AREA V
RESEARCH

I.4. encourages the conduct of externally funded researches.

Parameter B – Funding and Other Resources

Encourages the conduct of externally funded researches.

The University of Southern Mindanao (USM) continuously encourages its faculty members and researchers to seek external funding opportunities to support the conduct of relevant, innovative, and development-oriented research. This initiative aims to strengthen the University's research capabilities, expand collaboration with funding agencies and partner institutions, improve access to research resources, and enhance the contribution of research to regional and national development.

The University's efforts to encourage externally funded research have resulted in a diverse portfolio of completed and ongoing research projects supported by various national government agencies, international organizations, and development partners. These include the Department of Science and Technology (DOST), Department of Agriculture–Bureau of Agricultural Research (DA-BAR), Commission on Higher Education (CHED), National Economic and Development Authority (NEDA), Food and Agriculture Organization (FAO), International Committee of the Red Cross (ICRC), and the Ministry of Science and Technology of the Bangsamoro Autonomous Region in Muslim Mindanao (MOST-BARMM), among others. These partnerships demonstrate the growing capacity of USM faculty members to develop research proposals, secure external grants, and implement projects aligned with institutional priorities and the needs of various sectors.

The completed research projects over the past three to five years cover a wide range of disciplines, including agricultural productivity, cacao and rubber research, coffee production, soil health and nutrient management, biotechnology, organic agriculture, livestock and halal food production, environmental conservation, renewable energy, engineering, technology commercialization, and community development. Other projects focus on strengthening research

infrastructure, developing technology incubation initiatives, promoting agricultural and natural resource technologies, and supporting the University's academic development programs. These accomplishments reflect the ability of USM researchers to respond to emerging challenges through evidence-based and multidisciplinary research.

The University also sustains its research initiatives through a substantial portfolio of ongoing externally funded projects. These include initiatives on smart cacao budwood nurseries, enhanced coffee productivity, microbial inoculants for sustainable corn production, regional intellectual property and technology business management, agri-business development, technology business incubation, socioeconomic research and data analytics, and the advancement of the Philippine mango industry. Other projects address biodiversity conservation, traditional music preservation, halal food safety, wildlife conservation, food security, and the sustainable utilization of microorganisms from Ligawasan Marsh. These initiatives demonstrate the University's commitment not only to generating new knowledge but also to translating research outputs into practical applications, technologies, services, and development interventions.

An important outcome of this initiative is the increased participation of faculty members as project leaders and research team members. Their involvement provides opportunities to develop research leadership, strengthen technical competencies, establish professional networks, and engage in collaborative and interdisciplinary undertakings. By securing external funding, faculty members can undertake research activities that may extend beyond the University's regular research appropriations, while also contributing to institutional research productivity and strengthening USM's partnerships with government agencies, industries, communities, and other research institutions.

Overall, the University's continuing encouragement of externally funded research has helped establish a more dynamic and responsive research environment. The completed and ongoing projects serve as evidence of faculty engagement in externally supported research and of USM's commitment to research excellence, innovation, and community-responsive development. Through sustained support for proposal development, research collaboration, and

engagement with funding agencies, the University seeks to further expand its research portfolio, enhance the utilization of research results, and strengthen its role as a contributor to scientific advancement and sustainable development in Southern Philippines and beyond.

i. State all completed research in the last 3-5 years

PROJECT TITLE	PROJECT LEADER	FUNDING AGENCY
"Nicer Project 1: Molecular Fingerprinting Of Cacao Parental Recommended Hyvs And True Criollo Ensuring Multilication Of Quality Planting Materials (Qpm) For Increased Productivity And Profitability"	Edward A. Barlaan	DOST-PCAARRD
"Nicer Project 2: Upgrading Of The Cacao Gene Bank For The Conservation And Management In Cacao Varietal Improvement"	Gwen Iris D. Empleo	DOST-PCAARRD
Nicer Project 3: Development Of Optimized Post-Harvest Processing Approaches For Improved Quality Of Cacao Beans"	Renel M. Alucilja	DOST-PCAARRD
"Aciar Project 1: Effective Rubber-Based Cropping Systems In Agusan Del Sur And North Cotabato"	Rezin G. Cabantug	DOST-PCAARRD
"Land Suitability Analysis For Rubber Crops In Agusan Del Sur"	Adeflor G. Garcia	DOST-PCAARRD
"Aciar Project 3: Development Of Rapid And Affordable Soil Nutrient Test Fertilizer Formulation"	Adeflor G. Garcia	DOST-PCAARRD

"Aciar Project 4: Development Of Cost-Effective Pest And Disease Management For The Rubber And Intercrops"	Elorde Jr S. Crispolon	DOST-PCAARRD
Phase 1:'Productivity Assessment Of Robusta Coffee Applied With Organic And Inorganic Fertilizers In Mindanao"	Leandreux D. Ocasion	DA-BAR
Phase 1: Indigenous Phosphorus And Potassium Solubilizing Microorganisms As Potential Enhancer Of Phosphorus And Potassium Uptake Of Corn	Leandreux D. Ocasion	DA-BAR
"Snap Testing Assay For Screening Antibiotic Residues In Milk"	Elma G. Sepelagio	DOST XII
"Development And Characterization Of Halal Feeds For Broiler Chicken Production"	Jurhamid C. Imlan	DOST XII
"Commercialization Of Chevon Food Products And Standardization Of Processing Center"	Jalaloden B. Marohom	DOST XII
"Biological Diagnostic Tool For Vulnerable Agro Ecosystem Nematode Community Analysis As An Approach To Assess Sustainability Of Agricultural Practices"	Ma. Teodora N. Cabasan	DOST XII
"Digital Promotion And Screening Of Local Products Or Startups In Region 12 For Technology Incubation"	PIA AMABELLE M. FLORES	DOST XII

Establishment Of Instrumentation System Modeling, Assembly And Response Testing (Ismart) Laboratory	Maricel G. Dayaday	NEDA
"Development Of Rubber-Based Cropping Systems In Southern Philippines (Land Management Of Diverse Rubber-Based Systems In Southern Philippines)" Y1-Y5	Adeflor G. Garcia	ACIAR
"Mainstreaming Aanr Technologies And Information Generated From R&D In The Soccsksargen"	Lawrence Anthony U. Dollente	DOST-PCAARRD
"Training On Policy Brief Writing"	Josephine R. Migalbin	DOST-PCAARRD
" Mainstreaming Aanr Technologies And Information In Mindanao Through Soxaarrdec's Participation In Rstw And Other Local Exhibits"	Gelyn V. Amilbahar	DOST-PCAARRD
"Harnessing Rhizobacteria And Actinomycete's Potential As Biofertilizer And Biocontrol Inputs Supportive Of Strengthening The Organic Agriculture Industry (Harbis-Organic)"	Mel Chrisel A. Sales	DA-BAR
"Steady-State Hyraulic Numerical Analysis For Optimized Water Distribution Network Modelling: An Appication Of Selected Hyraulic Solver"	Ma. Dely P. Esberto	DOST-PCIEERD

"Da Biotech Program Scholarship Grant To Usm Undergraduate Students Pursuing Agri-Biotechnology Or Related Fields"	Harem R. Roca	DA-BAR
"Usm College Of Medicine Development Project"	Dahlia S. Arancel	CHED
"Usm Center For Flood/Landslide Preparedness And Mitigation"	Cristopher A. Benito	DOST-PCIEERD
Re-Echo Training To Farmer's Cooperative/Associations On Site On Soil Sampling, Analysis, And Fertilizer Management In The Provinces Of Maguindanao Del Sur, Maguindanao Del Norte, And Sga	Mary Joy S. Cañolas	FAO
"Microbial Diversity Of Liguasan March And Their Potential Biotechnological Applications In Green Energy, Fisheries, Sustainable Agriculture And Animal Production, And Human Health"	Maria Elena N. Tanabe	MOST-BARMM
"Biodiversity Assessment In Key Areas For Wildlife And Nature Project (Bakawan Project): Assessment Of Structural And Functional Biodiversity In Mangrove Ecosystem Of Timaco, Mangrove Swamp, Bangsamoro Autonomous Region In Muslim Mindanao"	Cherie C. Mangaoang	MOST-BARMM
"Barmm (Biomonitoring And Assessment Of Relationship Between Marsh And Man) In A Changing Environment"	Meriam Manampan-Rubio	MOST-BARMM

"Food For Life: Assessment Of Wild Food Resources For Sustainable Andsafe Food Production Among Local Communities In Liquasan Marsh"	Florence Roy P. Salvaña	
"Validation Of Molecular Markers For Identification Of Cacao Hyvs, Criollo Types And Disease Resistant Varieties Through Marker-Assisted Breeding"	Edward A. Barlaan	DOST-PCAARRD
"Optimization Of Irrigation Flow Through Conduit Micro Hydropower To Generate Electricity For Off-Gri Barangay Of Kabacan, Cotabato"	Marilyn P. Calub	DOST-PCIEERD
"17th NATIONAL ORGANI AGRICULTURE CONGRESS"	Mary Joy S. Cañolas	DA-BAR
"Enhancing Fits For Rural Development (Component 2,3 S& T Based Farm Establishment)"	Edward A. Barlaan	DOST-PCAARRD
"Enhancing Fits For Rural Development	Edward A. Barlaan	DOST-PCAARRD
"Upgrading Of Tissue Culture Facility In Usm"	Mark Al-Jamie J. Muttulani	DA-BAR
"Upgrading Of High Value Crops Food Processing Laboratory At University Of Southern Mindanao"	Sandra Joy P. Pahm	DA-BAR
"Establishment Of Usm Agricultural And Biosystems Machinery Testing And Evaluation Center"	Renel M. Alucilja	DA-BAR

"Banana Health Diagnostics: Molecular Surveillance Of Major Disease Causal Pathogens Of Banana In Region 11 And 12"	Edward A. Barlaan	DOST XII
"Usm Establishment Of Urban Mushroom Production"	Joan P. Sadoral	DA-BAR
"Usm Establishment Of Community Garden"	Joan P. Sadoral	DA-BAR
"Production Of Tissue Cultured Banana (Saba/Cardava) Planting Materials"	Harem R. Roca	DA RFO XII
"Nationwide Clonal Adaptation Trial And Innovation Of Propagation Techniques On Newly Introduced High-Yielding And Promising Rubber Clones. Project 3: Development Of Efficient Techniques On Tissue Culture Somatic Embryogenesis And In-Vivo And In-Vitro Propagation In Rubber"	Harem R. Roca	DOST-PCAARRD
"Science And Technology Community-Based (Stcbf) On Improved Nursery Management, Budwood Garden Establishment And Intercropping Schemes To Promote And Expand Rubber Farming In Cotabato Province"	Gloria Dela Peña	DOST-PCAARRD
"Regional Durian R&D Program Enhancing Productivity And Sustainable Of The Durian Industry In Southern Mindanao For Improved Market Access (Phase 1): Project 1. Durian Tree Management For Optimum Production"	Dr. Alfredo Calvo	DOST-PCAARRD

ii. State all on-going research

PROJECT TITLE	TOTAL BUDGET	PROJECT LEADER	FUNDING AGENCY
"Smart Cacao Budwood Nursery And Greenhouse For Production Of High-Quality Planting Materials"	4,417,957.60	Edward A. Barlaan	DOST-PCAARRD
Phase 2:"Field Validation Of Nutrient Requirements For Enhanced Productivity Of Robusta Coffee In Mindanao"	3,000,000.00	Leandreux D. Ocasion	DA-BAR
Phase 2: Optimization Of Microbial Inoculant With Phosphate And Potassium Solubilizing Microogranisms Isolated From Acidic And Calcareous Soils In Southern Philippines For Sustainable Corn Production"	2,500,000.00	Maria Elena N. Tanabe	DA-BAR
"Raise Project 1. Regional Intellectual Property And Technology Business Management (Iptbm) In Soccsksargen Through The Raise Program"	2,588,932.00	Pia Amabelle M. Flores	DOST XII

"Raise Project 2. Establishment Of Regional Agri-Business Hub (Abh) In Soccsksargen Through The Raise Program"	1,200,400.00	Ronald Z. Pascual	DOST XII
"Raise Project 3a. Enhancement Of The Agri-Aqua Technology Business Incubator (Atbi) In University Of Southern Mindanao (Usm) Through The Raise Program"	1,835,100.00	Pia Amabelle M. Flores	DOST XII
"Raise Project 4. Establishment Of Regional Knowledge Management (Km) Hub In Soccsksargen Through The Raise Program"	1,264,000.00	Josephine R. Migalbin	DOST XII
"Enhanced Regional Collaborative Program In Soccsksargen"	1,689,008.00	Josephine R. Migalbin	DOST-PCAARRD
"Consortium Member Institutions (Cmi) Contribution"	1,094,726.67	Josephine R. Migalbin	DOST-PCAARRD
"Dokumentasyon Ng Mga Wika Sa Pilipinas"	150,000.00	Radji A. Macatabon	
"International Committee Of The Red Cross (Icrc)"	96,500.00	Mary Joy S. Cañolas	ICRC

"Empowering Equity Target Students: Enhancing Access And Success In State Universities And Colleges Across Region Xii"	5,000,000.00	Marcos F. Monderin	CHED
"Biotechnology Unit - Other Income"	16,184.00	Edward A. Barlaan	DA-BAR
Heirit: Establishment Of Usmart Technology Business Incubator - Dost Funded Tbi"	8,110,392.00	Jalaloden B. Marohom	DOST-PCIEERD
"Satellite Serdac: Establishment Of Satellite Socio-Economic And Data Analytics Center (Serdac) At The University Of Southern Mindanao To Strengthen Capacity In Socio-Economic Research And Analytics In The Region"	3,477,574.50	Romiel John P. Basan	DOST-PCAARRD
"Development Of Rubber-Based Cropping Systems In Southern Philippines (Land Management Of Diverse Rubber-Based Systems In Southern Philippines)"	3,580,188.46	Mel Chrisel A. Sales	GGGI
"Iarc: Impact Assessment Of Dost-Pcieerd Regional Consortia In The Philippines"	3,032,523.20	Romiel John P. Basan	DOST-PCIEERD

"Preserving Maguindanaon Traditional Music Through Learning Packages, Digital Apps, And Iec Materials"	1,273,429.85	Debbie Marie B. Verzosa	MOST-BARMM
"Technical Education And Skills Development Authority (TESDA)- OVERHEAD"	3,263,241.94	Clark I. Maarat	TESDA
"Isolation Of Lactic Acid Bacteria From Job's Tears (Coix Lacryma-Jobi) And Two Forages And Their Utlization As Inoculant In Silage Production For Halal Ruminant Feed"	1,050,038.00	Josephine R. Migalbin	MOST-BARMM
"Molecular Diagnostics For Detection Of Halal And Non-Halal Animal Species Using Advanced Molecular Technologies"	5,363,000.00	Edward A. Barlaan	CHED
"Impact Assessment Of The Program On Advancing The Philippine Mango Industry Through Production Of Export Quality Mangoes"	3,556,490.00	Jennet Rioboca Mag-Aso	DOST-PCAARRD

"Empowering Local Government Units In Harnessing Insect Bat Ecosystem Services Towards Wildlife Conservation And Food Security"	1,665,993.00	John Aries G. Tabora	CHED
"Utilization Of Microorganisms Isolated From Ligawasan Marsh In Sustainable Agriculture And Fish And Animal Production"	2,311,050.55	Maria Elena N. Tanabe	MOST-BARMM