Prize Competitions to Drive Private Sector-Led Growth and Investment in Livestock Productivity

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$145 million multi-donor initiative that uses Pay-for-Results (PfR) prize competitions to incentivize the private sector to invest in high-impact agricultural innovations that help achieve the following goals:

- Reducing Food Insecurity
- Improving Household Nutrition and Health
- Increasing Livestock Productivity

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

1. Identify or source new technology
2. Incentivize the private sector to overcome market barriers
3. Achieve wide-scale adoption and scaling
4. Create sustainable markets
The Role of Pay-for-Results Prize Competitions

- **Stimulate markets** around agricultural technologies to solve market failures
- Engage the private sector so they **realize the economic potential** of investing in underserved markets
- Encourage linkages between smallholder farmers and private sector to **strengthen value chains**
- Increase incomes, boost livelihoods, **and transform market systems**
Assessing the Conditions to Design an Effective Prize Competition

**MISSION IMPACT**
Does the problem align with mission goals and impact expectations?

**MARKET FAILURE**
Is there a market breakdown that a prize competition can fix?

**ENABLING ENVIRONMENT**
Are the context and enabling conditions neutral to supportive?

**PRIZE DESIGN**
Is the prize competition design feasible and measurable?
AgResults in Action around the World

- **Nigeria Aflasafe™ Project**
  Promoting adoption of biocontrol technology to combat aflatoxin (fungal mold) in maize

- **Kenya On-Farm Storage Project (CLOSED)**
  Expanding on-farm storage solutions for smallholder farmers

- **Foot and Mouth Disease Project (Regional)**
  Creating improved FMD vaccine for East Africa and encouraging private sector market

- **Vietnam GHG Emissions Reduction Project**
  Testing and scaling up improved, low emissions rice farming technologies

- **Tanzania Dairy Productivity Project**
  Incentivizing delivery of specialized input bundles and extension services to develop dairy value chain

- **Uganda Legume Seeds Project (CLOSED)**
  Strengthening production and distribution value chain for improved legume seeds

- **Brucellosis Vaccine Development Project (Global)**
  Creating a low-cost and effective Brucellosis vaccine

- **Zambia Biofortified Maize Project (CLOSED)**
  Encouraging uptake of pro-Vitamin A orange maize
**Brucellosis Vaccine Challenge Project**

*Brucella melitensis*, which causes abortions, infertility, and decreased milk production, costs smallholder farmers US$641 million annually and leads to 90% of 500,000 new annual cases of human Brucellosis.

**US$30 million prize** competition incentivizes commercial and academic organizations to develop, register, and scale up an improved *Brucella melitensis* vaccine for developing countries to strengthen livestock health.

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**Milestone 1: Application**

Best ten applications to meet criteria and pass review by an expert judging panel are awarded **US$100,000 each**.

**Milestone 2: Efficacy Study**

First four commercially supported vaccine submissions that are safe, scalable, and meet minimum viable product (MVP) requirements are awarded **US$1,000,000 each**.

**Milestone 3: Grand Prize**

First company to register vaccine in EU, Canada, US, Japan, or Australia is awarded **US$20,000,000**.

Within a year, the first to meet any best-in-class element is awarded **US$5,000,000**.

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**Milestone 1 Awards**

- **$1M**

**Milestone 2 Awards**

- **$4M**

**Milestone 3 Awards**

- **$20M**
- **$5M**

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2017 2018 2020 2021 2026
Prevalence of low-yield breeds, poor availability of inputs, and inaccessible and unaffordable extension and veterinary services for farmers has weakened the dairy value chain in Tanzania.

**US$2.2 million prize** competition incentivizes Tanzanian dairy input suppliers to deliver customized bundles of inputs to smallholder dairy farmers to increase productivity and strengthen value chain.

**Tanzania Dairy Productivity Challenge Project**

**Project Overview**

- **Competition launched and competitors apply for inclusion**
- **Competitors deliver inputs to farmers. Prizes depend on the input’s value and complexity**
- **Farmers receive and utilize more productivity increasing inputs**
- **Improved animal productivity and farmer livelihoods**
- **Increased Market Formalization**

**Estimated Project Outcomes**

- **Expected Additional Milk Production**
  - ~23M Liters

- **Expected Additional Farmer Revenue**
  - $9.4M

- **Expected Competitor Revenue**
  - $4.14M

- **Market Penetration**
  - (% of Dairy Farmers in the Region reached)
  - 22%
Key Takeaways: Value of Livestock Sector Prize Competitions

Livestock sector prize competitions can ...

- ... leverage private sector investments and **innovation**
- ... **spark productivity** and growth by paying for outputs or outcomes
- ... stay **solution-agnostic**
- ... encourage **research and development**
- ... improve **efficiency** of capital
- ... create sustainable and **scalable solutions**
Wrap-up and Reflection

- Role of prize competitions to leverage private sector innovation to overcome market barriers
- Competitions can target market failures along the livestock sector value chain
- Impact of prize competitions to create sustainable solutions to encourage long-term growth
- Group discussion (if time permits):
  - What challenges do you face around livestock productivity and animal health?
  - Can these challenges be addressed by Pay-for-Results prize competitions?
Thank you!

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