



Food and Agriculture
Organization of the
United Nations



World
Organisation
for Animal
Health

MEETING OF THE RINDERPEST JOINT ADVISORY COMMITTEE

Rome, 27 – 28 June 2017



1. Welcome and Introduction

The meeting was opened by Dr Berhe Tekola, Director of the Animal Production and Health Division at FAO, who welcomed the participants and thanked the Secretariat for organizing the meeting. Dr Tekola encouraged the Secretariat and the JAC to continue to work toward maintaining global vigilance against rinderpest. The importance of concentrating efforts toward raising disease awareness and prevention was emphasized, so that the world may be prepared in the event of rinderpest re-emergence.

Ms Tianna Brand, Head of the OIE Programmes Department, emphasized the progress made on the post-eradication efforts with expert advice of the JAC, such that the policies developed and decisions taken on rinderpest as part of the post-eradication activities will serve as an example for other diseases, such as the Global Strategy for the Control and Eradication of PPR.

The Chair, Dr Junaidu Maina, recognized the competence of the Secretariat and JAC members to take the next steps in the post-eradication era. Since 2012, the JAC has been able to continue as a coherent group due to the efforts and expertise of its members. In order to use rinderpest eradication as a model for other transboundary animal diseases, the JAC is prepared to meet a high level of expectation. Dr Maina reviewed the expected outcomes of the meeting, namely the review of applications for Rinderpest Holding Facilities (RHF), further discussion on the development of the Global Rinderpest Action Plan (GRAP) and Operational Framework for the Management and Deployment of Rinderpest Vaccine Reserve (RVR), and an update on the status of efforts concerning sequestration and destruction.

2. Adoption of the agenda

The draft agenda was adopted with the addition of one item;

1) Empowering of reference centers to perform diagnostics, presented by the FAO Co-secretariat on the morning of the second day.

3. Action items from last meeting

Action items established at the 10th meeting of the JAC were completed with the exception of items;

- 2.2. Draft Contingency Plan; FAO to assist Iran.

Ongoing

- 7. Update the diagnostics components of chapter 2.1.19 on Rinderpest in the OIE Manual; Dr Libeau to lead this task and to accept comments from other Committee members. The version with comments from JAC will be sent to the OIE.

The chapter is expected to be adopted by May 2018

- 10. JAC to write recommendation to stop quality control of vaccine using live animals in Japan and proposing alternative potency and identity testing methods.

Not completed

- 13. Sign the data sharing agreement between FAO and the OIE.

Unnecessary to sign a data sharing agreement, data has already been shared.

- 14. Secretariat and JAC to write chapter on virus sequestration in Rinderpest History book.

Ongoing

4. Conclusions from the Outreach Meeting in Kathmandu, Nepal

FAO Co-secretariat presented **Conclusions from the Outreach Meeting in Kathmandu, Nepal**. Thirteen countries were represented, with a total of 45 participants including representatives of the

Rinderpest Secretariat, AU-IBAR, JAC, RHF, and donors. The participation of the two JAC members was paramount to the success of the meeting. Meeting objectives to 1) share the status of the global situation in terms of rinderpest virus containing material (RVCM) holdings, 2) advocate for RVCM destruction and sequestration, 3) present the GRAP and the Operational Framework for the RVR for feedback, and 4) establish a network of RHF – were met, and the risks of rinderpest re-emergence were illustrated. By displaying of the global map of countries currently holding RVCM stocks, the participating countries took the opportunity to identify other facilities in countries holding RVCM stores.

Countries were encouraged to seriously consider destroying or transferring their RVCM including vaccine stocks or, as a last resort – for those with vaccine stocks to apply to host a Category B RHF. It was highlighted that the FAO offers assistance to countries upon request to destroy and/or to sequester material in a RHF.

Participants provided valuable input to the GRAP which covers preparation and contingency planning and intends to establish procedures, chain of command and responsibilities for preventing an outbreak of rinderpest and to eliminate it and mitigate its consequences in case it occurs. The Operational Framework for the RVR was discussed, and solutions for its inherent challenges were suggested. The Secretariat will keep participants engaged in the GRAP's development and will provide opportunities for further feedback. Countries, continental/regional organizations, RHF and vaccine manufacturers are encouraged to continue progress on their respective National Contingency Plans (NCPs). Participants provided valuable feedback on the design and development of the regional Table-Top Exercises (TTX) in East Africa and South Asia that are intended to test and improve upon the GRAP.

The RHF network, which was established at the meeting in Nepal, agreed to work toward the development of a non-infectious diagnostic tool and to make it available for emergency response.

The JAC was presented with maps of the global RVCM stores before (based on the 2011 FAO questionnaire and the annual ERRS reports sent to the OIE from 2013-2016) and after the Nepal meeting. A suggestion was made by the JAC to add country names to the map and to publish these names on the FAO website. The issues of sensitivity and risk implications of publishing this information were raised. It was decided to publish only names of those countries that have destroyed RVCM since 2011.

- **Action Item 1** FAO to develop and publish a map with countries that have destroyed RVCM since 2011
- **Action Item 2** Secretariat to develop a strategy for following up and confirming with countries where there are discrepancies in official reported data to FAO and OIE, and data collected through other means

5. Update on the Pirbright Institute and CIRAD sequence and destroy projects

Progress has been made at the Pirbright Institute and CIRAD in their respective Sequence & Destroy projects. At the Pirbright Institute, 35 isolates were sequenced at over 90% recovery.

CIRAD has 30 to 40 viral genomes nearly sequenced, and intends to discontinue sequencing thereafter. A suggestion was made by the JAC that samples be destroyed upon determining that the genome has been sequenced to the extent possible.

- **Action item 3** The Secretariat will undertake a review of the conditions of the projects with the project reports to ensure alignment with the expectations.

6. Feedback on the Global Rinderpest Action Plan (GRAP)

The GRAP framework is consistent with the five Good Emergency Management Practices (GEMP) published by FAO and the general emergency management cycle of prevention/ mitigation, preparedness, response and recovery. The Operational Framework for RVR provides a framework for vaccine deployment and vaccination strategy which are integral components of the plan. TTXs to test the

GRAP are scheduled for early October in Kenya, and early December in India. JAC members expressed interest in assisting in the development and participating in the TTX. Feedback provided at the Nepal meeting included a suggestion to reverse the layout order to national, continental/ regional, and international levels, so that the national level is prioritized.

A suggestion was made by the JAC to include a section on identifying gaps in the GRAP document. There is a need to have a standardized submission form to submit rinderpest suspect samples to the national labs. In an emergency, prior agreements may be compromised due to convenience and self-interest. Therefore, there is need for solid political agreements that withstand during an emergency. Suggestions were made to include the necessity of NCPs.

7. Feedback on the Operational Framework for Management and Deployment of the Rinderpest Vaccine Reserve (OF-RVR)

The OF-RVR addresses the request, deployment and use of vaccine held by Category B RHF in the event of a rinderpest re-emergence, as well as the management of the reserve in *peace time*. Feedback provided at the Nepal meeting included that production of additional vaccine should begin as soon as the first country with a confirmed case of rinderpest requests vaccine - if not to contain the outbreak, then to replenish the reserve.

The JAC commented that the estimated response time of 15 days for vaccine arrival is reasonable as long as stamping out starts immediately after case confirmation. The bottleneck lies in the declaration of global emergency by FAO and OIE. A suggestion was made from the JAC to approach funding bodies for an agreement on funds for vaccination logistics and vaccine deployment in the event of an outbreak. FAO Co-secretariat noted that there will be a meeting for stakeholders to pledge commitment to the GRAP and to providing emergency support.

- **Action item 4** JAC to provide feedback on GRAP and OF-RVR due by 14 July
- **Action item 5** FAO to contact a consultant to write the section on vaccination strategy in the GRAP by 14 July
- **Action item 6** OIE to provide comments on SOP; Inactivation of Residual Rinderpest Virus in Sera Potentially containing RPV by 14 July
- **Action item 7** OIE to discuss GRAP, RVR, and the way forward in the post-eradication era at the 2nd OIE Biological Threat Reduction conference in Ottawa, from 31 October to 2 November 2017. Prepare presentation and abstract for JAC Chair by 1 August.
- **Action item 8** Secretariat to plan for a stakeholder meeting for further feedback and buy-in on GRAP and RVR
- **Action item 9** FAO to publish the GRAP, including the OF-RVR by March 2018

8. Update on applications for RHF

An update on pending and potential RHF applications from five countries was provided; China, Iran, France, India, and Russia. A suggestion was made by the JAC that consideration be given to designating facilities keeping vaccine seed in BSL 3 as Category A facilities with no intention to manufacture vaccine.

9. Guidelines for biorisk management in the (re-)evaluation of RHF

The first draft of the Guidelines for Biorisk Management in the (re-)evaluation of RHF was presented. A comment was made by the JAC that the guidelines are pertinent for facility staff and inspectors; however, they should be simplified. It was agreed that the Secretariat will provide a template for the facility to provide a report for the three-year term in order to apply for renewal of its designation as a RHF. The template will be sent to the facility in advance of 6 months prior to the designation expiration date. It was agreed that the renewal of RHF designations would involve a review of facility reports and may involve discretionary on-site visits as needed.

- **Action item 10** Secretariat to prepare a template for reporting that will include elements from the Guidelines for Biorisk Management by the 12th JAC meeting in December 2017.
- **Action item 11** JAC to provide comments on Guidelines for Biorisk Management by 21 July

10. Rinderpest Differentiation of Infected from Vaccinated Animals (DIVA) Vaccine

An overview was provided on the development of a DIVA vaccine for rinderpest. A DIVA vaccine is advantageous as it is non-infectious, and a suggestion was made by the JAC to look for funding. The FAO position regarding a DIVA vaccine is not to encourage development of a new vaccine which requires RVCM to be handled *in vitro* and *in vivo*. The JAC proposed to draft a Concept Note on development of DIVA vaccine according to a JAC member's suggestion.

11. Reference Vaccine Virus Seeds

FAO proposed to set up a bank for reference vaccine strain master and product seeds at the RHF's. FAO would announce to countries that it has a vaccine bank in case of an emergency.

- **Action item 12** FAO to prepare a summary on Reference Vaccine Virus Seeds

12. Non-infectious molecular diagnostic tool

It was emphasized that development of a non-infectious molecular diagnostic test, such as a serological non-infectious ELISA and molecular test (RT-PCR), is essential for the recovery period in the event of a rinderpest re-emergence. At the Nepal meeting, FADDL gave a presentation on Q Beta phage to use as a positive control for real-time RT-PCR. The Pirbright Institute has obtained validation of the RT-PCR test and is performing the test annually using infectious materials as part of their efforts to ensure that diagnostic capability is maintained. During the meeting in Nepal, there was agreement between The Pirbright Institute and FADDL to work on the assembly and testing of the Q Beta phage as a non-infectious positive control for the real-time RT-PCR, which would include a proficiency panel for inter-laboratory comparison. It is expected that the same kind of diagnostic test be implemented at the National Laboratory level, in case the non-infectious control proves to be successful by the proficiency panel.

13. Empowering reference centers to perform diagnostics

JAC agreed that the reference laboratories should be empowered to be proficient in diagnostic activities for rinderpest as per their mandate and in case of an emergency. Tests need to be available in case there is a suspect case, with the condition that if a reference laboratory must handle virus, it must inform the Rinderpest Secretariat in advance.

- **Action item 13** JAC to prepare conditions for empowering reference centers to undertake diagnostic activity and share it with reference centers
- **Action item 14** FAO to update research application form to allow reference laboratories to apply for conducting research projects, even if they are not RHF's.

14. Updates on OIE resolutions, standards, and manual chapter

OIE Terrestrial Code chapter 8.15. *Infection with Rinderpest Virus* Article 8.15.6 was discussed. It was pointed out that a non-infectious diagnostic test would be crucial for surveillance with the purpose of regaining status of freedom in case of a rinderpest occurrence.

An update on the status of revision of the OIE Terrestrial Manual chapter 2.1.19. was given by the Co-Secretariat. Drs Geneviève Libeau and Michael Baron are expected to harmonize the versions that received comments from the three reference laboratories and the JAC and share the final version with the OIE in August 2017. The updated chapter would be adopted in May 2018.

OIE Resolution No. 21, approved at the last General Session, in May 2017, was presented to the JAC. This Resolution was an update to Resolution No 18 (GS79, 2011) that aimed to update the text with regards to removing references to BSL 3, eliminating references to actions that were already concluded and reiterate the importance of sequestration & destruction as well as preparedness.

JAC was informed about the current status of removing appropriately heat-treated sera from RVCM definition, which requires updating the OIE Article 8.15.2.1) The OIE Co-secretariat reported that the

change in RVCM definition had already been accepted by the OIE Scientific Commission for Animal Diseases, and the OIE Code Commission had already prepared and circulated the draft among OIE Members. The draft is expected to be approved in May 2018 at the OIE General Session.

15. Revision of the RHF annual report form

The RHF annual report form will include a provision for inventory of destruction of RVCM during the reporting period.

- **Action item 15** FAO to provide revised annual report form to include items destroyed during the last 12 months in the inventory tables.

16. FAO and OIE communication and advocacy activities/ awareness raising

FAO and the OIE presented the respective communication campaigns. FAO is following a “communication for development” approach and targeting specific countries, while the OIE is working with its Members’ National Veterinary Services as the advocates for the campaign implementation. The Communications Departments of both organizations will remain in contact so that no overlapping occurs.

17. Web-based reporting system for RHF

The OIE gave an update on the status of developments of the Rinderpest Virus Tracking System. This will be a web-based database platform for RHF to update their inventories and real time and to report annually to FAO and OIE. The timeline of the project was presented and the platform is to go live by May 2018. The RHF, as well as the FAO, will be contacted frequently by the OIE to contribute to the project and to guarantee that the platform suits everyone’s’ need as much as possible.

18. Electronic Rinderpest Reporting System (ERRS)

The OIE provided an overview on its Members ERRS 2016 survey. The response rate was 100% and the number of countries holding RVCM has steadily decreased since 2013. It is expected to go even lower in 2017 ERRS reports, as some countries destroyed their RVCM after the 1 November deadline.

19. Update Rinderpest Roadmap

The roadmap was updated and will be amended according to the JAC recommendations.

- **Action item 16** Rinderpest Secretariat to update Roadmap

20. Date of Next Meeting

The following dates for the 12th Meeting of the JAC were proposed and agreed to:

- 19 and 20 December 2017 at the OIE Headquarters in Paris.

Closing Remarks

Closing remarks were made by Dr Juan Lubroth, FAO Chief Veterinary Officer, who was pleased with the progress of the JAC and Rinderpest Secretariat in the post eradication era.

Appendix I

**11TH MEETING, RINDERPEST JOINT ADVISORY COMMITTEE
Rome, 27 – 28 June 2017**

Ethiopia Room (C285/9)

Agenda

Tuesday 27 June 2017	Item	Speaker/Chair
9:30 – 10:40	Introduction and Welcoming	B Tekola T Brand J Maina
	Adoption of the agenda	J Maina
	Action items from the last meeting	FAO
	Conclusions of Nepal meeting and way forward	S Metwally
10:40 – 10:55	<i>Coffee break</i>	
10:55 – 13:15	Update on Pirbright and CIRAD sequence and destroy projects	G Libeau/OIE
	Feedback on the Global Rinderpest Action Plan (GRAP)	L Myers
	Feedback on the Operational Framework for the Rinderpest Vaccine Reserve (RVR)	M Marrana
13:15 – 14:30	<i>Lunch break</i>	
14:30 – 16:45	Update on applications for RHF's a. Pending (CIRAD, China, Iran) b. Expected (India, Russia, ...?) c. Discussion on holding vaccine virus seeds in RHF category A facility (BSL3)	FAO/OIE
	<i>Coffee break</i>	
	Guidelines for biorisk management in the (re-)evaluation of RHF	M Marrana
	Rinderpest DIVA vaccine	D Ulaeto
	End of day 1	

Wednesday 28 June 2017	Item	Speaker/Chair
9:00 – 10:30	Summary of day 1	
	Ref Vaccine Virus Seeds Non-infectious molecular diagnostic tool Empowering reference centers to perform diagnostics	S Metwally
	OIE Chapter's procedure of recovery in case of RPV re-occurrence	M Salman
	Updates on OIE resolutions, standards, and manual chapter	OIE
10:30 – 10:45	<i>Coffee break</i>	
10:45 – 12:55	Revision of the RHF annual report form	A Skrypnyk
	FAO and OIE communication and advocacy activities/ awareness raising	FAO/OIE
	Web-based reporting system for RHF's	OIE
	ERRS/RHF reports 2016	OIE
	Update Rinderpest Roadmap	All
	Date of next meeting	All
	End of meeting	

Working documents

1. Meeting agenda and participant list;
2. 10th JAC Meeting report;
3. Response to action items from last meeting;
4. Draft Communique from Nepal meeting;
5. Participant list from Nepal meeting;
6. Global Map of RVCM Status as of June 2017;
7. Global Rinderpest Action Plan (GRAP) draft;
8. Operational Framework for Management and Deployment of the Rinderpest Vaccine Reserve (RVR) draft;
9. Draft Guidelines for Biorisk Management in the (re)evaluation of Rinderpest Holding Facilities;
10. TAHSC comment on Article 8.15.2 of the OIE Terrestrial Code Chapter 8.15 Infection with rinderpest virus;
11. Articles 8.15.6 and 8.15.8 of the OIE Terrestrial Code Chapter 8.15 Infection with rinderpest virus (2017);
12. Changes to Chapter 2.1.19 Rinderpest (Infection with rinderpest virus) of the OIE Terrestrial manual;
13. OIE Resolution No. 18 of 25 May 2011;
14. OIE Resolution No. 21 at GS85 (2017), Amendments to the annex "Guidelines for Rinderpest Virus Sequestration", of Resolution No. 18 of 25 May 2011;
15. May 2017 Report on Sequence and Destroy project, Pirbright;
16. Identification of material which holds a risk of containing RPV, April 2016;
17. SOP Inactivation of Residual Rinderpest Virus in Sera, Jan 2017

Appendix II

11th MEETING, RINDERPEST JOINT ADVISORY COMMITTEE

Rome, 27 – 28 June 2017

Ethiopia Room (C285/9)

List of participants

FAO HEADQUARTERS

Dr Berhe Tekola

Director of the Animal Production and Health Division
Food and Agriculture Organization of the United Nations
Viale delle Terme di Caracalla
00153 Rome
ITALY
Berhe.Tekola@fao.org

Dr Samia Metwally

Senior Animal Health Officer (Virologist)
FAO Secretariat
Food and Agriculture Organization of the United Nations
Viale delle Terme di Caracalla
00153 Rome
ITALY
Samia.Metwally@fao.org

Dr Lee Myers

Manager
Crisis Management Centre – Animal Health (CMC-AH)
Viale delle Terme di Caracalla
00153 Rome
ITALY
Lee.Myers@fao.org

Dr Artem Skrypnyk

Rinderpest Technical Officer
FAO Secretariat
Food and Agriculture Organization of the United Nations
Viale delle Terme di Caracalla
00153 Rome
ITALY
Artem.Skrypnyk@fao.org

Mr Fitsum Habtemariam

Communications Coordinator
FAO Secretariat
Food and Agriculture Organization of the United Nations
Viale delle Terme di Caracalla
00153 Rome
ITALY
Fitsum.Habtemariam@fao.org

Dr Carla Stoffel

Technical Consultant
FAO Secretariat
Food and Agriculture Organization of the United Nations
Viale delle Terme di Caracalla
00153 Rome
ITALY
Carla.Stoffel@fao.org

Dr Akiko Kamata

Animal Health Officer
Food and Agriculture Organization of the United Nations
Viale delle Terme di Caracalla
00153 Rome
ITALY
Akiko.Kamata@fao.org

OIE HEADQUARTERS

Ms Tianna Brand

Head of Programmes Department
World Organisation for Animal Health
12 rue de Prony
75017 Paris
FRANCE
t.brand@oie.int

Dr Kazutoshi Matsuo

Chargé de mission
World Organisation for Animal Health
12 rue de Prony
75017 Paris
FRANCE
k.matsuo@oie.int

Dr Mariana Marrana
Rinderpest Officer
World Organisation for Animal Health
12 rue de Prony
75017 Paris
FRANCE
m.marrana@oie.int

COMMITTEE MEMBERS

Dr Alejandro Costa
WHO scientist, Team Lead
Emergency Vaccination and Stockpiles (EVS)
Control of Epidemic Diseases (CED)
20, Avenue Appia
Geneva 27 CH - 01211
SWITZERLAND

Dr Geneviève Libeau
In charge of FAO Reference Centre for Morbilliviruses in Ruminants
CIRAD-Département Systèmes Biologiques UPR "Contrôle des
Maladies Animales Exotiques et Emergentes"
Groupe Virologie
TA A-15/G (bureau G204)
Campus International de Baillarguet
34398 Montpellier cedex 5
France
genevieve.libeau@cirad.fr

Dr Junaidu Maina (Chair)
Contingency Plan Specialist
J M Global Associates Ltd
13 Khartoum Street Wuse Zone 5
Post Office Box 8867
Abuja
NIGERIA
junaidumaina@yahoo.com

Dr Mo Salman
Professor of Veterinary Epidemiology
Animal Population Health Institute
College of Veterinary Medicine and Biomedical Sciences
Colorado State University
Fort Collins, CO 80523-1644
UNITED STATES OF AMERICA
mo.salman@colostate.edu

Dr Greg Smith
Biorisk Manager
Chair Institutional Biosafety Committee
CSIRO - Australian Animal Health Laboratory
National Facilities and Collections
5 Geelong-Portarlington Road | East Geelong, VIC 3219
AUSTRALIA
Greg.A.Smith@csiro.au

Dr David Ulaeto
Principal Scientist
Department Biomedical Sciences
DSTL Porton Down
Salisbury SP4 0JQ
UNITED KINGDOM
DULAETO@mail.dstl.gov.uk

**MEETING OF THE RINDERPEST JOINT ADVISORY COMMITTEE
Rome, 27-28 June 2017**

Roadmap
Rinderpest Post-Eradication Activities

	Activity	Responsible	Starting date	Expected completion date	Outcome	Remarks
1. Rinderpest holding facilities (RHF)						
1.1	Develop Application form	FAO, OIE, JAC	Oct 2012	April 2013	Used for UK, US, Japan, PANVAC, CIRAD, China and Iran applications	Requires update to align with the facility mandate. See 1.4
1.2	Develop criteria and checklist for reviewing applications	JAC	Dec 2012	April 2013		Completed
1.3	Open application process to OIE/FAO Ref Labs and PANVAC	FAO, OIE	May 2013	Feb 2014	All applied	Completed
1.4	Update of application form	JAC	March 2015/ April 2016		Completed Feb 2016	Completed; version 2
1.5	Guidelines and criteria for inspecting facilities (inspection checklist)	FAO,OIE, JAC	March 2013	Nov 2014		Completed

	Activity	Responsible	Starting date	Expected completion date	Outcome	Remarks
1.6	Operational guidance for designation of RHF	FAO, OIE	Nov 2014	Dec 2014	Completed	
1.7	Form for RHF annual report	JAC	Jan 2015	March 2015/Dec 2016	Jan 2015 sent to RHF's	Completed; new version is in the pipeline
1.8	Conduct site inspection for RHF applications	FAO, OIE	Jan 2015	Ongoing	6 RHF's had been inspected, 2 new in progress (China, Iran)	Ongoing; completed - AU-PANVAC, Japan, USA, UK, France
1.9	Review submitted paper applications	JAC	Oct 2013	Ongoing	6 RHF's approved, 3 new applications in progress	Ongoing; pending AU-PANVAC Cat A
1.10	FAO and OIE facility designation	FAO, OIE	May 2015	Ongoing	5 official designations by FAO and OIE completed	Ongoing
1.11	Facility re-approval	OIE, FAO	May 2018			
1.12	Open application to biocontainment labs	FAO, OIE			China and Iran applied	Ongoing
1.13	Re-evaluation of RHF					

	Activity	Responsible	Starting date	Expected completion date	Outcome	Remarks
2. Research using RVCM						
2.1	Research application form	JAC, OIE, FAO	Nov 2013	Jan 2014/April 2016	2 nd version	Completed; 3 rd version in pipeline
2.2	Criteria for reviewing application	JAC, OIE, FAO	Nov 2012	Jan 2013		Completed
2.3	Review proposals submitted to OIE and FAO	JAC	Jan 2013	Ongoing	Five projects reviewed by JAC and approved by FAO and OIE. One application from non-RHF rejected	
2.4	Approval of research proposals	FAO, OIE		Ongoing	Seven approved	<ul style="list-style-type: none"> • Non-infectious diagnostic control(FADDL) • Sequence & Destroy (TPI, CIRAD, FADDL); • Accreditation of diagnostic test at TPI

	Activity	Responsible	Starting date	Expected completion date	Outcome	Remarks
2.5	Review reports of research project on a regular basis	JAC		Ongoing	Reporting: TPI (2), CIRAD (1), FADDL (0)	<ul style="list-style-type: none"> • Sequence and Destroy (TPI and CIRAD) • Non-infectious diagnosis (FADDL)
2.6	Completion of research project and submission of final report	Research Institute		Ongoing	One final technical report received	One research project completed and published
2.7	Review outcome of project and review next steps if any	JAC		Ongoing	No next steps necessary	
3 Rinderpest virus containing material (RVCM) destruction and sequestration (DAS)						
3.1	Establish database holding RVCM inventory at country level	OIE	June 2013	Nov 2013		Completed
3.2	Standard operating procedures for DAS	JAC, FAO, OIE	June 2012	April 2016	Four SOPs have been completed	Completed
3.3	Support countries in DAS	FAO	Feb 2015	Ongoing	Botswana, Sudan, Nigeria, Senegal, Kenya, Taiwan, Canada, and Germany are finalized	Next is Mongolia

	Activity	Responsible	Starting date	Expected completion date	Outcome	Remarks
3.4	Develop disease spread risk model	FAO	Dec 2014	June 2016		Was demonstrated in Kenya. Publication is underway
3.5	Offer support to DAS targeting countries known to hold RVC	FAO	July 2013	Ongoing	Botswana, Nigeria, Senegal, Kenya, Switzerland, Germany, Sudan, Taiwan, Canada and Netherlands are completed	Mongolia, Vietnam and South Africa are in the pipeline
3.6	Engage with countries that did not respond to surveys in 2010 and 2011	FAO, OIE	March 2013	Ongoing	A list of countries is already started	6 countries to be re-checked (FAO is on it)
3.7	OIE Member Countries report on status of RVC	OIE	Nov 2013	Annually	First report completed May 2014	
3.8	Report to OIE World Assembly on global status or RPV stocks	OIE	May 2014	Annually		
3.9	Identify countries needing support for RVC D&S	FAO	Jan 2015		Asian countries identified during Nepal meeting	Ongoing

	Activity	Responsible	Starting date	Expected completion date	Outcome	Remarks
3.10	List of rinderpest virus prototype and vaccine strains	JAC/OIE	June 2015	Oct 2017	A list of these countries is under construction	Need to clarify some vaccine strains in several countries
3.11	Reduce number of biocontainment labs holding RVCM	FAO/OIE	June 2013	ongoing		
4. National contingency plans (CP) and Global Rinderpest Action Plan (GRAP)						
4.1	Develop country template for national CP	FAO	Feb 2013	June 2013		Completed
4.2	Develop international rinderpest post eradication preparedness, linking existing international mechanisms (reporting mechanisms, response mechanisms, legal instruments, national contingency plans, vaccine banks)	FAO, OIE, JAC	June 2012	March 2018	Zero draft of the GRAP was presented in June 2017	Ongoing
4.3	Secure funding for simulation exercise (point 4.3)	FAO	March 2015	Dec 2017	One project funded by Canada Phase II proposal had been accepted by DTRA	Completed

	Activity	Responsible	Starting date	Expected completion date	Outcome	Remarks
4.4	International simulation exercise in high risk regions	FAO	Feb 2016	Dec 2017	Two simulation exercises are scheduled	Preparations are ongoing for Africa (Kenya, October 2017) and Asia (India, December 2017)
5. Rinderpest vaccine reserve (RVR)						
5.1	Approved a SOP for quality control testing to extend vaccine shelf-life, included in rinderpest chapter (check)	OIE				Will need to draft SOP on this as changes to Manual chapter will take too long
5.2	Develop SOP for vaccine quality control testing using non-infectious tests	JAC	March 2015			Need update from JAC
5.3	Identify vaccine manufacturers for production of emergency vaccine	FAO, OIE, JAC	Aug 2014 (FAO)	Ongoing		2016 technical meeting will provide guidance
5.4	Develop spread model to determine doses and location of RVR	FAO, OIE/JAC	Jan 2016	Dec 2016		Models cannot predict the future. Models can only compare control strategies

	Activity	Responsible	Starting date	Expected completion date	Outcome	Remarks
5.5	Define strategic geographic location of RVR and number of doses (modeling and ad hoc group)	FAO, OIE, JAC	Jan 2015	Dec 2017		Ongoing
5.6	Vaccine deployment plan and activation of RVR	OIE, FAO	March 2017	Dec 2017		Ongoing
5.7	Annual inventory on vaccine doses	FAO, OIE	May 2013 (FAO)	Annually		Current doses 2.0 mil. - Expired: 1.5 mil (Plowright) - Expired but QC checked: 0.2 mil (LA-AKO) - Valid: 0.2 mil (LA-AKO) - unknown (24 thou: Plowright, Sudan)
6. Database for virus inventory and country status						
6.1	Establish country level database (ERRS)	OIE	Nov 2013	Ongoing		Each Member Country submit inventory as an annual report to the OIE

	Activity	Responsible	Starting date	Expected completion date	Outcome	Remarks
6.2	Develop and install virus inventory system	OIE	Jan 2015	Ongoing		2016 Rinderpest holding facility meeting agreed that they will come with a plan
7. Advocacy and increase awareness						
7.1	Creation of JAC	FAO-OIE	Dec 2012	April 2012		Completed
7.2	develop 10 reasons leaflet	JAC	June 2012	Sep 2012		Completed
7.3	Movie on virus sequestration and destruction (OIE rinderpest eradication)	OIE		May 2013		Completed
7.4	Regional Community Outreach (Egypt, Ethiopia, Kenya, Nigeria, Senegal)	FAO	Feb 2015	Dec 2016		Target livestock holders, wildlife handlers and governments
7.5	Regional Outreach for Government Education and Training	FAO	March 2015	Jan 2016	2015 and 2016 meetings	Completed
7.6	Moratorium on live rinderpest virus research and handling (nature publication and others)	FAO,OIE,JAC	June 2012		Feb 2013 lifting moratorium on research approved by FAO and OIE	Completed

	Activity	Responsible	Starting date	Expected completion date	Outcome	Remarks
7.7	Disseminate 10 reasons leaflet	FAO,OIE	Jan 2013		Distribution to various potential stockholders was accomplished	Completed
7.8	Distribute flyers and materials in relevant FAO and OIE assemblies and conferences	OIE, FAO	April 2013			Flyers distributed to West Eurasian countries FAO-April, 2013, countries participated in the Sharm, Rome and Nepal meetings
7.9	Transform JAC guidance biological materials may contain RPV into media-friendly, easy to understand format	JAC	April 2013	Dec 2016		New document for JAC 9
7.10	Designate Rinderpest Day (cf Rabies Day). Suggest 23 October (last outbreak)	FAO, OIE		April 2018		
7.10	Include rinderpest chapter in the veterinary and animal science curriculum	FAO, OIE	Jan 2016			Part of DTRA phase 2 concept note
7.11	Interactive Website/twitters	FAO	Jan 3016			Regular updates
7.12	Advocacy movie for D&S	FAO		August 2016		Completed
8. Surveillance and Early warning						

	Activity	Responsible	Starting date	Expected completion date	Outcome	Remarks
8.1	In country training in surveillance and early warning activities in risk regions	FAO	Jan 2015	Dec 2017		Training in Togo done
8.2	Improve data capture of disease rumors at national and regional levels	FAO	Jan 2015			Ongoing
8.3	Improve exchange of information on potential RP events between organizations	FAO, OIE, GLEWS	March 2013			Ongoing
8.4	Improve passive surveillance, field investigations and reporting at the national level	FAO	Jan 2015	December 2017 in 5 countries		Current awareness raising should improve passive surveillance
8.5	Develop a non-infectious molecular diagnostic tool for screening of rinderpest suspect cases (for ref labs and selected facilities)	FAO	June 2016	2018		PI and FADDL will exchange reagents to test the positive control standard for RT-PCR
8.6	Secure funding for point 8.6	FAO	June 2016			Not yet
8.7	Diagnosis application form	FAO/OIE				for Reference laboratories
9. Publications						

	Activity	Responsible	Starting date	Expected completion date	Outcome	Remarks
9.1	OIE rinderpest code chapter	OIE		May 2017		Update code on definition of sera (heat inactivated is not RVCM)
9.2	Rinderpest history book	FAO, OIE	2015	Scheduled 2017		One book chapter is to Secretariat and JAC to co-author
9.3	Update on progress of post eradication activities- peer-reviewed article	FAO, OIE, JAC	June 2015		OIE survey has been published	
9.4	Documents and SOPs related to rinderpest post-eradication in FAO and OIE website (toolbox)	FAO, OIE	Jan 2015 (FAO)			Ongoing
9.5	Peer-reviewed publication on research projects	Principle investigators			Study on PPRV as vaccine against RPV is published	
9.6	Book chapter on rinderpest post-eradication activities	FAO, OIE	Jan 2017	Sep 2017		Ongoing

Completed task
 dated task
 revolving task
 long term task

Appendix IV

MEETING OF THE RINDERPEST JOINT ADVISORY COMMITTEE

Rome, 27 – 28 June 2017

Action Items from the 11th Meeting

Number	Action	Responsible Party	Deadline
1	Develop and publish a map with countries that have destroyed RVCVM since 2011	FAO	15 September
2	Develop a strategy for following up and confirming with countries where there are discrepancies in official reported data to FAO and OIE, and data collected through other means	Secretariat	12th JAC meeting
3	Contact Director of the Pirbright Institute and director of risk and assurance to discuss conditions that are not being met	Secretariat	12th JAC meeting
4	Feedback on the GRAP and OF-RVR	JAC	14 July
5	Update vaccination strategy in GRAP	FAO	14 July
6	Provide comments on SOP; Inactivation of Residual Rinderpest Virus in Sera Potentially Containing RPV	OIE	14 July
7	Discuss GRAP, RVR, and moving forward at BTR conference in Ottawa. Prepare presentation and abstract for JAC Chair.	OIE	1 August
8	Plan for a stakeholder meeting for further feedback and buy-in on GRAP and RVR	Secretariat	12th JAC meeting
9	Publishing of the GRAP	FAO	March 2018
10	Prepare a template for the final report of re-evaluating RHF	Secretariat	12th JAC meeting
11	Provide comments on Guidelines for Biorisk management in the (re)evaluation of Rinderpest Holding Facilities	JAC	21 July
12	Prepare a summary on Reference Vaccine Virus Seeds	FAO	12th JAC meeting
13	Prepare conditions for empowering reference centers to undertake diagnostic activity and share it with reference centers	JAC	12th JAC meeting
14	Update research application form	FAO	12th JAC meeting
15	Provide revised annual report form	FAO	12th JAC meeting
16	Update Roadmap	Secretariat	14 July