





19th meeting of the FAO-WOAH Rinderpest Joint Advisory Committee

Virtual, 26th April 2024



1. Opening remarks and adoption of the agenda

The 19th meeting of the FAO-WOAH Rinderpest Joint Advisory Committee (JAC) was opened by the FAO-WOAH Rinderpest Secretariat which welcomed the participants and led a round of introductions.

Dr Thanawat Tiensin provided opening remarks on behalf of the Food and Agriculture Organization of the United Nations (FAO). Dr Tiensin congratulated WOAH on its 100th anniversary and complimented the good working relationship between the two organisations. Dr Tiensin individually welcomed the members of the Committee and highlighted the importance of their mission as part of the second phase of the post-eradication era. Dr Tiensin also noted the remarkable progress achieved in the sequestration and destruction of rinderpest virus containing materials (RVCM) in the previous 12 years.

Dr Montserrat Arroyo took the floor on behalf of the World Organisation for Animal Health (WOAH). Dr Arroyo expressed her appreciation for the two members of the previous JAC who had accepted to remain in the Committee and thanked the new members for accepting the invitation from FAO and WOAH. Dr Arroyo emphasized the importance of the work that would be done by the group with regards to developing recommendations and improving processes which are key in maintaining global freedom. She also highlighted that the Committee would provide valuable science-based opinions to advocate with the five countries still holding RVCM, and to continue the progressive reduction of RVCM held in FAO-WOAH designated Rinderpest Holding Facilities (RHFs).

The agenda was adopted, as per Appendix I.

The list of participants is included as Appendix II.

The action items from the present meeting are included in this report as Appendix III.

All action items from the 18th meeting have been addressed and hence have not been included in this report.

2. Progress and achievements 2012-2023, objectives for the next 3 years, recommendations of GFTADs MC 45 and 47, and recommendations of the RHF meeting

The co-chairs of the GF-TADs Rinderpest Secretariat, Dr Mariana Marrana (WOAH) and Dr Muhammad Javed Arshed took the floor to deliver a presentation covering the progress and achievements of the previous decade and the recommendations recently issued by the GFTADs Management Committee and the members of RHF network. The presentation started with an overview of the mandate of FAO and WOAH in the post-eradication era, as stated by FAO Resolution 4/2011 and WOAH Resolution 18/2011, which has been upheld by the organisations. The group was then informed of the progress in the number of laboratories holding RVCM – from 44 laboratories in 35 countries in 2012 to 5 laboratories in 5 countries in 2024, in addition to 7 RHFs in 6 countries. The process for inspection and designation of RHFs, the establishment of rinderpest vaccine reserves, the development of SOPs for handling/destroying/shipping RVCM and the review/acceptance of over 10 research projects were mentioned as successes. Additionally, the Secretariat highlighted the publication of the Global Rinderpest Action Plan (GRAP) and of the Rinderpest History Book, the organisation of 8 advocacy meetings and simulation exercises, and the development of an array of communication and education tools. The group was informed of the priorities for the second phase of the post-eradication era:

- Reduce the number of RHF Category A (while maintaining the capacity of Reference Lavoratories)
- Explore options for additional rinderpest vaccine reserves (RVR) and increase the number of vaccine doses. Develop an arrangement between FAO RVR for vaccined deployment
- Development of a non-infectious cELISA to allow for surveillance for proof of freedom in case of re-

emergence of rinderpest

- Continue the destruction of RVCM while keeping the genetic information
- Maintain awareness of rinderpest among veterinarians, livestock keepers, and academia
- Resource mobilization to continue biothreat reduction

The recommendations of the GFTADs Management Committee (MC) made on the occasion of its 47th and 48th meetings were shared with the members of the JAC. At the 47th meeting, the MC requested that the JAC consider developing an opinion on the capacity/need to produce vaccine in the absence of infectious virus. It was noted that a discussion on this topic had aready been initiated at the 3rd RHF meeting in December 2023 and, at the time, the members of the network deemed that there was no need to prioritize new rinderpest vaccines as the risk of the live attenuated vaccine did not justify the investment or the workload. Secondly, at the 48th meeting, the MC asked that the JAC individually assessed the risk of the materials held by the five countries holding RVCM outside FAO-WOAH designated RHFs and addressed individual, science-based advisory statements to these countries. Subsequently, the recommendations made by the members of the RHF Network during its 3rd meeting, in December 2023, were listed. These included (i) the launch of funded calls for proposals for "sequence & destroy" projects to encourage non-RHFs to apply; (ii) the calculation of the cost of becoming an RHF to be used as an advocacy argument; (iii) the organisation of vaccine deployment simulation exercises; (iv) the dissemination of information regarding the current diagnostic options using non-infectious materials (to be used as an advocacy argument); and (v) the increase of exchanges and collaboration with the PPR community. Finally, the objectives for the 3-year mandate of the JAC were outlined. These included (i) the delivery of a science-based advisory statement to each of the 5 countries still holding RVCM; (ii) the development of an opinion on the definition of "essential RVCM"; (iii) the development of an opinion regarding the capacity/rationality to produce vaccine in the absence of infectious virus; and (iv) the development of a strategy to reduce the number of RHF Category A.

Action item 1 – Rinderpest Secretariat to share the inventories of the 5 countries holding RVCM outside RHFs with the JAC and enquire about the Committee's preferred way of working on this topic

Action item 2 – A member of the JAC to do a rough calculation of the cost of being a RHF Category A for a 3-year period

Action item 3 – Rinderpest Secretariat to facilitate an online (written) discussion capacity/rationality to produce vaccine in the absence of infectious virus

3. Review of pending research applications:

Two research proposals had been submitted to the FAO-WOAH Rinderpest Secretariat to be reviewed by the Committee. The first proposal had been submitted by the Centre de Cooperation en Recherche Agronomique pour le Developpement (CIRAD), France, a Rinderpest Holding Facility Categories A & B, and was titled "SD24: Sequencing and destruction of last RPV isolates remaining at Rinderpest Holding Facility (RHF), CIRAD, France". This proposal received unanimous support from the Committee members. The good coordination of CIRAD with The Pirbright Institute to avoid working on isolates that had already been sequenced was praised. The Committee recommended that FAO and WOAH approved the proposal. A second proposal had been submitted by the National Institutes for Animal Health, Kodaira, Japan, a Rinderpest Holding Facility Category A, and was titled: "Sequence and Destroy Project regarding Rinderpest Inventory of NIAH Kodaira". This proposal was well received by the Committee. However, the Committee requested that the Rinderpest Secretariat forward a set of questions to NIAH to clarify points related to the management of risks.

Action item 4 – FAO to inform CIRAD of the outcome of the review of the research proposal by the Committee.

Action item 5 – WOAH to inform NIAH of the outcome of the review of the research proposal by the Committee.

4. Discussion: list of "essential RVCM"

Dr David Ulaeto initiated a discussion on the concept of essential RVCM. Dr Ulaeto started by reminding the Committee which types of materials fall under the RVCM definition, per the WOAH Code chapter on rinderpest¹. It was noted that it is important for laboratories to keep serum samples due to their use in diagnostic testing. Serum can be heat-inactivated which removes it from the scope of the RVCM definition and makes it safe for keeping. Also, it was mentioned that WOAH/FAO Reference Laboratories for rinderpest would need to keep certain materials to ensure diagnostic capacity, and that the National Competent Authorities of the countries where such laboratories are located would have a say in determining which materials should be kept for preparedness together with the laboratory leads. The Committee agreed that the discussion needed more time for reflection than that available during the meeting and agreed to launch an online written discussion on the topic. The key points under discussion would be: 1) whether or not plasmids containing the whole genome fall under RVCM, 2) whether plasmids containing a field strain instead of a vaccine strain should be considered "essential RVCM" or if their systematic destruction should be recommended, and 3) check if recombinant viruses containing partial genomes (such as capripox viruses used as vectors) fall under the RVCM definition.

Action item 6 – Rinderpest Secretariat to facilitate an online (written) discussion about the concept of "essential RVCM", which will feed the discussion/approach to the reduction and progressive extinction of RHFs Category A.

5. Review of the Rinderpest Holding Facility (RHF) inspection checklist

Ms Catherine Robertson led the discussion on the RHF inspection procedure. Ms Robertson offered a comparison of the procedures used by the World Health Organization in the inspection of the two designated smallpox repositories and those used by FAO and WOAH in RHF inspections. The checklist used by WHO is based on the CWA 15973 Laboratory Biorisk Management standard and includes 16 areas. The findings of the inspection team are assigned a level of priority (1-3) which determines how urgently these need to be addressed by the laboratory. It was noted that the checklist developed in 2014 by the JAC was too lengthy for the scope of the current RHF inspections, it was not based on a risk assessment, and a number of the points there listed were outside of the scope of the mandate of RHFs, such as animal work. A member of the JAC shared their experience with RHF inspections, noting that the inspection has steered away from assessing the compliance of the laboratory with the RHF mandate and included areas which had no connection with planned work. Dr Marrana noted that in cases in which the inspected RHF Category A is also a WOAH Reference Laboratory, the inspection team should be mindful of not including the Reference Laboratory activities in the

¹ Rinderpest virus (RPV)-containing material means field and laboratory strains of RPV; vaccine strains of RPV including valid and expired vaccine stocks; tissues, sera and other material from animals known or suspected to be infected; laboratory-generated diagnostic material containing live virus, recombinant morbilliviruses (segmented or nonsegmented) containing unique RPV nucleic acid or amino acid sequences; and full-length genomic material including viral RNA and its cDNA copies.

Subgenomic fragments of RPV genome (either as plasmids or incorporated into recombinant viruses) that cannot be incorporated into a replicating morbillivirus or morbillivirus-like virus are not considered to be RPV-containing material, neither are sera that have been either heat-treated to at least 56°C for at least two hours, or shown to be free from RPV genome sequences by a validated RT-PCR assay.

scope of the inspection. However, should research work involving rinderpest virus be planned (whether it has already been revied by the JAC or not), the inspection could cover the areas that would be used for such work. Ms Robertson informed the group that a review of the RHF inspection checklist had been started with the assistance of FAO. The revised version should follow a risk-based approach and adopt the element format with the possible addition of a specific section for animal work. With regards to the inspection process, it was suggested that the list of documents was shared with the RHFs with enough time in advance for the RHF to provide the documents ahead of the inspection (when possible), that a self-assessment form is provided ahead of the inspection, and that the updates to the facility/procedures/manuals since the previous inspection are highlighted in the documents provided.

Action item 7 – Rinderpest Secretariat to continue working with the JAC to finish the update of the checklist and inspection SOP ahead of the CIRAD site inspection.

6. Meeting summary and dates of next meeting

FAO and WOAH thanked the JAC members for their time and expertise.

The 20th meeting of the JAC will be held at the FAO Headquarters, Rome, at a date yet to be determined.

Appendix I

$\mathbf{19}^{\mathsf{TH}}\,\mathsf{MEETING}\,\mathsf{OF}\,\mathsf{THE}\,\mathsf{RINDERPEST}\,\mathsf{JOINT}\,\mathsf{ADVISORY}\,\mathsf{COMMITTEE}$

Virtual, 26th April 2024

Agenda

Time (CET)	26 th April 2024	Speaker	
14:00-14:15	Opening, introduction and welcome remarks	Thanawat Tiensin (FAO) Montserrat Arroyo (WOAH)	
14:15-14:45	Progress and achievements 2012-2023, objectives for the next 3 years, recommendations of GFTADs MC 45 and 47, and recommendations of the RHF meeting	Rinderpest Secretariat	
15:00-15:15	Break		
15:15-15:45	Review of pending research applications:	Rinderpest Secretariat to	
	 CIRAD, sequence and destroy 	lead	
	 NIAH, sequence and destroy 		
15:45-16:30	Discussion: list of "essential" rinderpest virus containing	David Ulaeto to lead	
	materials (RVCM)		
16:30-17:30	Review of the Rinderpest Holding Facility (RHF)	Cathy Robertson to lead	
	inspection checklist		
	End of meeting		

Appendix II

19th MEETING OF THE RINDERPEST JOINT ADVISORY COMMITTEE

Virtual, 26th April 2024

List of participants

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Appendix III

19th MEETING OF THE RINDERPEST JOINT ADVISORY COMMITTEE Virtual, 26th April 2024

Action Items from the 19th Meeting

No	Item	Responsible party	Deadline
1	Rinderpest Secretariat to share the inventories of the 5 countries holding RVCM outside RHFs with the JAC and enquire about the Committee's preferred way of working on this topic	WOAH	31 st August 2024
2	A member of the JAC to do a rough calculation of the cost of being a RHF Category A for a 3-year period	FAO to liaise with JAC member	31 st August 2024
3	Rinderpest Secretariat to facilitate an online (written) discussion on the capacity/rationality to produce vaccine in the absence of infectious virus	WOAH	31 st August 2024
4	Inform CIRAD of the outcome of the Committee's review	FAO	15th May 2024
5	Inform NIAH of the outcome of the Committee's review	WOAH	15th May 2024
6	Rinderpest Secretariat to facilitate an online (written) discussion about the concept of "essential RVCM", which will feed the discussion/approach to the reduction and progressive extinction of RHFs Category A.	WOAH	31 st August 2024
7	Rinderpest Secretariat to continue working with the JAC to finish the update of the checklist and inspection SOP ahead of the CIRAD site inspection.	FAO	31 st August 2024