

EDUARDO MONDLANE UNIVERSITY CENTRE OF EXCELLENCE IN AGRI-FOOD SYSTEMS AND NUTRITION CALL Nº 01/2025

CALL FOR SUBMISSION OF PROPOSALS: COMUNITY ACTION RESEARCH PROJECTS (CARP-E) FOR ENTERPRISE CREATION, INCUBACTION AND BUSINESS SPIN-OFFS

1. Background information

The UEM through additional financing of the second phase of the African Centers of Excellence Project funded by the World Bank, has established the Center of Excellence in Agri-Food Systems and Nutrition (CE-AFSN). The aim of the UEM Centre of Excellence is to contribute to agri-food systems transformation in Africa and Mozambique through training highly qualified human resources at postgraduate level (Master and PhD) and in delivering high-quality research outputs in agri-food systems and nutrition, agricultural policy analysis and agricultural risk management and climate change.

Operating under the framework of the World Bank's African Centers of Excellence (ACE II) project, CE-AFSN aims to strengthen higher education institutions in Africa by providing quality postgraduate education and fostering collaborative research capacity in agriculture and related fields. Increasingly, universities and knowledge centers are currently being challenged to create economic value by transforming research and innovations into marketable products and services to address society needs. CE-AFSN is launching a call for proposal in Community Action Research Project for Enterprise Development (CARP-E). This initiative emphasizes business incubation and enterprise creation ("spin-offs") to contribute to the society transformation through innovation, entrepreneurship and economic development in local communities.

CARP-E aims to foster innovation, nurture startups, and accelerate their growth. Participants will have access to mentorship, business planning support, resources, market access, industry partnerships, training, and other vital tools to encourage the growth of innovative startups.

A key challenge addressed by the ACE II project is the skills gap in the agro-food sector in Sub-Saharan Africa, particularly in Mozambique. By equipping graduates with cognitive and technical skills, the project seeks to enhance productivity, foster innovation, and support the commercialization of agricultural products. CE-AFSN plays a critical role in these efforts, focusing on four key pillars:

- Agro-Food Systems and Nutrition
- Agricultural Policy Analysis
- Risk Management and Climate Change Adaptation
- Entrepreneurship and Innovation

The CARP-E aims to support innovative initiatives that offer practical solutions to challenges in agri-food value chains, as follows:

- Promote Community Entrepreneurship
- Stimulate the Creation and Growth of Innovative Startups
- Facilitate Market Access for Innovative Products and Services
- Provide Strategic Business Training
- Strengthening the Local Innovation Ecosystem

Priority areas

Aligned with the Mozambique's Strategic Plan of Agriculture Development Sector (PEDSA 2030) and the Sustainable Development Goals, CE-AFSN has identified priority food value chains aiming to ensure food security and promoting jobs creation. Applicants are requested to submit their proposals in the following thematic areas:

Theme 1: Livestock feed innovations, production and commercialization.

This theme seeks to address the inherent problems of low quality feed, high cost of feeds due to importation. Applicants are invited to explore the utilization of locally materials to develop innovative livestock feed solutions for cattle, poultry and well as accelerate their commercialization and adoption at community level by creating local enterprises that produce livestock, and commercial feed operations. Innovative, cost-effective solutions are crucial, such as utilization of agricultural products as primary materials in livestock feed production. Potential projects under this thematic area may include a digital feed optimization platform for sustainable feed recipes, climate-smart feed production using drought-resistant crops, small-scale mechanized feed processing machines, and value chains linking local feed producers to farmers.

Theme 2: Roots and Tubers Community Seed Systems Development and Commercialization.

This theme responds to challenges faced by farmers and value chain stakeholders in roots and tubers with availability, access, and distribution of quality seed at community level that continuously affect productivity. Further, it is seeking to challenge the continues importation of basic starchy roots and tubers that could be locally produced in Mozambique but the population remains unaware of the possible sources of materials and what the developed commercial operations of these value chains looks like. The call seeks to invite applicants that will offer innovative solutions to developing roots and tubers community seed systems and commercialization of products through agro-processing and value addition. Potential projects under this thematic area may include: developing high-yield, pest-resistant varieties of tubers and roots, and introducing small-scale agro-processing units for value-added products like cassava flour and chips. Sustainable storage solutions, such as solar-powered cooling, can reduce post-harvest losses.

Theme 3: Cereal Grains Production, Value Addition and Commercialization.

Cereals, such as maize, are staples in Mozambique, but malnutrition and reliance on imported products require urgent action. This theme responds to problems of high cost of seed, low value addition on the grains and low profitability of the enterprises among farmers. The call seeks for proposals that will introduce cost effective mechanized processing for fortified flour and cooking oil.

Theme 4: Innovations for last mile delivery, profitability and market place connectivity.

This theme recognizes that despite advances in ICT, millions of farmers and value chain stakeholders still struggle to access quality agricultural and markets information at the right time and quality. This affects the quality of their farm operations and agricultural enterprises. Further, the advances in ICT offer promise of increasing market efficiency and reducing costs through increased access to agri-business advisory services among others. This call seeks for competitive innovations, models, practices and processes that will deploy ICTs to connect markets in different value chains.

Theme 5: Alternative Protein Sources and Emerging Value Chains.

This theme recognizes that as the population growth and structure changes, urbanization and globalization, reshapes Mozambique, the food culture and habits are dramatically changing. Food sources and supply chains are dramatically changing. There is an emergence of frogs, snails, shrimps as popular cuisines. Additionally, black soldier farming that provides alternative protein source chicken feed has become a possible alternative for reducing cost of chicken feed whilst addressing waste management problems therefore moving into the circular economy for the farming communities and societies. This call seeks for proposals that will develop and commercialize alternative protein sources in Mozambique.

Theme 6: Agro-processing, value addition and local industrialization. This theme recognizes Mozambique's unique problem of dependence on importation of goods and services and seeks to advance import substitution agenda for Mozambique by promoting local agro-process, value addition and community oriented industrialization through evolution of chalet industries. This call therefore seeks for innovative agro-process, value addition and local industrialization

champion actions that support import substitution. The call particularly encourages applicants that seek to advance processes in neglected value chains (opportunity crops/value chains) including coconut.

Thematic area 7: Mobile veterinary services in rural communities.

Extension services play a crucial role in disseminating essential knowledge, such as production techniques, pest and disease management, and market information. However, in Mozambique, limited coverage, particularly in rural areas, hampers their impact. Potential projects under this thematic area include: creating a Digital Vet Platform to connect farmers with veterinarians for real-time advice and treatment scheduling, and implementing Drone-Based Vet Supply Delivery to transport vaccines and diagnostic tools to remote areas. Additionally, Portable Diagnostic Kits can provide affordable disease detection solutions, while Climate-Smart Vet Services can train mobile teams to tackle climate-related livestock health issues. A Community Vet Business Model, built on subscriptions, could ensure sustainable service delivery by linking local entrepreneurs with farmers.

Applicants are encouraged to select and apply for one thematic area. However, applications involving complementary areas are also encouraged. Women scientists in early carrier are encouraged to apply.

Benefits for participants:

Successful applicants will have the opportunity to:

- Receive technical assistance and mentorship to develop their idea;
- Gain access to resources from partner Institutions to support business growth;
- Contribute to the development of innovative solutions for the community;
- Collaborate with community members, small and medium-sized enterprises, and researchers to generate new ideas and knowledge that address community challenges;
- Receive financial support for business implementation costs, up to a maximum of \$30,000.

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 thematic areas outlined above.

Application Requirements:

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

Schedule of Activities.

Table 1. Schedule of Activities

Period/Date
March 28 to April 11, 2025
April 14 to 18, 2025
April 18, 2025
April to December 2025

Application documents must be submitted to the following email address: dir.ceafesn@uem.mz by April 11, 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 Dean of CE-AFSN

(Prof. 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