

Call for Community Action Research Projects for Enterprise Development (CARP-E) under ACE II AF

Background.

The Center for Resilient Agri-Food Systems (CRAFS) at the University of Malawi invites proposals for community action research projects to enhance the resilience of agri-food systems in Malawi. This call aims to support innovative, sustainable, and locally driven solutions that address the challenges faced by the agri-food sector.

CRAFS is funded by the World Bank, through the Government of Malawi, under the Eastern and Southern Africa Higher Education Centres of Excellence Additional Financing (ACE II AF) project. CRAFS aims to stimulate and support research and development for holistic solutions focusing on agri-food systems and nutrition, agricultural risk management, and climate change proofing. It also focuses on innovation, statistical analysis, digital agriculture, and market information management systems, including AI and data analytics.

Sustainable food systems are at the center of the Sustainable Development Goals (especially SDGs 1, 2, 3, 4, and 13), which call for significant transformations in agri-food systems to end hunger, achieve food security, and improve nutrition by 2030. Food security is a national priority in Malawi (MW 2063; Pillars 1 and 2) and is a development pillar in the African Union's 2063 strategic framework. Eliminating hunger requires transitioning to sustainable, inclusive, and resilient agri-food systems based on scientific evidence and modern technology. Understanding the complex interactions between smallholder farmer food production, preservation, and processing, high yield gaps, and larger-scale policy influences is also crucial. To this end, local researchers and practitioners can develop fine-scale, locally relevant solutions that bridge the disconnect between science, policy, and practice in the food systems value chain.

CRAFS, therefore, requests proposals from individuals, small and medium enterprises (SMEs), community groups, and cooperatives for community action research projects to enhance the resilience of agri-food systems in Malawi. This initiative seeks to foster innovative, sustainable, and locally driven solutions that address the challenges faced in our agri-food sector.



Objectives:

The primary objectives of this call for proposals are to:

- Develop energy-efficient and intelligent process and device control systems
- Strengthen all-weather food production and harvest-to-market processes, including market linkages
- Improve food and feed product formulation, processing, and biosafety
- Enhance market information systems and WIBI schemes

Priority Areas: We are particularly interested in proposals that focus on the following four themes:

Theme 1: Food and Feed Formulation and Processing

Many SMEs in Malawi are involved in the processing of cereals (e.g., sorghum, millet, oats), legumes (e.g., soy, chickpeas), roots and tubers (e.g., yams, cassava, sweet potato), and nutritious indigenous vegetables (e.g., hibiscus, moringa). Investing in infrastructure, access to finance, and technology to support small farmers and businesses can help the industry grow and contribute to food security and economic development. Project proposals are invited to develop balanced and efficient diets for humans and animals, considering factors like nutritional needs, cost, and environmental impact. This effort seeks to support the creation of novel products that optimise the composition of food and feed ingredients to meet specific animal production and human health requirements by utilising locally accessible resources and expertise. In addition, project proposals that optimise fresh food storage to extend shelf life are welcome under this theme.

Theme 2: Market Information Systems and WIBI Schemes

Under this theme, we seek project proposals that aim to improve market information systems, data analytics, and Weather-Index-Based Insurance (WIBI) schemes to enhance decision-making and resilience in agri-food systems. We seek solutions that provide near-real-time market data, predictive analytics for price and commodity or product demand trends, and WIBI products to protect smallholder farmers from climate and market shocks.

Theme 3: Biosecure Mushroom Production and Product Development

Mushroom production in Malawi is currently low, with most farmers opting for low-cost cultivation methods. Obstacles include the shortage of spawn (the mushroom "seed"), lack of knowledge and technical expertise, and the complexities of mushroom cultivation compared to other crops. Natural mushroom habitats have also been adversely affected by deforestation. Under this theme, project proposals focused on scaling out biosecure mushroom spawn production, certification, and branding are invited. Projects should empower women and use intensive all-weather output and harvest-to-market processes.



Theme 4: Smart and Energy-Efficient Precision Farming Control Systems

Under this theme, we invite project proposals focused on developing and commercialising innovative and energy-efficient device and process control systems. Examples of control systems of interest include incubator and hydroponic control systems, mushroom house control systems, food storage control systems, farm environment parameter monitoring and irrigation control systems, and food product assembly-line control systems. We are particularly interested in solutions customised to function in environments with limited access to electricity. Additionally, these solutions should incorporate capabilities for remote control, data analytics, and information use for improved decision-making and system function optimisation.

Eligibility Criteria

Individuals, small and medium enterprises (SMEs), community groups, and cooperatives are invited to apply for participation in CARP. The applicants must demonstrate expertise, a business idea, and a work-in-progress product, technology, innovation, process, or service with market potential and readiness for incubation.

Support and timeframe (Benefits of participation)

Up to five applicants will receive support through awards of up to US\$10,000 each for 12 months from May 2025, to help them develop their business idea or solution into a functional enterprise. Participants will have access to industry experts, mentors, and fellow entrepreneurs. Participants will go through a one-month inception phase for onboarding, which will involve establishing foundations for the *modus operandi*, governance, and reporting mechanisms, and financial systems related to the project. Together, CRAFS and the successful participants will develop a review procedure to evaluate progress, check alignment with CRAFS objectives, and adjust methods of operation. This review will offer a chance to assess the effectiveness of the partnerships and, if any issues cannot be resolved jointly, to explore alternative arrangements to ensure goal achievement.

How to Apply

Applicants are encouraged to select and apply for one thematic area. Concept notes must be submitted by May 08, 2025; late submissions will not be accepted. Applicants must fill out the application form and email their applications to crafs@unima.ac.mw. Proposals that are not submitted in the correct format will not be accepted. Applicants can get more information by calling Dr. Elias Mwakilama at +265 991 731 265/888 310 061 during working hours.

Selection criteria

The review and award process will follow the ACE II AF project guidelines for CARP-E calls. A panel of evaluators (minimum 3) will assess the applications through a weighting system out of 100. The selection process will include an assessment of the capacity to deliver on the key activities, an understanding of the problem the applicant is trying to solve, clarity of the solution, market, and business model, and verification of their proposed product, service, process, innovation, or technology. For more information, https://tinyurl.com/3ve65xtp