EDUARDO MONDLANE UNIVERSITY

CENTRE OF EXCELLENCE IN AGRI-FOOD SYSTEMS AND NUTRITION IN COLLABORATION WITH HIGHER POLYTECHNIC INSTITUTE OF GAZA (ISPG) AND HIGHER POLYTECHNIC INSTITUTE OF MANICA (ISPM)

CALL Nº 03/2025

June 16th, 2025

CALL FOR SUBMISSION OF PROPOSALS:

COMUNITY ACTION RESEARCH PROJECTS (CARP-E) FOR ENTERPRISE CREATION, INCUBACTION AND BUSINESS SPIN-OFFS

Title: **Veterinary Services in Rural areas of Mozambique**

1. Background

The livestock sector is a cornerstone of rural livelihoods in Mozambique, supporting food and nutrition security, income diversification, and economic resilience for approximately 70% of the population residing in rural areas (FAO, 2021)[1]. Livestock, including cattle, goats, poultry, and other animals, provide essential resources such as meat, milk, eggs, and manure, while also serving as a critical asset for smallholder farmers facing economic and environmental challenges. However, the sector's potential is hindered by significant constraints, particularly the limited availability and high cost of veterinary services in rural and underserved communities.

Access to quality veterinary care in rural Mozambique is severely restricted due to a shortage of trained veterinarians, inadequate infrastructure, and the high cost of veterinary supplies, such as

[1] FAO (2021). *Livestock sector in Mozambique: Opportunities and constraints*. Rome: Food and Agriculture Organization of the United Nations.

vaccines and medicines, which are often imported (IFAD, 2020)[2]. This results in high animal mortality rates, poor disease management, and reduced productivity, directly impacting farmers' livelihoods and food security. Remote areas are particularly affected, as veterinary professionals are predominantly concentrated in urban centers, leaving rural farmers reliant on informal or untrained local practitioners (World Bank, 2022)[3].

Women and youth, who constitute a significant portion of the rural agricultural workforce, face additional barriers in accessing veterinary services. These include limited financial resources, restricted mobility, and exclusion from decision-making processes, which further exacerbate inequities in livestock health management (CARE, 2019)[4]. Moreover, climate variability, including frequent droughts and disease outbreaks, increases the vulnerability of livestock populations, underscoring the need for accessible, climate-smart veterinary solutions (USAID, 2021)[5].

Emerging innovations offer promising opportunities to address these challenges. Mobile veterinary clinics, tele-veterinary platforms, and community-based veterinary service models have the potential to bridge the gap in service delivery, bringing affordable and timely care to remote areas. Digital tools, such as SMS-based advisory systems and mobile applications, can enhance farmers' access to real-time information on animal health, disease prevention, and treatment options (ILRI, 2020)[6]. These solutions, when designed with inclusivity and local context in mind, can empower rural farmers, particularly women and youth, by improving livestock health, reducing losses, and fostering sustainable enterprise development.

This call for proposals seeks innovative, scalable, and inclusive models to strengthen veterinary services in rural Mozambique. Proposals should focus on delivering cost-effective, accessible, and climate-resilient veterinary care, addressing the specific needs of rural communities, and promoting enterprise creation to enhance livelihoods, food security, and rural development.

2. Thematic Areas

Thematic Area 1: Mobile Veterinary Services

Proposals under this theme should focus on developing mobile veterinary clinics or outreach programs to deliver affordable and timely veterinary care to remote rural communities. Solutions

---

[2] IFAD (2020). *Agricultural Sector Assessment Mozambique*. International Fund for Agricultural Development.

[3] World Bank (2022). *Mozambique Agriculture Public Expenditure Review*. Washington, DC: World Bank Group.
[4] CARE (2019). *Gender and Agriculture in Mozambique: A Policy Review*.
[5] USAID (2021). *Climate Risk Profile: Mozambique*. United States Agency for International Development.
[6] ILRI (2020). *Livestock and digital innovation: Emerging solutions for Africa*. International Livestock Research Institute.

should incorporate climate-resilient practices, such as drought-resistant animal health strategies, and prioritize accessibility for women and youth. Enterprise-driven solutions that include:

- **Mobile Veterinary Clinic Cooperative**: A cooperative of trained veterinary technicians operating mobile clinics equipped with basic diagnostic tools, vaccines, and medicines. The cooperative can serve multiple villages, charging affordable fees and offering subscription models for regular check-ups.
- **Solar-Powered Mobile Vet Units**: A start-up that designs and operates solar-powered mobile veterinary units to provide services in off-grid areas, reducing operational costs and ensuring sustainability.
- **Women-Led Veterinary Outreach**: An enterprise focused on training and employing women as mobile veterinary agents to deliver services and educate farmers, addressing gender barriers in rural areas.

Thematic Area 2: Digital and Tele-Veterinary Solutions

This theme emphasizes the use of digital technologies, such as tele-veterinary platforms, SMS-based advisory systems, or mobile applications, to provide real-time animal health information, diagnostics, and treatment advice to rural farmers. Proposals should ensure inclusivity by designing solutions that are accessible to low-literacy populations and those with limited smartphone access. Enterprise-driven solutions that include:

- **SMS-Based Veterinary Advisory Service**: A start-up offering an SMS platform where farmers can report symptoms, receive automated advice, or connect with veterinarians for consultations, using basic mobile phones widely available in rural areas.
- **Tele-Vet Mobile App**: An enterprise developing a multilingual mobile app that connects farmers with veterinarians for video consultations and provides educational content on disease prevention, targeting youth and tech-savvy farmers.
- **Community Digital Hubs**: A business model establishing solar-powered digital hubs in rural areas where farmers can access tele-veterinary services, training, and market information via shared tablets or computers.

Thematic Area 3: Community-Based Veterinary Service Models

Proposals should explore community-driven approaches, such as training local veterinarians or establishing village-level veterinary pharmacies, to enhance access to veterinary care. These models should empower local communities, particularly women and youth, and integrate climate-smart practices to address environmental challenges. Enterprise-driven solutions that include:

- **Veterinarian Training Academy**: A social enterprise that trains youth and women as veterinarians, equipping them to provide basic veterinary services and sell affordable medicines in their communities.
- **Village Veterinary Pharmacy Network**: A start-up creating a network of community-managed veterinary pharmacies stocked with essential medicines and vaccines, supported by a supply chain linking to urban suppliers.
- **Farmer-Led Veterinary Cooperatives**: An enterprise supporting the formation of farmer cooperatives that pool resources to hire local veterinary agents and procure supplies, ensuring affordable and sustainable service delivery.

Thematic Area 4: Veterinary Supply Chain Innovations

This theme focuses on improving the availability and affordability of veterinary supplies, such as vaccines, medicines, and diagnostic tools, in rural areas. Proposals should address supply chain inefficiencies, high costs, and the need for climate-resilient storage solutions. Enterprise-driven solutions that include:

- **Local Veterinary Medicine Production**: A start-up producing low-cost, locally adapted veterinary medicines (e.g., herbal remedies or generic drugs) to reduce reliance on expensive imports.
- **Cold Chain Logistics for Vaccines**: An enterprise developing solar-powered cold chain solutions for transporting and storing vaccines in rural areas, ensuring their efficacy in high-temperature environments.
- **Veterinary Supply Aggregator Platform**: A digital platform connecting rural veterinary service providers with urban suppliers to streamline procurement and reduce costs through bulk purchasing.

Thematic Area 5: Climate-Smart Veterinary Practices and Disease Prevention

This theme addresses the need for veterinary practices that enhance livestock resilience to climate-induced diseases and environmental challenges. Proposals should focus on sustainable disease management and prevention strategies tailored to rural contexts. Proposals may include:

- **Early Warning Disease Systems**: An enterprise developing digital or community-based early warning systems for disease outbreaks, integrating climate data to predict risks and inform farmers;
- **Climate-Adapted Vaccination Programs**: A start-up offering affordable, climate-resilient vaccination services, prioritizing vaccines for diseases exacerbated by climate variability;

- **Traditional-Modern Veterinary Integration**: An enterprise combining traditional veterinary knowledge with modern practices to create cost-effective, locally accepted disease prevention solutions.

Thematic Area 6: Youth and Women Empowerment in Veterinary Entrepreneurship
This theme fosters entrepreneurship among youth and women to deliver veterinary services, addressing gender and age barriers through inclusive business models. Proposals may include:

- **Youth Veterinary Start-Up Incubator**: An enterprise providing training, seed funding, and mentorship for youth to launch veterinary service businesses in rural areas;
- **Women-Led Veterinary Microfinance**: A business model offering microloans to women to establish veterinary service enterprises, coupled with business management training;
- **Mentorship Networks for Veterinary Entrepreneurs**: A social enterprise creating networks to connect young and female veterinary entrepreneurs with experienced mentors for guidance and market access.

Thematic Area 7: Public-Private Partnerships for Veterinary Service Delivery
This theme encourages collaborations between universities, private companies, and government agencies to scale veterinary service delivery. Proposals should leverage partnerships to enhance infrastructure and affordability. Proposals may include:

- **Veterinary Extension Partnership**: An enterprise collaborating with government extension programs to integrate veterinary services into agricultural outreach, reducing costs for farmers;
- **Private-Sector Veterinary Hubs**: A business model partnering with private companies to establish rural veterinary service hubs offering subsidized services and supplies;
- **University-Led Veterinary Innovation Network**: An enterprise led by universities to pilot innovative veterinary solutions, scaling successful models through private and public funding.

3. Who should apply

This call invites faculty members (Principal Investigators, Lecturers and researchers) from Eduardo Mondlane University (UEM), Higher Polytechnic Institute of Manica (ISPM), and Higher Polytechnic Institute of Gaza (ISPG) to submit proposals that align with the Title outlined above.

4. Application Requirements:

- Be a Principal Investigator, Lecturer or Researcher of UEM, ISPM and ISPG.
- Technical and financial proposal: Refer to Annex 1.
- Curriculum Vitae.

5. Schedule of Activities

Table 1. Schedule of Activities

Activity	**Period/Date**
Submission of proposals	16 to 30 June, 2025
Evaluation and Selection	1ST to 3rd July, 2025
Publication of results	July 4th , 2025
Implementation period	July to December 2025

6. Budget

- Each selected project will receive funding of up to USD 15,000.

Application documents must be submitted to the following email address: dir.ceafsn@uem.mz by June 30th, 2025. The same email can be used for further details or additional information about the process. Details regarding the terms of reference and application forms can be accessed in the following website: www.ceafsn.uem.mz.

The Director of CE-AFSN

(Prof. Doutor Rogério Marcos Chiulele)

ANNEX 1:

1. CARP-E application form

2. Entrepreneurs/start-ups application form and with the Costing Excel.

Available in www.ceafsn.uem.mz