GF-TADs
GLOBAL FRAMEWORK FOR THE PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES

Food and Agriculture Organization of the United Nations

WORLD ORGANISATION FOR ANIMAL HEALTH

Global priority diseases for the Global Steering Committee (GSC11)

v. 11/11/20

Foreword

This report provides an overview of the main activities on global priority transboundary animal diseases (TADs) since the last Global steering Committee in November 2018.

It covers, by alphabetic order, African Swine Fever (ASF), Foot and Mouth disease (FMD), Peste des Petits Ruminants (PPR) and Rinderpest post eradication programme (RP). Financial information are presented in Annex I.

Information on specific activities can also be found through the dedicated sections of the GF-TADs website or on request to the GF-TADs global secretariat.

The GF-TADs global secretariat thanks the members of these disease specific working groups and secretariat for their support to prepare this document.

Contents

GF-TADs Initiative for the Global Control of African Swine Fever, 2020-2025 (Global Initiative) [1]

The ASF Working Group

The GF-TADs Working Group for African swine fever control (ASF WG) was appointed by the GF-TADs Management Committee. Its ToRs include the coordination, monitoring and evaluation the implementation of the Global Initiative. The ASF WG will also contribute to the development and support of ASF control strategies at the global and regional levels. The ASF WG meets monthly (It has already held its 4th meeting). It includes 6 members from OIE and FAO HQ and regional offices, and is chaired on a rotational basis with OIE chairing the first year. The ASF WG receives guidance from the Management Committee of GF-TADs.

It is composed of Gregorio Torres, chair (OIE); Caitlin Holley (OIE); Jee Yong Park (OIE); Andriy Rozstalnyy (head for FAO delegation); Charles Bebay,(FAO); Akiko Kamata (FAO)

Brief description of the strategy

The GF-TADs Initiative for the global control of African swine fever was officially launched on 20th July 2020, in response to the request made at the 87th OIE General Session with the aim of fostering national, regional, and global partnerships, to strengthen control measures and to minimise the impact of African Swine Fever (ASF).

On a global scale, the sustained spread of ASF poses a threat to livelihood, food security, economic and rural development, and thus global control of ASF will contribute to achieving the United Nations Sustainable Development Goals, notably Goals 1 (No Poverty) and 2 (Zero Hunger).

The Global Initiative was designed based on the lessons learnt from past and existing global animal disease control and eradication strategies under the GF-TADS. It defines the following 3 strategic objectives.

- Improve the capability of countries to control (prevent, respond to, eradicate) ASF using OIE International Standards and best practices that are based on the latest science.
- Establish an effective coordination and cooperation framework for the global control of ASF.
- Facilitate business continuity ensuring safe production and trade to protect food systems.

The Global Initiative also identifies key factors for the successful global control of ASF: A disease intelligence framework, effective risk communication, operational and technical capability and sustainable resources

Epidemiological situation

The disease is present and continues to spread in the African, European, and Asian/Pacific regions. In Europe the first incursion of Genotype II was reported in 2007. Since then, many countries in the region have reported the first occurrence of the disease, with recent notifications from Hungary, Bulgaria and Belgium in 2018, Slovakia in 2019, and Serbia, Greece and Germany in 2020. In Asia and the Pacific, China (People's Republic of) notified the presence of the disease for the first time in 2018, followed by Mongolia, Vietnam, Cambodia, Hong Kong (SAR-PRC), Korea (Dem. People's Rep.), Laos, Myanmar, Philippines, Korea (Rep. of), Timor-Leste and Indonesia in 2019. More recently, in 2020, Papua New

[1] http://www.gf-tads.org/asf/the-global-initiative-for-the-control-of-asf/en/

Guinea and India reported the first incursion. The disease remains endemic in most Sub-Saharan African countries.

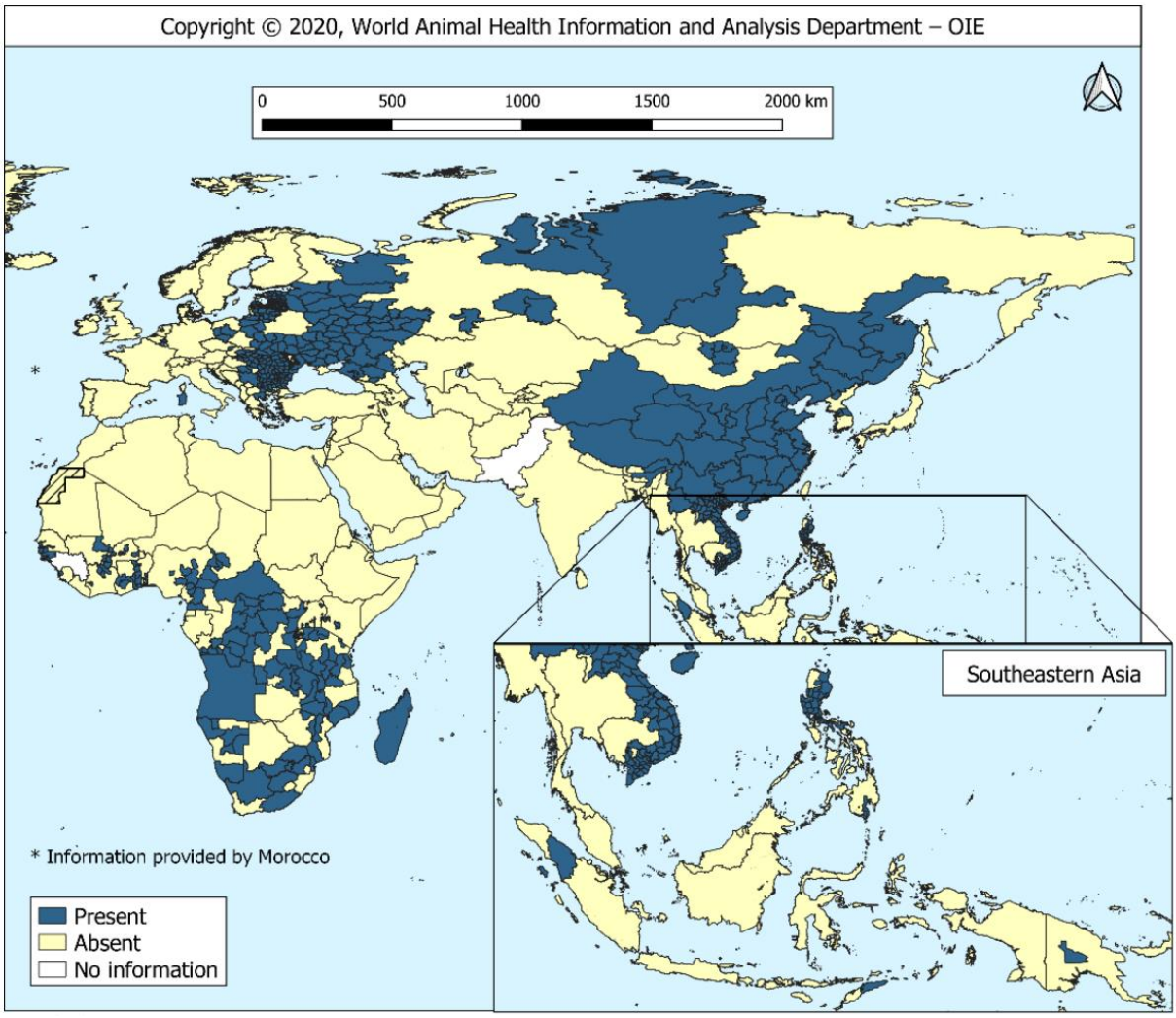


Fig. 1. Global situation of ASF (2016-2020)

The global pattern of distribution of ASF in this period reveals a serious deterioration due to the spread of the disease, mainly in Europe and in Asia and posing high risk for the Americas. In this context, the work of GF-TADs mechanism play an important role in empowering regional alliances in the fight against transboundary animal diseases and assisting the countries to establish programmes for the prevention, preparedness and control noting the different production sectors and the domestic-wild boar interface.

Progresses achieved in the last 2 years

During the 87th OIE General Session, held in May 2019, a report on the global ASF situation was presented to the Assembly, resulting in the adoption of resolution No. 33[2], identifying the key roles to be played by the Members, FAO and OIE in the global control of ASF, and specifically the need for a Global Initiative.

[2] https://www.oie.int/fileadmin/Home/eng/About_us/docs/pdf/Session/2019/A_RESO_2019.pdf

The Global Initiative (2020-2025) was jointly developed by the FAO and OIE, which was based on a theory of change that was translated into a logic framework[3], describing the outputs, outcomes and indicators for each of the strategic objectives. The accompanying operational plan lists the specific activities to be implemented under the GF–TADs by FAO, OIE or by our partners, to achieve the outputs and outcomes and will be updated periodically.

The Global Initiative was launched with a joint global press release by the FAO[4] and OIE[5] in July 2020.

The GF-TADs ASF website[6] was launched, which provides relevant information and links to the Global Initiative, including the document, logic framework and the operational plan.

Regional Standing Group of Experts on ASF (SGE-ASF) has been established in Asia and the Americas in 2019, based on the model for Europe, with regular meetings being held. Good progress is being made for the creation of a similar coordination mechanism in Africa.

Constraints

There is lack of human resources at both HQ and regional level, which is a major constraint to effectively coordinate the Global Initiative. In particular, ASF WG needs to be supported by an ASF Global coordinator, to be recruited and tasked with assisting the ASF WG in their responsibilities.

SGE-ASF is not yet established for the African region, but works are underway including finalising the regional taskforce on ASF and the meeting of the East-Africa subregional animal health network in August 2020 to discuss key ASF topics.

The engagement and strengthening of collaboration with private and public stakeholders have been identified as an important challenge for the effective implementation of the Global Initiative.

Upcoming strategic activities

The following are some of the activities that are being planned to promote and further develop the Global Initiative.

- A joint FAO and OIE call for action consisting of series of webinars will be held on 26–30 October 2020. The overarching goals of the event are to review existing and recently developed tools, mechanisms and practices to address the introduction and spread of ASF, and to make a global call for action to adopt and implement the GF-TADs initiative for the global control of ASF.
- Development of methodology and tools to conduct M&E of the Global Initiative, considering that the M&E at global, regional and national levels will require different strategies.
- Produce the 2020 annual report for the Global Initiative.
- Socialisation of the Global Initiative with stakeholders at available opportunities.
- Webinar on Public-Private Partnership for ASF control.
- Strengthen coordination mechanisms in Africa and supporting the existing SGE in Americas, Europe and Asia

[3] https://www.oie.int/fileadmin/Home/eng/Animal_Health_in_the_World/docs/pdf/ASF/ASF_GFTADsInitiative_LogicFramework.pdf

[4] https://news.un.org/en/story/2020/07/1068711

[5] https://www.oie.int/en/for-the-media/press-releases/detail/article/global-action-needed-now-to-halt-spread-of-deadly-pig-disease/

[6] http://www.gf-tads.org/asf/asf/en/

Global Foot and Mouth Disease Control Strategy

The GF-TADs FMD Working Group

The joint FAO/OIE FMD Working Group (WG) was established in 2011 and was composed of six members, three members from each of the two organizations (Food & Agriculture Organization of United Nations-FAO and World Organisation for Animal Health-OIE). In 2018, the two organizations invited EuFMD to join the WG (one representative). The WG operations are guided by its terms of reference and the WG receives guidance from the Management Committee of GF-TADs

It is composed of: Samia Metwally (chair for FAO delegation); Baba Soumare (FAO); Madhur Dhingra (FAO); Muhammad Arshed (FAO); Néo Mapitse (chair for OIE delegation); Djahne Montabord (OIE); Letshwenyo Moetapele (OIE); Fabrizio Rosso (EU-FMD); Paolo Motta (EU-FMD); Etienne Chevanne (EU-FMD)

Brief description of the strategy

The FAO and the OIE developed a fifteen-year Global FMD Control strategy, endorsed by 100 countries at the 2nd global FMD conference held in Bangkok in June 2012, with following three components:

(i) Improving global FMD control;
(ii) strengthening Veterinary Services; and
(iii) prevention and control of other major diseases of livestock

The overall objective of the Global Strategy is to contribute to poverty alleviation and improving the livelihoods in developing countries and to protect the global and regional trade in animals and animal products. Its view is also to ease the impacts of the FMD worldwide, and maintain the status of free countries.

The global strategy is using the 5-stage structured Progressive Control Pathway for FMD control (PCP-FMD) and the OIE Pathway on the Performance of the Veterinary Services (PVS Pathway) as the main tools to combat FMD control. Other tools of importance for FMD prevention and control are FMD-specific surveillance, diagnostic laboratories, vaccines and vaccination coverage, and performance monitoring.

The PCP-FMD is designed to guide countries in the planning and management of efforts to increase the level of control of FMD from the early stages up to the point where an application to the OIE for official recognition of freedom from FMD. The Global Control Strategy has been applied at national level while the progress is assessed at regional level using roadmap platforms, which permit the formulation of harmonized programs and exchange of information on virus circulation, vaccination and other control initiatives.

The expected results of the FMD Control Strategy within 15-year period include, for countries:

- in PCP stages 0 and 1, to- advance at least to PCP stage 2;
- in PCP stages 2 and 3, to preferably progress towards eradication and official recognition;
- with an officially recognized FMD free status (with or without vaccination, for the whole country or specified zones), to maintain and improve their status.

Epidemiological situation *in the past 2 years*

In 2018 to 2020, FMD outbreaks reported on OIE's Animal Health Information (WAHIS) from various pools (Figure 1) and mapped by EMPRES-AH (Figure 2), noting the occasional trans-pool spread and outbreaks in FMD. Among them:

- FMD in Pakistan in 2019 caused by a lineage (O/ME-SA/Ind-2001e)
- An outbreak of FMD due to SAT2 in South Africa, resulting in the suspension of South Africa`s officially recognised FMD-free status.
- Libya and Morocco recorded outbreaks of FMD due FMDV O/EA-3 and FMDV serotype A is currently responsible for outbreaks in Libya.
- The southwards spread of FMDV O/EA-2 to Comoros and Zambia in 2019 is a cause for concern. FMDV serotype A has also spread to Zambia in recent years.
- There was a retroactive report of FMD due to SAT1 in Cameroon in 2016. Furthermore, SAT2 from Egypt in 2017/2018 was distinct from previous SAT2 from Egypt in 2012, suggesting a more recent introduction.

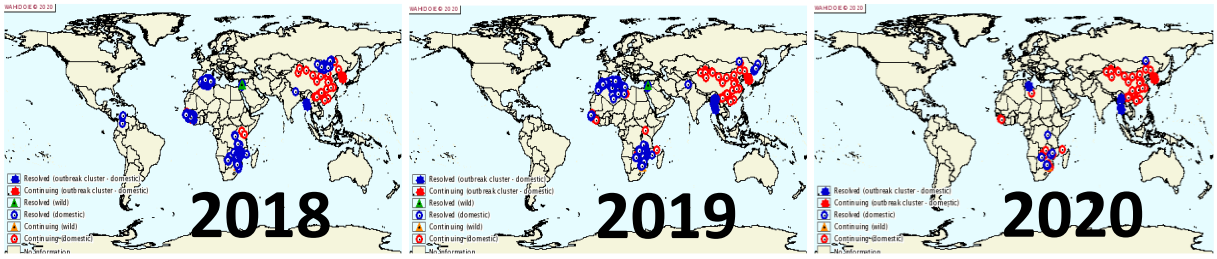


Figure 1. FMD outbreaks reported to OIE in 2018-2020 (Source OIE WAHIS)

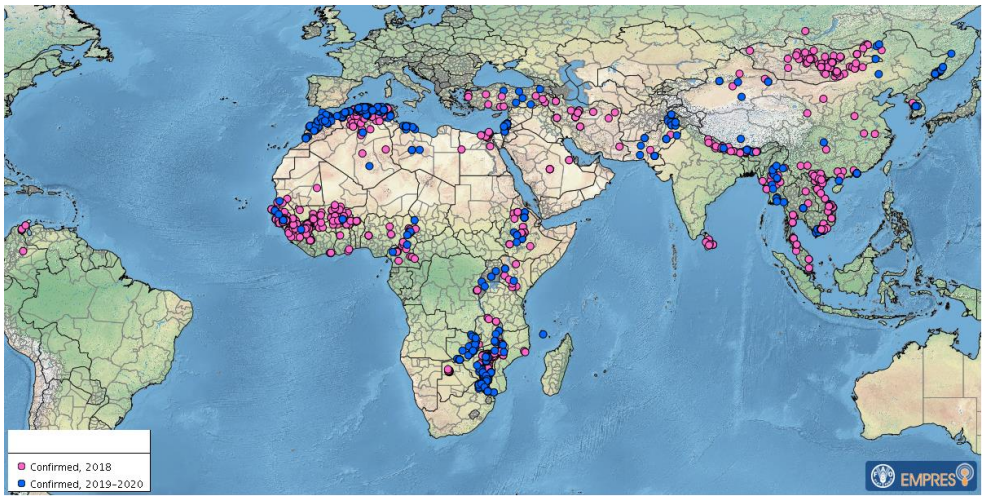


Figure 2. FMD globally reported events, from Jan. 2018 to Sep. 2020 (by year of onset) (EMPRES-AH)

Progresses achieved in the last 2 years

- Currently, 80 countries are engaged in the implementation of the PCP-FMD, to reduce or eliminate FMD virus circulation (Figure 3). Although not all regions/sub-regions are actively engaged; however, some countries have made significant progress in controlling the disease. The status of countries along the PCP in 2018 and 2020 is illustrated in Figure 3.
- Countries regularly receive technical assistance, from FAO/OIE Reference Laboratories, for virus characterisation and vaccine matching, to inform vaccine selection. This has also benefited

epidemiological investigations on relationships between the outbreaks and to identify potential source of outbreaks. EuFMD in coordination and collaboration with the WRLFMD, provides diagnostic analysis and provision of laboratory proficiency test (PTS) ring trials to FMD laboratories in non-EU states and to Members.

- The regional advisory groups (RAGs) virtual meetings convene to accept national control plans for country to advance along the PCP-FMD, update on regional FMD virus circulation, control activities, impact of COVID-19 and future regional priorities.
- The Middle East Epidemiology and Laboratory Networks have been established and a 2-year work plan was prepared. Two roadmap meetings were conducted; one in west Eurasia and one in East Africa.
- Seven (7) zones from 3 countries were officially recognised FMD free without vaccination in 2019. In 2020, 5 zones from 2 countries were recognised as FMD free with vaccination and 1 zone free without vaccination. The latter was previously free with vaccination.
- Kyrgyzstan advanced from PCP stage 1 to OIE status in 2020 (endorsed official control programme).
- Figures 3 & 4 below shows advancement in FMD control worldwide, depicting the countries in different PCP stages and OIE endorsement official control programmes and FMD free status.

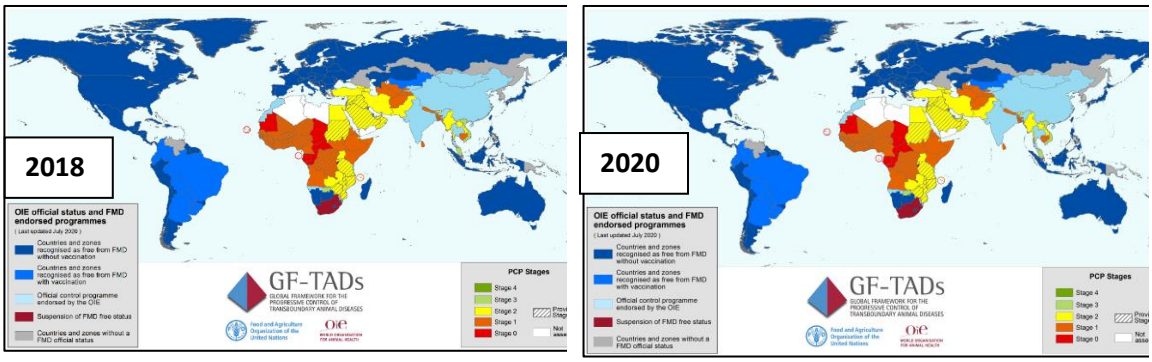


Figure 3. FMD global OIE status and PCP stages - October 2018 and 2020

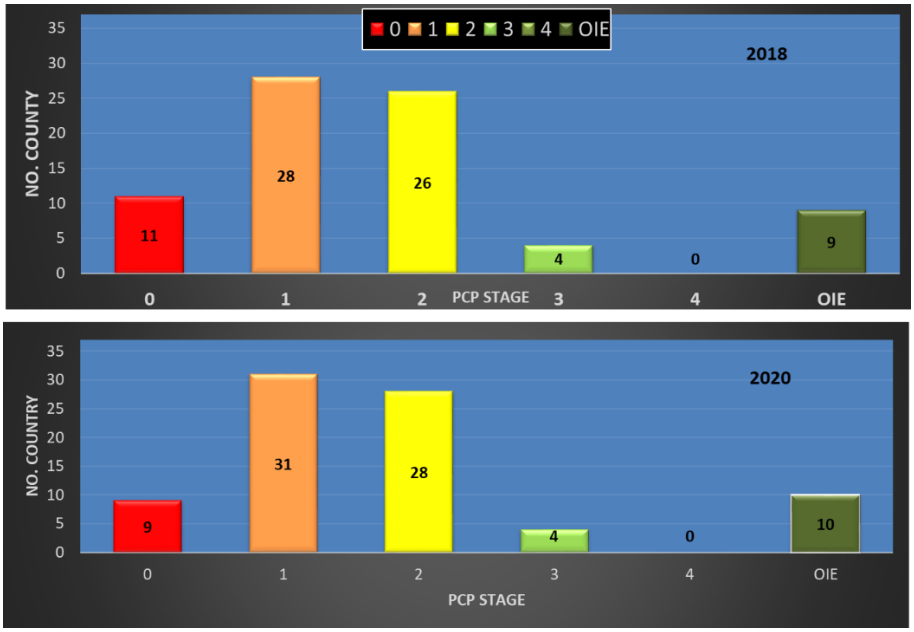


Figure 4. Number of countries in each PCP stage in 2018 and 2020

- The Risk-Based Strategic Plan of Kenya was reviewed by the WG and accepted by the Regional Advisory Group of East Africa, enabling Kenya to progress to PCP Stage 2 in 2020.
- Eight other national control plans were reviewed by the FMD WG and feedback provided to countries for further improvements.
- The progress also concerns the FMD Working group activities and includes
    - updated the PCP-FMD tools and supporting documents to facilitate understanding and usage by countries
    - revised the PCP-FMD Self-Assessment Tool (SAT) and translated into French and Russian.
    - developed the Tool for Review and Communication (TRAC) System, in coordination with EuFMD, for facilitating national plans submission and revision and communication between the Regional Advisory Groups (RAGs), the GF-TADs FMD Working Group and national Authorities
    - eleven (11) new PCP-FMD support officers (PSO) were assigned to countries in Africa, West Eurasia and Middle East to assist countries in preparing the national control plan;
- EuFMD supporting tools for the global strategy:
    - development and establishment of Virtual Learning Centres (VLCs) in Southern Africa and Asia, in coordination with regional GF-TADs partners and technical networks, to build capacities for virtual training development and delivery in support of TADs control.
    - virtual courses covering FMD and various thematic areas e.g. PPP, organization of simulation exercises, socio-economic impact assessment were delivered under the FAST programme.
    - establishment of a *Public and Private Sector Platform* (PPSP) for FAST disease vaccination and solutions to access quality and effective FMD vaccine supply in countries in PCP Stage 1 to 3
    - provided specific technical assistance to European neighbouring countries (Turkey, trans Caucasus countries, Jordan, Palestine, Egypt) for progression along PCP and/or in the development of control strategies
    - risk mapping assistance in North African countries to improve surveillance and control strategies
    - assessment of national reference laboratory capacities and capabilities in the European neighbourhood regions and definition of training needs as part of the assistance to the laboratory networks.

Constraints

- Resource & skills: Shortage of resources at national, regional and international levels; Socio-economic, Risk assessment and risk management skills
- Movement control & transparency: Cross-border movement control; Livestock migration pattern; Timely information exchange
- Communication and information exchange within networks
- Diagnostic capacity & supplies: Shipment of samples to Ref Labs; virus sequencing; vaccine matching and procurement
- Lack of technical expertise in vaccine and vaccination
- COVID-19 Challenges: Field investigations, collection and shipping of samples; Reporting and early warning; Equipment maintenance (laboratory); Risks of incursions, transmission and spread of infection; competing priorities, vaccine supplies, vaccination campaigns, diagnostic kits
- Political will: Inadequate stakeholders' engagement
- Insufficient resource/funding in FAO and OIE to implement the strategy and follow up on progress with countries and regions

Upcoming strategic activities

- Establishment of the Global Coordination Committee on FMD (GCC-FMD)
  - Share global/regional/national/organizational initiatives
  - Facilitate harmonization and alignment of FMD global and regional projects and programmes
  - Platform for stakeholders to share progress of FMD control initiatives/ synergy/coherence
  - Platform to liaise with development partners for advocacy and resource mobilization
- Evaluation of implementation of the Strategy to inform the learning agenda and work planning for the next 5 years
- Develop and publish guidelines on conducting socio-economics impact studies
- Revision and adaptation of RAG meetings format to ensure regular consultation on Roadmap activities.
- Workshop and training: preparation of national control plan (RAP, RBSP and OCP) safe trade and cost benefit analysis
- Expand the list of PCP support officers (PSO), including experts from FAO and OIE Reference centers, and develop adequate competency and training pathway
- Continue assisting countries in developing and implementing their control plans with support from the FAO/OIE regional offices/ECTAD and PCP support officers
- Alignment of the PCP and the OIE status evaluation processes to motivate Members to join in the process at any stage with the same goal to eventually achieve FMD freedom

Peste des Petits Ruminants Global Eradication Programme (PPR GEP)

PPR Secretariat

The FAO/OIE PPR GEP Secretariat was established in 2016 as the follow-up of the FAO 39th Conference resolution and the Resolution 25 of the 84th General Session of the World Assembly of the OIE Delegates in May 2016 supporting the PPR GEP. The PPR Secretariat was initially defined as a team of 3 senior officers from FAO and OIE. Following the retirement of two members, Félix Njeumi (FAO) is currently the only member of the PPR Secretariat. He is supported by Camilla Benfield (FAO). Anna-Maria Baka is the contact point of the PPR Secretariat for the OIE. The Secretariat receives guidance from the Management Committee of GF-TADs, the PPR Advisory Committee (AC) and the PPR Global Research and Expertise Network (PPR GREN)".

Brief description of the strategy

The PPR Global Control and Eradication Strategy (GCES) developed by FAO and OIE was endorsed during an international conference on PPR held in Abidjan, Côte d'Ivoire, in April 2015, with the vision of a PPR-free world by 2030. At national level, the PPR GCES promotes a stepwise approach based on four stages. A PPR Monitoring and Assessment Tool (PMAT) has been developed under the GCES with the aim to categorise countries according to these four stages and direct their activities towards eradication. The PPR GCES has 3 objectives: i) Eradicate PPR by 2030; ii) Strengthen Veterinary Services and iii) Reduce the impact of other major infectious diseases of small ruminants. The Global Strategy is also contributing to fighting rural poverty, ensuring food security and nutrition, strengthening resilience and national economies and achieving the Sustainable Development Goals (**SDG**s). The critical importance of small ruminants to communities globally means that the PPR GEP will make a key contribution to SDG1 (Ending poverty) and SDG2 (Ending hunger) while also helping to achieve SDGs 3, 5, 8, 12, 15 and 17.

In 2016, the first five-year PPR GEP was launched (2017-2021) which lays the foundation for implementing the strategy.

Epidemiological situation

PPR has spread in almost 70 countries throughout Africa, Asia, Middle East and Europe. For coordination purposes, the PPR GCES identifies nine regions/subregions in the aforementioned areas.

Since 2018, only Bulgaria and Burundi have been newly infected. Globally, there are 198 countries to be recognized as PPR free by 2030. Among these, 58 countries and one country zone are officially recognised by the OIE as PPR free, 67 are infected and 73 have not reported PPR. Out of the 73 countries, 12 are at risk of PPR infection based on permeable national and trade boundaries and reliance on small ruminant agriculture. Therefore, the programme's target is those 79 at risk and infected countries which need support to achieve disease freedom. These 79 countries were engaged in regional roadmap meeting, which are organised on an annual or biannual basis, aiming at exchanging of information between stakeholders of different countries and effectively harmonisation and synchronisation of health policies and strategies. Since 2016, two rounds of roadmap meetings have been organised for all nine regions (with the exception of Southeast Asian Nations (ASEAN) countries, China, Mongolia and Timor Leste for which only one roadmap meeting has been organised) and the third round has been initiated with the organisation of the meeting for Economic Cooperation Organization (ECO) countries in August 2019 (figure 1).

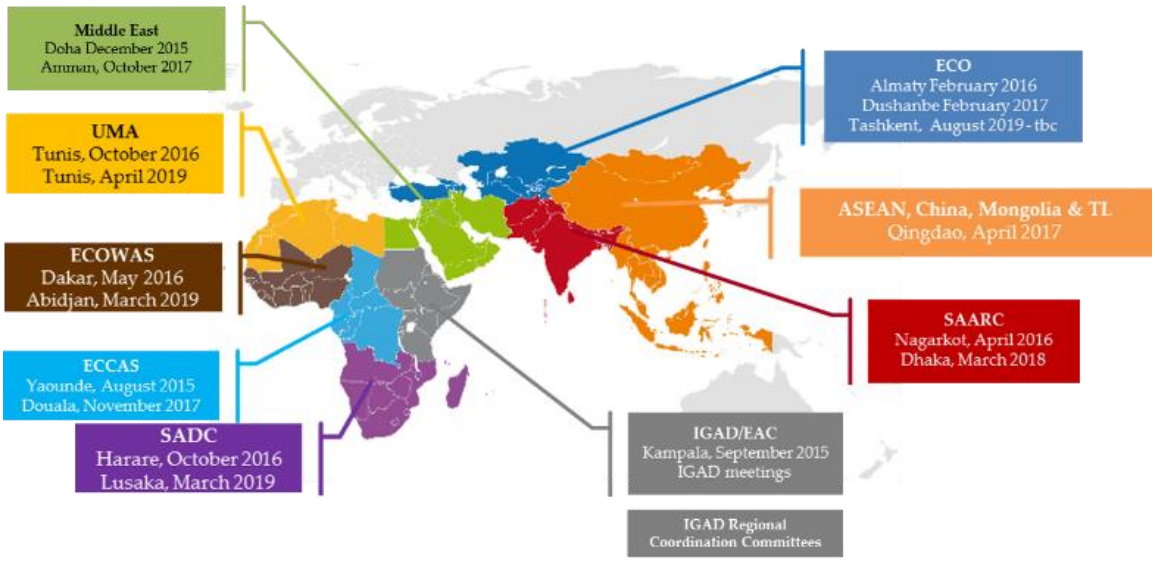


Figure 1: PPR Regional Roadmap Meetings organised from 2016 to 2019

As per August 2019, countries participating in the roadmap meetings have been self-assessed as being in Stage 1 (Assessment Stage; 30 countries), Stage 2 (Control Stage; 38 countries), stage 3 (Eradication Stage; 5 countries) and Stage 4 (Post-eradication Stage; 6 countries). Fig 2 shows which countries have progressed from one stage to another over the last 2 years.

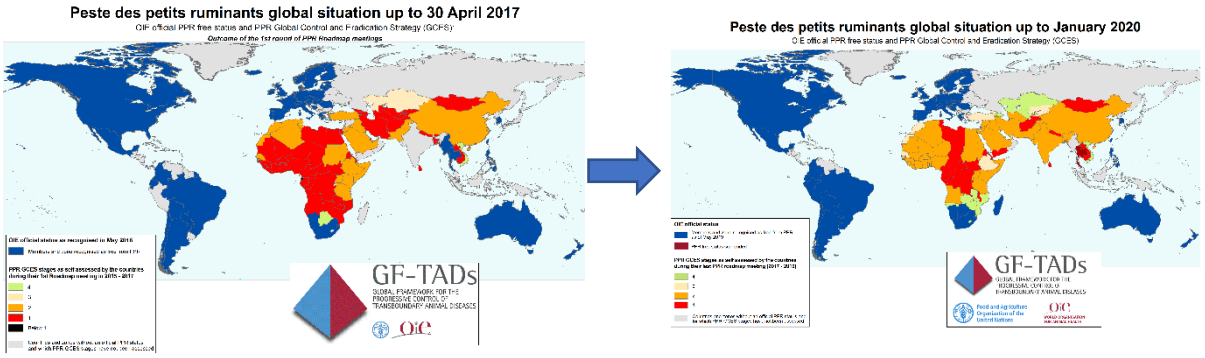


Figure 2: Maps showing countries' categorisation (self-assessment) of their Stage in the PPR GCES stepwise approach

Progress achieved in the last 2 years

The group of Rome-based UN Agencies Permanent Representatives Friends of PPR GEP ("Friends of PPR Eradication" was established and is tasked to i) advocate for the importance of the PPR Eradication Program as a global challenge contributing to the achievement of the United Nations Sustainable Development Goals by 2030, ii) support FAO and the OIE and their Joint Secretariat and iii) advocate during FAO and other United Nation statutory meetings for the achievement of PPR eradication by 2030. They have played a crucial role advocating during each FAO governing body meeting. Discussions are ongoing with the International Fund for Agricultural Development (IFAD) and the African Development Bank for funding. Through this group, PPR GEP is high in FAO agenda and it played an

important role in the recent FAO Committee on Agriculture where the resolution for consideration by FAO 41st Conference was discussed and endorsed.

The Secretariat is supported by an Advisory Committee (AC) and Global Research and Expertise Network (PPR GREN), which have been meeting once per year. Partnerships have been established with global and regional organizations, AU-IBAR/PANVAC, Regional Economic Communities, Research institutions, as well as with relevant civil society organizations at different levels.

As the follow-up of the 4th Advisory committee meeting, a resource partner meeting was organized and attended by IFAD, World Bank, African Development Bank, EC-DEVCO and Islamic Development Bank. All of them showed interest in investing in PPR but highlighted that requests to include PPR in national funding proposals need to come from affected countries themselves. A number of actions were agreed, including the sharing of resource partners' pipeline projects to enable timely engagement, and follow up bilateral discussions with them.

In line with the PPR global strategy, eight of the nine targeted Regional Economic Communities (RECs) were assisted to formulate and endorse their PPR regional strategies. At national level, out of the 79 infected and at risk countries, 68 were assisted to formulate their costed PPR National Strategic Plans (PPR NSP). From the eight formulated regional strategies, only two (ECOWAS and IGAD) have been endorsed by their constituencies.

More than 90% of laboratories in infected and at risk countries have the capacity to use at least the ELISA kit for PPR diagnosis. Laboratory and epidemiological networks are now established in several regions (South East Asia, East Central and West Africa).

Sero-surveillance was carried out in several countries with more than 50,000 sera collected and tested. More than 100 M animals were immunized with some instances of very high seroconversion rates (eg 98% in Burundi, 88.27%, in Kyrgyzstan, Mali [86,88% (89,38% in Mopti, 85,63% in Tombouctou et 84,38% in Gao) but low rates in most countries (e.g 16.4% in DR Congo; 5.9% in Ghana).

Epizone in addition to regional approach for PPR control has been established for the coordination of PPR control and eradication efforts across regions and between countries belonging to different Regional Economic Communities but sharing common borders and epidemiologic characteristics.

The PMAT review has started. Questionnaires were sent to 93 countries with more than 80% response rate. This involvement of stakeholders will ensure that PMAT, a key self-assessment tool for countries to advance along the stepwise pathway of control and eradication, is improved and adopted.

Infection of wildlife and other species: there are now convincing reports demonstrating the ability of PPRV to cross species barriers and infect a wider range of hosts than previously recognised. Indeed, PPRV can infect animal species other than small ruminants, with dromedaries, pigs and cattle reportedly susceptible. One of the PPR GREN Working Groups, established in 2019, is focussed on wildlife, and another on 'atypical hosts', such that the GEP can be responsive to these new research and epidemiological findings and account for these within the epizone approach in the next phase of the program. In the light of these findings, the PPR Secretariat, the OIE Working Group on Wildlife and the Global Research and the Expertise Network (GREN) developed 'the FAO/OIE Guidelines for the prevention of PPR in wildlife populations' to support countries in integrating wildlife into their PPR NSP, which is in the process of being published electronically.

Constraints

The implementation of the PPR GEP poses a series of challenges that need to be addressed.

- **Advocacy:** although national strategic plans were formulated in several countries, they are not mainstream in the national investment plan. The socio-economic studies and cost-benefit analysis of PPR GEP need to be carried out that will realistically contribute to improve long-term planning and funding.
- **Funding and political will:** Many of the countries where PPR is now endemic simply cannot finance an efficient, effective and sustained control/eradication programme. Indeed, they will need significant support for operational costs, training and meetings in order to properly implement their plans. Even if livestock owners themselves contribute more towards the costs of vaccination, there will still be a requirement at the regional and global level for international funding to provide technical and coordination costs, as well as member state support. The current funding gap for the GEP phase one is estimated at 340 million USD. In this context, it will be necessary to explore public-private partnerships, such as those that have proved so effective for polio, measles and malaria control as well as crowdfunding.
- **Manpower:** the OIE coordinator resigned in July 2020 but has not been replaced. In general, the Secretariat cannot support the workload requested by member countries and stakeholders as per below task sharing in annex 1.
- **Partnership:** was established with several institutions but the engagement of several regional economic communities and countries for the implementation of PPR plans is lacking. More discussion is needed so that the national strategic plans are mainstream in their national/regional investment plans. For this, the economic and societal case for PPR control and eradication must be made in a format understandable to policy-makers.
- **Improving epidemiological understanding of PPRV:** Identifying critical control points, incursion points into countries, and prevalence 'hotspots' is of fundamental importance for countries to design and implement appropriate targeted interventions at these points, to support effective management of eradication. However, it has been identified that many countries lack capacity to conduct detailed epidemiological assessment and risk analysis to understand the PPR prevalence and geographical patterns of its transmission.
- **PPR vaccination campaigns** conducted by most of the countries are not in line with the PPR GCES, being not really based on epidemiological assessment, with an insufficient number of vaccinated animals and inappropriate PVE (Post-vaccination evaluation). As a result, several countries have been undertaking vaccination for many years without achieving eradication. In addition, the coordination of control measures between neighbouring countries is not satisfactory and the regional or epizone approach is not taken into consideration.
- **Recruitment rate of newly susceptible sheep and goats** into small ruminant populations following vaccination is high, and this may require more frequent vaccinations than the annual ones that proved so successful during rinderpest eradication. Studies to investigate the levels of recruitment and to develop a proposed methodology for risk-based surveillance could be translated into useful actions such as targeted re-vaccination.
- **Applying post-vaccination serological monitoring in the field**: to assess the success rates of vaccination campaigns or to invigilate the effectiveness of individual vaccination teams. It is important to identify and remedy technical or administrative errors, or indeed administrator negligence in order to ensure the implementation of effective vaccination campaigns and take corrective actions, if needed. However, considering that -in line with the PPR GCES – several approaches can be used for that purpose (e.g. estimation of PPR incidence through outbreak reporting, sociological participatory surveys), the case for detailed serological monitoring may have to be made on a case-by-case basis. Engaging and incentivising the field operatives involved

on the ground in GEP implementation will be critical, and efforts to create a 'community of practice' would likely be very beneficial in this regard.

- **Laboratory**: supply of reagents is a major challenge and these countries' laboratory infrastructure and access to laboratory consumables need to be strengthened through the national and regional networks.
- **Applying movement controls:** the control of animal movement, including the imposition of quarantines and other sanitary measures, are integral to most infectious disease control and eradication programmes. However, strict movement control can be counter-productive because it can actually stimulate illegal and thus uncontrolled movement of animals in order to bypass quarantines and restriction orders. To this end, movement controls must be managed based on the experience of local animal health teams who are better equipped to judge the behaviour of local owners when faced with such restrictions.

Upcoming strategic activities

PPR GEP II and review of the implementation of GCES: in a participatory manner, formulate the second phase of the programme (2022-2027) and review the implementation of PPR GCES as recommended by the 2015 Abidjan conference. Learning from rinderpest experience, the new version will draw the blue print toward 2030 with Monitoring and Evaluation (*M&E).*

Epizone approach*:* (NB. Epizones combine regions/areas with similar epidemiology into zones and require concerted control and eradication efforts across regional borders.) 2-3 epizones need to be identified for action intensification based on available resources and epidemiological situation. In this regard, a mechanism could be introduced of assigning dedicated consultants (PPR experts including GREN experts) to countries of those epizones to provide them with concrete and tailored technical support , along with workshops/training on risk analysis and epidemiological assessment.

Using on-line technologies for capacity development, training and guidance for PMAT, and greater coordination/engagement of the PPR GREN which supports the GEP.

Manpower: Secretariat needs to be strengthened for better engagement with countries, and to increase capacity to effectively drive the GEP forwards.

Advocacy: through communication and engagement of resource partners, Regional Economic Communities and countries to achieve the vision mandated to FAO and OIE of a 2030 PPR free world.

FAO-OIE current task sharing scheme, used for the day-to-day work:

PPR Secretariat

- Coordination including Advisory committee and GREN
- Partnerships
- Support to Resource Mobilization and Marketing
- Road map meeting and follow up jointly with the Regional Advisory Groups
- PMAT review and follow-up of its utilization
- Support to NSP formulation and establishment of the NSPs repository
- Reporting and monitoring framework
- Advocacy and communication.

OIE

- PVS Evaluation or PVS Follow up Evaluation missions with specific content on PPR (eight PVS-PPR missions conducted so far for Turkey, Afghanistan, Nigeria, Tchad, Burundi, Liberia, Iran, Mongolia)
- Endorsement of PPR official control programmes/official recognition of PPR free status
- WAHIAD and Continuous notification of PPR
- Laboratory Twinning Projects for PPR
- Communication
- PPR Vaccine Bank
- Resource mobilization

FAO

- Surveillance, disease intelligence, risk analysis, networks and preparedness,
- Laboratory capacity building and networks
- Socio-economic studies including cost/benefit analysis, guidelines/tools/manuals production and implementation
- PPR vaccines production, quality control and used
- Communication for development and cross-border harmonisation
- Resource mobilization.

Rinderpest-post Eradication

The FAO-OIE joint Rinderpest Secretariat

The FAO-OIE Rinderpest Secretariat and the Rinderpest Joint Advisory Committee (JAC) were established in 2012 to coordinate a post-eradication strategy for rinderpest and mitigate the risk posed by the release of Rinderpest Virus Containing Material (RVCM). The Secretariat receives guidance from the Management Committee of GF-TADs,

It is composed of Samia Metwally, chair(FAO), Shija Jacob (FAO), Varun Chaudhary (FAO) and Mariana Marrana (OIE)

Brief description of the strategy

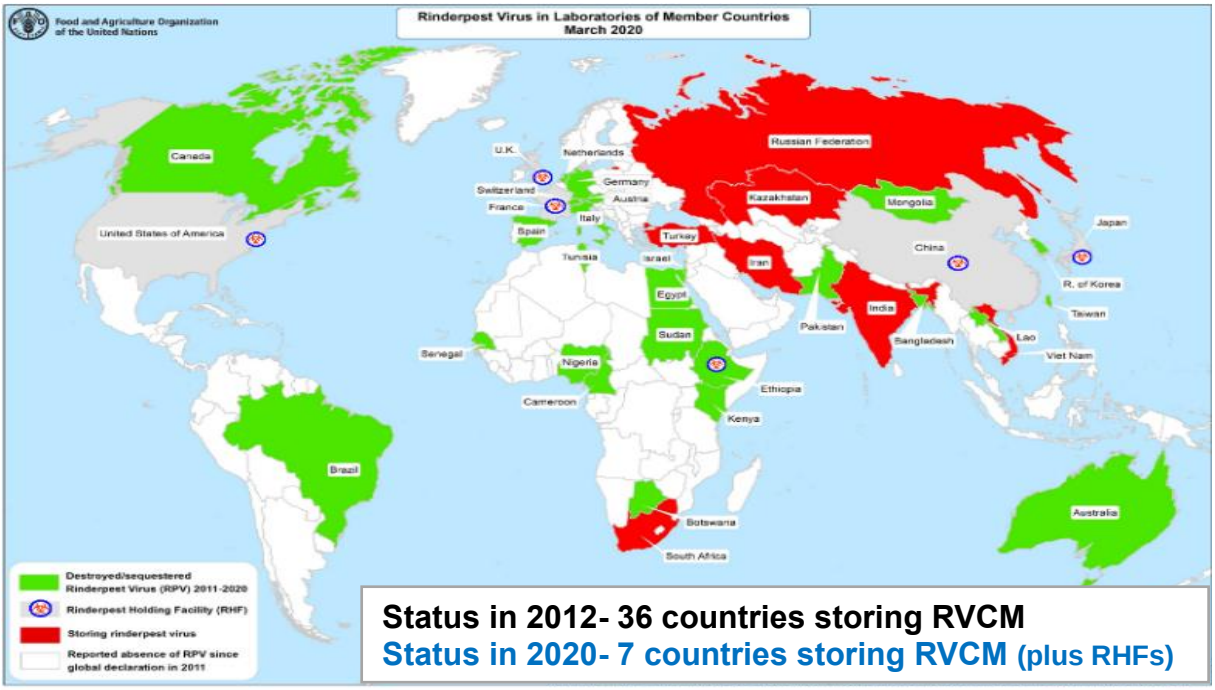
Following the declaration of Global Freedom from Rinderpest in 2011, the Food and Agricultural Organization (FAO) and the World Organisation for Animal Health (OIE) were entrusted by Members to implement precautionary measures to maintain rinderpest global freedom.

Post-eradication priorities:

- Establish FAO-OIE Rinderpest Holding Facilities (RHF) for safe storage of the remaining RVCM stocks
- Prepare an international preparedness plan [referred to as Global Rinderpest Action Plan (GRAP)]
- Continue to advocate for destruction and sequestration of RVCM in the remaining countries and reduction of RVCM holdings in RHFs, while keeping the RHF network active
- Maintain a global inventory of RVCM stored in and outside RHFs
- Establish vaccine reserves and build diagnostic capacity
- Approve essential research projects relevant to the post eradication era
- Adequate surveillance systems and follow up on suspect cases
- Communicate and advocate to strengthen awareness of rinderpest and the impacts of the disease re-emergence and ensure that the campaign tools remain available

Epidemiological situation

The last case of rinderpest was reported in Kenya, in 2001. The disease was declared as eradicated in 2011.



Status in 2020

- 7 countries storing RVCM
- 6 countries hosting RHF

Who is next to destroy RVCM? Viet Nam; Turkey

Application for RHF: Kazakhstan; Iran; India – ongoing

No intention to remove: South Africa; Russian Federation

Progress achieved in the last 2 years

FAO-OIE joint activities:

- The number of countries storing RVCM outside of RHFs is reduced to seven
- Nigeria, Netherlands, Ethiopia, and South Korea were the latest countries to destroy/sequester RVCM
- The Pirbright Institute destroyed their historical RVCM stocks as a result of the conclusion of the "Sequence and Destroy" project
- Publication of the GRAP in 6 languages www.gf-tads.org/resources/publication-detail/en/c/1152427/
- Convened the second RHF Network meeting in 2019 to advocate for the removal of virus from countries storing RVCM and develop the biennium RHF network workplan
- Approved research projects and vaccine production with recommendation from the JAC (one each from CIRAD and Pirbright and two from Japan)
- Designation of two RHFs in France and China, in addition to the five RHFs that were designated in 2015 in the UK, USA, Japan and Ethiopia.
- Developed a non-infectious diagnostic test for rinderpest to make available at the RHFs

- FAO-OIE co-branding agreement for communication materials developed. In process of getting validated by FAO and OIE. The agreement covers all communications tools to be co-branded and jointly promote the tools

FAO led activities:

- Viet Nam agreed to destroy their RVCM and requested FAO's assistance (put on hold due to COVID-19)
- Established the FAO rinderpest vaccine seed bank at CIRAD
- FAO strengthened capacity of NIAH, Japan in achieving a robust quality vaccine production and management system for building a rinderpest vaccine reserve (RVR) in Asia. Rinderpest vaccine reserve in Japan holds 1.5 million doses manufactured vaccine and 1 million doses of antigen concentrate
- FAO is implementing rinderpest advocacy in Pakistan, Viet Nam, Kenya and India
    - Pakistan – Hired a national communications consultant; completed needs assessment surveys in three districts; led an inception meeting with government representatives, academia and livestock-keepers associations. Developing the communications strategy for a follow-up meeting with stakeholders and implementation approval by government representatives.
    - Viet Nam – FAO representatives visited two laboratories in Ho Chi Minh and Hanoi. Organized an inception meeting with government representatives. Hired a communications agency to implement in-country activities agreed under Global Rinderpest Post-Eradication Security: Phase II. Needs assessment survey conducted in two districts with livestock keepers. Communications strategy being prepared for presentation in the stakeholders meeting.
    - Kenya – Signed the FAO's Government Cooperative Programme (GCP)agreement. In the process of hiring a national consultant for dissemination of FAO e-learning course, veterinarian's pocket guide and other communication tools to veterinary professionals and laboratory personnel.
    - India – FAO is actively communicating with the government representatives for signing the GCP agreement. The Rinderpest Secretariat has also offered to revise India's application to become a rinderpest Holding Facility.
- FAO published and launched the first ever eLearning module on Rinderpest Disease Recognition https://elearning.fao.org/course/view.php?id=528. The second eLearning module modelled on GRAP is being developed. FAO is leading sustained promotions of the E-learning course on FAO social media network with geo-tagging target countries and their official twitter accounts
- FAO organized a divisional seminar on rinderpest for a larger technical and non-technical audience with invited speakers from RHFs, OIE and JAC
- FAO led a special online event to commemorate the 9th year anniversary of rinderpest eradication - ***9th Rinderpest Anniversary - Lessons learnt from rinderpest eradication to be used for controlling other diseases***

OIE led activities:

- The Rinderpest Virus Tracking System was launched in 2017 and is hosted by the OIE with granted access to FAO. The RVTS has received technical enhancement in 2019 based on feedback from RHF users.

- OIE developed and disseminated the “Never Turn back” campaign and the Rinderpest game. Two annual challenges for the game were organized in 2018 and 2019.

Constraints

- Difficult engagement with 7 countries still storing RVCM
- Lack of interest/awareness on an eradicated disease

Upcoming strategic activities

- Communication opportunity: 10-year anniversary of rinderpest eradication
- Publication of the book “Rinderpest and its eradication”
- Engagement with countries still storing RVCM outside RHFs
- FAO to publish and launch the Rinderpest e-learning module on GRAP
- FAO to finalize a pocket guide for veterinarians
- FAO to finalize a book chapter on rinderpest to be included in academic curriculum
- FAO is leading the conceptualisation and creation of a rinderpest mobile application
- Work on the new FAO animal health website for updating rinderpest webpage with resources and archives
- Develop the framework between FAO and RVR for vaccine deployment and condition in case of a global emergency
- Explore options for additional RVR’s
- Develop strategy to reduce the number of RHFs to minimum
- Virus destruction mission in Viet Nam
- NVI’s (Ethiopia) facility inspection to become a vaccine manufacturer
- Annual JAC meetings
- Virtual advocacy meeting with the remaining countries storing RVCM to assist in the removal of RVCM stocks or complete their application for RHF designation
- Resource mobilization to continue biothreat reduction and expand the number of vaccine doses in store

Annex I. Source of fundings

The following parts reflect the financial contributions to the disease specific control strategy. The FAO and the OIE recognise that a number of donors and countries also provide significant logistic or human resource contributions that cannot be added to the table (Canada, China, European Commission, France, Japan, Italy, Spain) and also acknowledge the contribution of countries that host physical events."

1. Funding for ASF

The Global Initiative lists the various activities that are currently underway or are being planned under each objectives of the Global Initiative in the operational plan[7] available online in the GF-TADs website. . The operational plans shows allocated funds and funding sources for each activity and funding gaps for in view of efficient coordination. Activities that have identified the donors are shown .Although the activities are coordinated under the Global Initiative, the management of the activities and the funds are under the responsibility of the relevant FAO or OIE HQ or regional offices.

The following is a summary table of the funding available for the past 2 years and for the coming years on activities related to ASF.

Table 1. Funding to support the activities related to ASF by donor, amount, regions and period.

Organisation	Donor	Amount	Beneficiary Region	Time period
OIE	Canada (CFIA-AAFC)	CAD 382 000	Americas	6.2023
	Colombia	USD 300 000	Americas	12.2020 to be extended
	China (People's Republic of)	EUR 1 459 000	AP; Global	open
	Japan-Trust Fund	EUR 150 000	AP	6.2021
	Korea (Rep. of)	EUR 40 000	AP	open
	EU-DG SANTE	EUR 80,000	Europe/Africa	12.2021
	USA-DTRA	USD 600 000	Global; SEA; Africa	10.2022
	Italy	EUR 150 000	Global	12.2021
FAO	DoD DTRA (USA)	USD 371,800	Global	29.Sep.23
		USD 901,000	SEA	
		USD 803,500	EA	
	OFDA (USA)	USD 1,775,000	SEA	15.Sep.21
	FAO	USD 500,000	Balkans	31.Oct.21
	FAO	USD 467,000	Ivory Cost	30.Dec.20
	FAO	USD 500,000	East and SEA	31.Dec.20
	FAO	USD 250,000	PNG	31.Dec.20
	FAO	USD 500,000	LA and Caribbean	31.Dec.20

[7] https://app.smartsheet.com/b/publish?EQBCT=9b60eb8a78bc41feb2bcd79da955f2ea

- Draft the WG action plan for 2021-2022 (with involvement of the RAGs)

2. Funding for FMD

FAO-funded projects:

- DTRA Funded Project (GCP/GLO/074/USA): March 2020 to September 2022
  - Total Budget for FMD global (259K) and West Africa (919K)
- Control of Transboundary Animal Diseases- FMD & PPR- Pakistan (UTF/PAK/139/PAK): $36,530,335
- Risk-based control of FMD in Pakistan (UTF/PAK/145/PAK) 2019-2025: $6,598,917
- Support to implementation of the FMD-PCP in South Sudan (TCP/SSD/3602) 2017-2020: $451,000
- Emergency assistance for the control of Foot and Mouth Disease in central and western regions of Mongolia (TCP/MON/3701) 2018-2020: $300,000
- Plus regular Programme funding

EuFMD funded project:

- EU funded activities (2019-2023) by the European Commission for the control of Foot and Mouth Disease (GCP /GLO/026/EC) to improve preparedness, risk reduction and sustain global strategy: EURO 12,253,830 of which EURO 2,604,456 for Pillar III Programme to sustain the FMD Global Strategy.

OIE funded-projects:

Donor	Scope	Amount	Period covered
EU-DG SANTE	Global	EUR 80 000	2019-2020
EU-DG SANTE	EU neighbouring countries	EUR 80 000	2020-2021
China	SEACFMD	EUR 650 000	Open
DTRA	Global	USD 510 000	2020-2022
NZ-MFAT	Lao PDR/Myanmar/SEACFMD	NZD 1 493 5123	2015-2022
Italy	Global	EUR 150 000	12.2021

3. funding for PPR

FAO: France 2017-2020 (USD 330,891), DTRA (2019-2022 for USD384,926) and FAO regular funds and several trust funds at the country level.

OIE: US Defense Threat Reduction Agency (US-DTRA) (Period 2019-2022, USD 600,000, geographical scope Global), World Bank Regional Sahel Pastoralism Support Project - PRAPS (Period 2015-2021, USD 3,140,060 to ensure the regional coordination of the animal health component, geographical scope Sahel), Germany Federal Ministry of Economic Cooperation and Development (Period 2020-2024, EUR 2,500,000, geographical scope East Africa), European Union Directorate-General for Health and Food Safety - DG SANTE (Period 2019-2020, EUR 80,000, geographical scope Global), Italy (Period 12.2021, EUR 150,000, geographical scope Global)

To be noted: The World Bank funded Regional Sahel Pastoralism Support Project (PRAPS) launched in 2015 (Period 2015-2021, USD 248 million, geographical scope Sahel) is currently under negotiation for a second phase for the period 2022-2027.

4. funding for Rinderpest post eradication

FAO

- DTRA (USA), September 2017 to June 2021, around 1,243,191 USD, global.
- MAFF (Japan), October 2015 to November 2020, global, joint project with EMC 2,500,000
- MAFF (Japan), starting in December 2020 to 2025, global. 45,000 per year

OIE

- DTRA (USA), starting in September 2020, 2 years, around 500.000 USD, global.