including control tools (BNVL, CIRAD, INIAV, IZS, PANVAC) Joint presentation, delivered by Charles Bodjo (AU-PANVAC, AU, Bishoftu)			
15:15 – 15:30	The potential contribution of the Joint FAO/IAEA Centre			
	Farai Catherine Muchadeyi (Joint FAO/IAEA Centre, Vienna)			
10:30 - 10:50	The potential contribution of regional service laboratories (AHI, NVRI, LCV) Joint presentation, delivered by			
	Tesfaye Chibssa Rufael (AHI, Sebeta) <u>Maryam Muhammad (NVRI, Vom)</u>			
15:30 – 15:45	The potential contribution of ILRI Musa Mulongo (TAHSSL, ILRI, Kabete)			
15:45 – 16:00	The potential role of resource partners (AfDB, AOAD, Bilateral donors, BMGF, EU, IsDB, World Bank)			
	Joint presentation			
	Discussion, led by the chair			
	Break			
16:30 – 17:30	Open discussion in two groups (English and French) Question 3 : Possible epi-systems or roadmap approaches Question 4 : What type of governance is suitable for this ? 			
	Question 5 : What would be the essential focus and approach of such continental starts are 2			
	Question 6 : What would a validation process look like ?			
17:30 – 17:40	Brief presentation of the rapporteurs on the outcomes of the group discussions			
17:40 – 18:00	Final discussion, led by the chair			

Time Date >	Thursday 25 July 2024		
08:00 - 09:00	Open discussion in two groups (English and French)		
	 Question 3 : Possible epi-systems or roadmap approaches Question 4 : What type of governance is suitable for this 2 		
	 Question 5 : What would be the essential focus 		
	and approach of such continental strategy ?		
	Question 6 : What would a validation process look like ?		
	Brief presentation of the rapporteurs on the outcomes of the group discussions		
	Final discussion, led by the chair		
09:00 – 09:10	Brief presentation of the main rapporteur and chair on the recurring challenges		
	and issues raised in discussions, as well as solutions.		
Session :	Focus on Strategy : rationale for an international strategy		
09:10 - 09:40	The case put forward by GF-TADs		
	Akiko Kamata (NCAH, FAO, Rome)		
	Viola Chemis (RAD, WOAH, Nairobi)		
09:40 - 10:00	The case put forward by the African Union		
	Huyam Salih (AU-IBAR, Nairobi)		
10:00 - 10:20	The case put forward by the Joint FAO/IAEA Centre		
	Farai Catherine Muchadeyi (Joint FAO/IAEA Centre, Vienna)		
10:20 - 10:40	Obtaining official recognition of CBPP freedom or endorsement of CBPP control programme by WOAH		
	Min Park (Status Department, WOAH, Paris) <u>Online</u>		
10:40 - 11:00	Learning from the development of the <i>Global Control and Eradication Strategy</i> for PPR (GCES) and the eradication of rinderpest		
	Henry Wamwayi (Former AU-IBAR, Nairobi)		
11:00 - 11:30	Break		
11:30 - 11:50	The potential contribution of international reference laboratories (BNVL, CIRAD,		
	INIAV, IZS, PANVAC) Joint presentation, delivered by		
	Massimo Scacchia (IZS, Teramo)		
11:50 – 12:10	The potential role of resource partners (AfDB, AOAD, Bilateral donors, BMGF, EU,		
	IsDB, World Bank) Joint presentation		
	Najete Satini (IDRC, Ottawa)		
	Final discussion, led by the chair		

	-		
12:10 - 13:10	 Open discussion in two groups (English and French) Question 7 : How can the different tiers interact for better coordination and integration (national → international) ? Question 8 : What would a validation process look like ? 		
13:10 - 14:10	Lunch break		
14:10 - 14:20	Brief presentation of the rapporteurs on the outcomes of the group discussions		
14:20 - 14:40	Final discussion, led by the chair		
Session :	Closing		
14:40 - 14:50	Presentation of important websites on CBPP and GF-TADs, and invitation to contribute.	Closed meeting of the chairs and rapporteurs (joint writing team)	
14:50 – 15:20 Break			
15:20 - 15:30	Presentation of the draft conclusions and action plan (joint writing team)		
15:30 - 16:00	Discussion, amendment and adoption of the draft conclusions and action plan		
16:00 - 16:10	Next steps and dates and venue for the third meeting		
16:10 - 16:20	Closing remarks		



End of the second SGE CBPP meeting

16:20

Group photograph. Picture © G. Bazimo (woah) 2024

Session 1. Introductions and updates

The opening remarks were delivered by Mamadou Niang, the regional laboratory expert of FAO ECTAD in Ghana on behalf of Mohammed Shamsuddin (Vice-President of the GF-TADs Africa *Regional Steering Committee*, RSC), Moetapele Letshwenyo, the WOAH Sub-Regional Representative for Southern Africa on behalf of Karim Tounkara (GF-TADs Africa Regional Secretariat), Huyam Salih, the Director of AU-IBAR (and President of the GF-TADs Africa RSC), Yoseph Mamo, Senior Fisheries and Livestock Officer, on behalf of Providence Mavubi (COMESA Secretariat, Director of Industry and Agriculture) as well as the *Chief Veterinary Officer* (CVO) and WOAH Delegate of Zambia, Dr. Charles Maseka, on behalf of the Minister for Agriculture, Fisheries and Livestock.

The presenters emphasised the importance of CBPP to bovine health in Africa, the high impact on food security and livelihoods of small holder farmers and limitations to trade. Dr. Letshwenyo reminded the meeting that CBPP is a WOAH-listed disease as per the Terrestrial Animal Health Code with WOAH Members having the obligation to report. Being a disease mostly reported in Africa, Dr. Niang (FAO) mentioned that FAO had received requests from some Member(s) Countries/States in the region to support outbreak response. Dr. Salih (AU-IBAR) called for strengthened collaboration and dialogue on CBPP in Africa, emphasising AU-IBAR's commitment to the development of a regional strategy. In support of CBPP control among other livestock health and trade aspects, Dr. Mamo (COMESA) informed the meeting of COMESA's continued efforts for skills deployment to facilitate trade among its Member States. He emphasized the importance of the service industry as offtake markets for livestock and livestock products. He expressed the need for strengthened collaboration by regional and international organisations with the *Regional Economic Communities* (REC), such as COMESA, for better support to countries.

The meeting was opened by Dr. Charles Maseka on behalf of the Minister who reiterated the need for cooperation amongst countries and stated, amongst others, that :

"...'Yes we can' is Zambia's statement. This is borne from the resilience of our forefathers who managed and braced through diseases like rinderpest. The eagle, which is part of Zambian's flag, reminds us to develop resilience so we can rise above CBPP. Our national anthem states that Africa is blessed, let her people join as one. Even with CBPP we shall join as one and eradicate it from the continent. We should extend a hand to one another..."

Following Dr. Gregorie Bazimo's presentation on the *Updates on the current status of CBPP and CCPP worldwide, with specific reference to Africa, since June 2023 (based on WAHIS reporting),* the issue of under-reporting was noted, as it was during SGE I. The state of play of CBPP in the region is marked by low surveillance, lack of official reporting, under-reporting where it's happening, resulting in a limited reflection of actual field presence of CBPP which portrays CBPP as a neglected disease despite its burden in Africa. There is moreover quite a lot of variation in surveillance capacity among Member(s) Countries/States, leading to differences in the ability to monitor and report.



Cattle vaccination operation against CBPP in the municipality of Gueguere (South-West Region) in Burkina Faso. 2023-2024 vaccination campaign. Picture © PRAPS (woah) 2024.

The meeting encouraged countries to develop and implement realistic strategies ensuring their integration into national strategic documents and financing mechanisms, in order to unlock national resources for CBPP control activities. However, the meeting also noted the need for technical guidance to Members as they develop their strategies, to enable them to elaborate specific decisions such as :

- whether to control or eradicate CBPP,
- whether to include the use of *antibiotics* in the control strategy in light of concerns of *antimicrobial resistance and antimicrobial use* (AMR/AMU) and comparative analysis for antibiotherapy versus vaccination strategies or a combination thereof.



Figure 1. CBPP outbreaks reported in Nigeria from 2020-2023. Source : DVPCS, Nigeria, 2024

Session 2. Focus on Strategy : rationale for national strategic plans

The meeting noted that control of CBPP will require investments in building capacities of Veterinary Services and alignment in implementation with other priority disease strategies. This should include strengthened capacities for veterinary professional and other labour providers during vaccination campaigns, solutions for deployment and delivery of vaccines, surveillance for early detection and response. It was noted that stamping-out still seems to be the best approach, but that vaccinationbased control remains the rule in Africa, mostly due to lack of compensation mechanisms. The ideology of promoting cost-effective strategies such as combined vaccinations (e.g. with *Lumpy skin disease*, LSD, or as previously conducted alongside Rinderpest vaccination) was discussed, with inconclusive decision requiring further need for evidence.

Countries were encouraged to utilise existing capacity development initiatives and strategies such as zoning approaches, test-and-slaughter methods, WOAH's official control programme endorsement and status recognition for CBPP, remote electronic support such as telediagnosis and online training platforms, among others. The role of the private sector to support off-take following e.g. test-and-slaughter methods was elaborated based on Zambia's experience as a viable option for countries to explore.

The current status with regards to CBPP diagnosis at national level was summarised as:

- limited infrastructure for CBPP surveillance and diagnosis;
- limited ability for sampling with country presentations indicating a decline in the number of samples submitted during the occurrence of COVID-19 pandemic;
- difficulty to access critical reagents and proficiency testing, including ELISA kits, and complement fixation;
- uncoordinated vaccinations at federal/national level with seemingly lack of clarity on vaccination coverage, post-vaccination sero-monitoring and vaccine quality control systems in place to determine the immunity response rate or vaccine efficacy;
- control efforts remain uncoordinated with neighbouring countries, especially problematic where cross-border livestock movement is happening;
- limitations to implement timely quarantine and stamping out operations.

The use of antibiotics for CBPP control was discussed at-length as an option, though there is a general recognition that more effective antibiotics are costly and may not be readily available. The most accessible antibiotics in most countries are still the oxytetracyclines. Others in use are tylosin and 2nd generation macrolides such as tulathromycin and gamithromycin.

Lessons from country strategies such as the one in Zambia show that using epidemiological data, zoning is an effective approach to target interventions accordingly. This includes defining the *infected* zone, *protection zone with vaccination*, *protection zone without vaccination*, *high surveillance zone* and the CBPP *free zone*. The national strategy consists of removing all clinical cases as soon as they are reported while conducting vaccination only in endemic areas and maintaining the *free zone* as free of vaccination. Surveillance at slaughter was noted as the most useful method to detect cases and enable traceback for exposed animals.



Map 1. Zoning approach in the fight against CBPP. Source : Ministry of Fisheries and Livestock (Zambia)

The need for national programmes to advance community awareness, build trust and participation in reporting, control and implementation of biosecurity measures was underscored. Field veterinarians note that farmers are receptive to vaccination but are not supportive of sero-monitoring, hence the importance of conducting more producer education alongside implementation of traceability measures. The meeting promoted the concept of a national strategy that is guided by a vaccination plan informed by the epidemiology of CBPP, coordinated across affected areas followed by sero-monitoring as a measure of vaccination efficacy, supported with accurate data on vaccination coverage (in target areas/zones) and acquired immunity. A CBPP modelling study by ILRI (unpublished, verbally reported by Musa Mulongo) shows that weather and livestock movement are the key drivers for CBPP spread. Countries were advised to apply movement control linked to an animal identification and traceability system to support pharmaco-vigilance and vaccination monitoring.

The meeting was informed of the voluntary mechanism available for WOAH Members for endorsement of *Official Control Programmes* (OCP) targeting CBPP. This is useful as a checklist for countries to monitor progress and receive scientific reviews from international experts. Countries with OCPs for CBPP in Africa are: Namibia since 2015 and Zambia since 2022. Countries need to determine first whether they engage on (a) progressive *control* of CBPP or (b) an *eradication* roadmap.

Session 3. Focus on Strategy : rationale for (sub)regional strategies or implementation modalities

Many policy issues came up during the different sessions and were further elaborated during the group discussion on the final day. The discussion included the use of antibiotics, regulation and monitoring of antibiotic use, border controls and the importance of quarantine stations. In addition, a case was made for promoting *Public-Private-Partnerships* (PPP) in vaccination campaigns, as it would appear that government subsidies are adversely affecting the commercial prospects for large scale vaccination. It was argued that where Veterinary Services have the capacity for supervision and regulation, private sector engagement should be encouraged. Governments are expected to take charge during outbreaks, but sustainable farming systems should be encouraged, including the integration of PPP for disease control, without dependence on subsidies and/or government support.



Map 2. Cattle marketing circuits in West Africa, according to means of transport (by lorry, on-hoof, both/mixed, by train). Map provided by the Regional Animal Health Centre (RAHC) for West Africa (ECOWAS), Bamako, Mali.

The challenges of limited information sharing and harmonisation of approaches amongst neighbouring countries led to a discussion around promoting and implementing bilateral agreements or *Memorandums of Understanding* (MoUs) to support cross-border harmonisation and coordination of control activities. The Members noted the need to promote coordinated planning, harmonisation and joint activities. This is also closely linked to informal trade along major trade corridors. Informal trade

is of particular concern if animal movement occurs from endemic to non-infected zones. The latter is usually motivated by market prices which are higher in the non-infected zones.

Some countries have considered re-introducing cordon fences or barriers. However, taking the example of Zambia, deliberations are still ongoing whether the cordons should be physical barriers. The employment of 250 cordon guards has already been done.

The *Regional Economic Communities* (RECs) play a critical role in promoting political goodwill in Member States or Member Countries to support implementation of MoUs to enhance cross-border cooperation and collaboration in disease control, especially around livestock trade corridors, transhumance (pastoralist, nomadic) livestock routes and informal livestock movement channels. Coordinated actions can be better informed when sharing of surveillance and laboratory data is regularly done through the regional epidemiology and laboratory networks. Some Member(s) Countries/States have functional surveillance systems and laboratory capacity whereas others will need support. An example was provided of the RESCAM network that is used for collating data on surveillance and diagnosis in Cameroon.

Being the intermediary between Member States or Member Countries on the one hand, and regional organisations on the other hand, the RECs can better inform priority countries and technical topics for capacity building to advance CBPP control in the sub-region.



Figure 2. Flowchart of the epidemio-surveillance network for animal diseases in Cameroon (in French).

None of the RECs currently owns a sub-regional strategy for CBPP, except for the *Southern Africa Development Community* (SADC) which – according to Dr Gaolathe Thobokwe - initiated the process and have had a draft since 2016, but has never been discussed beyond the *Livestock Technical Committee* (LTC), i.e. the regional technical meeting of CVOs.

The RECs present at the SGE meeting were not in favour of developing sub-regional strategies but recognise that they play a critical role in facilitating collaborations between Member(s) Countries/States towards coordination and cooperation for CBPP control, enabling agreements on cross-border activities, harmonised control programmes, common funded programmes, monitoring of progress, facilitating consultations and other related activities. The efforts of partners and programmes supporting RECs such as the PRAPS (*Regional Project in Support of Pastoralism in the Sahel*) were mentioned.

To advance political goodwill, the RECs noted that has been little participation of key decision makers in animal health meetings except during CoP negotiations and the AU Summits where they get due attention.

Map 3. PRAPS beneficiary countries in West Africa (Burkina Faso, Chad, Mali, Mauritania, Niger, Senegal). Index of herd positivity, based on ELISA serology. Cut-off at 50. Positive herd as of 10% or more (in French). Map provided by the Regional Animal Health Centre (RAHC) for West Africa (ECOWAS), Bamako, Mali.

Session 4. Focus on Strategy : rationale for a continental strategy

The Interafrican Bureau for Animal Resources of the African Union (AU-IBAR) informed the meeting of plans to develop a Continental CBPP Strategy through participatory approaches between 2025 – 2027, the latter year being the target for validation and adoption. The Director of AU-IBAR, Dr Huyam Salih, informed the meeting of plans for a first annual meeting in November 2024 to bring together Members, RECs and partners to discuss plans and actions to enhance collaboration. The Director also noted that a strong monitoring and evaluation (M&E) component will be required to track actions and results.

Likewise, Members were reminded that the *Pan-African Veterinary vaccine Centre* of the African Union (AU-PANVAC) is presently the only organisation mandated by the AU to provide international and independent *Quality Control* (QC) of all vaccines used in Africa and in addition, has the mandate to produce and distribute essential biological reagents for the surveillance and diagnosis of animal diseases. By word of its acting Director, Dr Charles Bodjo, AU-PANVAC reiterated its support to vaccine quality control and encouraged laboratories to submit vaccine batches and their diluents for QC including re-submission while used in the field (to check cold chain management). The meeting was informed that AU-PANVAC and International Reference Laboratories plan to replace the vaccine seed provided to labs (adjuvant/killed/improved vaccine for both T1/44 and T1/44sr without mutations) and continue to support production capacity and provision of guidelines to minimize evolution of the strain.

The meeting noted that many regional service laboratories are faced with aging infrastructure and equipment, have a prolonged turnaround time of getting consumables up to regions, limited personnel, affected by insecurity in areas funding some and constraints. There is need to strengthen collaborations and support diagnostic capacity building for Member(s) Countries/States.

Map 4. Countries reporting vaccination against CBPP as a control measure in Africa (2019-2024). <u>Source</u>: WAHIS (woah) 2024

Countries were encouraged to implement early detection of CBPP foci and submit notifications to WOAH. This includes suspicions, based on abattoir and field slaughter surveillance. The IZS from Teramo, represented by Dr Massimo Scacchia, recommended the wider use of telediagnosis with

remote support using calls and photos as an option for enhanced surveillance in remote areas where the contacts are possibly traditional leaders, farmers, NGO personnel or lay persons (non-vets). This includes providing remote training for veterinary personnel using mobile based applications that can support telediagnosis *cum* remote assistance.

Session 5. Focus on Strategy : rationale for an international strategy

The benefits and setbacks of promoting multi-TADs approaches came up in several sessions. Examples of joint interventions are general surveillance, vaccination and community approaches. The meeting was informed there have been trials for combined vaccination against CBPP and pasteurellosis, but the level of immunity acquired is yet to be confirmed in the field setting. Questions were also raised about the possible development of bivalent or trivalent vaccines, with considerations for opportunities for commercialisation and promoting sustainable markets.

The meeting was reminded by Dr Mamadou Niang (FAO) of the USDA-funded and STAR-IDAZ implemented <u>gap analysis meeting</u> of June 2023 (Cambridge UK), which identified research topics to include epidemiology and control, diagnostics, immunology, vaccines and therapeutics, bacteriology and anti-microbial use, pathogenesis and pathology. The meeting discussed the need to improve CBPP vaccine production capacity, research for vaccines providing longer immunity, DIVA tests, updated evidence for combined antibiotic and vaccination protocols, guidance on antibiotic use/types, improved diagnostic capabilities and techniques, and the assessment of the socio-economic burden of CBPP.

The meeting noted that the CBPP Chapter of the WOAH Terrestrial Code doesn't mention the use of antibiotics, which is a glaring omission on what guidance should be provided for/in endemic areas.

The International Reference Laboratories present (IZS Teramo, Italy and BNVL Sebele, Botswana), the Joint FAO/IAEA Centre (Vienna, Austria), and ILRI (Kabete, Kenya) presented their activities, showing continued efforts for technical capacity building for Member Countries/States, including twinning with candidate laboratories, support for research and innovation, networking and technical support for development of disease control strategies. During the discussion, Dr Musa Mulongo from ILRI mentioned that ILRI has been able to demonstrate no new cases of lung lesions following treatment with tulathromycin, unlike what is observed when using tylosin or tetracyclin. However, as noted earlier, the latter are the readily accessible antibiotics in most areas where use is allowed.

While discussing the need for better diagnostic tests including penside tests, it was mentioned that there are possibilities for better diagnostic tests coming from e.g. ID-Vet, but the prospects for broad marketing / commercialisation remain to be proven before such companies will consider scaling-up production.

The meeting resolved that while an international control or eradication strategy is currently unlikely to be supported or adopted, international coordination remains of paramount importance and should ideally be done under the GF-TADs mechanism, enabling coordinated support and information exchange. This will also enable the necessary linkages with what is happening in other regions, and with other partners, showing an interest in the recognition of freedom of CBPP disease / infection.

Session 6. Conclusion and Action Plan

Resulting from the various presentations made during the above-mentioned sessions, the last part of the programme (on 25 July) was dedicated to the preparation of the following considerations, and the following issues or action points that were identified :

Considering:

- I. That Member(s) Countries/States have competing priority diseases to address;
- II. The direct impact of CBPP to trade and economies, the volatility of market prices, loss of income, livelihoods, food insecurity, *antimicrobial resistance* (AMR), *antimicrobial use* (AMU), the effects of climate change and its environmental impacts, etc;
- III. That CBPP control efforts must be coordinated between Member(s) Countries/States;
- IV. That strategy development should be conducted through participatory approaches involving local communities, governments, regional and international organisations, and the private sector;
- V. The difficulties faced by some Member(s) Countries/States in implementing or enforcing appropriate surveillance, stamping out, quarantine measures, as well as the reluctance from communities to systematically report, fearing not only for business continuity (as market prices may be affected) but also the challenges of sanitary measures that may be applied;
- VI. The inadequate control tools available to date (i.e. vaccines, both in quantity and quality), the inadequate vaccination campaign monitoring tools and the limitations of exchanging biological materials in compliance with the Nagoya Protocol;
- VII. The role of AU-IBAR, AU-PANVAC, *Regional Economic Communities* (RECs), international partners, and research institutions in support of (coordination of) animal health actions in the region;

The meeting concluded as follows :

- a) Rationale for <u>national</u> strategic plans
 - Learning from Zambia and Nigeria, Member(s) Countries/States should fully understand the CBPP epidemiological situation in their territories to inform demarcation of epi-zones, e.g. infected zones, protection zones-with-vaccination, protection zones-without-vaccination, high-risk surveillance zones and CBPP free zones (without vaccination only);
 - Member(s) Countries/States should determine if they aim for (progressive) control or eradication of CBPP;
 - <u>In non-endemic zones</u>, facing occasional epidemics, Member(s) Countries/States are encouraged to consider test and slaughter methods, along with post-mortem inspections, as well as compensation mechanisms, considering PPPs and other innovations in compensation approaches. The strategy in such areas is to remove all clinical cases as soon as they are reported;
 - <u>In endemic zones</u>, Member(s) Countries/States should define effective vaccination approaches (coverage, frequency, vaccine choice) following appropriate protocols that are informed by scientific evidence targeting high vaccination coverage followed by

sero-monitoring to determine the effectiveness of the vaccination campaigns and the monitoring of the disease prevalence in Member(s) Countries/States;

- Member(s) Countries/States, <u>free of CBPP</u>, should nonetheless endeavour to put in place Official Control Programmes (OCP), endorsed by WOAH, emergency preparedness plans (EPP) and/or seek recognition by WOAH for official freedom of infection;
- In whichever scenario, Member(s) Countries/States should prioritise abattoir surveillance which is key to support targeted investigation and diagnosis of CBPP;
- Member(s) Countries/States, with the support of partners, should invest in basic diagnosis of CBPP to support early detection and are encouraged to collaborate on diagnosis, including sharing of diagnostic materials and disease information;
- The capacities and capabilities of Veterinary Services should be strengthened to support early detection and response to CBPP, including the use of available electronic tools (online, telediagnosis);
- Member(s) Countries/States are encouraged to (further) develop and seek endorsement of *Official Control Programmes* (OCP), a voluntary support mechanism provided by WOAH. The OCP acts as a checklist for monitoring progress and supports buy-in from stakeholders, donors and governments;
- Member(s) Countries/States should (continue to) enhance stewardship over the prudent use of antibiotics, implementing appropriate regulations and monitoring mechanisms, in particular where CBPP control is entrusted to the private sector, as a private good;
- The aspect of funding should be discussed during the development and validation of strategies to fast-track operationalisation of the action plans, once endorsed by Member(s) Countries/States.

b) Rationale for sub-<u>regional strategies and implementation modalities [RECs]</u>

- The regional economic communities (RECs) present are not in favour of developing sub-regional strategies but recognise that they play a critical role in facilitating collaborations between Member(s) Countries/States towards coordination and cooperation for CBPP control, enabling agreements on cross-border activities, harmonised surveillance and control programmes, common funded programmes, monitoring of progress, facilitating consultations, etc;
- Control efforts should be considered using an "epi-systems approach" ¹ based on information about CBPP infection foci, drivers of disease spread (animal movement, seasonality, value chains) and not necessarily the administrative boundaries of any REC;

¹ The **epi-systems approach** in animal health refers to the ecological systems that maintain disease agents in nature. More specifically, episystems are the interaction between pathogens, hosts and environment that maintain pathogens across space and time. They are not static; they evolve and change over time. The concept of epi-systems is rooted in disease ecology (Kilpatrick and Altizer 2010), population biology (Anderson and May 1979) and modern practical epidemiology (Vaughan *et al*, 2021). Central to the concept of epi-systems is identifying those component populations that serve as the reservoir of infection as opposed to those populations that may experience incidental disease but are not good transmitters and do not play an essential role in the maintenance of disease. Epi-systems are determined by the characteristics of the pathogen, the host populations and the environments that maintain them. Some agents have reservoirs such as persistently infected hosts capable of onward transmission or means of survival in the environment. This approach can be complemented by the **conventional value-chain approach**, i.e. a comprehensive method that involves analyzing the entire set of actors, activities, and flows involved in the provision of animal goods or services on a market. It's a major operational concept for socio-economic analysis at the meso level, widely used in development practice and still undergoing refinement to account for environmental and social sustainability.

- RECs will support the development and alignment of national strategic plans and implementation across countries where there are common risks (epi-systems);
- RECs will support the implementation of a continental strategy (*The Strategy*) at subregional level in liaison with the African Union leadership (AU-IBAR) and its partners;
- The development of collaborative project proposals and implementation by Member(s) Countries/States are encouraged through the RECs mechanism.

c) Rationale for a <u>continental</u> strategy

- AU-IBAR is regarded as the most appropriate authority / agency, with the necessary political weight, technical mandate and convening power to develop and help validate the continental Strategy (*The Strategy*) focusing on:
 - Strategic choices to be made between disease-specific (CBPP-focused) approaches, species-specific (cattle) approaches (multiple diseases) and/or value chain approaches;
 - The participation of key stakeholders;
 - Vaccination strategies which are compatible with the prevailing production (epi-) systems;
 - Cost effective approaches, combined with other transboundary animal disease or priority diseases, in terms of combined surveillance, vaccination, sero-monitoring, etc;
 - Capacity building needs at country and regional levels;
 - Standardised guidelines and protocols;
- The Strategy will inform programmes, meant to build the capacities and capabilities of Veterinary Services and ensure timely implementation of different disease strategies;
- There is a need for strong continental guidance and specific solutions for the deployment and delivery of vaccines, including the training of veterinary paraprofessionals and other cadres of personnel involved in vaccination campaigns and animal health in general;
- AU-PANVAC to be leading the Strategy in terms of continental oversight over vaccine development, vaccine production capacity and quality control, whilst international and regional (reference) laboratories will support laboratory capacity-building for multi-disease diagnostic services (differential diagnosis);
- The Strategy will involve a bottoms-up approach in terms of consultation, consider all stakeholders and will contain a cost-effective action plan with a robust *monitoring and evaluation* (M&E) system;
- The Strategy will include elements of gender-responsive animal health services such as gender inclusive vaccine delivery models, as well as socio-economic aspects of CBPP and other identified priority diseases.

d) Rationale for <u>international</u> strategy

• An international strategy or global eradication campaign is currently regarded as a lesser priority, but there is a need - at international level - to focus on advocacy, resource mobilisation, research coordination (alliance-type e.g. GFRA, GARA, etc), as well as a standardised framework or set of protocols to guide CBPP control, *cum*

eradication. This includes research on cost-effective combined approaches to inform vaccination strategies, and opportunities for synergy with other TADs;

- The World Organisation for Animal Health will continue to provide a framework for the endorsement of *Official Control Programmes* (OCP) and status' recognition;
- Existing and available laboratory networks will be used to enhance networking, data sharing and capacity development covering the entire laboratory services' value chain (i.e. scarce / expensive diagnostics). This therefore also includes innovative detection and characterisation strategies;
- International partners will (continue to) provide technical support and capacity building for surveillance, diagnostics and the use of appropriate tools to support CBPP control and eradication;
- Coordination of international initiatives will be conducted through existing GF-TADs mechanisms, using the available governance mechanisms at global and regional levels, including the *Standing Group of Experts* (SGE) for CBPP. These linkages and partnerships will avoid duplication of efforts.

Note that a dedicated SGE page was created on the GF-TADs for Africa website (hosted by WOAH Africa) in order to facilitate the sharing of information amongst members of the SGE (click the link) :

Contagious Bovine Pleuropneumonia - Standing Group of Experts (SGE) - Africa

Annex 1. Proposed amended terms of reference of the CBPP SGE for Africa

Standing Group of Experts on Contagious bovine pleuro-pneumonia for Africa

Introduction

Contagious bovine pleuro-pneumonia (CBPP) or lung sickness in cattle, caused by *Mycoplasma mycoides subsp. mycoides* (Mmm) is truly an African disease, long eradicated from the developed world, which represents a considerable burden for cattle owners in many parts of Africa (EMPRES-AH, FAO, 2013), from Senegal and the Gambia in the west through Somalia in the east, and as far south as Namibia and Tanzania.

In recent years, the disease has seen its area of spread increase in Africa (e.g. Senegal in West Africa, Gabon in Central Africa) and the number of outbreaks increase in areas where it was already present. It is currently being reported as present by around 18 countries (WAHIS, Jan – Jun 2019) with the latest outbreaks having been reported from Namibia (2021, 2020, 2019), Niger (2020) and the Gambia (2018).

As one of the listed diseases, subject to the procedure for official recognition of animal health status by the *World Organisation for Animal Health* (WOAH, founded as OIE), only four countries in Africa are currently officially free from CBPP, i.e. Botswana, Eswatini, South Africa (country-wide) and Namibia (zone located south of the *Veterinary Cordon Fence*, VCF). Namibia and Zambia are also the only countries having a WOAH endorsed official control programme for CBPP.

Several factors compound the control of CBPP: the fact that the disease is seen as a production disease, chronic and with rather limited mortality, that meat and meat products (excluding lungs) are regarded by WOAH as safe commodities according to the *Terrestrial Animal Health Code* (TAHC), irrespective of the disease status of the country or zone, that the disease is widely treated with antibiotics, mitigating the symptoms, but at the same time propagating the infection through carriers and -most importantly- the limited efficacy of the available vaccines, mainly based on the attenuated strains T1/44 and T1sr.

Though live attenuated vaccines (T1/44 and T1sr) are available, their protection is limited to maximum of 12 months, hence requiring considerable logistical efforts to attain protection at population level. An additional constraint to attain demonstrated absence of infection or disease is the need for animal identification and traceability systems to be in place.

As a result, CBPP can only realistically be controlled through a series of measures, one which is movement control, making it a truly transboundary animal disease. In a paper released in 1987, in the *Rev. sci. tech. Off. int. Epiz.*, Provost et al. affirmed that the eradication of CBPP was possible on the condition that all cattle are vaccinated for several years in a row and that all clinically affected animals need to be emergency slaughtered. The latest guidance on CBPP dates back to 2003 (the FAO – OIE - AU/IBAR - IAEA Consultative Group on Contagious Bovine Pleuropneumonia, Third meeting "Towards Sustainable CBPP Control Programmes For Africa",

Rome, 12–14 November 2003 - <u>http://www.fao.org/3/a-y5510e.pdf</u>), demonstrating that CBPP control has become a neglected public good.

<u>More information</u>: <u>Contagious Bovine Pleuropneumonia - Africa (woah.org)</u> and <u>Contagious bovine pleuropneumonia - World Organisation for Animal Health</u>

The *Standing Group of Experts* on CBPP (SGE-CBPP) for Africa is set up within the Food and Agriculture Organization of the United Nations / WOAH GF-TADs to promote regular exchange of information and best practices among concerned national veterinary authorities, international and national experts, and the private sector. The disease was identified as one of the 5 priority diseases under the GF-TADs Regional Strategy 2021 – 2025, adopted in October 2021.

The SGE-CBPP for Africa will start with a core group of 4 founding Members Countries drawn from Central (Chad), Eastern (Somalia), Southern (Zambia) and Western Africa (Nigeria), with the aim to progressively extend to more countries.

Objectives - Strengthening Africa regional cooperation and dialogue on CBPP control *through:*

- Regular information exchange on CBPP situation preparedness and control measures applied,
- Technical support for regular review of national and regional CBPP control strategies by experts, based on experiences and best-practices, with a view to provide scientific and technical advice,
- Technical formulation of disease control policies and scientific guidance to aid in the coordination of CBPP prevention and control efforts, integrated into other bovine disease control efforts, where applicable,
- Enhance / foster / promote regional collaboration on;
 - laboratory diagnosis by exchange of best practices and support capacity building,
 - applied research or adaptation of existing tools, including CBPP epidemiology, biosecurity, socioeconomics and vaccine upgrading,
 - technical support and guidance on awareness raising campaigns by exchange of best practices and tools to improve *risk communication, and community and stakeholders' engagement* (RCCE) and drive behaviour change,
 - technical support and guidance on cross-border surveillance and concerted risk management measures along the beef and dairy value chains, among countries in the Africa region;
- Regular communication/information exchange/sharing on the outcomes of the group discussions to other Member Countries and all stakeholders,
- Coordination on technical support and guidance on identification of priorities for the development and adaptation of existing tools, training needs, and CBPP control projects relevant for the region,

Composition

The composition should be diversified in origin, with experts drawn from veterinary services, the dairy and beef industry, academia, research institutions, NGOs acting on CBPP or bovine production development, private sector along the value chain.

- The founding Member Countries (**Chad, Nigeria, Somalia** and **Zambia**) will establish the SGE CBPP for Africa. Experts from other countries in the region will be included in SGE CBPP when relevant according to the extension of the engagement of more countries to active CBPP control strategies.
- AU-IBAR, <u>AU-PANVAC</u>, Regional Economic Communities (COMESA Secretariat, ECCAS-RAHC, ECOWAS-RAHC, IGAD-ICPALD, and SADC-LTC), FAO and WOAH regional representations, ILRI, the Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture and other regional organizations active in the field of animal disease control strategies.
- Regionally and internationally recognized CBPP experts with experience working in Africa will be included in the group on an ad hoc basis.
- Experts from WOAH and FAO reference laboratories and collaborating centers, as well as selected national/regional laboratories: the Pan-African Veterinary Vaccine Centre of the African Union (AU-PANVAC) Debre-Zeit Ethiopia, the Animal Health Institute (AHI) Sebeta Ethiopia, the National Veterinary Research Institute (NVRI), Vom Nigeria, the Botswana National Veterinary Laboratory (BNVL) Gaborone Botswana and the Laboratoire Central Vétérinaire (LCV) Bamako Mali.
- Additional international recognized experts drawn from universities/academia, partners and donors on CBPP or other technical topics to be invited by the group to support the SGE-CBPP on an ad hoc basis.

Governance

The SGE-CBPP will be established under the umbrella of the GF-TADs for Africa. It will report to the GF-TADs *Regional Steering Committee* (RSC) for Africa and will liaise with other GF-TADs regional platforms working on CBPP, where relevant.

Chair: The meetings will be rotational hosted by founding Member Countries of the SGE- CBPP with host to chair the meeting upon agreement of SGE- CBPP.

The *World Organisation for Animal Health* (WOAH) Regional Representation for Africa, based in Bamako, Mali (RR AF) will act as Technical Secretariat in coordination with the *Food and Agriculture Organization* of the United Nations (FAO) Regional Office for Africa (RAF).

Funding mechanism

- Meeting costs of representatives from African Member Countries and costs for the logistical organization of meetings will be covered by the three organizations (FAO, WOAH and AU-IBAR). Other members are expected to cover their own expenses or seek funding from partner organizations.
- The costs of the operation of the Technical Secretariat will be covered by WOAH.

Meeting mechanism

- The meetings will take place in the SGE-CBPP Member Countries, on a rotating basis and will be called by the GF-TADs Regional Secretariat;
- The SGE-CBPP will meet in person at least once a year, electronic consultations and online meetings may be organised between meetings;
- <u>Language</u>: English and French with simultaneous interpretations;
- Host country to assist technical Secretariat in identification of appropriate meeting venue / hotel and provide logistical support, including transfer from the hotel and, if possible, either welcome dinner or social evening;
- Summary minutes of the meeting to be prepared by the SGE-CBPP Technical Secretariat, circulated to participants by email and published on the website of the WOAH Regional Representation for Africa.

Meeting attendees

- Founding Member Countries:
 - WOAH Delegate (CVO or appointed representative of CVO),
 - \circ $\;$ National CBPP technical experts in the topic being covered.
 - Total number from each founding member country should not exceed two persons (with exception of host when hosting physical meetings)
- **Subject-matter experts** selected from recognized international and regional CBPP and/or cattle disease experts.
- Representatives of AU-IBAR, FAO and WOAH
- **Representatives of partner organizations:** upon agreement of the members of the group.
- **Meeting observers:** upon agreement of the hosting member.

Annex 2. List of participants

No	Duty Station	Name	Surname	Organisation
1	Austria	Farai	Muchadeyi	FAO/IAEA
2	Botswana	Moetapele	Letshwenyo	WOAH
3	Botswana	Leruo	Keokilwe	BNVL
4	Botswana	Gaolathe	Thobokwe	SADC
5	Botswana	Nomsa	Thekiso	WOAH
6	Canada	Najete	Safini	IDRC
7	Ethiopia	Charles	Bodjo	AU-PANVAC
8	France	Gregorie	Bazimo	WOAH
9	Ghana	Mamadou	Niang	FAO
10	Italy	Akiko	Kamata	FAO
11	Italy	Massimo	Scacchia	IZS Teramo
12	Kenya	Hiver	Boussini	AU-IBAR
13	Kenya	Huyam	Salih	AU-IBAR
14	Kenya	Musa	Mulongo	ILRI
15	Kenya	Patrick	Bastiaensen	WOAH
16	Kenya	Viola	Chemis	WOAH
17	Mali	Hassane	Elhadji Adakal	RAHC WA
18	Nigeria	Maryam	Muhammad	NVRI
19	Nigeria	Janada	Danladi	FMAFS
20	Gabon	Moussa	Baschirou	RAHC CA
21	Zambia	Yoseph	Mamo	COMESA
22	Zambia	Cornelius	Mundia	MFL
23	Zambia	Charles	Maseka	MFL
24	Zambia	Nawa	Mabuku	MFL
25	Zambia	Leonard	Sampa	MFL
26	Zambia	Benson	Bowa	CVRI, MFL
27	Zambia	Fusya	Goma	MFL
28	Zambia	Jila	Mweemba	Interpretor
29	Zambia	Rene	Kamachi	Interpretor

