



Towards a More Resilient Veterinary Workforce for Africa 2024

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Animal health is our health. It's everyone's health



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AgResults FMD Vaccine Challenge Project: Encouraging Public-Private Partnerships to Address FMD Vaccine Value Chain Challenges

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AgReults FMD Vaccine Challenge Project Overview & Updates

AgResults

INNOVATION IN RESEARCH
AND DELIVERY

\$152 million multi-donor initiative that uses Pay-for-Results (PFR) prize competitions to incentivize the private sector to develop or distribute high-impact agricultural innovations that achieve the following goals:



Reduce Food
Insecurity



Improve Household
Nutrition and Health



Increase Livestock
Productivity

AgResults' **theory of change** rests on the idea that, if appropriately incentivized with a prize, the private sector will respond by creating and/or scaling new technologies to benefit smallholder farmers:



OVERVIEW OF THE AGRESULTS FMD VACCINE CHALLENGE PROJECT

Problem

Foot and Mouth Disease (FMD) is a highly contagious viral livestock disease that results in short-term productivity losses and long-term weakness and debilitation of adult animals.



Solution

Large-scale adoption of high-quality vaccines, suitable for use in Eastern Africa.



Incentive

The Project will fund a portion of the purchase price of the new vaccines purchased by public and private sector buyers.

Anticipated Impact

Incentivize manufacturers to support long-term efforts to control FMD by continuing to serve the Eastern African market and reduce the FMD productivity-driven losses and income decreases for smallholder farmers by increasing access to vaccines.

PROJECT OBJECTIVES AND IMPACTS

8-year, US\$17.34M prize competition that supports development, registration, and uptake of high-quality FMD vaccines tailored to match the currently circulating strains in six Eastern Africa countries: Burundi, Ethiopia, Kenya, Rwanda, Tanzania, Uganda.

Project Objectives



Develop and register high-quality FMD vaccines tailored to the needs of Eastern Africa



Create greater market stability and affordability through increased production and purchase of FMD vaccines that are regionally relevant



Build a private sector model for FMD vaccine purchase and distribution to complement public sector efforts



Anticipated Impact



Incentivize manufacturers to support long-term efforts to control FMD in the Eastern African market with regionally appropriate vaccines

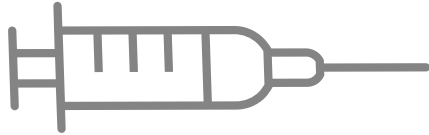


Increase access to and uptake of effective FMD vaccines



Reduce FMD-driven production losses for small-scale farmers in the region (estimated USD\$2.3 billion per year across sub-Saharan Africa)

FOSTERING DEVELOPMENT OF HIGH-QUALITY, REGIONALLY-RELEVANT FMD VACCINES



To be eligible for the AgResults FMD prize, the vaccine must meet the following conditions:

1 Target Product Profile

Quadrivalent vaccine at least 6PD50 containing serotypes A, O, SAT1, and SAT2 that match circulating FMD viruses in EA.

2 Vaccine Registration

Vaccine must achieve full registration in at least one target country (Burundi, Ethiopia, Kenya, Rwanda, Tanzania, Uganda).

3 Vaccine Approval

Judging Panel reviews applications and grant approvals to those vaccines that meet the eligibility criteria in first two columns.



The prize is structured as a USD\$15.8M cost-share that reduces the cost-per-dose for buyers who purchase directly from manufacturers, enabling public and private sector actors to better combat FMD through access to more effective vaccines.

FIRST COMPETITOR AND LAUNCH OF PROJECT'S COST-SHARE PHASE



September 2024: the Project announced **Biopharma (Morocco)** as the first company to register a **quadrivalent FMD vaccine** in Eastern Africa and meet the AgResults eligibility criteria.



The Cost-Share Phase launched on 1st October 2024:

| Sales Period | # of Months | Start Date | Cost-Share %* | Total Doses |
|--------------|-------------|------------|---------------|-------------|
| 1 | 18 | 1 Oct 2024 | 75% | 3,000,000 |
| 2 | 14 | 1 Apr 2026 | 65% | 4,250,000 |
| 3 | 14 | 1 Jun 2027 | 55% | 5,250,000 |

COST-SHARE PHASE: PROJECT'S COMMITMENT TO VACCINE UPTAKE

Timeline

The Cost-Share Phase, structured in three sales periods, began on 1st October 2024 and will end in July 2028.

Funding

- The cost-share support available to vaccine buyers through the competition is USD\$15.8 million and will be paid directly to vaccine manufacturers to offset the cost of a target volume of vaccines.
- AgResults will fund a percentage of the vaccine price each sales period (e.g., 75% in the first sales period) up to a sale price of USD\$2.00 per dose. If the vaccine has a sale price above USD\$2.00, the buyer will pay the difference.
- To support the creation of a sustainable FMD vaccine market in the region, the level of cost-share support will gradually decrease each sales period in anticipation of the Project's completion.

Illustrative Example of Funding for 1st Sales Period

Price per Dose
Received by
Manufacturer:
\$2.00

AgResults Funded
Portion
\$1.50
(75%)

Buyer Funded
Portion
\$0.50
(25%)



Encouraging Public-Private Partnerships to Address FMD Vaccine Value Chain Challenges

PPP FRAMEWORK OVERVIEW

PPP Framework Objective and Value

A document developed by the AgResults FMD Project Team to create awareness about the benefits that PPPs could bring to the Foot and Mouth Disease Vaccine Value Chain (FMD VVC) in Eastern Africa - from production, purchasing, distribution, delivery, and vaccinations to post-vaccination monitoring - that would complement current public sector efforts, resulting in improved vaccine accessibility for farmers and greater market stability.

Scope of the PPP Framework

It customizes aspects of the WOAHP PPP Handbook into a practical framework that can be further developed into appropriate commitments between partners.

It addresses the challenges of the FMD VVC and is relevant to the unique FMD control situation in each of the Project's target countries. It can also be applied more broadly to other livestock VVCs and other geographies.

PPP Framework development was carried out in close collaboration with WOAHP's Public Private Partnership (PPP) Team.



PPP STAKEHOLDER OUTREACH AND ENGAGEMENT

The project conducted outreach to more than 140 key stakeholders (public 47%; private 53%) in Eastern Africa and beyond.

| <u>Public Sector</u> | <u>Private Sector</u> | | | | | | | | | |
|--|---|-------------|-------------|-----------|---------|---------------|-------------|-------|--|--|
| <ul style="list-style-type: none"> ✓ DVS/CVO office - BR, ET, KE, TZ, RW, UG ✓ Public veterinarians ✓ Veterinary Regulatory and Registration Authorities ✓ Veterinary Laboratory Agencies/Authorities ✓ Vaccine manufacturers ✓ National ranches/livestock enterprises | <ul style="list-style-type: none"> ✓ Vaccine distributors and suppliers ✓ Private veterinarians and para-vets ✓ Ranches and livestock enterprises ✓ Dairy enterprises and cooperatives ✓ Livestock exporters ✓ Regional and national associations | | | | | | | | | |
| <p style="text-align: center;"><u>Global and Regional Institutions</u></p> <table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">✓ WOAH</td> <td style="width: 33%;">✓ AU-PANVAC</td> <td style="width: 33%;">✓ AU-IBAR</td> </tr> <tr> <td>✓ EuFMD</td> <td>✓ IGAD/ICPALD</td> <td>✓ FAO-ECTAD</td> </tr> <tr> <td>✓ EAC</td> <td></td> <td></td> </tr> </table> | | ✓ WOAH | ✓ AU-PANVAC | ✓ AU-IBAR | ✓ EuFMD | ✓ IGAD/ICPALD | ✓ FAO-ECTAD | ✓ EAC | | |
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| ✓ EAC | | | | | | | | | | |

FEEDBACK 1: GENERAL OVERVIEW OF PPPs IN EASTERN AFRICA

Legal and administrative structures for PPPs in Eastern Africa are limited to the infrastructure development, energy and water sectors. PPP units are situated in ministries of finance and economic development.

- There is a need to establish links between the respective PPP units and the agriculture sector to be able to create an enabling environment for PPPs in the FMD VVC.

Stakeholders acknowledged gaps in current public sector provisions for FMD control. Most common gaps include:

- Poor vaccine supply and vaccination coverage
- Reactive and ad hoc procurement of vaccines
- Lack of involvement of private sector in FMD control

Stakeholders unanimously agreed on the need for PPPs in FMD VVC.

FEEDBACK 2: PPP CHALLENGES AND OPPORTUNITIES

1. High costs of vaccination

Public sector vaccination campaigns are typically carried out by government vets with high costs incurred to facilitate travel to remote areas.

- **Opportunity Area:** PPP with private veterinarians and veterinary paraprofessionals
- High potential for PPP identified in ALL target countries

2. Limited capacity in vaccine supply chains

FMD vaccines need a cold chain distribution process to maintain efficacy.

- **Opportunity Areas:** (1) PPP with vaccine manufacturer(s) to invest in enhanced public sector cold chain, and (2) PPP to outsource cold chain distribution to private sector (private distributors, vets, and vet paraprofessionals)
- High potential for PPP identified in ALL target countries

3. Long vaccine supply lead times

FMD vaccine production process takes two to three months, and vaccine delivery adds another delay. This issue is exacerbated by the typically reactive approach to FMD control.

- **Opportunity Area:** PPP with FMD vaccine manufacturer for projected supply and/or supporting the process of demand forecasting.
- High potential for PPP identified in ALL target countries

FEEDBACK 3: PPP CHALLENGES AND OPPORTUNITIES

4. Challenge with available vaccines to address all the regional FMD risks

Need development and production of high-quality vaccines relevant to the region

- **Opportunity Area:** PPP arrangement between local (govt) manufacturer and an international vaccine manufacturer
- High potential for PPP identified in Tanzania, Ethiopia, and Kenya

5. Challenges with serotyping and vaccine matching

Limited facilities, budgets and infrastructural mechanisms to carry out effective serotyping and vaccine matching

- **Opportunity Area:** PPP with (1) existing laboratory institutions, (2) potential local dairy or meat associations to help with capacity building and equipment upgrades
- High potential for PPP identified in Ethiopia, Kenya, Rwanda, and Tanzania

6. Limited post-vaccination monitoring

Difficult to measure the effectiveness of the vaccination campaigns

- **Opportunity Area:** PPP with VPPs (under supervision of vets, to ensure proper coordination, data analysis, and subsequent plan of actions)
- High potential for PPP identified in Tanzania and Uganda

ENABLING ENVIRONMENT CHALLENGES TO ESTABLISH PPPs

Key landscape and enabling environment challenges for developing PPPs include:

- Unclear policies and absence of a legal framework for PPPs
- Trust issues between the public and private sectors
- Budget shortages

Areas of support needed to establish PPPs in FMD VVC include:

- Training, awareness raising, and advocacy of PPPs
- Development of an institutional framework, legal framework, and a PPP Technical Unit
- Provision of portable cold chain storage units to be used in field settings

PROMOTING PPPs IN THE EASTERN AFRICA VETERINARY DOMAIN

1. The Project has engaged with WOA, EuFMD, IGAD/ICPALD, USDA-TRASE Project and others on PPP activities related to the FMD vaccine value chain in the Eastern African region.
2. The Project has created awareness on the PPP Framework knowledge base in various Eastern African regional and national platforms and association meetings (EA-RAHN, TVA, KVA, APSK, etc.)



The AgResults FMD Vaccine Challenge Project continues to identify opportunities to encourage initiation and scale-up of PPP opportunities that can strengthen the FMD vaccine value chain in Eastern Africa and thereby increase the impact of the Project.



Thank You!

Follow our progress by signing up for Project updates here:
www.galvmed.org/foot-and-mouth-project

