

UNIVERSITY OF SOUTHERN MINDANAO

Kabacan, Cotabato

ANNUAL REPORT 2023

ABOUT USM

The University of Southern Mindanao, a Level IV state university in Central Mindanao and ISO 9001:2015 certified, is formerly known as the Mindanao Institute of Technology. It was established by a respected Maguindanaon princess, Bai Hadja Fatima Matabay N. Plang on June 20, 1952 by virtue of Republic Act 763 signed by Pres. Elpidio Quirino.

USM is one of the four leading state universities in the country that achieved excellence in agricultural education. It is one of the state-owned universities and colleges (SUCs) that earned Level IV status.

USM has a total of 5, 129.97 hectares: Kabacan main campus has 1, 024 hectares; Arakan Valley campus has 4,091 hectares; and USM-Kidapawan City Campus has 14.97 hectares. Most of its land areas are used for agricultural projects.

For six decades now, USM has produced marketable graduates who have distinguished themselves with these marks: leadership, industry, and dedication to work. Until today, the university continues to instill the value of academic excellence and hard work among its students.

The University maintains an enviable track record of producing topnotchers and passers of various board examinations. It has gained international reputation in educating the youth that excel in skills competitions and in motivating its faculty and staff to lead in various fields of research. Ever pioneering and adventurous, USM will continue to provide educational leadership not only in the region but also nationwide.

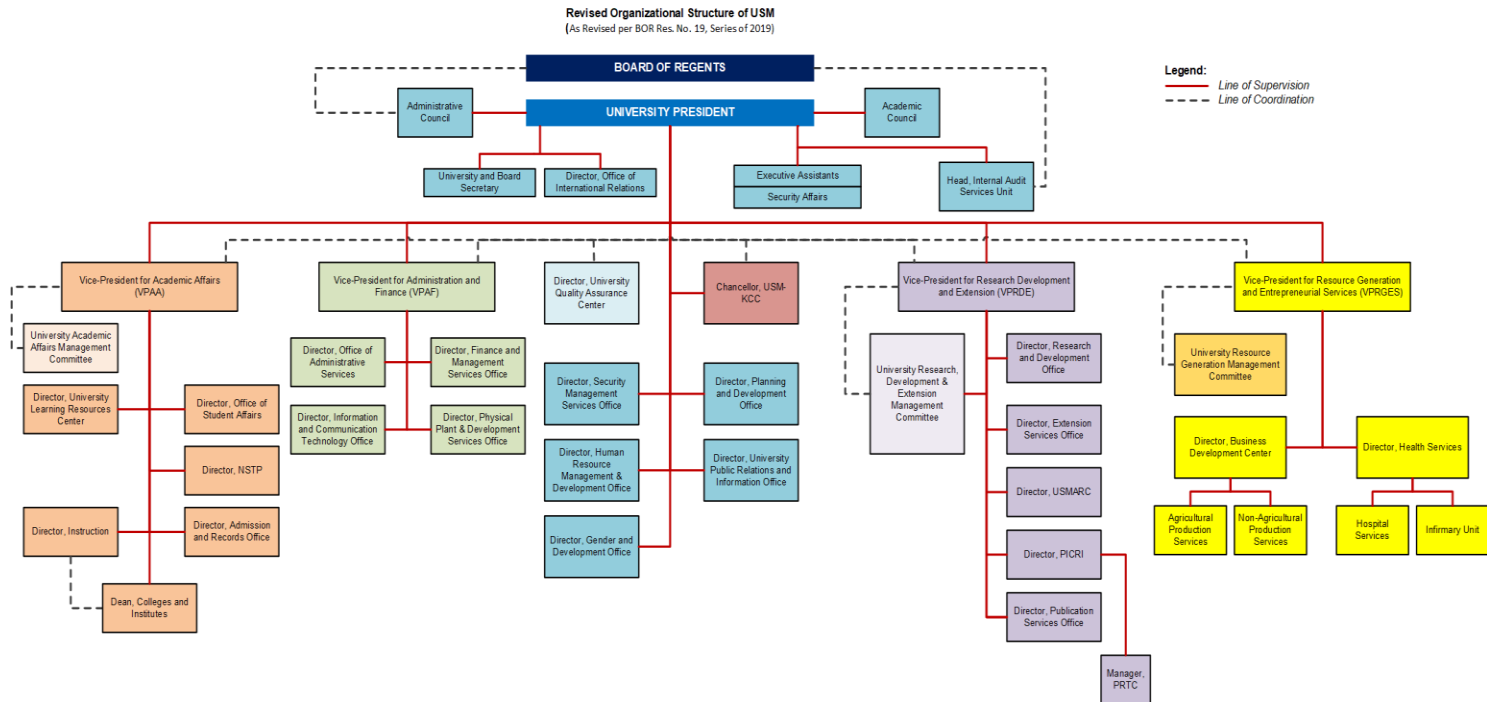
The USM main campus used to be a rubber plantation owned and managed by a Scott named Mr. Fleming, who was granted an area of 1, 024 hectares in 1909. The ownership changed hands several times until the Japanese occupation, when it came under the control of Ohta Development Company. After the Americans defeated the Japanese in 1944, this compound was taken over by the United States government until it was transferred to the Philippine government in 1947. It was not until the 1950s that a respected Maguindanao princess, Bai Matabay Plang, started the move to establish the Mindanao Institute of Technology (MIT) with the rubber

plantation areas as the proposed location. She was supported in this venture by Datu Udtog Matalam, the then governor of the Empire Province of Cotabato, together with Congressman and later House Speaker Salipada Pendatun of the same Province.

On June 10, 1954, Pres. Ramon Magsaysay signed Republic Act No. 998, an enabling act for the establishment and subsequent operation of MIT. On March 13, 1978, President Ferdinand E. Marcos Sr. signed Presidential Decree No. 1312 which converted the MIT into a University with Dr. Jaman S. Imlan as the first University President. As a University, it is mandated to carry out the four-fold functions of instruction, research, extension, and resource generation.

ADMINISTRATION

The University of Southern Mindanao stands as a beacon of excellence in higher education, committed to nurturing the next generation of leaders, scholars, and professionals. At the heart of USM's effective functioning is a well-structured and dynamic organization that ensures the seamless coordination of academic and administrative undertakings.



The Board of Regents

The Board of Regents is the governing body of the University with functions stipulated in Republic Act 8292. The Board of Regents oversees all major decisions concerning the administration of the university, including personnel appointment, promotion, welfare and discipline, student welfare and discipline, fiscal matters, academic and physical development, linkages, and collaborations,

Composed of ten (10) members, the Board is chaired by a Commissioner of the Commission on Higher Education and the University President as Vice-Chairperson. Its other members include the Chairperson of the Senate Committee on Education, Arts and Culture, the Chairperson of the House Committee on Higher and Technical Education, the Regional Director of the National Economic Development Authority Region XII, the Regional Director of the Department of Science and Technology Region XII, President of the USM Faculty Association, President of the University Student Government President, and two representatives from the Private Sector.

The Secretary of the University and the Board of Regents is responsible for the management of all meetings of the Board and safekeeping of all records and documents of the University and the Board of Regents.

**COMPOSITION OF THE BOARD OF REGENTS OF THE UNIVERSITY OF SOUTHERN MINDANAO AS DULY CONSTITUTED PURSUANT TO SECTION 3(a) OF
REPUBLIC ACT NO. 8292 (as of December 31, 2022)**

Hon. RONALD L. ADAMAT, PhD, PD Commissioner, CHED	- Chairperson
Hon. FRANCISCO GIL N. GARCIA, PhD President, University of Southern Mindanao	- Vice-Chairperson
Hon. FRANCIS JOSEPH G. ESCUDERO Chairperson, Senate Committee on Higher, Technical and Vocational Education Represented by: Hon. PALASIG U. AMPANG	- Member

<p>Hon. MARK O. GO Chairperson, House Committee on Higher and Technical Education Represented by: Cong. MA. ALANA SAMANTHA T. SANTOS</p>	- Member
<p>Hon. SAMMY P. MALAWAN Regional Director, DOST XII</p>	- Member
<p>Hon. TERESITA SOCORRO C. RAMOS Regional Director, NEDA XII</p>	- Member
<p>Hon. PAUL JOHN B. ONGCOY President, MIT-USM Alumni Association</p>	- Member
<p>Hon. JONALD L. PIMENTEL President, USM Faculty Association</p>	- Member
<p>Hon. KRISTINE C. MORALES President, University Student Government</p>	- Member
<p>Hon. RAMON N. FLORESTA Private Sector Representative</p>	- Member

SUMMARY OF RESOLUTIONS PASSED BY THE BOARD OF REGENTS

Below is a summary of the resolutions passed by the Board for the School Year 2023-2024. This table provides an overview of the key decisions and actions taken to support the governance and strategic direction of the institution.

I	ACADEMIC MATTERS
A	Policies
	1. Goals and Objectives of the College of Veterinary Medicine
	2. Harmonized Curricula for the Bachelor of Science in Agriculture for First- and Second-year Levels for Implementation in the SY 2023-2024
	3. Admission and Retention Policy for the following: a. Doctor of Veterinary Medicine Program b. All program offerings of the CHEFS c. Bachelor of Science in Accountancy
	4. Revisions to the Admission Guidelines under Article 21, Section 103 of the 2005 USM Code
	5. Renaming of Department of Hotel and Restaurant Management to Department of Hospitality Management based on CMO No. 62, series of 2017 and CMO No 04, series of 2018, effective Second Semester of SY 2023-2024
B	Curricular Matters
	1. New Program Offerings
	1.1 Offering of the Bachelor of Early Childhood Education (BECEd) on the First Semester of SY 2023-2024
	1.2 Offering of Master of Arts in Education (Major in Science)
	1.3 Offering of Master of Arts in Language and Literacy Education (MALLE) at the USM-Kidapawan City Campus
	1.4 Conditional approval of the offering of BS in Midwifery on the 1 st semester of SY 2023-2024 subject to evaluation by CHEDRO XII
	2. Curricular Revisions

	2.1 Revisions in the Bachelor of Technical and Vocational Education (BTVTEd) at the USM-Kidapawan City Campus
	2.2 Conditional Approval of the Revisions of the Curricula of the following, subject to evaluation by CHEDRO XII: <ol style="list-style-type: none"> BS in Civil Engineering BS in Electronics Engineering BS in Computer Engineering BS in Computer Science BS in Information Systems BS in Nursing BS in Business Administration BS in Accountancy BS in Management Accounting
	2.3 Approval of the Curricular Revisions in the Graduate School Programs, in compliance with CMO 15, series of 2019 and other issuances, accreditation requirements, and recommendations of scholarship providers
	3. Confirmation of Graduates from the USM Main Campus, USM-KCC and ULS
	4. Confirmation of Graduates with Honors from the USM Main Campus, USM-KCC and ULS
II	ADMINISTRATIVE MATTERS
A	Policies
	1. Appointment of Faculty Regent – Dr. Jonald L. Pimentel
	2. Appointment of Alumni Regent – Dr. Paul John B. Ongcoy
	3. Appointment of Student Regent – Ms. Kristine C. Morales
	4. Declaring USM as a VIP Chapter and all Regents as Peace Ambassadors
	5. Award of Commendation to Deans, Chairpersons, and Faculty members of the DCJE of CASS, DME of USM-KCC for consistent above the national passing rate performance in the licensure examinations for both courses

	6. Confirmation of the Composition of the Search Committee for Private Sector Representative to the Board
	7. Calendar of Activities for SY 2023-2024
	8. Establishment of the Legal Services Office
	9. Approval of the 2023-2028 USM Strategic Plan
	10. Approval of the USM 2023 Operational Plan
	11. Approval of the 2024 Annual Investment Plan
	12. Approval of the Regional Development Investment Plan for 2023-2028
	13. Institutionalization of the Intellectual Property, Technology Transfer and Business Development Office (IP-TTBD0)
	14. Recognition of USM-Kidapawan City Campus as satellite campus
	15. Composition of the Institutional Evaluation Committee (IEC) in compliance with the provisions of Joint Circular No. 3, series of 2022
	16. Action Plan for the Issuance of Certificate of Program Compliance (COPC) for curricular offerings
	17. Guidelines and Procedures for Application for and Utilization of the Philippine National Public Key Infrastructure (PNPKI) Digital Certificate for Personnel
	18. Approval of the Creation of the Project Management Unit, Internal Audit Unit, and Office of Legal Services through the ROSSS
	19. Approval of the adoption of the Brief Psychological Wellbeing Screening and Coaching Program as Intervention to Monitor Psychological Well-being of USM Students
	20. Approval of Guidelines for Grant of Incentives to students who excel in Academics and Extra-Curricular Activities
	21. Approval of Guidelines for Awarding of Incentives to Medalists and their coaches in the MASTS and SCUAA Games, subject to availability of funds
	22. Approval of the University Operations Manual for Administration and Finance (First Edition)
	23. Approving the adoption of the “ <i>Bagong Pilipinas</i> ” campaign of the government and the incorporation of the official logo in relevant university documents
	24. Increase in Tuition Fee at the USM Graduate School for the Master’s and Doctorate Programs
	25. Approval of the Establishment of the USM Cisco Academy

	26. Grant of Authority to the University President or his assigns to review all contracts and agreements with USM that were contracted more than twenty (20) years ago, and to revoke, terminate, or revise these contracts and agreements as the case may be, where it is found to be detrimental or disadvantageous to USM
B	MOAs/MOUs :
	1. With government agencies – 30
	2. With private agencies – 12
	3. With foreign agencies – 2
C	New Designations - 19
D	Redesignations - 15
E	Other Administrative Matters
	1. Endorsement of Grant of Travel Authority to the University President
F	Confirmation of Referendum Matters
	1. Approval of nineteen (19) plantilla positions to the USM-Kidapawan City Campus
	2. Acquisition of Laboratory Facility for the Mechanical Engineering and Automotive Technology funded by CHED (2 fund sources)
III	HUMAN RESOURCE MATTERS
A	Promotional Appointments
	1. Teaching Appointments with Salary Grade 18 and below – 5, 11, 13, 1
	2. Teaching Appointments with Salary Grade 19 and above – 2, 5, 4
	3. Nonteaching Appointments with Salary Grade 18 and below – 9, 14, 54, 12, 2, 3
	4. Nonteaching Appointments with Salary Grade 19 and above – 1, 2
B	Privileges and Benefits Granted to Employees
	1. Permit to Study – 2
	2. Dissertation/Thesis Support – 1

	3. Extension of Study Leave – 5
	4. Grant of USM Scheme Scholarship – 1
	5. Study Leave with Pay – 4
C	Leave Beyond 30 Days
	1. Sick Leave with Pay - 1
	2. Maternity Leave with Pay – 8
	3. Special Leave for Women – 4
	4. Vacation Leave with Pay – 3
IV	RESEARCH AND EXTENSION MATTERS
A	Policies
	1. Establishment of the Journal of Education and Community Development (JECD)
	2. Establishment of the Journal of Business, Economics, and Governance Studies (JBEGS)
	3. Amendments to the Policy Guidelines on Grant/Award of Incentives to Paper Publication
	4. Approval of the USM Research, Development and Extension (RDE) Manual for implementation in the Calendar Year 2024, subject to annual review
V	FINANCE AND INFRASTRUCTURE MATTERS
A	Financial Reports
	1. Quarterly Budget Utilization Reports
	2. Proposed Quarterly Budget Utilization
	3. Annual Procurement Plan (APP) and Program of Receipts and Expenditures (PRE)
	4. Supplemental Special Budget for Funds 05, 06, 07, and Administrative Cost
B	Projects
	1. Infrastructure – 12
	2. Services –5

	3. Goods (Equipment) – 40
	4. Small Value Procurements – 70
C	Project-Related Matters
	1. Grant of Authority to the University President to Rescind the Project, <i>"Refurbishment of Administration Building Offices (Improvement of Architectural Finishes of the Administration Building)"</i>
	2. Approval of the Variation Order for the College of Agriculture Building and grant of an additional ten (10) days extension for project completion
	3. Endorsement of the Proposal to the DOH for funding and management of the construction of a 2-storey Hemodialysis Building
	4. Approving Variation Order No. 1 (Extra Work) for the Project, <i>"Increase in Carrying Capacity of Nursing and Allied Health Programs"</i>
	5. Approving Variation Order (Change Order Nos. 1 and 2) for the Construction of the College of Medicine Phase 1 sourced from Fund 01, by Greco Construction and Supply/PB Obial Construction (JV) at the Main Campus
	6. Approving Variation No. 1 (Extra Work) for the project, Improvement of the University Information, Communication and Technology Office Building, sourced from Fund 01, by Pastcar Construction and Supply Co.
	7. Approving the Additional Program of Work for Electrical, Works for the Welding and Fabrication (WAF) Building-Phase 2 at the Kidapawan City Campus
	8. Approving the Additional Works for the Construction of the Mini Convention and Training Center at the USM-Kidapawan City Campus
	9. Approval of the Amendment of Previously Approved Contract Price of the Project, <i>"Supply and Delivery of Various Construction and Electrical Materials for the Completion of the Technical-Vocational Building (Lot Bidding)"</i>
	10. Approval of the Request to Replace the Unit in the Approved Project, <i>"Supply and Delivery of One (1) Unit Brand New Double Cab Pickup" (Toyota Hilux 2.4L 4x2 Conquest MT Super White II"</i> be replaced with Toyota Hilux 2.4L 4x2 G AT 2024
	11. Approving the Budget for the Repair of the NFA Stockroom to be Reprogrammed as budget for the Repair of the Central Laboratory
	12. Approving the Request for Confirmation and Grant of Authority to the University President to expedite the procurement of infrastructure projects at USM-Kidapawan City Campus

	13. Approving the Reprogramming of the Budget for the Repair of the NFA Stockroom to Repair of the USM Hospital Building under the New Project of Fund 05 in the FY Supplemental Special Budget and PPMP
D	Other Financial Matters
	1. Designation of Quenielyn L. Durendes, FMS Director, as replacement signatory for financial transactions with the Landbank of the Philippines, Inc
	2. Designation of Signatories for Financial Transactions at the USM-Kidapawan City Campus
	3. Endorsing the Request of USM to DBM for the release of SARO and NCA of Unfunded Personnel Services (PS) for FY 2023 due to unfunded filled positions and NBC 461 implementation
	4. Approving the Change of Fund Source of the Php40M Laboratory Equipment Project for the College of Medicine and Allied Health Sciences from Fund 05 to Fund 07
	5. Mandatory Enrollment to the Internet Banking Services of the Landbank of the Philippines
	6. Appointment of the Budget Officer as Secondary Signatory for Cheques at Landbank of the Philippines
	7. Approval of the Request to Close and Transfer Dormant Accounts of the University at Landbank of the Philippines
	8. Approval of the Reclassification of Budget for Local and Foreign Travel Expenses in the FY 2023 APP under Funds 01 and 05
	9. Approval of the Amendments to ULS' Authorized Signatories per Board Resolution No. 163, series of 202 to include Finance Officer and replacement of the ULS Registrar
	10. Authority to Grant Incentives to USM Employees: CAN, SRI, Gratuity Pay (for COS and JO)
	11. Approval of the Revisions in the 2023 Budget under Funds 01, 05, 06, 07 and Other Funds
VI	RESOURCE GENERATION MATTERS
	1. Sharing Scheme for Programs of the HRDT Office
	2. Proposed Rent Rate for the New Women's Dormitory
	3. Proposed Rent Rate for the USM Auditorium

The Administrative Council

The council is responsible for overseeing the implementation of the university’s mission, policies, and long-term goals, ensuring that academic and operational activities align with the institution’s objectives. The Administrative Council’s functions include approving budgets, developing academic programs, formulating policies related to faculty and student affairs, and maintaining institutional standards. They work collaboratively to address challenges, seize opportunities for growth, and uphold the university's commitment to excellence in education, research, and community engagement.

The Council is chaired by the University President, the Vice-President of Administration and Finance as its Vice-Chairperson, and the other Vice-Presidents, the Deans, Directors, and other officials of equal rank. Upon invitation by the President, the President of the USM Faculty Association and the President of the University Student Government, may also attend its meetings as resource persons.

N A M E	POSITION/DESIGNATION
1. Dr. FRANCISCO GIL N. GARCIA	SUC President IV
2. Dr. EIMER M. ESTILLOSO	VP for Administration & Finance
3. Dr. SAMSUDIN S. PANDAY	VP for Resource Generation & Entrepreneurial Services
4. Dr. GEOFFRAY R. ATOK	VP for Academic Affairs
5. Dr. MA. TEODORA N. CABASAN	VP for Research, Development & Extension
6. Ms. JENNIFER E. SINCO	Board Secretary V
7. Ms. QUENIELYN L. DURENDES	Director, Finance and Management Services
8. Prof. MARGIE B. GALANG	Director, Administrative Services
9. Dr. TESSIE E. LERIOS	Director, Human Resource Management & Development Office
10. Engr. RENEL M. ALUCILJA	Director, Planning & Development Office

N A M E	POSITION/DESIGNATION
11. Prof. ORLANDO B. FORRO	Director, Physical Plant Development Services
12. Dr. ANNALEAH B. LASAGA	Director, University Health Services
13. Engr. KAHARUDIN P. MANAMBA	Director, Business Development Center
14. Dr. ELSA A. GONZAGA	Director for Instruction
15. Dr. MARY JOY S. CAÑOLAS	Director for Extension Services
16. Dr. LYDIA C. PASCUAL	Director for Research and Development
17. Prof. EUGENE G. RANJO	Director, University Information and Communication Technology Office (UICTO)
18. Dr. EFREN E. MAGULAMA	Director, University of Southern Mindanao Agricultural Research and Development Center (USMARDC)
19. Dr. ABUBAKAR A. MURRAY	Director, Philippine Industrial Crops Research Institute (PICRI)
20. Prof. SUSAN S. MARTINEZ	Director, Kundo E. Pahm Learning Resource Center (KEP-LRC)
21. Prof. MA. LEIDA M. DONQUE	Director, Office of Student Affairs
22. Dr. MAY EVA Z. GARCIA	Director, National Service Training Program (NSTP)
23. Prof. ORLANDO B. FORRO	Director, Security Services Management Office (SSMO)
24. Dr. DEBBIE MARIE B. VERZOSA	Director, Publication Services
25. Dr. LAWRENCE ANTHONY U. DOLLENTE	Director, University Quality Assurance Center (UQAC)
26. Dr. EDNA LUZ T. DE GUZMAN	Director, Admission and Records Office
27. Dr. ALICIA C. CABIAO	Director, Human Resource Development and Training (HRDT)
28. Dr. RADJI A. MACATABON	Tagapamahala, Sentro ng Wika at Kultura
29. Dr. LEORENCE C. TANDOG	Dean, Graduate School

N A M E	POSITION/DESIGNATION
30. Dr. ARDNIEL A. BALADJAY	Dean, College of Agriculture
31. Dr. JONALD L. PIMENTEL	Dean, College of Science & Mathematics
32. Prof. MARCOS F. MONDERIN	Dean, College of Arts and Social Sciences
33. Dr. KAUTIN S. KULANO	Dean, College of Education
34. DR. MARICEL G. DAYADAY	Dean, College of Engineering and Information Technology
35. Dr. URDUJA G. NACAR	Dean, College of Human Ecology & Food Sciences
36. Dr. IRVING T. FAJARITO, JR	Dean, College of Business, Development Economics and Management
37. Dr. DAHLIA S. ARANCEL	Dean, College of Medicine and Allied Health Sciences
38. Prof. MANUEL J. TAYONG	Dean, College of Trades & Industries
39. Dr. ELIZABETH C. MOLINA	Dean, College of Veterinary Medicine
40. Dr. ABDULNASSER G. MAKALUGI	Dean, Institute of Middle East & Asian Studies
41. Dr. NORGE D. MARTINEZ	Dean, Institute of Sports, Physical Education and Recreation
42. Atty. FREDDIE H. BAYNOSA II	Dean, College of Law
43. Dr. RONIELYN F. PINSOY	Chancellor, USM-KCC
44. Dr. JACINTA T. PUEYO	Campus Director, PALMA Cluster Campus
45. Prof. ROSELYN M. CLEMEN	University GAD Focal Person

The Academic Council

The Academic Council is responsible for the planning and overseeing the implementation of admission, curricula, conferment of degrees, and disciplinary measures as prescribed by the USM Code and other rules and regulations set by the Board of Regents.

The Council is chaired by the University President, the Vice President for Academic Affairs as Vice-Chairperson, and the other Vice-Presidents with academic ranks, Deans of Colleges and Institutes, and all faculty members with the rank of Assistant Professor I and higher, as members.

The University Research Development and Extension Committee

The University Research Development and Extension Committee (URDEC) is responsible for the formulation of policies, guidelines, rules, and regulations governing research and extension and the recommendation of the same to the Board of Regents for approval. It is also responsible for the identification of research priorities of the University, allocation of available funds for research and extension activities, establish institutional linkages and collaborations, and the review and recommendation of amendments to improve existing policies and guidelines for research and extension.

The Council is chaired by the University President, the Vice President for Research Development and Extension as Vice-Chairperson, with the Directors of the Research Development Office, Extension Services Office, and Research Publication Services Office as its members

The Production Council

The Production Council is responsible for the formulation and implementation of policies, guidelines, rules, and regulations governing agro-industrial production projects and programs approved by the Board of Regents.

The Council is chaired by the University President, the Vice President for Resource Generation and Entrepreneurial Services is Vice-Chairperson. The Director for Business Development Center and other selected competent personnel shall be the members.

Other Key Officials

The key officers of the administration are the following: Executive Assistants, the Budget Officer, Chief Accountant, University Registrar, Records Officer, Supply Officer, Chief Security Officer, and other officials as may be determined by the University President.

INSTRUCTION

EXECUTIVE SUMMARY

The Office of the Vice President for Academic Affairs (VPAA) at the University of Southern Mindanao plays a pivotal role in steering the academic direction of the institution. The office oversees and directs all of the university's academic units and support services; coordinates the planning and preparation of the proposed annual budget; and manages the overall implementation of instructional policies approved by the Board of Regents and on the recommendation of the Academic Council and other higher authorities. It collaborates with the University Research and Extension Unit(s) to support the research and extension activities of the Faculty, Colleges, and other educational institutions and/or related agencies, ensuring inter-program/agency collaboration and supervising the effective utilization of available resources. In the 2023 narrative report, we highlight the key achievements, challenges, and initiatives undertaken by the VPAA and its 14 units, including the College of Law and Graduate School, 3 satellite campuses, and 5 academic support units – Kundo E. Pahm Learning Resource Center (KEPLRC), National Service Training Program (NSTP), Office of Student Affairs (OSA), Admission and Records Office (ARO), and Director for Instructions Office (DIO).

The VPAA has spearheaded efforts to maintain and enhance academic standards across all units. This includes the continuous improvement of curriculum, faculty development programs, and fostering a culture of research and innovation. The establishment of three satellite campuses reflects the commitment to expanding educational opportunities to diverse communities. The VPAA has overseen the successful integration of these campuses into the university's academic ecosystem. Academic support units, including the Kundo E. Pahm Learning Resource Center (KEPLRC), National Service Training Program (NSTP), Office of Student Affairs (OSA), Admission and Records Office (ARO), and Director for Instructions Office (DIO), have collaborated to provide efficient and student-centric services. The implementation of digital solutions and streamlined processes has contributed to improved service delivery.

Despite achievements, challenges also persist. The VPAA is actively working to explore avenues for additional funding to support academic initiatives and faculty and students' development. The rapid evolution of technology necessitates ongoing efforts to integrate digital tools into academic practices. The VPAA acknowledges the importance of staying at the forefront of technological advancements to enhance the quality of education.

The VPAA is driving initiatives for the continuous enhancement of curricula to align with industry demands and global trends. This includes the integration of interdisciplinary approaches and the promotion of experiential learning. To strengthen ties with local communities and stakeholders, the VPAA is collaborating with partnerships. This ensures that academic endeavors are closely connected to the needs and aspirations of the region. The VPAA places a strong emphasis on quality assurance mechanisms. Regular reviews of academic programs, faculty performance assessments, and student feedback mechanisms contribute to the continuous improvement of the academic landscape. The VPAA continues to shape a dynamic and responsive academic environment for the university community.

COLLEGES AND INSTITUTES

1. College of Agriculture (CA)
2. College of Veterinary Medicine (CVM)
3. Graduate School
4. College of Law
5. College of Medicine and Allied Health Sciences (CMAHS)
6. College of Science and Mathematics (CSM)
7. College of Business, Development, and Management (CBDEM)
8. College of Engineering and Information Technology (CEIT)
9. College of Human Ecology and Food Sciences (CHEFS)
10. College of Trades and Industries (CTI)
11. College of Education (CED)
12. College of Arts and Social Sciences (CASS)

13. Institute of Middle East and Asian Studies (IMEAS)
14. Institute of Sports, Physical Education, and Recreation (ISPEAR)

SATELLITE CAMPUSES

1. Kidapawan City Campus (KCC)

EXTERNAL CAMPUSES

1. Buluan Extension
2. PPALMA Cluster campuses)

ACADEMIC SUPPORT OFFICES

1. Kundo E. Pahm Learning Resource Center (KEPLRC)
2. Office of Student Affairs (OSA)
3. National Service Training Program (NSTP)
4. Director for Instruction Office (DIO)
5. Admission and Records Office (ARO).

INSTRUCTION ACCOMPLISHMENTS

- Over the past two years, 73% of graduates have successfully secured employment. However, it has been observed that 153 agencies have engaged in forged partnerships. Additionally, a total of 2,631 student trainees were deployed during this period.
- To enhance the feedback system, four mechanisms have been implemented:
 - a. Client Satisfaction
 - b. Exit Conference
 - c. Reporting/Review
 - d. Portfolio/Laboratory Journal

- Regarding faculty and staff competency, 18.79% (71 out of 379) of faculty members pursued advanced and post-doctoral degrees. Furthermore, all faculty members have undergone relevant training and seminars. Only 20% (76 out of 379) of faculty members are assigned a normal teaching load for both semesters of the academic year 2023-2024.
- The faculty-student ratio is 1:24, with a total of 21,098 students and 894 teaching staff, including Contract of Service and Part-time positions.
- There are a total of 18 undergraduate programs, with 14 programs having obtained a Certificate of Program Compliance (COPC). The remaining four programs are still in the process of compliance.
- Three programs have maintained their status as Centers of Excellence/Center of Development:
 1. Bachelor of Science in Agriculture – Center of Excellence
 2. Bachelor of Science in Biology – Center of Development
 3. Doctor of Veterinary Medicine – Center of Development

RESEARCH, EXTENSION, AND PRODUCTION ACCOMPLISHMENTS

- Out of 22 full-fledged professors, 54% or 12 are actively involved in Research, Development, and Extension Initiatives (RDEI).
- Among the 357 Associate Professors and below, 23% or 83 individuals actively participate in RDEI.
- A total of 378 students actively engaged in community engagement initiatives.
- Utilizing the techno-demo hub, 513 students were involved in practical demonstrations and technological applications.

OTHER ACCOMPLISHMENTS:

- Monitored and supervised the ASEAN EXPO 2023.
- Facilitated the conduct of the Gokongwei online orientation as an additional funding agency.
- Harmonized Agriculture programs and prepared other programs for harmonization among State Universities and Colleges (SUCs) in Region XII.
- Facilitated the DAR scholarship and Memorandum of Agreement (MOA) signing with DAR Central Office and Provincial DA Coordinator.
- Chaired the committee responsible for the billeting and transportation conduct of the National Officials and Administrators Conference (NOAC).
- Facilitated the proposed Visiting Professors Programs.

- Opened the door for collaboration and partnership with France Higher Education.
- Facilitated the MOA signing with the Cooperative Development Authority (CDA).



- USM President, 4 Vice Presidents and other USM Key Officials participated in the *Philippine Association of State Universities and Colleges (PASUC) 2023 Annual Convention*, which was took place from August 9-11, 2023 at the SMX Convention Center Manila in Pasay City. Centered around the theme "*Fostering Innovation and Collaboration in SUCs Towards Increasing Competitiveness and Sustainability*", this year's PASUC convention endeavors to establish an

inclusive platform where diverse stakeholders can foreground different perspectives and engage in collaborative discussions. This three-day event explored various approaches to enhance SUC programs and initiatives, with a particular focus on Innovation, Knowledge Creation, Intellectual Capital, Strategic Partnership, and Multi-level Collaboration, all integral in increasing competitiveness and sustainability. The program featured distinguished speakers from government and partner agencies.



- The Office of the Vice President for Academic Affairs (VPAA) has overseen the construction of a multi-purpose building in Avas, President Roxas, specifically designed for USM academic activities. This facility is a crucial component in the groundwork for establishing the anticipated 4th external campus of USM, aimed at extending educational opportunities to the surrounding community. Ms. Margie Galang and Dr. Radji Macatabon are integral members of the USM team responsible for monitoring the construction progress. Their role is pivotal in ensuring the timely completion of the project, and they actively collaborate with the

President Roxas LGU to facilitate seamless coordination. This initiative underscores the commitment of USM to expanding its educational footprint and fostering partnerships with local government units to enhance community development.



At SKSU-Regional Center
for Evaluation



At Zamboanga Peninsula Polytechnic
State University

USM
Submission of
ISS at CHED



A. Institutional Evaluation

- An institutional evaluation took place at the USM Faculty House, carried out by members of the Institutional Evaluation Committee (IEC). The issuance of DBM-CHED Joint Circular #3, series of 2022 aimed to establish and provide guidelines for the reclassification of faculty positions in State Universities and Colleges (SUCs). In compliance with these guidelines, an IEC was formed, and its members, appointed by the Board of Regents, conducted the initial evaluation. The Vice President for Academic Affairs (VPAA) serves as the Chairperson of the IEC, as mandated by the guidelines. The IEC members performed a preliminary

assessment of the submissions, validating the Individual Summary Sheet (ISS) points earned by each faculty member based on the specified evaluation criteria. Additionally, they compiled an Overall Summary Sheet (OSS) of points earned by all applicant faculty members, recommending faculty ranks in accordance with the template provided by CHED.

B. Regional Evaluation

- Regional evaluation of the OSS and ISS for USM faculty took place at the Zamboanga Peninsula Polytechnic College for Professorial ranks, while those with ranks below Professor underwent evaluation at the Sultan Kudarat State University (SKSU) as the Regional Center for Evaluation. The review and validation of IEC results were conducted by a Regional Evaluation Committee chaired by the CHEC Regional Director.



- The USM Team, consisting of President Garcia, Vice Presidents Atok, Panday, and Estilloso, Chancellor Pinsoy, Dean Monderin, Director Dollente, Dr. Magbanua, and Prof. Santos, actively participated in the 1st National Peace Convention held on January 25, 2023, at the Philippine International Convention Center (PICC).

During this event, a resolution was presented to President Marcos, proposing the potential declaration of a National Peace Day as a designated working day. The convention, organized by Heavenly Culture, World Peace, Restoration of Light (HWPL), an international peace NGO committed to global peace and the cessation of war, was conducted in collaboration with Dr. Ronald Adamat, CHED Commissioner.

The initiative aimed to establish a national peace framework, utilizing a holistic approach for the adoption of strategies in peace-building and conflict prevention. This framework seeks to strengthen the country's commitment to achieving national unity and sustainable development.



- A collaborative initiative involving PUM expert Mr. Herman Snoek-Netherlands, ATI-ITCH personnel, and USM's Vice President for Academic Affairs (VPAA) Atok is underway on May 9-11, 2023 in Batangas. The purpose of this collaboration is for extension services. The visiting team also includes BAI Assistant Director and Scientist 1, Dr. Renee Santiago, who is actively participating in the collaboration, particularly focusing on the hog-manure waste-to-asset program.



- The Mindanao-Wide Curricula Harmonization of Selected Academic Programs for Students and Faculty Members was facilitated and attended by VPAA Atok, representing USM. This initiative, aiming at harmonizing academic programs across Mindanao, presents a significant opportunity to elevate education quality, encourage faculty and student mobility, and foster collaboration among faculty members. Embracing a standardized curriculum framework, grounded in Center of Excellence (COE) or Center of Development (COD) accreditation standards, ensures both academic excellence and relevance. This endeavor aligns with our shared commitment to delivering the highest quality education to our students and fortifying the academic community in Mindanao.

The identified programs for harmonization include:

1. Bachelor of Science in Agriculture (BS Agriculture)
 2. Doctor of Veterinary Medicine (DVM)
 3. Bachelor of Science in Education (BS Education)
 4. Bachelor of Science in Biology (BS Biology)
 5. Bachelor of Science in Information Technology (BSIT)
- The Office of the Vice President for Academic Affairs (VPAA) proposed and successfully obtained approval from the Board of Regents on October 20, 2023, to allocate 10% of slots per academic program specifically for the dependents of USM employees within the freshman enrollee allotment. This privilege was introduced as a gesture of appreciation for the invaluable contributions of USM employees to the institution. Notably, this new initiative replaces the previous study privileges outlined in Article 21, Section 103 of the USM Code. The former privileges, which entailed free tuition for personnel dependents, are being revised in light of the implementation of the Universal Access to Quality Tertiary Education Act (UniFAST), which now covers tuition fees.



- The Academic Council convened on June 2, 2023, at the USM Auditorium, comprising members holding the rank of Assistant Professors and above. A focal point of the meeting included the announcement of candidates eligible for graduation, along with those candidates deserving Latin honors. The information was endorsed to the USM Board of Regents for confirmation.

SUPPORT ACTIVITIES OF THE VPAA



Benchmarking of Cotabato State University (CSU) on Internationalization Initiatives of USM. The Executive Assistance for International Affairs, Prof. Bretana, presented the achievements of USM.



Visit of Department of Foreign Affairs diplomat from Kidapawan City branch for possible harmonization meeting in Region 12 for USM students exchange program and Internship abroad.



Consultative meeting with Medicine students to resolve academic issues.

LICENSURE EXAMINATION PERFORMANCE

The licensure examination performance of a University holds significant importance because it speaks of the following aspects: quality assurance, credibility and reputation, employability of graduates, accreditation and recognition, and measuring learning outcomes, among others. It serves as a vital indicator of the institution’s educational quality, credibility, and impact on students’ future careers.

The table below shows the University’s performance in 2023:

LICENSURE EXAMINATION	EXAMINATION SCHEDULE	USM PASSING RATE (FIRST TAKERS)	USM PASSING RATE (%)	NATIONAL PASSING RATE (%)
Nutrition Dietician Licensure Examination	November 2023	66.67 %	61.36%	73.42 %
Certified Public Accountant Licensure Examination	May 2023		73.91 %	30.36%
	October 2023		100 %	31.37 %
Civil Engineers Licensure Examination	April 2023	56.18%	38.71 %	34.76%
Licensure Examination for Agricultural and Biosystems Engineers	September 2023	49.02 %	38.36 %	33.41 %
Electronics Engineer Licensure Examination	October	40%	30%	33.49%
Librarian Licensure Examination	September 2023	26.67 %	31.25 %	62.64 %
Electronics Technician Licensure Exam	April 2023	6.67%	57.14%	73.68%
	October 2023	100%	75%	73.53%
Licensure Examination for Agriculturists	November 2023	53.59 %	47%	34.18%
Criminology Licensure Examination	April 2023		100%	48.27%

PROGRAM ACCREDITATION

Accreditation is a crucial measure of quality and excellence in higher education institutions, ensuring that programs meet rigorous standards set by accrediting bodies, to meet the evolving needs of our students and the industry. The following table provides an overview of the program accreditation status across various disciplines, demonstrating our commitment to fulfilling our vision and mission.

No.	CAMPUS(ES) /PROGRAM(S)	LEVEL (ACCREDITATION STATUS)	DATE OF VALIDITY OF ACCREDITATION STATUS	DATES OF ACCREDITATION VISIT
1.	Bachelor of Science in Industrial Technology (major in Automotive Technology, Architectural Drafting Technology, Electrical Technology, Electronics Technology)	Level III, Re-accredited Assessment on-going in Phase of the 4 th Survey Visit (Revisit Areas V, VI, IX)	September 1, 2023 – August 31, 2024	August 14-18, 2023
2.	Bachelor of Science in Business Administration	Level II, Re-accredited Must comply w/mandatory recommendations	July 1, 2023 – June 30, 2024	June 21-23, 2023
3.	Bachelor of Science in Development Management	Level II, Re-accredited (Revisit Areas II, III, V, IX)	August 2019 – July 2021	July 1-3, 2019
4.	Bachelor of Science in Agricultural Economics	Level IV, Re-accredited (must comply with mandatory recommendations)	AUGUST 2022 – JULY 2023	June 29-July 1, 2022
5.	Bachelor of Science in Agri- Business	Level IV, Re-accredited (must comply with mandatory recommendations)	AUGUST 2022 – JULY 2023	June 29-July 1, 2022
6.	Bachelor of Science in Accountancy	Level II, Re-accredited (must comply w/mandatory recommendations (Revisit Extension)	July 1, 2023 – June 30, 2024	June 21-23, 2023
7.	Bachelor of Science in Electronics Engineering	Level II Re- accredited	December 16, 2021 – December 15, 2025	November 29 - December 3, 2021
8.	BS in Computer Engineering	Level II Re- Accredited	December 16, 2021 – December 15, 2025	November 29 – December 3, 2021

No.	CAMPUS(ES) /PROGRAM(S)	LEVEL (ACCREDITATION STATUS)	DATE OF VALIDITY OF ACCREDITATION STATUS	DATES OF ACCREDITATION VISIT
9.	BS in Civil Engineering (Structural Engineering)	Level II Re-Accredited Assessment on-going in Phase 1 of the 3 rd Survey Visit (Revisit ALL AREAS)	September 1, 2023 – August 31, 2027	August 14-18, 2023
10.	Bachelor of Science in Computer Science	Level III Re-accredited (must comply with mandatory recommendations) subject to another revisits in ALL AREAS	JULY 2022 – JUNE 2023	June 27 – 29, 2022
11.	Bachelor of Science in Information Systems	Level III Re-accredited (must comply with mandatory recommendations)	JULY 2022 – JUNE 2023	June 27 – 29, 2022
12.	BS in Library Information Science	Level III Re-accredited (must comply with mandatory recommendations)	JULY 2022 – JUNE 2023	June 27 – 29, 2022
13.	BS in Agricultural Engineering (BS IN AGRICULTURAL AND BIOSYSTEMS ENGINEERING)	The program is level III. Passed the Phase 1 of two (2) phases of evaluation in the 4 th Survey Visit. Has to undergo Phase 2.	September 1, 2023 – August 31, 2024	August 14-18, 2023
14.	Bachelor of Science in Hotel & Restaurant Management	Level II Re-Accredited (must comply w/mandatory recommendations)	July 1, 2023 – June 30, 2024	June 21-23, 2023
15.	Bachelor of Science in Tourism Management	Level II Re-Accredited (must comply w/mandatory recommendations)	July 1, 2023 – June 30, 2024	June 21-23, 2023
16.	Bachelor of Science in Nutrition Dietetics	Level III Re-accredited (must comply with mandatory recommendations) Revisit ALL Areas	December 1, 2023 – November 30, 2025	NOVEMBER 13-15, 2023
17.	Bachelor of Science in Food Technology	Level III Re-accredited (must comply with mandatory recommendations)	JULY 2022 – JUNE 2023	June 27 – 29, 2022
18.	BS in Travel Management	Level I Accredited	July 16, 2015 – July 15, 2018	July 7-10, 2015
19.	Bachelor of Science in Physical Education	Level II Re-Accredited	JULY 16, 2022 – JULY 15, 2026	July 4 – 8, 2022
20.	Bachelor of Arts in Islamic Studies	Level I Accredited	APRIL 2022 - MARCH 2026	March 21-25, 2022

No.	CAMPUS(ES) /PROGRAM(S)	LEVEL (ACCREDITATION STATUS)	DATE OF VALIDITY OF ACCREDITATION STATUS	DATES OF ACCREDITATION VISIT
21.	Bachelor of Science in International Relations	Level II Re-accredited	APRIL 16, 2023 – APRIL 15, 2027	March 21-25, 2022; APRIL 01-14, 2023
22.	Bachelor of Elementary Education	Level III Re-accredited (must comply with mandatory recommendations) Revisit Area of Community Service and International Linkages & Consortia	December 1, 2023 – November 30, 2024	NOVEMBER 13-15, 2023
23.	Bachelor of Secondary Education (major in Science, Math, Filipino, English & Social Studies)	Level III Re-accredited (must comply with mandatory recommendations) Revisit Area of Community Service and International Linkages & Consortia	December 1, 2023 – November 30, 2024	NOVEMBER 13-15, 2023
24.	Doctor of Veterinary Medicine	Level IV Re-accredited (must comply with mandatory recommendations)	AUGUST 2022 – JULY 2023	June 29-July 1, 2022
25.	Bachelor of Arts in Psychology (AB Psychology)	Level III – Reaccredited (Assessment ongoing in Phase 1 of the 4 th Survey Visit.)	January 2021 – December 2024 (Revisit Area I, II, III, IV, V, VI, VIII, & IX)	November 30 – December 4, 2020
26.	Bachelor of Science in Development Communication	Level IV Re-accredited (must comply with mandatory recommendations)	AUGUST 2022 – JULY 2023	June 29 - July 1, 2022
27.	Bachelor of Science in Chemistry	Level III Re-accredited	MAY 2022 – APRIL 2023	May 5-6, 2017; Compliance Report Submitted on November 27, 2018; Compliance Report Submitted on March 02, 2022 (must comply with mandatory recommendations)
28.	Bachelor of Science in Biology	Level IV Re-accredited	March 1, 2020 – Feb. 28, 2025	May 5-6, 2017; Compliance Report Submitted on November 27, 2018

No.	CAMPUS(ES) /PROGRAM(S)	LEVEL (ACCREDITATION STATUS)	DATE OF VALIDITY OF ACCREDITATION STATUS	DATES OF ACCREDITATION VISIT
				Compliance Report Submitted on January 2, 2020
29.	Bachelor of Arts in English	Level III Re-accredited	JULY 1, 2022 – JUNE 30, 2026	June 27 – 29, 2022
30.	Bachelor of Science in Criminology	Level I Accredited	APRIL 16, 2023 – APRIL 15, 2026	APRIL 10-14, 2023
31.	Arts and Social Science (Political Science)	Level I Accredited	MAY 1, 2021 – APRIL 30, 2024	APRIL 26-30, 2021
32.	Bachelor of Science in Nursing	Level I - Accredited	December 16, 2021 – December 15, 2024	November 29 - December 3, 2021
33.	Bachelor of Science in Agriculture	Level IV Re-accredited (must comply with mandatory recommendations)	MAY 2022 – APRIL 2023	May 5-6, 2017; Compliance Report Submitted on November 27, 2018 Compliance Report Submitted on March 17, 2022 (must comply with mandatory recommendations)
34.	BS Fisheries	Candidate (Revisit Area VI and IX)	MAY 1, 2023 – APRIL 30, 2024	APRIL 10-14, 2023

No.	Kidapawan City Campus	LEVEL (ACCREDITATION STATUS)	DATE OF VALIDITY OF ACCREDITATION STATUS	DATES OF ACCREDITATION VISIT
1.	Bachelor of Science in Industrial Engineering	Level III, Re-accredited Assessment on-going in Phase 1 of the 4 th Survey Visit (Revisit ALL AREAS)	July 1, 2023 – June 30, 2028	June 19-23, 2023
2.	Bachelor of Science in Mechanical Engineering	Level II, Re-accredited Assessment on-going in Phase 1 of the 3 rd Survey Visit (Revisit ALL AREAS)	July 1, 2023 – June 30, 2027	June 19-23, 2023

No.	Kidapawan City Campus	LEVEL (ACCREDITATION STATUS)	DATE OF VALIDITY OF ACCREDITATION STATUS	DATES OF ACCREDITATION VISIT
3.	Bachelor of Technology (Majors: Automotive Technology, Civil Technology, Electrical Technology, Electronic Technology, Mechanical Technology, refrigeration and Air-conditioning Technology)	Level III Re-accredited (assessment on-going in Phase 1 of the 4 th Survey Visit (Revisit ALL AREAS)	July 1, 2023 – June 30, 2028	June 19-23, 2023
4.	Bachelor of Secondary Education (majors: English, Filipino, Mathematics, Social Studies)	Level I Accredited	December 16, 2021 – December 15, 2024	November 29 - December 3, 2021
5.	Bachelor of Technical and Vocational Teacher Education (majors: Automotive Technology, Electronics Technology, Food Service and Management Technology, Garments, Fashion and Design Technology)	Level I Accredited	December 16, 2021 – December 15, 2024	November 29 - December 3, 2021
6.	Bachelor of Science in Electrical Engineering	Level I Accredited	JULY 16, 2022 – JULY 15, 2025	July 4 – 8, 2022
7.	Bachelor of Industrial Technology (major: Food and Beverage Preparation and Service Management)	Level I Accredited	December 16, 2021 – December 15, 2024	November 29 - December 3, 2021
8.	Master of Technology Education	Level I Accredited	September 1, 2023 – August 31, 2026	August 21-25, 2023

No.	Kabacan Campus: (GRADUATE PROGRAMS)	LEVEL (ACCREDITATION STATUS)	DATE OF VALIDITY OF ACCREDITATION STATUS	DATES OF ACCREDITATION VISIT
1.	Doctor of Philosophy in Extension Education	Level III- Re-accredited	MAY 2022 – APRIL 2023	June 1-3, 2021; Compliance Report on March 02, 2022
2.	Ph.D. - Agricultural Science (Doctor of Philosophy in Agricultural Science) majors: Animal Science, Crop Protection, and Crop Production and Management	Level III Re-accredited (must comply with mandatory recommendations) Revisit ALL Areas	December 1, 2023 – November 30, 2025	NOVEMBER 13-15, 2023
3.	Master of Science in Biology	Level IV Re-accredited (must comply with mandatory recommendations)	AUGUST 2022 – JULY 2023	June 29-July 1, 2022

No.	Kabacan Campus: (GRADUATE PROGRAMS)	LEVEL (ACCREDITATION STATUS)	DATE OF VALIDITY OF ACCREDITATION STATUS	DATES OF ACCREDITATION VISIT
4.	Doctoral of Education in Educational Management	Level III Re-accredited (must comply with mandatory recommendations) Revisit Area of Community Service and International Linkages and Consortia	December 1, 2023 – November 30, 2024	NOVEMBER 13-15, 2023
5.	Master of Science in Agriculture (Agronomy, Crop Prot, Horticulture)	The program level is III. Passed the Phase 1 of two (2) Phase of Evaluation in the 4 th Survey Visit. Must Conduct Phase 2.	December 16, 2020 – December 15, 2021	November 30 – December 4, 2020
6.	Master of Arts in Education in Educational Management	Level III Re-accredited (must comply with mandatory recommendations) Revisit Area of Community Service, International Linkages and Consortia	December 1, 2023 – November 30, 2024	NOVEMBER 13-15, 2023
7.	Master of Science in Teaching -Physics	Level I - Accredited	MAY 1, 2021 – APRIL 30, 2024	APRIL 26-30, 2021
8.	Master of Science in Teaching – Mathematics	Level II Re-accredited	September 1, 2023 – August 31, 2027	August 21 -25, 2023
9.	Master of Science in Teaching -Chemistry	Level II Re-accredited	September 1, 2023 – August 31, 2027	August 21 -25, 2023
10.	Master of Science in Teaching-Biology	Level II Re-accredited	September 1, 2023 – August 31, 2027	August 21 -25, 2023
11.	Master of Science in Extension Education	Level II Re-accredited	September 1, 2023 – August 31, 2027	August 21 -25, 2023
12.	Master of Science in Plant Breeding	Level I Accredited (Revisit Area VI)	Sept. 1, 2020 – August 31, 2024	August 21-25, 2023
13.	Master of Science in Agricultural and Biosystems Engineering	Level II Re-accredited	September 1, 2023 – August 31, 2027	August 21 -25, 2023
14.	Master of Public Administration	Level II Re-accredited	September 1, 2023 – August 31, 2027	August 21-25, 2023

No.	Kabacan Campus: (GRADUATE PROGRAMS)	LEVEL (ACCREDITATION STATUS)	DATE OF VALIDITY OF ACCREDITATION STATUS	DATES OF ACCREDITATION VISIT
15.	Master of Engineering in Rural Infrastructure Engineering	Level I – Accredited (Revisit ALL AREAS)	September 1, 2023 – August 31, 2027	August 21-25, 2023
16.	Master of Arts in Teaching Industrial Arts	Level I Accredited	APRIL 1, 2022 – MARCH 31, 2025	March 21-25, 2022
17.	Master of Arts in Language Teaching-Filipino	Level II Re-accredited	September 1, 2023 – August 31, 2027	August 21 -25, 2023
18.	Master of Arts in Language Teaching-English	Level II Re-accredited	September 1, 2023 – August 31, 2027	August 21 -25, 2023
19.	Master of Arts in Home Economics	Candidate	Sept. 16, 2018 – Sept. 15, 2020	September 12-14, 2018
20.	Master in Information Systems	Level II Re-accredited	September 1, 2023 – August 31, 2027	August 21-25, 2023
21.	Doctor of Philosophy in Rural Development	Level II Re-accredited	September 1, 2023 – August 31, 2027	August 21 -25, 2023
22.	Master of Science in Animal Science	Level I Accredited	APRIL 16, 2023 – APRIL 15, 2026	APRIL 10 – 14, 2023
	Undergraduate Program		Graduate Programs	Kidapawan City Campus
	Level IV Reaccredited - 1		Level IV – 0	Level IV – 0
	Level III Reaccredited - 17		Level III – 6	Level III – 2
	Level II Reaccredited - 10		Level II - 0	Level II - 1
	Level I Accredited - 5		Level I - 15	Level I - 4
	Candidate - 1		Candidate – 1	Candidate – 1
	PSV - 0			
	Total: 34		Total: 22	Total: 8

CENTERS OF EXCELLENCE AND DEVELOPMENT

The University has sustained the status of its Centers of Excellence and Development, to wit:

Programs	COE/COD
Bachelor of Science in Agriculture	CENTER OF EXCELLENCE
Bachelor of Science in Biology	CENTER OF DEVELOPMENT
Doctor of Veterinary Medicine	CENTER OF DEVELOPMENT

OTHER ACCOLADES

1. QS STARS UNIVERSITY RATING

As one of the universities that championed internationalization in Philippine Higher Education, USM was awarded by the Commission on Higher Education its QS Stars University rating during the ASEAN Philippine Higher Education Internationalization Champions of Nation-building and Sustainability (ICONS) for being awarded 2 stars by the Quacquarelli Symonds, the world’s largest international higher education network. The ASEAN ICONS Internationalization Awards is an avenue to recognize exemplary Philippine higher education institutions that championed the global reputation of Philippine Higher Education through their commendable performance in recognized international rankings and ratings, trailblazing efforts to advance internationalization of Philippine HEIs, and valuable contributions to the ASEAN’s regional prosperity.

2. PHILIPPINE QUALITY AWARD (PQA)

The Philippine Quality Award is a prestigious recognition given by the Department of Trade and Industry (DTI) to organizations that demonstrate exceptional performance and commitment to quality management practices and aims to promote and recognize excellence in both the private and public sectors.

In its desire for a transformative journey that will result in enhanced performance, improved stakeholder satisfaction, and a significant impact on the institution and the wider community it serves, USM applied for the Award. On **October 12, 2022**, an **Organizational Briefing** was conducted by PQA Assessors among the key officials of the University. After less than a year of preparation, USM was subjected to rigorous assessment by the Department of Trade and Industry on **November 2, 4, and 14, 2022**.

3. **29th SPOT in the 100 BEST UNIVERSITIES OF THE PHILIPPINES**

USM remained in the 29th spot in the list of 100 best universities in the Philippines, as ranked by EduRank based on research outputs (45%), non-academic prominence (45%), and alumni influence (10%). EduRank is an independent metric-based ranking of 14, 131 universities from 180 countries. It uses a proprietary database with an index of 44,909,300 scientific publications and 1,237,541,960 citations to rank universities across 246 research topics.

4. **ONE OF ASIA'S OUTSTANDING ACADEMIC INSTITUTIONS**

USM was awarded as one of Asia's Outstanding Academic Institutions by CMO Asia with the Asian Confederation of Businesses as its strategic partner and Stars of the Industry Group as research partner. The awards of highest reputation are presented to individuals and institutions which have surpassed several levels of excellence, are set as role models, and displayed exemplary leadership. Institutions were evaluated on educational achievement, placements, leadership, class infrastructure, student impact (internal to the organization), and future orientation.

5. **ISO 9001:2015 CERTIFICATION**

True to its commitment to maintain quality management system, the University maintained its certification to ISO 9001:2015.



STUDENT ENROLLMENT AND STUDENT SUPPORT

After two years of COVID restrictions, one of the major highlights of 2022 was the opportunity for face-to-face engagement with students, prompted by the order from the Commission on Higher Education to implement full face-to-face classes. The University welcomed back its old students and admitted freshmen and transferees. Total enrollment for the first semester of SY 2022-2023 was 21,208 and for the second semester, a total of 20, 408 students were registered.

The table below presents an overview of the enrollment data for 2022 categorized by year level and gender. This gives a picture of student population growth, gender representation and potential patterns across various year levels.

Summary of Enrolment by Year Level
1st Semester SY 2023-2024

COLLEGE / ACADEMIC PROGRAM	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	All Year Levels
College of Agriculture	223	464	182	175			1,044
Bachelor of Agricultural Technology	2	2	75	74			153
Bachelor of Practical Agriculture	-	-	2	12			14
BS in Agriculture	170	373	105	66			714
BS in Fisheries	51	89	-	23			163
College of Arts and Social Sciences	519	522	465	310			1,816
Bachelor of Arts in English Language	82	63	82	66			293
Bachelor of Arts in Philosophy	53	33	39	30			155
Bachelor of Arts in Political Science	98	72	57	27			254

COLLEGE / ACADEMIC PROGRAM	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	All Year Levels
Bachelor of Arts in Psychology	106	133	101	39			379
BS in Criminology	79	193	105	81			458
BS in Development Communication	101	28	81	67			277
College of Business, Dev't Economics & Management	470	360	465	404			1,699
Bachelor of Public Administration	88	78	75	-			241
BS in Accountancy	101	33	18	24			176
BS in Agribusiness	87	57	78	66			288
BS in Agricultural Economics	95	40	55	47			237
BS in Business Administration	99	84	108	119			410
BS in Development Management	-	-	-	41			41
BS in Management Accounting	-	68	131	107			306
College of Education	321	396	343	294			1,354
Bachelor of Elementary Education	80	138	147	150			515
Bachelor of Secondary Education	217	258	196	144			815
Certificate in Professional Education	24	-	-	-			24
College of Engineering & Information Technology	475	521	431	690	16		2,133
Bachelor of Library and Information Science	-	40	30	2	-		72
BS in Agricultural and BioSystems Engineering	91	127	83	157	-		458
BS in Civil Engineering	96	127	131	207	12		573
BS in Computer Engineering	98	87	81	107	1		374
BS in Computer Science	48	50	40	74	-		212
BS in Electronics Engineering	41	44	26	34	3		148

COLLEGE / ACADEMIC PROGRAM	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	All Year Levels
BS in Information Systems	101	46	40	109	-		296
College of Human Ecology and Food Sciences	359	393	293	265			1,310
BS in Food Technology	51	53	-	24			128
BS in Hospitality Management	119	159	132	96			506
BS in Nutrition and Dietetics	89	91	93	56			329
BS in Tourism Management	100	90	68	87			345
BS in Travel Management	-	-	-	2			2
College of Law	76	62	0	0			138
Juris Doctor	76	62	-	-			138
College of Medicine & Allied Health Sciences	262	240	206	87			795
BS in Midwifery	38	-	-	-			38
BS in Nursing	98	90	161	87			436
BS in Pharmacy	93	82	-	-			175
Diploma in Midwifery	-	32	-	-			32
Doctor of Medicine	33	36	45	-			114
College of Science and Mathematics	319	288	175	111			893
BS in Applied Mathematics	50	24	19	24			117
BS in Applied Physics	55	32	-	-			87
BS in Biology	93	121	90	69			373
BS in Chemistry	48	32	19	18			117
BS in Environmental Sciences	30	29	-	-			59
BS in Microbiology	43	50	47	-			140

COLLEGE / ACADEMIC PROGRAM	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	All Year Levels
College of Trades and Industries	341	250	181	87			859
BS in Industrial Technology	251	209	171	50			681
Bachelor of Technical-Vocational Teacher Education	90	41	10	37			178
College of Veterinary Medicine	132	177	275	138	77	51	850
BS in Veterinary Technology	84	93	163	80			420
Doctor of Veterinary Medicine	48	84	112	58	77	51	302
Institute of Middle East and Asian Studies	219	291	129	131			771
Bachelor of Arts in Islamic Studies	116	198	86	77			478
BS in International Relations	103	93	43	54			293
Institute of Sports Physical Educ & Recreation	179	196	129	122			626
Bachelor of Physical Education	93	100	61	117			371
BS in Exercise and Sports Science	86	96	68	5			255
USM PALMA Campus	231	316	329	236			1,112
Bachelor of Agricultural Technology – ALAMADA	-	-	28	22			50
Bachelor of Elementary Education – ALAMADA	-	-	1	13			14
Bachelor of Elementary Education – ALEOSAN	43	30	43	33			149
BS in Agriculture – LIBUNGAN	1	38	-	22			61
BS in Business Administration – LIBUNGAN	-	46	2	38			86
BS in Criminology – LIBUNGAN	24	55	34	20			133
BS in Hospitality Management – LIBUNGAN	120	84	112	32			348
Bachelor of Secondary Education – LIBUNGAN	43	34	45	35			157

COLLEGE / ACADEMIC PROGRAM	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	All Year Levels
BS in Veterinary Technology – ALEOSAN	-	29	64	21			114
USM Mlang Campus	0	35	23	0			58
BS in Criminology - MLANG	-	35	23	-			58
USM Buluan Campus	0	0	0	8			8
Bachelor of Agricultural Technology - BULUAN	-	-	-	8			8
USM Graduate School	820	191	106	0			1,117
Doctor of Education	1	-	1	-			2
Doctor of Education major in Educational Management	34	3	-	-			37
PhD in Extension Education	14	4	-	-			18
PhD in Agricultural Sciences major in Animal Science	4	6	-	-			10
PhD in Agricultural Sciences major in Crop Production and Mngt	1	3	-	-			4
PhD in Agricultural Sciences major in Crop Protection	10	1	-	-			11
PhD in Agricultural Sciences major in Crop Science	4	-	-	-			4
PhD in Education major in Applied Linguistics	24	10	-	-			34
PhD in Education major in Biology	12	2	8	-			22
PhD in Education major in Filipino	17	-	-	-			17
PhD in Education major in Mathematics	52	13	3	-			68
PhD in Rural Development major in Organizational Management	-	-	1	-			1
PhD in Rural Development	19	-	3	-			22
PhD in Rural Development major in Theories and Methods	-	-	2	-			2

COLLEGE / ACADEMIC PROGRAM	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	All Year Levels
Master in Information Systems	10	5	4	-			19
Master in Public Administration	63	15	12	-			90
Master of Art in Home Economics	1	1	6	-			8
Master of Arts in Education major in Educational Management	35	11	23	-			69
Master of Arts in Education Major in Science	23	-	-	-			23
Master of Arts in Education major in Social Science	64	7	-	-			71
Master of Arts in Education major in Elementary Education	28	5	-	-			33
Master of Arts in Language Teaching (MALT)	27	-	-	-			27
Master of Arts in Language Teaching English	43	18	4	-			65
Master of Arts in Language Teaching Filipino	51	11	3	-			65
Master of Arts in Teaching Industrial Arts	23	8	1	-			32
Master of Engineering in Rural Infrastructure Engineering	24	4	1	-			29
MS in Agricultural and Biosystems Engineering	22	3	2	-			27
MS in Agricultural Economics	2	1	-	-			3
MS in Agronomy	9	2	2	-			13
MS in Animal Science	25	5	1	-			31
MS in Biology	18	1	3	-			22
MS in Crop Protection	19	9	-	-			28
MS in Extension Education	6	1	4	-			11
MS in Horticulture	12	3	1	-			16
MS in Plant Breeding	7	1	-	-			8

COLLEGE / ACADEMIC PROGRAM	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	All Year Levels
MS in Rural and Economic Development	17	4	3	-			24
MS in Teaching Biology	27	17	6	-			50
MS in Teaching Chemistry	9	1	1	-			11
MS in Teaching Mathematics	50	11	10	-			71
MS in Teaching Physics	13	5	1	-			19
USM KIDAPAWAN CITY CAMPUS							
College of Industry and Technology	146	49	62	0			257
Doctor of Philosophy in Technology Education Management	13	9	30	-			52
Master of Arts in Education	13	21	7	-			38
Master of Arts in Language and Literacy Education	41	-	-	-			41
Master of Technology Education	60	19	25	-			104
Professional Education	19	-	-	-			19
College of Education, Art and Sciences	341	363	308	284			1,296
Bachelor of Secondary Education	208	222	259	199			888
Bachelor of Technical Vocational Teacher Education	133	141	49	85			408
College of Engineering	139	135	85	93			452
Bachelor of Science in Electrical Engineering	44	29	24	10			107
Bachelor of Science in Industrial Engineering	51	63	31	43			188
Bachelor of Science in Mechanical Engineering	44	43	30	40			157
College of Technology	692	520	334	221			1,767

COLLEGE / ACADEMIC PROGRAM	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	All Year Levels
Bachelor of Industrial Technology	105	68	57	91			321
Bachelor of Technology	224	212	141	130			707
Diploma of Technology	264	155	85	-			504
Food Preparation and Service Technology	99	85	51	-			235
USM-Main Total	4,946	4,702	3,732	3,058	93	51	16,582
Tertiary	3,786	4,062	3,229	2,814	93	51	14,035
PALMA	231	316	329	236			1,112
Mlang	0	35	23	0			58
Buluan	0	0	0	8			8
JD	76	62	0	0			138
MD	33	36	45	0			114
GS	820	191	106				1,117
ULS	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	741
USM-KCC-Total	1,318	1,067	789	598			3,772
USM-KCC-Tertiary	1,172	1,018	727	598			3,515
GS	146	49	62	0			257

STUDENT SUPPORT

As part of its commitment to support student success and providing financial assistance, a diverse range of scholarships were made available to disadvantaged but eligible students. These scholarships recognize academic achievements, promote excellence in various fields of study and provide opportunities for students with exceptional talents and abilities. The following tables show the list of scholarships and the number of scholars:

CATEGORY	NAME OF SCHOLARSHIP	TOTAL
Government	CHED – Tulong Dunong Program (TDP)	807
	CHED – Tertiary Education Subsidy (TES)	14
	CHED - CHED Scholarship Program (CSP)	99
	CHED – Medical Scholarship Return Services (MSRS)	61
	Bangsamoro Medical Scholarship Program (BMSP)	33
	SIDA Scholarship Program (SIDA-SGP)	11
	Scholarship Program for Coconut Farmers and their Families (CoScho)	51
	Department of Science and Technology	96

CATEGORY	NAME OF SCHOLARSHIP	TOTAL
Non-Government	TATEH Feeds Scholarship (TATEH)	6
	Gokongwei Brothers Foundation	2
	Nestlé Scholarship	80

HUMAN RESOURCES

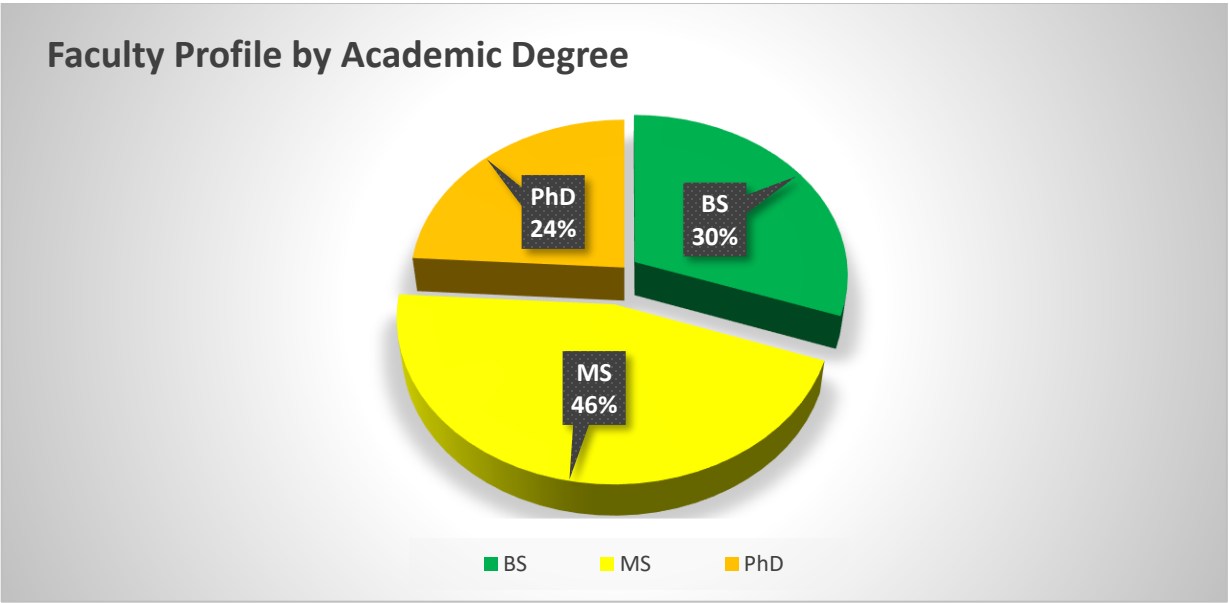
The University’s human resources play a vital role in its functioning and success. They contribute to USM’s mission of education, research and community engagement, and production. The quality of human resources is central to the achievement of academic excellence, student success, diversity and inclusion and employee development.

FACULTY PROFILE

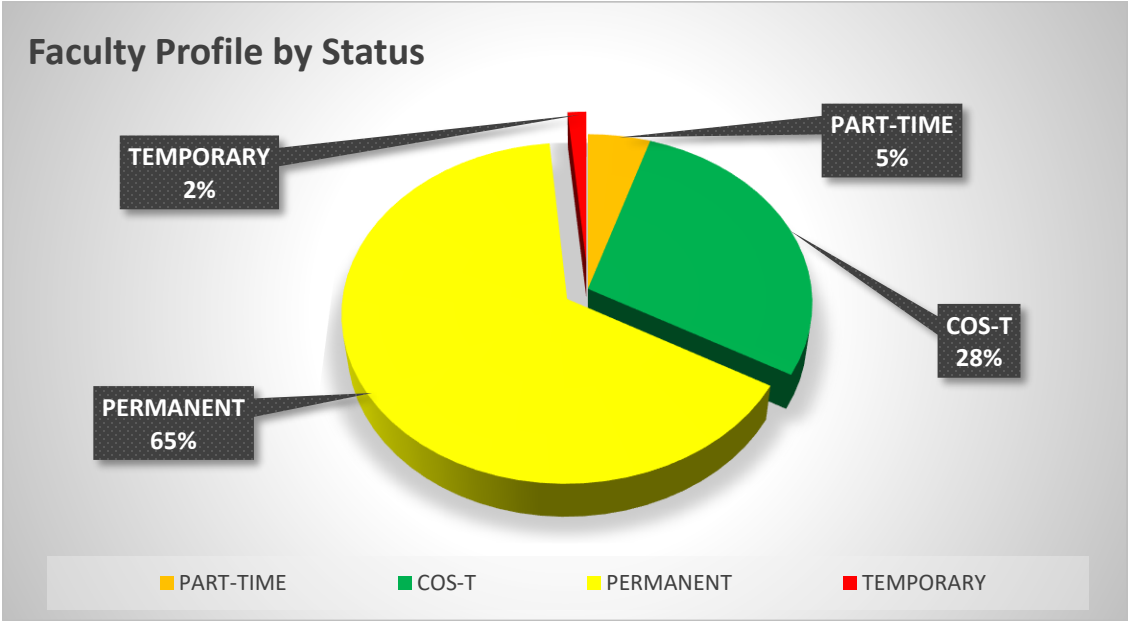
Faculty members support the vision and mission of the University by committing themselves fully to their teaching obligations, to participate in the development of the programs of their colleges and institutes and of the University as a whole, to engage in scholarly activities, and, as appropriate, to support the University in its goal to render public service.

In 2023, there were 678 faculty members who delivered quality education to its most important clientele – the students. Data below show the University’s faculty profile by academic qualifications, employment status, and gender.

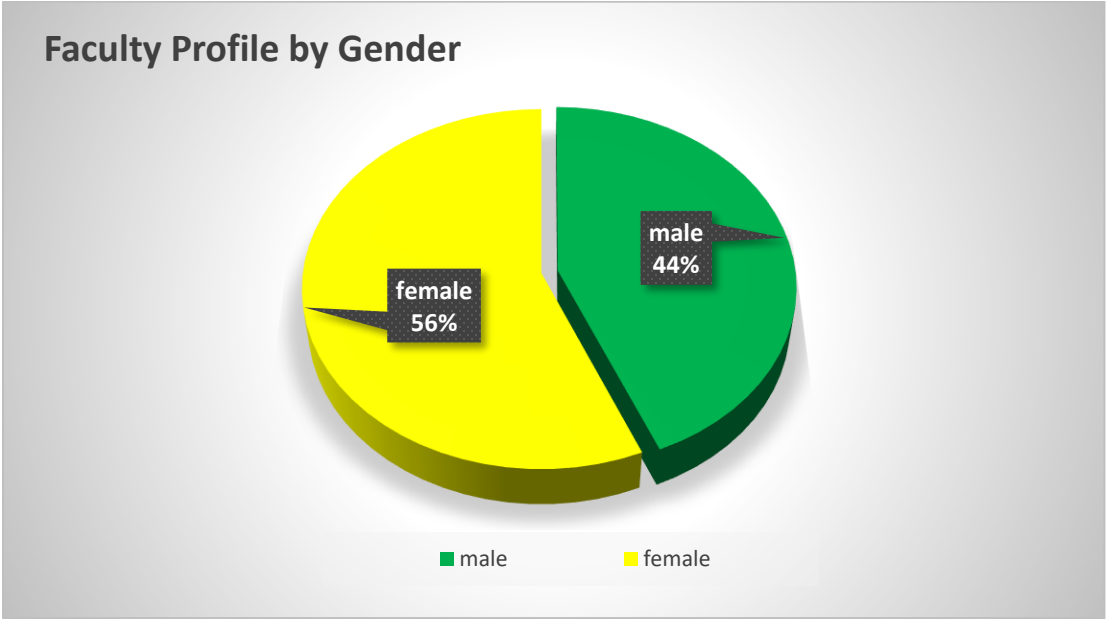
The illustration below showcases the distribution of faculty members with various levels of academic qualifications, such as bachelor's, master's, and doctoral degrees. This visual representation provides insights into the educational background of the faculty, which is important for evaluating the institution's academic expertise and guiding professional development initiatives.



The illustration below shows proportions of permanent, temporary, part-time, and contract of service faculty members within the institution, offering a clear overview of the employment composition. This breakdown is crucial for understanding the staffing structure and planning for resource allocation and academic support.



The chart below illustrates the classification of faculty members according to gender. It depicts the relative proportions of male and females within the institution. This visual representation is essential for assessing gender diversity and equity among the faculty, highlighting the current gender distribution and informing diversity initiatives and policies.

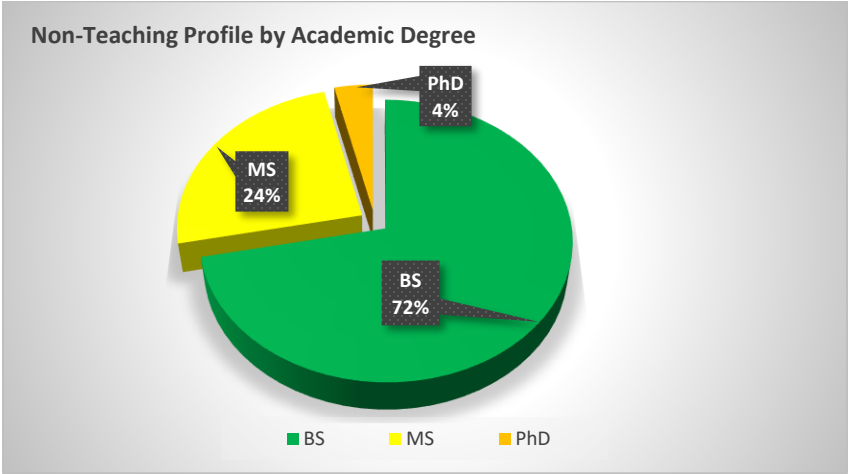


NONTEACHING STAFF PROFILE

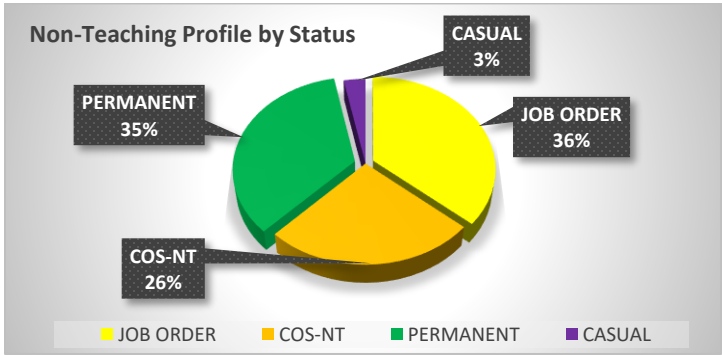
While faculty members are at the forefront of teaching and research, the University’s support staff play a crucial role in ensuring the overall efficiency and effectiveness of the following aspects: administrative support, facilities and maintenance, information technology support, library services, student support services, financial services, and campus security and safety. Support staff are the backbone of USM, providing essential services and support that enable faculty, students, and other stakeholders to thrive.

In 2022, there were 618 support staff who provided these essential services. Data below show the University’s nonteaching staff profile by academic degree,, employment status, and gender.

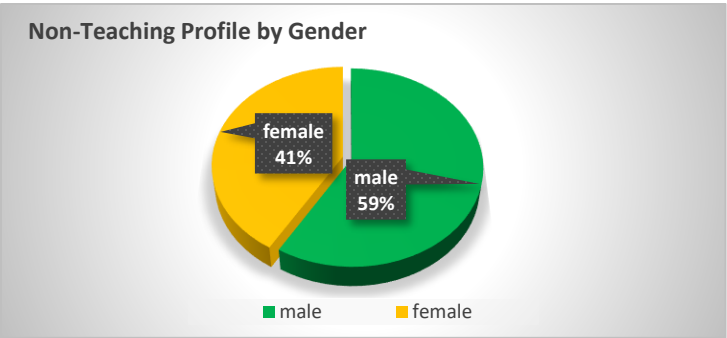
This visual representation offers valuable insights into the educational background of the non-teaching staff, aiding in understanding their qualifications and supporting strategic planning for staff development and training programs.



Below is a visually representation of the proportions of permanent, contract of service, casual, and job order staff the institution. This overview is crucial for understanding the staffing structure, facilitating effective workforce planning, and ensuring appropriate allocation of resources and support for non-teaching personnel.

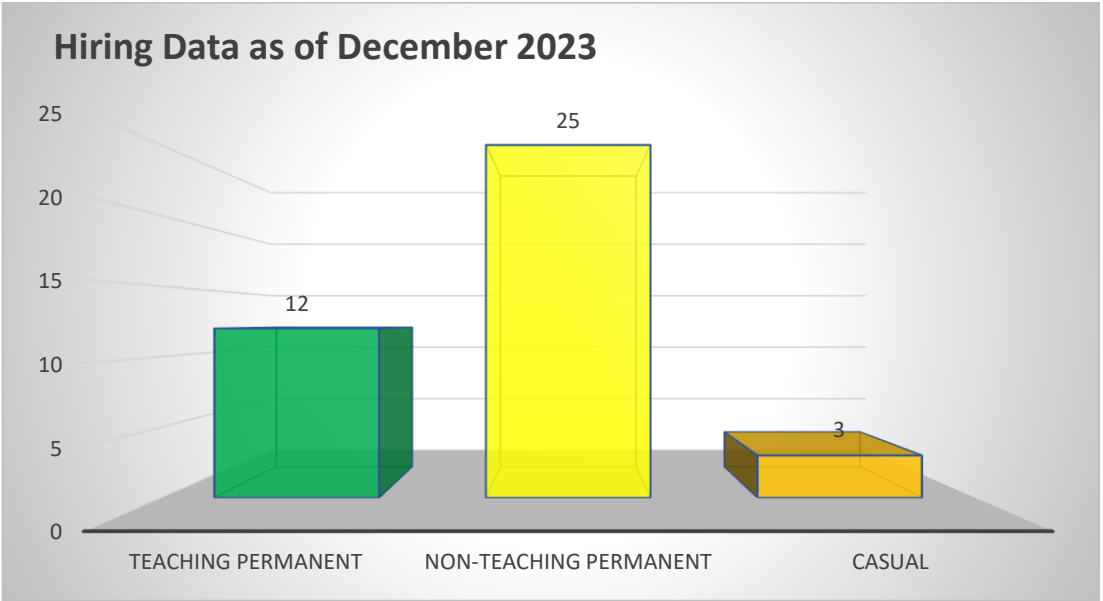


This visual representation is key to understanding the gender distribution among non-teaching employees, helping to assess diversity and support the development of inclusive policies and practices.



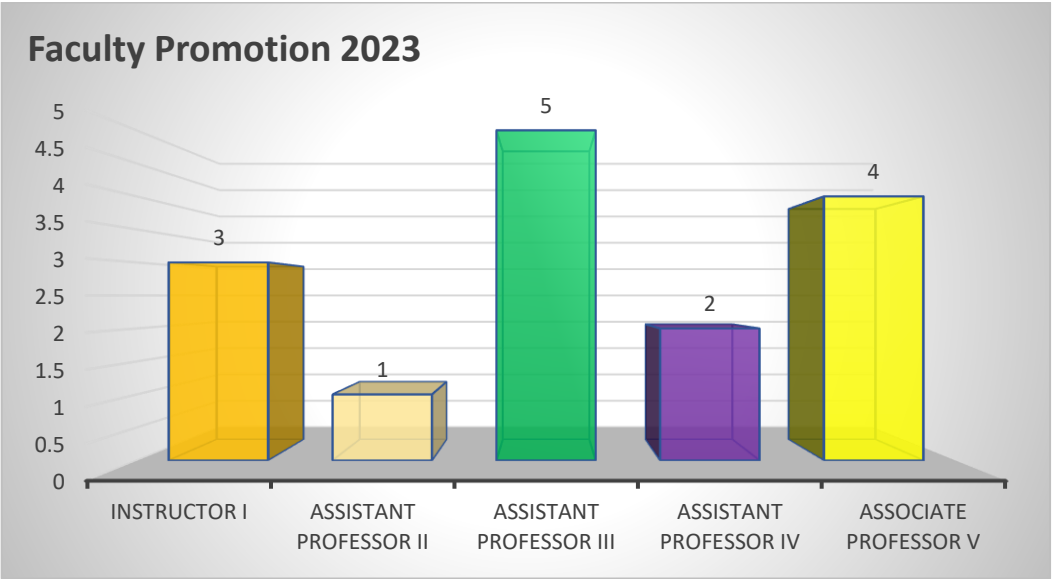
HIRING

The graph displays the hiring data of the university for the year 2023. It illustrates the number of new hires across various departments and roles, providing a comprehensive overview of the institution's recruitment trends. A total of forty (40) personnel were hired to augment and strengthen the University's workforce.



PROMOTION

The graph presents the promotion data of the university for the year 2023. It highlights the number of promotions across different departments and positions, offering a detailed view of career advancement within the institution. This visual representation is essential for understanding the university's promotion trends, evaluating staff development, and supporting strategic planning for future career progression opportunities.



The graph displays the promotion data for non-teaching staff at the university for the year 2023. It highlights the number of promotions across various departments and roles, providing a detailed view of career advancement among the non-teaching personnel. This visual representation is crucial for understanding promotion trends, evaluating the effectiveness of staff development programs, and informing future strategies for career progression and employee retention.



SIGNIFICANT HUMAN RESOURCE POLICIES

The CSC Regional Office 12 has approved on October 14, 2022 the **Gawad Uliran sa Serbisyong Mahusay (Gawad USM)** – the university’s customized Program on Awards and Incentives for Service Excellence (PRAISE). Gawad USM is a data-driven rewards and recognition system that extract award parameters from the existing information systems of the university. Likewise, CSC 12 also approved the **Merit Selection Plan (MSP)** for the Administrative, Academic, and Research, Development, Extension, and Production Support Staff of USM on November 16, 2022. The MSP for non-teaching personnel is a data-driven recruitment, selection, placement system instituting the **Dynamic Candidates Assessment System (DYCAS)** that extracts and processes potential and performance data of individual employees.

The University Board of Regents, through Resolution no. 126, series of 2022, has approved on October 6, 2022 the ***Linang Tao Learning and Development Management System*** instituting the *Linang Tao Academy* – an online learning platform that caters to self-paced online courses for employees for progressive layering career enhancement, workplace innovation hubs, career lifelong learning, and digital onboarding.

RESEARCH DEVELOPMENT AND EXTENSION SERVICES

The Office of the Vice-President for Research Development and Extension (OVPRDE), together with the University Research and Development Executive Council (URDEC) oversees and monitors research, development and extension programs, projects and activities of the university encompassing the USM main and other campuses. It also sets the directions of RDE based on university themes and priorities.

The University envisions upholding its status of excellence in Research, Development and Extension (RDE) as one of its major functions. Through its RDE function, the University shall be the forerunner of progressive research projects and innovation in response to the needs of time. This is by means of continuing to be the pioneer source of technology and information that are on track towards poverty reduction, food security, and global competitiveness and likewise, for cohesive and sustainable development among its multi-socio-cultural clienteles. RDE is implemented in consonance with the University's vision, mission, and objectives, and in support of the national and regional development thrusts and the United Nations Sustainable Development Goals (SDGs). We improved our RDE engagement and outputs through increased RDE fund and resources, and number of research facilities and centers. We have generous support from our collaborators and partners such as the Department of Science and Technology (DOST), Department of Agriculture - Bureau of Agricultural Research (DA-BAR), and local government units. Our RDE projects are funded locally by the university or through external fund source.

Our RDE outputs are the endeavors of our faculty, students and researchers and we exceeded the target number of faculty engaged in RDE. Students also participate in our funded projects and we conducted an in-house review for students these in which best theses were recognized and awarded. All R&D and extension proposals were evaluated based on established criteria and their alignment to the USM RDE themes.

RDE capacity building was enhanced through seminar, workshop and training. Our RDE outputs were published in reviewed international journals and other outputs are translated into IEC materials. USM also hosted the review of papers and the publication of 7 articles through the Journal of Agricultural Research, Development, Extension and Technology (JARDET). Two new journals managed by the university were approved for implementation. Intellectual property assets produced this year are more on utility model and copyrights. The USM RDE is visible through its website and social media and have increased linkages with local and international partners.



Dr. Francisco Gil N. Garcia

USM President – URDEC Chair

The 2023 USM
Research,
Development and
Extension Committee
(URDEC)



Dr. Ma. Teodora N. Cabasan
*Vice President for Research,
Development, and Extension
– URDEC Co-Chair*



Dr. Lydia C. Pascual
*Director, Research and
Development Office*



Dr. Mary Joy S. Cañolas
*Director, Extension
Services Office*



Dr. Debbie Marie B. Verzosa
Director, Research
Publication Services Office



Dr. Efren E. Magulama
Director, USM Agricultural
Research and Development
Center



Dr. Abubakar A. Murray
Director, Philippine
Industrial Crops Research
Institute

1. RDE Institutional of Project-based Centers and Laboratories in CY 2023

1.1 Research Facilities and Laboratories

1.1.a Biotechnology Building

This facility was originally named the Animal Research Laboratory Building in 1979 in support of the development of the national research system for Agriculture and Natural Resources. Currently, this is called the Biotechnology Building (Figure 1) and this houses the following laboratories: 1) Plant Tissue Culture Laboratory; 2) Plant Molecular Biology Laboratory I; 3) Plant Molecular Biology Laboratory II; and 4) Animal Molecular Laboratory.

Different research was conducted in this facility like DNA fingerprinting of high value fruit crops (Mango, Durian and Banana) and industrial crops (Coffee, Rubber, Cacao and Oil Palm) as well as Plant Tissue Culture in Banana. Biotechnology Unit also serves as learning hub for students in the University as well as those students, farmers and other stakeholders coming from the nearby municipalities and cities who are interested in Biotech. The unit also offers services like molecular fingerprinting, molecular diagnostics, molecular technology training (Figure 1).

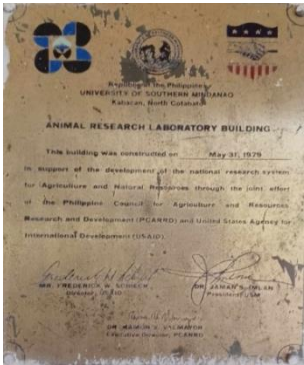


Figure 1. Biotechnology Building

1.1.b Crop Research Laboratory Building

The Crops Research Laboratory Building (Figure 2) houses the USMARDC Central Laboratory, Plant Pathology Laboratory 1, Plant Pathology Laboratory 2, Biocontrol Laboratory, NICER Cacao R&D Center, NICER project office, Atomic Absorption Spectrometer Lab, Lactic Bacteria Laboratory, Agronomy Laboratory, Post-harvest Laboratory.



Figure 2. Crop Research Laboratory Building

1.1.c High Value Crops Food Processing Center

The High Value Crops Food Processing Center includes the food processing and packaging area, personnel office, display section, and equipment section. This is the center of research, development and extension of high value industrial crops to significantly contribute in the growth and sustenance of the country's economy (Figure 3).

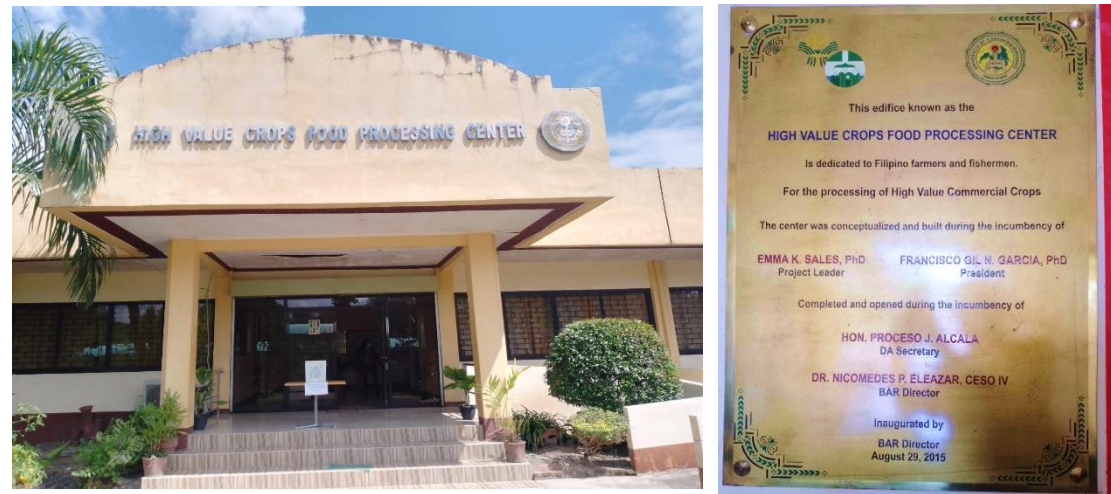


Figure 3. High Value Crops Food Processing Center

1.1.d Philippine Carabao Center

One of the operating centers of the Philippine Carabao Center (PCC)- DA is located at USM (Figure 4). This includes the office building, buffalo area, and milk processing facility.

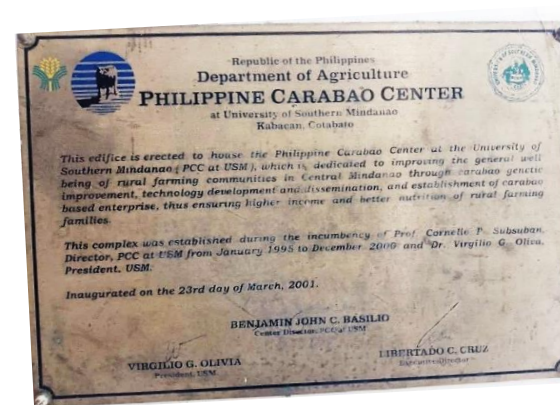


Figure 4. Philippine Carabao Center

1.1.e Organic Agriculture Research and Development Center

The Organic Agriculture Research and Development Center is located at the USM-CA complex. This R & D Center (Figure 5) serve as hub for mapping priority research in Organic Agriculture; training venue for Organic Agriculture practitioners and advocates and analyze present and future research needs and gaps in Organic Agriculture in Southern Philippines.

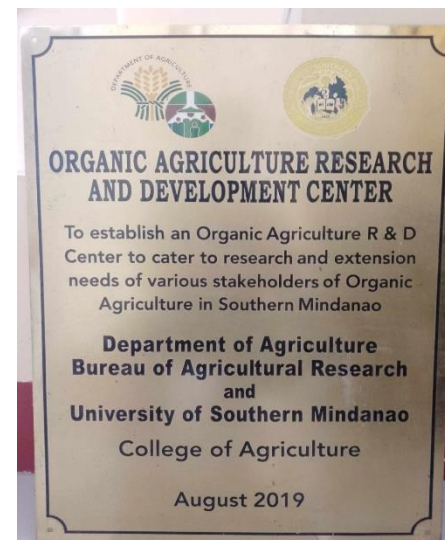


Figure 5. Organic Agriculture Research and Development Center

1.1.f Philippine Rubber Testing Center

The Philippine Rubber Testing Center (Figure 6) was established in 1993 under the Philippine Industrial Crops Research Institute (PICRI) with the aim to improve the processing and manufacturing of raw rubber for local consumption and export.

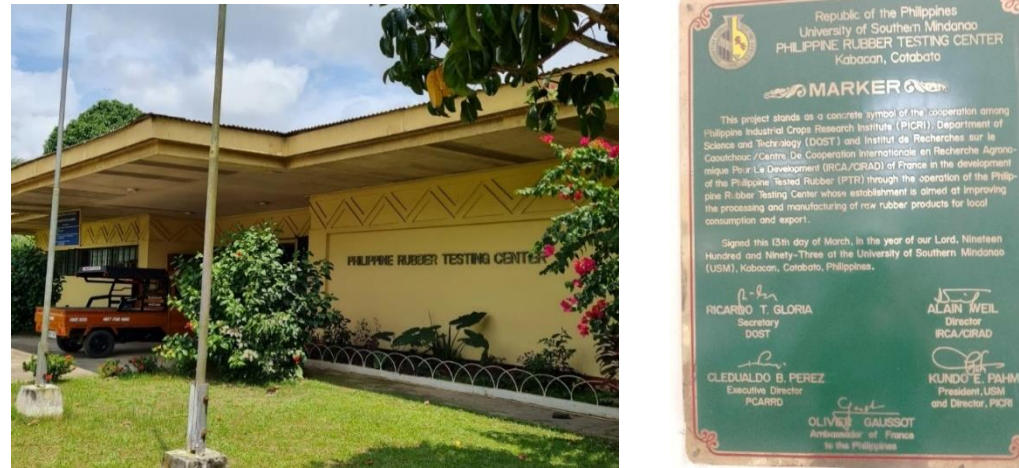


Figure 6. Philippine Rubber Testing Center

1.1.g Science and Technology Building

The S&T Building (Figure 7) houses the Crop Protection and Soils Laboratory on the 1st floor under the College of Agriculture. The second floor has the following laboratories: Molecular Biology, Microscopy, Microbiology, Nematology, and Ecology Conservation Laboratory under the Department of biological Sciences. The Tuklas Lunas Development Center is located at the 3rd floor of the building under the Department of Chemistry.



Figure 7. Science and Technology Building

1.1.h Cacao Post-Harvest Processing Center

The University of Southern Mindanao (USM) is a prime-mover in cacao R & D. USM intends to expand its cocoa products to include fruit-based chocolates. The cacao post- harvest processing facility (Figure 8) was upgraded in support of on-going and future cacao research activities. Various modern equipment was acquired for cacao post-harvest processing.



Figure 8. Cacao Post-Harvest Processing Cent

1.1.d High Value Crops Food Processing Center for chocolate and other cacao products

The High Value Crops Food Processing Center based at University of Southern Mindanao was established in 2012 with funds from the Department of Agriculture-Bureau of Agriculture Research (DA-BAR). It has become the processing center mainly for high quality turmeric tea and its variants and the production of the USM chocolates. With the increasing supply of cacao beans for processing, it was upgraded in 2023 with additional physical facilities and equipment for cacao processing (Figure 9).



Figure 9. High Value Crops Food Processing Center

1.1.e Geographic Information Support System Center

The Geographic Information Support System Center for High Value Commodities and Indigenous Crops in SOCCSKSARGEN (Figure 10) houses the geographic soils information center, the soils and insect museum laboratory and the farm tourism hub, leading into multifaceted activities with emphasis on precision agriculture.

The facility is also a multipurpose venue for training and extension engagement of soils support system in SOCCSKSARGEN, and for establishing awareness among stakeholders on the geographic information support system for streamlining the program on high value commodities and indigenous crops in the region. The center is also a hub where researchers and stakeholders would be educated and trained in terms of the usage of geographic information systems and interpretation of crop suitability maps. The center was established through funding by the Department of Agriculture-Agricultural Competitiveness Enhancement Fund-Research Facility Development Fund (DA-ACEF-RFDG).



Figure 10. Geographic Information Support System Center

1.1.f NICER – SOCCSKSARGEN Cacao Research, Development and Extension Center

The NICER Program (Niche Centers in the Regions for R&D) aims to address the discrepancy in access to R&D funding among the regions. Since NICER Cacao R&D Center in USM is a project-based program, it was institutionalized as NICER – SOCCSKSARGEN Cacao Research, Development and Extension Center (URDEC Resolution 10, Series of 2022, BOR approved) in order to:

- a. to sustain the cacao R&D and outputs of the program for utility primarily in the region and ultimately in the country;
- b. to enhance collaborations in cacao RDE with other agencies and HEIs in the region;

- c. to strengthen the capacity of USM and other collaborating entities in generating cacao-related RDE proposals and implementation; and
- d. to broaden the capabilities of USM and other cooperating entities in generating cacao-related functional outputs for extension, incubation, and commercialization.

This center is currently housed at the Crop Research Laboratory Building.

1.1.g Corn Integrated Building

This is located in the USM Agricultural Research and Development Center. This facility includes the corn seed processing facility and corn seed storage (Figure 11).



Figure 11. Corn Integrated Building

1.1.h Food Processing Laboratory (FPL) building

This food processing laboratory building (Figure 12) caters for research on food security specific for tropical fruits and vegetables. This will serve as a facility for food processing, product development and cutting-edge food processing research. This is ideal for new formulations, production of consumer samples and shelf-life testing samples on a scale that simulates real production. It is equipped with a wide selection of pilot-scale equipment with capabilities including drying among others.



Figure 12. Food Processing Laboratory (FPL) building

1.1.i Plant Tissue Culture Lab

The plant tissue culture lab (Figure 13) caters research on plant propagation using aseptic techniques focused on different varieties of banana with experiments on cells, tissues, or organs and their subsequent placement into an artificial environment for growth and multiplication. This facility is located at the back of the Biotechnology building.



Figure 13. Plant tissue Culture Lab

1.1.j Wildlife Research & Rescue Center

In support of R.A. 9147 “Wildlife Resource Conservation and Protection Act”, the USM Wildlife Research and Rescue Center (USM-WRRC, Figure 14) was established. It is a temporary place for wildlife species caught or confiscated from traders, hunters, and pet handlers, as well as injured or harmed species from the wild. It included specialized and designed facility made to house specific wildlife species. Wildlife rescued and rehabilitated are categorized and observed in the center for reintroduction which is also part of the re-populating process. In 2023, this houses 1 Saltwater Crocodile (*Crocodylus porosus*), 2 Brahminy Kite (*Haliastur indus*), 1 Pinsker's Hawk Eagle (*Nasaetus pinskeri*), 1 Monitor Lizard (*Varanus* sp.), and 1 Philippine Hawk Eagle (*Nisaetus philippensis*).



Figure 14. Wildlife Research & Rescue Center

1.1.k Laboratory equipment obtained in 2023

Equipment	No. of units	Cost (Php)	Fund source/ donated by	Location
Nitrogen Distillation	1	976,000.00	GGGI-BKCF	USMARDC Central lab
pH meter	1	79,680.00	GGGI-BKCF	USMARDC Central lab
Plant Grinder	1	250,000.00	GGGI-BKCF	USMARDC Central lab
Shredder	1	325,852.32	Red Cross	USMARDC Corn facility

1.2 Support to Research Facilities and Engagements

1.2.a International Affairs Office – Research

The University of Southern Mindanao with its vision of providing quality and relevant education for its clientele to be globally competitive, culture-sensitive, and morally responsive human resources for sustainable development, has a need to strengthen its international visibility by expanding its partnership and linkages with higher education institutions and research development organizations abroad. To become a global university, USM shall be engaged in internationalization activities in accordance with CMO No. 55 s. 2016 and RA 11448 to strengthen the University’s international visibility. Hence, the establishment of the Office of International Affairs is timely and relevant in the move for internationalization of the University.

The Office of the International Affairs is under the Office of the University President. The Department of International Affairs, Linkages, and Programs for Research and Extension coordinates with the Vice President for Research Development and Extension, Director of Research Development Office, Director of Publication Services Office, and the Director of Extension Services Office for concerns related to researcher exchange and mobility, international research and extension collaborations, capacity and capability building and international exposure and visibility of University research personnel, and on-the-job training and internship programs for researchers.

1.2.b Research Ethics Office and IACUC Office

In support of the research facilities, laboratories, and research engagements, the Research Ethics Office and the Institutional Animal Care and Use Committees (IACUC) were established at the DOST-USMARD Center. The USM Research Ethics Committee (REC) established a set of guiding principles, such as minimizing the chance of harm, obtaining informed consent, safeguarding anonymity and confidentiality, avoiding deceptive activities, providing the right to withdraw, and supporting researchers in establishing goals and reconciling competing values that are significant to researchers. The REC conducts the ethical review of research proposals and protocols. It is in the Research Ethics Office where researchers secure the Research Ethics certification on research concerning humans.

On the other hand, on animal research, IACUC evaluate and approve the Animal Care and Use Program (ACUP) and the protocols of scientific procedures, as well as monitor and review its implementation and provide necessary technical recommendations and guidelines. Application for accreditation of the Research Ethics Committee and AICUC is underway.

1.2.c USMARDC Services

In addition to the services offered by the newly established R&D centers, office or those upgraded research facilities, the USM Agricultural Research and Development Center (USMARDC) continues to provide RDE services to clients and stakeholders such as laboratory analytical services to 227 clients (served as of November 2022). USMARDC also caters to the needs of students who requested for an area to conduct their research. A total of 5,124 sq. m experimental area was provided to students for thesis support.

1.2.d RDE Disbursement and Procurement System Committee

With the institutionalization of the RDE Disbursement and Procurement System Committee (PDSC) last 2021, the PDSC has supported RDE engagements through support in processing of research documents related to disbursement and procurement to ensure efficient utilization of funds under RDE for both local external funded projects. Coordination meetings and monitoring of RDE disbursement and procurement system were done quarterly to ensure efficient utilization of funds under RDE for both locally and externally funded projects.

1.2.e. Intellectual Property, Technology Transfer and Business Development Office (IPTTBDO)

USM Institutionalizes the Intellectual Property, Technology Transfer and Business Development Office (IPTTBDO) to safeguard the intellectual property of the University and strengthen IP and technology commercialization (TC) operations of the University.

The main objective of the USM IPTTBDO is to protect, transfer, and commercialize research outputs of faculty, researchers, and students leading to business development. USM faculty and constituents are encouraged to approach the office to register their IP outputs and seek guidance on how these can be protected, commercialized, and utilized by the community. Specifically, functions of the office are to:

- 1) lead in the identification, protection, and management of the University's intellectual properties (IPs) generated from R&D;
- 2) develop and monitor the implementation of the IP policy, technology transfer, and technology business incubation protocol;
- 3) monitor implementation of projects and activities on IP generation, technology commercialization and technology business incubation;
- 4) establish services on intellectual property, technology transfer and business development priority areas in consonance with and in support of regional/national priorities;
- 5) strengthen IP promotion and commercialization of technologies generated from R&D; assist in securing research collaborations and funding from commercial enterprises;
- 6) initiate capacity-building activities in areas of entrepreneurship, finance, marketing, human resources, business modeling, business planning, business legal concerns, and intellectual property management; and create and maintain database of the University's IP assets and commercialized technologies.

2. RDE FUND AND RESOURCES

The Research, Development, and Extension of the university generated a total budget of Php 93,566,623.75 (Php 78,116,404.45– external (downloaded in 2023) and Php 15,450,219.30 from internal source) allocated into different RDE offices, activities, and projects (Table 1). There was a 22% decrease in RDE fund in 2023 compared to 2022. From the total internal budget 15,450,219.30 was allotted on 2023 for RDE activities and projects, and the other budget was used to fund the operations of the RDE offices. There was a 42% increase in the funds from external sources in 2023 compared to 2022 (78,116,404.45). Overall, 22% fund increase was recorded in 2023.

Table 1. RDE budget allotment for CY 2023

OFFICES/ACTIVITY/PROJECT	ALLOTMENT
RDE Overhead	
Office of the Vice President for RDE	660,000.00
USM Agricultural Research and Development Center	780,564.52
Research and Development Office	824,791.21
Research Publication Services Office	500,000.00
Sub-total for overhead	2,105,355.73
Support to RD&E activities	
Counterpart to SOXAARRDEC	320,000.00
R &D Display Center	150,000.00
USM Wildlife Rescue Center	170,000.00
RDE Gawad Parangal	433,000.00
Faculty Development Assistance	150,000.00
Agency In-House Review (RDO)	900,000.00
Publication Incentive (RPSO)	600,000.00
USMARDC Support	1,613,590.72
Sub-Total for RDE support	4,336,590.72
VARIOUS PROJECTS/STUDIES	
RDO PROJECTS	2,326,953.55
USMARDC PROJECTS	1,140,000.00
PICRI PROJECTS	675,400.00
EXTENTION PROJECTS	400,000.00
GAD R&D PROJECT	592,700.00

	Sub-total for various projects/studies	5,665,053.55
TOTAL Fund from 01		12,107,000.00
EXTENSION Projects and Activities		
Fund 01		2,033,000.00
Fund 05		1,310,219.30
	Sub-total for Extension	3,343,219.30
Total Internal Fund		15,450,219.30
Total External Fund		78,116,404.45
TOTAL		93,566,623.75

Fund	2022	2023	% change
R&D fund 01	11,854,000.00	12,107,000.00	+2.13
RDE fund 01& 05	18,820,740.48	15,450,219.30	- 21.82
External sources	45,621,096.57	78,116,404.45	+41.60
Toal	60,818,315.87	78,116,404.45	+22.14

3. RDE engagement of faculty, full-time researchers and students

3.1 RDE programs/projects with internal funding

There were 40 RDE programs/projects monitored quarterly for compliance with expected outputs/deliverables, and budget utilization. Forty (40) were locally funded projects and xx were externally funded research projects (Table 2-5). Of the 40 projects/studies, 15 projects were monitored by the RDO, 6 projects/studies monitored by USMARDC and 3 monitored by PICRI. There were 14 extension projects under the ESO (Table 2).

Table 2. RDE Program/Activity/Project with internal fund

COLLEGE-BASED RESEARCH					
	Research Title	Researcher/s	Unit	Thematic Areas	Budget
1	Project: Maguindanaon Delicacies, Packaging, Labeling, Marketing and Profitability Toward Commercialization	Roy B. Gacus, Francisco Gil N. Garcia, Maribelle Piamonte, Irving Fajarito	CBDEM CHEFS	Sustainable Entrepreneurship and Management/Food Security and Poverty Reduction	200,000.00
2	Financial Analysis of Income Generating Projects (IGP) of Public High Education Institutions (HEIS) in Region XII	Charisse Angela S. Quiambao, Sandra Angela A. Bangcaya, Shereen Mae P. Villaruz, & Jay-R Vildac	CBDEM	Sustainable Entrepreneurship and Management	140,000.00
3	Development of E-learning Modules for Certificate Courses in Halal Science	Jalaloden Marohom, Francisco Gil N. Garcia, Jurhamid C. Imlan, Josephine R. Migalbin, and Jerry Piamonte	CBDEM/ CA /CEIT	Quality Learning, Skills Development, and Literacy	200,000.00

4	Design & Innovation of Fully Automatic Egg Incubator	Joel V. Misanes & Orlando Forro	CIT	Innovations in Science, Engineering, and Technology	132,000.00
5	Statistical Tool Selector (Stat Select): A Mobile App for Faculty, Students and Researchers	Anna Jean S. Garcia, Honey Vincent Valle, Daryl Mae Mamon, Leonard Paleta, Jupiter Pulongco, Roel Valenton, Jeaneth Licaros, Jonald Pimentel, Philip Benjamin, Rowel Madio, Leorence Tandog, & Debbie Marie Verzosa	CSM	Innovations in Science, Engineering, and Technology	270,000.00
6	Compendium of Ethnoveterinary Therapies for Control of Internal Parasites in Livestock	Elizabeth C. Molina and Josephine Flores	CVM	Quality Learning, Skills Development, and Literacy	200,000.00
7	Seed Propagation Techniques in Growing Various Herbs and Spices and Their Pesticidal Efficacy Against Bacterial and Fungal Diseases of Red Pepper (<i>Capsicum annuum</i>)	Lorelyn Joy Turnos-Milagrosa, Mark Al-Jamie J. Muttulani, & Tamie C. Solpot	CA	Innovations in Science, Engineering, and Technology	250,000.00
8	Development of Contextualized Instructional Materials in Teduray	Girly D. Batapa, Ashley Coleen Ortiz, & Hazel Ann S. Soriano	CED	Preservation of Culture	100,000.00
9	Carbon Stock Potential of Agroforests in University of Southern Mindanao (USM) and Arakan Valley Agricultural School (AVAS)	Florence Roy Salvaña	CSM	Environmental Protection, Conservation, and Risk Reduction	200,000.00

10	Study: Utilization of Corn Sprouts as Fodder for Livestock Production	Mary Ann D. Rama, Efren Magulama, & Josephine R. Migalbin	CA	Food security and poverty reduction/ Sustainable entrepreneurship and management	200,000.00
11	Study: Lactic Acid Bacteria Serum Production for Silage Making	Josephine R. Migalbin, Bernadith Borja, & Neil Pep Dave Sumaya	CA	Food security and poverty reduction/ Sustainable entrepreneurship and management	250,000.00
12	Development of Herbal Mosquito Repellent from Leaves and Flowers of Marigold (<i>Tagetes erecta</i>)	Sedra A. Murray & Elma G. Sepelagio	CSM	Innovations in Science, Engineering, and Technology	184,953.55
Fund 164					
13	Product Development and Innovation of Calamansi Infused Beverages for Refreshing Blends USMARDC	Sandra Joy Pahm	CA	Sustainable Entrepreneurship and Management	200,000.00
14	Development of Arduino Microcontroller-based Lee's Disc Apparatus	Benedict Entera & Amancio Il S. Manceras	CSM	Innovations in Science, Engineering, and Technology	150,000.00
USM AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER					
15	Maximizing Adlai Farm Productivity Through Integration of Selected Field Legumes, Vegetables and Root crops	Nancy E. Duque, Baser L. Mamalac, Ana Rose Cunanan, & Efren E. Magulama	CA	Food security and poverty reduction/ Sustainable entrepreneurship and management	230,000.00

16	Collection, Propagation, and Marketing of Forage Crops for Ruminants	Mary Joy S. Cañolas, Lorelyn Joy N. Turnos, & Geoffray R. Atok	CA	Food Security and Poverty Reduction/ Sustainable Entrepreneurship and Management	250,000.00
17	Impact and Pre-Harvest Application of Biocon Agent on Dragon Fruit Production	Jasmin A. Pecho	USMARDC	Innovations in Science, Engineering, and Technology	160,000.00
18	Establishment, Conservation and Utilization of Indigenous Tropical Fruit Crops at the University of Southern Mindanao	Nenita E. Olero	USMARDC	Environmental Protection, Conservation and Risk Reduction	150,000.00
19	Development of Corn Hybrids and Synthetic with Tolerance to Herbicide	Jessie Elarde	USMARDC	Food security and poverty reduction/Sustainable entrepreneurship and management	250,000.00
20	Phenology, Yield and Fruit Quality of Different Pummelo Cultivars at USMARDC	Nancy E. Duque Nenita E. Olero Mark Al-Jamie J. Muttulani	CA USMARDC	Food security and poverty reduction/ Sustainable entrepreneurship and management	150,000.00
PHILIPPINE INDUSTRIAL CROPS RESEARCH INSTITUTE					
21	Efficiency of Freshwater Fish Farming under Monoculture Oil Palm Plantation	Pia Amabelle M. Flores & Rezin Cabantug	CA USMARDC	Innovations in Science, Engineering, and Technology	205,400.00

22	Innovation in Product Development: Soap Formulation from Selected Plantation Crops	Abubakar A. Murray, Sedra Murray & Lorelyn Joy Turnos-Milagrosa	IMEAS CA CSM	Innovations in Science, Engineering, and Technology	300,000.00
23	Yield Performance of 12 Promising Rubber Clones Using Different Tapping System	Sheena B. Lucena and Randy Tumacder	USMARD CSM	Sustainable entrepreneurship and management	170,000.00
GENDER AND DEVELOPMENT (GAD) PROJECTS-Research					
24	Pagpalain Bangsamoro: Unveiling the History and Struggles of Primary Actors towards Peaceful Bangsamoro government	Saima M. Andil, Jikiri M. Entol, Monibar M. Sudang, & Abubakar A. Murray	IMEAS	Preservation of Culture/ Social Development, and Strong Institutions	148,175.00
25	MOM (Mothers on Move) Towards Building Assets Through Innovation Development of Fish Products	Ivy Mar Cabornida	CHEFS	Social Development, and Strong Institutions	148,175.00
EXTENSION PROJECTS					
GENDER AND DEVELOPMENT (GAD) PROJECTS-Extension					
26	YES, through SSTAMP: Youth Engagement in Sports through Sustainable Sport Training and Management Program	Elpedio A. Arias Moreno B. Java Jr. Vinus P. Java Eduard S. Sumera	ISPEAR	Social Development, and Strong Institutions	148,000.00
27	HOPE (Holistic Opportunities for Progress and Empowerment) for Student Mothers	Jacinta T. Pueyo Altair R. Neri Vivekeh D. Bat-og	PALMA	Social Development, and Strong Institutions	148,000.00

Extension Projects (Fund 05)					
28	Knowledge and Skills Advancement for the Ambulant Food Vendors in Kabacan, Cotabato	Melchie G. Palapar Maribelle T. Piamonte Shirl May M. Bebit	CHEFS	Quality Learning, Skills Development, and Literacy	60,000.00
29	Transferring and Advancing Learning materials for Knowledge: Using of IECs for Archiving and Information Disseminating (TALK:AID)	Charlotte Adrea D. Tutor Allan C. Facurib Janice M. Bangoy	ESO	Quality Learning, Skills Development, and Literacy	60,000.00
30	Bionihan Para sa Kalikasan: Community Empowerment Towards Conservation	Florence Roy P. Salvana Cromwel M. Jumao-as Cherie C. Mangaoang	CSM	Environmental Protection , Conservation and Risk Reduction	60,000.00
31	Livelihood Enhancement through Agricultural Products	Leo M. Gayao Jane R. Desamito Karizza Jane B. Pejaner Sambay P. Mila	PALMA	Sustainable entrepreneurship and management	60,000.00
32	Use of ICT in Facilitating Independent Learning and Teaching in the New Normal	Benedict D. Entera Astrofil Hyde M. Alcala	Grad School	Quality Learning, Skills Development, and Literacy	60,000.00
33	Adopt a Madrasah for Knowledge and Skills Development in Teaching Pedagogy of Azatidz in Barangay Aringay, Kabacan, Cotabato	Sofia G. Molao Remedios C. Kulidtod Norjaida D. Maliga	IMEAS	Quality Learning, Skills Development, and Literacy	60,000.00
34	Strengthening Mother-tongue based Education of Elementary Teachers in	Philip Lester P. Benjamin Sandra A. Nanding	Grad School	Quality Learning, Skills Development, and Literacy	60,000.00

	DepEd Cotabato/MBHTE BARMM through Instructional Materials Development and Validation				
35	A Farmer-Centric Study to Evaluate the Adoption and Impact of Transferred Macropropagation Techniques on Cardava Production in Columbio, Sultan Kudarat	Charlotte Adrea D. Tutor Mary Joy S. Cañolas Janice M. Bangoy	ESO	Food security and poverty reduction	60,000.00
Extension Projects (Fund 01)					
36	Production, Processing and Positioning (3Ps) coco-based Products for Collaborative Barangay-Based Development and Economic Mainstreaming (3Ps CBDEM)	Jay-R G. Vildac Lian D. Bagonoc Jeannie U. Duka Aileen Mitzi M. Alba Rodelyn A. Cariaga	CHEFS	Sustainable entrepreneurship and management	100,000.00
37	CASAMA-Comprehensive Assistance and Services Authentic and Meaningful Action-Phase 2: Utilization of Local Coconuts Fruits for VCO Production and VCO Enhance Soap	Cherie C. Mangaoang Marivic D. Candari	CSM	Quality Learning, Skills Development, and Literacy	100,000.00
38	Farmers Field School (FFS): Technology Delivery System for Enhancing Skills on Swine Production and Artificial Insemination	AP Warren P. AdamatVrenelie II D. Flores	CVM	Quality Learning, Skills Development, and Literacy	100,000.00

39	CA-CARE: Capacity and Resiliency Enhancement for Agricultural Technologist of Cotabato Province	Noe S.Mamon, Jr. Gelyn V. Amilbahar	CA	Quality Learning, Skills Development, and Literacy	100,000.00
Education program specialist research					
40	Examining academic and institutional factors influencing licensure performance of selected programs in the university of southern Mindanao	Kharlo J. Subrio, Rhea Ann P. Antonio, Merchia C. Mayormente, Leizl Gray T. Oria, Jessie Elarde and Marry Grace S Balbuena	USMARDC	Quality Learning, Skills Development, and Literacy	Core funding

3.2 RDE Projects with External Fund

RDE funds generated from external sources amounted to Php 95,911,404.88. From this fund, Php 78,116,404.45 were downloaded in 2023 (Table 3) from partners, collaborators and government agencies like DOST, PhilRice, DA BAR and LGU.

Table 3. RDE project, studies and activities supported by external fund sources in 2023.

No.	Research/ Project Title	Proponent/s	Unit/s	Funding agency	Research fund	Budget downloaded as of 2023
	Program Title: Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in SOCCSKSARGEN	Josephine Migalbin		DOST-PCAARRD		

No.	Research/ Project Title	Proponent/s	Unit/s	Funding agency	Research fund	Budget downloaded as of 2023
1	Project 1. Regional Intellectual Property and Technology Business Management (IPTBM) in SOCCSKSARGEN through the RAISE Program	Pia Amabelle Flores	CA		6,247,288.00	3,658,296.00
2	Project 2: Establishment of Regional Agri-Business Hub (ABH) in SOCCSKSARGEN through the Raise Program	Ronald Pascual	CSM		2,480,800.00	1,280,400.00
3	Project 3A: Enhancement of the Agri-Aqua Technology Business Incubator (ATBI) in University of Southern Mindanao (USM) through the RAISE Program	Pia Amabelle Flores	CA		3,830,200.00	1,195,100.00
4	Project 4: Establishment of Regional Knowledge Management (KM) Hub in SOCCSKSARGEN through the RAISE Program	Josephine Migalbin	CA		2,528,000.00	1,264,000.00
5	Indigenous Phosphorus and Potassium Solubilizing Microorganisms as Potential Enhancer of Phosphorus and Potassium Uptake of Corn	Leandreux Occasion, Maria Elena Tanabe, Adeflor Garcia	CA CSM	DA-BAR	3,000,000.00	3,000,000.00

No.	Research/ Project Title	Proponent/s	Unit/s	Funding agency	Research fund	Budget downloaded as of 2023
6	Productivity assessment of Robusta coffee applied with different organic and inorganic fertilizers in Mindanao	Leandreux Ocasion	CA	DA-BAR	3,109,088.40	3,109,088.40
7	SNAP Testing Assay for Screening Antibiotic Residues in Milk	Elma Sepelagio, Cyrill Besana	CSM	DOST-Region XII	1,000,162.80	1,000,162.80
8	Biological diagnostic tool for vulnerable agroecosystems: nematode community analysis as an approach to assess sustainability of agricultural practices	Ma. Teodora Cabasan, Bryan Lloyd Bretaña	CSM	DOST 12 – GIA	999,396.20	999,396.20
9	Developing Land Management Options for Diverse Cacao-Based System in Mindanao	Mel Chrisel Sales	CA	Global Green Growth Institute (GGGI)	3,748,531.60	3,748,531.60
10	Steady-State Hydraulic Numerical for Optimized Water Distribution Water Distribution Network Modelling: An Application of Selected Hydraulic Solver	Ma. Dely Esberto, Benito Cristopher, Zherwin Descallar	CEIT CIT	DOST- PCIEERD	921,600.00	921,600.00
11	Optimization of Irrigation Flow Through Conduit Microhydropower to Generate Electricity for Off-grid Barangay of Kabacan, Cotabato	Marilyn Painagan, Tito Jun Tidula, Benhamin Mamalo, Jonnah Mae Casalan	CEIT	DOST- PCIEERD	996,776.00	996,776.00

No.	Research/ Project Title	Proponent/s	Unit/s	Funding agency	Research fund	Budget downloaded as of 2023
	Accelerated R&D Program for Capacity Building of Research and Development Institutions and Industrial Competitiveness: NICHE centers in the regions for R&D (NICER) Program: Cacao R&D Center			DOST-PCAARRD		
12	NICER Project 1 - Molecular Fingerprinting of Cacao Parental Recommended HYVs and True Criollo Ensuring Multiplication of Quality Planting Materials (QPMs) for Increased Profitability	Edward Barlaan	CA		1,369,383.70	1,369,383.70
13	NICER Project 2 - Upgrading of the Cacao Gene Bank for Conservation and Management in Cacao Varietal Improvement	Gwen Iris Empleo, Ivy Pasquin	CA		1,333,072.70	1,333,072.70
14	NICER Project 3 - Development of Optimized Post-Harvest Processing Approaches for Improved Quality of Cacao Beans	Renel Alucilja, Maricel Dayaday, Lydia Pascual, Sheena Lucena	CEIT CSM		2,137,006.68	2,137,006.68

No.	Research/ Project Title	Proponent/s	Unit/s	Funding agency	Research fund	Budget downloaded as of 2023
15	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 Mangaoang, Florence Roy Salvaña	CSM	MOST-BARMM	1,031,289.34	1,031,289.34
16	Screening of Potential Endophytes as Biocontrol Agent Against Major in Emerging Leaf Diseases of Rubber	Tamie Solpot, Ma. Teodora Cabasan, Bernadith Borja	CA CSM	DOST-PCAARRD	5,000,000.00	372,832.02
	Program Title: Land Management of Rubber- Based Systems in Southern Philippines		CA	ACIAR / PCAARRD		
17	PROJECT 1. Effective Rubber-Based Cropping System in Southern Philippines	Joseph Castillo, Rezin Cabantug			651, 020.00	651, 020.00
18	PROJECT 3. Developing Rapid and Affordable Soil Nutrient Test Fertilizer Formulation for Rubber Cropping System	Leandreux Ocasion			924, 715.00	924, 715.00

No.	Research/ Project Title	Proponent/s	Unit/s	Funding agency	Research fund	Budget downloaded as of 2023
19	PROJECT 4. Development of Cost and Effective Pest and Disease Management of Rubber and Intercrops	Joan Sadoral			522,020.00	522,020.00
21	(D-SPOT) Digital Promotional and Screening of Local Products for Startups in Region 12 for Technology Incubation	Pia Amabelle Flores	CA	DOST- PCAARRD	350,000.00	350,000.00
22	BARRM in a Changing Environment (Biomonitoring and Assessment of the Relationship between Marsh and Man)	Meriam Rubio, Renee Jane Ele, Bona Abigail, Husain Krizler Tanalgo	CSM	MOST-BARRM	2,066,367.90	1,206,367.90
23	Fruit Quality Improvement in Carabao Mango through Quantitative Trait Loci (QTL) Identification for Scab and Stem-end Rot Resistance by Genotyping by Sequencing GBS and Genome-wide Association Studies (GWAS)	Edward Barlaan	CA	DOST- PCAARRD	2,254,997.56	2,254,997.56
24	Validation of Molecular Markers for Identification of Cacao HYVs, Criollo Types and Disease Resistant Varieties through Marker-Assisted Breeding	Edward Barlaan	CA	DOST-PCAARRD	5,000,000.00	810,353.15

No.	Research/ Project Title	Proponent/s	Unit/s	Funding agency	Research fund	Budget downloaded as of 2023
25	SMART Cacao Budwood Nursery and Greenhouse for Production of High-Quality Planting Materials	Edward Barlaan, Maricel Dayaday, Renel Alucilja	CA CIET	DOST-PCAARRD	24,176,622.80	24,176,622.80
26	Food for Life: Assessment of Wild Food Resources for Sustainable and Safe Food Production Among Local Communities in Ligawasan Marsh	Florence Roy Salvaña, Cherie Mangaoang, Lothy Casim	CSM	NCRP-NSTEP	997,861.20	997,861.20
27	Multilocation Trial of Ten (10) Promising Varieties of Cacao in Type II and Type III Agro- Climatic Zone in Southern Mindanao and Norther Mindanao	Ardniel Baladjay, Sheena Lucena	CA USMARDC	DOST-PCAARRD	1,340,000.00	910,306.40
28	Commercialization of chevon food products and standardization of processing center	Jalaloden Marohom, Ivy Mar Cabornida	CBDEM CHEFS	DOST-PCAARRD	1,000,000.00	1,000,000.00
*29	Conduct of 17th National Organic Agriculture Congress	Mary Joy Cañolas	ESO	DA RFO XII	4,000,000.00	4,000,000.00
30	Establishment of the University of Southern Mindanao Agricultural & Biosystem Machinery Testing and Evolution Center	Renel Alucilja	CIET	DA BAFE	1,200,000.00	1,200,000.00

No.	Research/ Project Title	Proponent/s	Unit/s	Funding agency	Research fund	Budget downloaded as of 2023
31	Program: University of Southern Mindanao Futures Thinking: Food and Health Security, Systems, Innovations and Sustainability	Francisco Gil Garcia, Edward Barlaan, Ma. Teodora Cabasan	OP/CA/ OVRDE	Office of Sen. Pia Cayetano	2,000,000.00	2,000,000.00
32	Program: University of Southern Mindanao Higher Education Research: Technological Advancements and Innovation Projects	Francisco Gil Garcia, Lydia Pascual, Khris June Callano	OP/CA/ RDO	Office of Sen. Pia Cayetano	3,000,000.00	3,000,000.00
33	CAPE 3- Consultancy for Agricultural Productivity Enhancement Program	Francisco Gil Garcia, Faculty Experts	OP/ Academic units	DOST 12 – GIA	900,000.00	900,000.00
34	Seed multiplication pilot project	Mary Joy Cañolas	ESO	Red Cross	182,950.00	182,950.00
35	Instrumentation System Modeling, Assembly and Response Testing (iSMART) Laboratory	Maricel Dayaday Renel Alucilja Jerry Piamonte Kharlo Subrio	CEIT	NEDA Central office	4,998,860.00	4,998,860.00
TOTAL					95,911,404.88	78,116,404.45

** See Table 5 for the projects supported by the Futures Thinking Program

3.3 RDE projects with partners and collaborators

Table 4. Other R&D engagements with partners and collaborators

No.	Title of project	Faculty Researchers	Unit/ College	Partner/ Collaborator
1	Developing Sustainable Agricultural Environment through the Organization of Durian Producers in Mindanao, Philippines	Mel Chrisel Sales	CA	CAMP ASIA, Inc./ KOICA
2	Artificial Intelligence-Based Diagnostic Clinic for Detection and Monitoring System for the Management of Rubber Diseases and Insect Pests	Melecio Cordero Jr.	CEIT	PRRI/DOST-PCAARRD
3	I-CARES: Islamic Relief’s COVID19 Adaptation and Recovery through Economic and Social Protection and Support project	Irving T. Fajarito, Jr.	CBDEM / CHEFS	Islamic Relief
4	Etiology, Detection and Management Strategies against Pestalotiopsis Disease of Rubber	Tamie Solpot	CA	PRRI/DOST-PCAARRD

Table 5. RDE projects and studies supported under GAA.

No.	Project	Researchers/Faculty	Unit	Budget
	Program: USM Futures Thinking for Food Security, Systems, Innovations and Sustainability Agri-based Initiatives	Francisco Gil Garcia, Edward Barlaan, Ma. Teodora Cabasan		856,636.00
1*	Cacao-based product development and innovation using cocoa butter and powder			450,000.00

No.	Project	Researchers/Faculty	Unit	Budget
	Component 1. Optimization of Butter and Powder Production for Cacao-based Product Development	Jane R. Desamito	CA	
	Component 2. Development of Innovative Cacao-based Products	Harem R. Roca	CA	
2*	Formulation and Optimization of Functional Cereal-based Snack Foods			500,000.00
	Component 1. Product formulation and optimization of functional cereal-based nutri-drink	Apple U. Revilla	CHEFS	
	Component 2. Product formulation and optimization of functional cereal-based extruded snack food	Ivy Mar B. Cabornida	CHEFS	
	Component 3. Product formulation and optimization of functional cereal-vegetable based patty	Maribelle T. Piamonte	CHEFS	
3*	Innovative Growing of Corn Microgreens (<i>Zea mays</i>) as Potential New Food for Commercialization			220,000.00
	Component 1: Sensory Evaluation and Acceptability of Corn Microgreens to Different Harvesting Stages and Light Responses	Mark Al-jamie J. Muttulani	CA	
	Component 2. Sensory Evaluation and Acceptability of Various Corn Cultivars as Microgreens for Potential Food	Lorelyn Joy N. Turnos	CA	

No.	Project	Researchers/Faculty	Unit	Budget
	Component 3: Postharvest Quality and Shelf-Life Assessment of Corn Microgreens Using Different Packaging Materials	Leila S. Moscoso	CHEFS	
4*	Sustainable production of culinary ingredients using halal plant-based extracts as root promoters, nutrient boosters, and biofumigants			250,000.00
	Component 1. Enhancing Propagation Techniques and Quality Planting Materials of Selected Halal Herbs (Rosemary, Thyme) and Spices (Chili pepper)	Mark Al-Jamie J. Muttulani	CA	
	Component 2. Productivity Performance of Selected Halal Herbs (Rosemary, Thyme) and Spices (Chili pepper) Using Organic Based Fertilizers	Lorelyn Joy Turnos-Milagrosa	CA	
	Component 3. Pesticidal Efficacy of Bio-Plant Extracts Against Pathogens Causing Fungal Diseases of Selected Halal Herbs (Rosemary, Thyme) and Spices (Chili pepper)	Bernadith T. Borja	CA	
	Component 4. Shelf-life Evaluation of Halal Herbs (Rosemary, Thyme) and Spices (Chili Pepper) to Various Types of Modified Atmosphere Packaging (MAP)	Sandra Joy P. Pahm	CA	
5*	USM LIFER 2 Project: USM & Ligawasan Marsh Innovative Fish-based Products and Establishing Relevant Community Collaboration			300,000.00

No.	Project	Researchers/Faculty	Unit	Budget
	Component 1. Product Development and Feasibility of Commonly Caught Fish Resources at Ligawasan Marsh for Innovative Products	Pia Amabelle M. Flores	CFAS	
	Component 2. Establishing linkage in Ligawasan Marsh community through local government partnership for Promotion of RTE Products	Rowell N. Nitafan	CASS	
6*	Development and Halal verification of "plant-based protein-rich" feed for Halal-grown poultry products			500,000.00
	Component 1. Characterization of Protein-rich plants for Halal Feed formulation	Queennie L. Rufino	CFAS	
	Component 2. Enhancing the formulation and verification of Halal Feeds for poultry production	Mary Ann B. Rama	CFAS	
	Component 3. Growth Performance, Carcass Evaluation and Characterization of the Halal grown poultry meat fed with Halal Plant-based Feeds	Jurhamid C. Imlan	CFAS	
7*	Herbicide-based application as weed management intervention for improved productivity in Adlay			280,000.00
	Study: Identification of appropriate combination of herbicides and application timing in Adlay	Baser L. Mamalac	CA	
8*	Enhancing Adlai Farming Techniques through Precision Agriculture			264,160.00

No.	Project	Researchers/Faculty	Unit	Budget
	Component 1. Advancing Adlai Farming Practices: A Study on Planting and Harvesting Machinery Performance	Shieryl P. Ortiza	CEIT	
	Component 2. Precision Agriculture: Assessing Adlai Nitrogen Deficiency using Vegetative Indices and Drone-based NIR/Red Edge Imaging Technology	Efren E. Magulama	CA	
	Component 3. Maximizing Adlai Crop Yield: Predictive Analysis through Vegetative Indices Captured by Drone -based NIR/Red Edge Imaging Technology	Renel M. Alucilja	CEIT	
9	Development and optimization of innovative tissue culture systems for 'cardava' banana			300,000.00
	Component 1. Redefining Improvement of Tissue Culture Media Formulation for 'Cardava' Banana and Detection of Genetic Stability/Somaclonal Variants through SSR Markers	Harem R. Roca	CA	
	Component 2. Innovation Towards Botanicals as Biocontrol Agents against Microbial Contaminants in 'Cardava' Banana In vitro Culture	Tamie C. Solpot	CA	
10	Development of Protocols and Identification of Halal Critical Control Points (HalCCP) Towards Establishment of Philippine National Standards (PNS) for Halal Sheep and Vegetable Production			300,000.00

No.	Project	Researchers/Faculty	Unit	Budget
	Component 1. Development of Protocols and Identification of Halal Critical Control Points (HalCCP) Towards Establishment of Philippine National Standards (PNS) for Halal Vegetable and Sheep Production	Josephine R. Migalbin	CFAS	
	Component 2. Implementation of Developed Halal Protocols for Vegetable & Sheep Production	Jurhamid C. Imlan	CFAS	
11	Food for Life2.0: Strengthening Sustainable Fisheries in Ligawasan Marsh			297,204.00
	Component 1: In-situ conservation and repopulation of local fish species in Ligawasan Marsh	Cherie Cano-Mangaoang	CSM	
	Component 2. Evaluation of Sexual Reversal in local fish species in Ligawasan Marsh	Florence Roy P. Salvaña	CSM	
	Sub total			4,518,000.00
12	Program: University of Southern Mindanao Higher Education Research: Technological Advancements and Innovation Projects			2,060,200.00
	Project 2: R&D Initiatives for Technological Advancements and Innovations in the University of Southern Mindanao	Francisco Gil Garcia Lydia C. Pascual Khris June L. Callano		
13	Subproject 1: Green Synthesis of Zinc Oxide Nanoparticles Using Plant and Bacteria for Agricultural Application	Lydia C. Pascual		403,541.38
14	Subproject 2: Policy Briefing	Francisco Gil N. Garcia		236,258.62

No.	Project	Researchers/Faculty	Unit	Budget
15	Project 3: Appraisal and Upgrading of Selected Facilities for Technological Advancements and Innovations in the University of Southern Mindanao	Francisco Gil N. Garcia		300,000.00
	Sub total			3,000,000.00
	TOTAL			7,518,000.00

*- funded from 2022 GAA with continuing implementation in 2023

3.3 RDE engagement of faculty and full-time researchers

RDE in the university was strengthened through an active engagement of the full-pledged professors (48% of them, 11 out of 23), as well as other faculty members (with the rank of associate professors and below, 20% of them or 85 out of 480), including 12 full-time researchers (Science Research Specialist, SRS) and education program specialists (EPS).

As per unit, the College of Science and Mathematics had the highest number of RDE engagements in 2023, followed by the College of Agriculture (CA) and the Engineering and Information Technology (CEIT) and USMARDC (Figure 15).

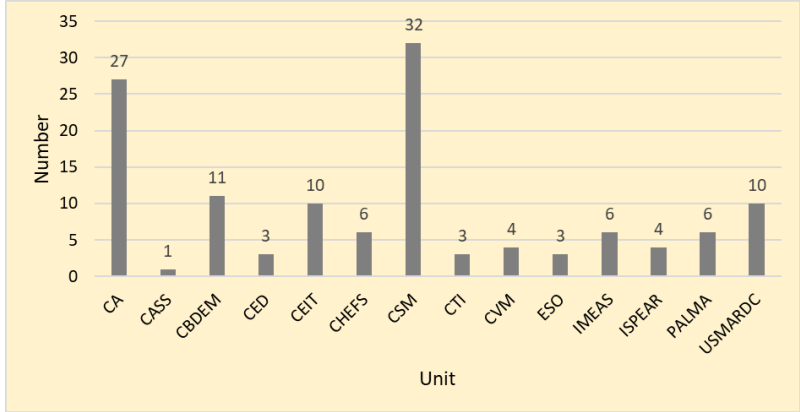


Figure 15. Number of faculty and researchers per unit engaged in research as of CY 2022.

The University Research, Development, and Extension Committee (URDEC) have evaluated 56 research proposals and 15 Extension project proposals. These proposals were presented by the proponents to the URDEC for evaluation. There were 23 proposals given funding for 2024 based on their quality and alignment to the USM RDE themes, potential to develop new products (agriculture, engineering, educational tools, food and food-based products, educational materials), new technologies (processing, mechanisms, software/program, e-learning materials), innovations (any innovations of existing technologies and products, modifications), entrepreneurship (marketing strategies, product testing, technology adoption), and relevant social concerns leading to policies and publication (Table 6).

Table 6. Project proposals evaluated for 2024 implementation.

No.	Proponents	Proposed Title	Unit	Themes	Approved Budget (Php)
RESEARCH AND DEVELOPMENT OFFICE					
1	Marivic D. Candari, Queennie L. Rufino,	Characterization of Palm Oil Products Using GC-MS and FTIR and its	CSM	Innovations in Science, Engineering, and Technology	300,000.00

No.	Proponents	Proposed Title	Unit	Themes	Approved Budget (PhP)
	Nikki Jane S. Benito	Potential Application for Bio-Plasticizers			
2	Kathleen Mae B. Alucilja, Eugene Ranjo and Renel M. Alucilja	USMGEO: University Spatial Mapping and Geographic Information System Portal	CEIT	Innovations in Science, Engineering, and Technology	306,000.00
3	Romiel John Basan Mitzi Aileen M. Alba	A Survey on the Training Needs among Lifelong Learners in Cotabato Province for the Development of Microcredential Certification Programs in the University of Southern Mindanao	CBDEM	Social Science	250,000.00
4	Jasmin A. Pecho, Marry Grace S. Balbuena, Rhea Ann Palermo, and Clark I. Maarat	Molecular Identification, and Management of Brown Leaf Disease of Lanzones, Rambutan, and Mangosteen	USMARDC	Innovations in Science, Engineering, and Technology	250,000.00
5	Jurhamid Imlan,	Hybridization, Breeding, and	USMARDC	Food Security and Poverty Reduction	250,000.00

No.	Proponents	Proposed Title	Unit	Themes	Approved Budget (PhP)
	Sheena B. Lucena and Efren E. Magulama	Propagation of Popular Durian cv Musang King			
UNIVERSITY OF SOUTHERN MINDANAO AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER					
6	Jessie G. Elarde, Nenita E. Olero Efren E. Magulama, Edward A. Barlaan, Monaira Sumael	Phenotyping of Three-way Hybrid Cross and Synthetic Varieties with Tolerance to Herbicide	USMARDC	Food Security and Poverty Reduction	163,404.00
7	Nenita E. Olero and Janice Bangoy	Breeding of Corn Varieties for Resilient to Climate Change	USMARDC	Food Security and Poverty Reduction	190,456.00
8	Monaira Sumael and Nenita E. Olero, Jessie Elarde	Breeding of White OPVs, Glutinous and Sweet Corn for Herbicide Tolerance	USMARDC	Food Security and Poverty Reduction	223,126.00
9	Jasmin A. Pecho	Optimization and Validation of USM Developed Biostimulant for Dragon Fruit Production	USMARDC	Innovations in Science, Engineering, and Technology	120,000.00

No.	Proponents	Proposed Title	Unit	Themes	Approved Budget (PhP)
10	Mary Joy S. Cañolas, Geoffray R. Atok, Julius Jerome G. Ele	Duckweed as an Alternative Protein Source in the Development of Feeds for Swine and Ducks	CA/USMARDC	Food Security and Poverty Reduction	200,000.00
PHILIPPINES INDUSTRIAL CROPS RESEARCH INSTITUTE					
11	Rezin G. Cabantug and Abubakar A. Murray	Anti-inflammatory and Anti-oxidant Properties of Liniment Formulations from Herbs and Spices	RES	Good Health and Well-being	130,280.73
12	Bernadith Borja and Tamie Solpot	Screening for Resistance and Fungicide for Pestalotiopsis Leaf Spot disease of Coffee	CA	Innovations in Science, Engineering, and Technology	100,000.00
13	Janice Bangoy, Jasmin Pecho, Sheena Lucena, Noe Mamon, Marry Grace Balbuena	Hybridization of Rubber (<i>Hevea brasiliensis</i>) Towards Development of High-Yielding and Disease Resistant Clones	RES	Sustainable Entrepreneurship and Management	100,000.00

No.	Proponents	Proposed Title	Unit	Themes	Approved Budget (PhP)
14	Lorelyn Joy T. Milagrosa, Mark Al-Jamie Muttulani, and Sedra Murray	Product Innovation for Coffee and Cacao Beverages (particular innovative product)	CA	Food Security and Poverty Reduction/ Innovations in Science, Engineering, and Technology	100,000.00
GENDER AND DEVELOPMENT					
16	Myka Ivana P. Sorilla	Towards a Healthy Well-being: Psychoeducation and Psychosocial Intervention for High scoring high school students in DASS21 in Kabacan, Cotabato	CASS	Good Health and Well-being	60,000.00
17	Radji A. Macatabon	Infograp ng mga Impormasyon Hinggil sa Halaga, Tamang Pamamaraan at Benepisyo ng Pagpapasuso: Isang Teknikal na Pagsasalin sa Wikang Teduray	CED	Preservation of cultures	60,000.00

No.	Proponents	Proposed Title	Unit	Themes	Approved Budget (PhP)
18	Mariz Balquin	Safe Spaces: Fighting Sexual Harassment through Education and Empowerment	CASS	Quality Learning Skills Development and Literacy	60,000.00
19	Jhon Dave E. Llanto	Leaving No One Behind: Examining Disability-Inclusive Social Services in Local Government Units and Public Higher Education Institutions (HEIs) in Cotabato Province	CBDEM	Social Development, and Strong Institutions	85,000.00
20	April Rose T. Butalid	Assessment of the Integration of Gender and Development (Gad) Concepts Across General Education Courses in Selected SUCs in REGION XII	CASS	Social Development, and Strong Institutions	85,000.00

No.	Proponents	Proposed Title	Unit	Themes	Approved Budget (PhP)
21	Sarrah Jane C. Guerrero	Speaking Out: A Survey of Students Perceptions on the Reporting System for Sexual Harassment and Other Related Gender-Based Violence in the University of Southern Mindanao	CASS	Social Development, and Strong Institutions	85,000.00
22	Juvilyn Gesulga	Voices From Civil Society: An Assessment of Knowledge, Perceptions, Organizational and Communication Needs on Public Governance Among CSOS in the Municipality of Kabacan, Cotabato	CASS	Social Development, and Strong Institutions	85,000.00
23	Maria Luz D. Calibayan	E-KAAGAPAY: Pagbuo Ng Kontekstwalisadong E-Kagamitan Sa Pagpapaangat Ng Antas	CED	Quality Learning Skills Development and Literacy	60,000.00

No.	Proponents	Proposed Title	Unit	Themes	Approved Budget (PhP)
		Ng Pagunawa Sa Pagbasa Sa Filipino Ng Mga Mag-Aaral Sa Elementarya Ng Kabacan West District			

3.4 RDE In-house Review for Faculty and Researchers

Faculty and researchers participated in the annual RDE in-house review. This is done to evaluate completed and ongoing RDE projects/activities particularly with regard to the attainment of objectives; to identify problems met during implementation and recommend specific courses of action, to identify technologies generated for field testing, verification, and piloting before its final dissemination/promotion and commercialization; to identify mature technologies ready for packaging and dissemination, significant results for policy formulation and development, new researchable areas; and to record and monitor both in-house and externally funded research projects or studies. During the mid-year in-house review (Figure 16), progress reports of 8o RDE projects were presented. There were four sessions–Basic Research, Applied Research, Innovation, and Extension.





Figure 16. USM Mid-year in-house Review on Advancing Research and Innovations towards sustainable development. on July 20, 2023.

The 43rd Year-end In-house Review was conducted on December 4-5, 2023 at the Commercial Building in the University of Southern Mindanao (Figure 17). During the activity, all ongoing research projects were presented to a distinguished panel of evaluators. The evaluators are Dr. Graciella Caballero, Dr. Chris Rey Lituanas, and Dr. Naomi Tangonan for Research; Dr. Ariston Calvo, Dr. Mark Lloyd Dapar, and Engr. Berdeneth Pacio for Development; Dr. Josh Elisha Octura, Dr. Mark Jude Trundillo, and Engr. Nemesio M. Tolentino for Innovation; and Dr. Josephine Arbes, Mr. Ommal Abdulkadil, and Dr. Keno Jay Balogbog for Extension. Outstanding projects in four categories were also recognized and identified. The winning projects under oral and poster competition are in Table 7a and 7b.

Table 7a. List of outstanding projects in CY 2023 during the 43rd RDE in-house review in oral presentation.

Category 1 (Basic Research – Science)
1st place: <i>Tamie C. Solpot, Ma. Teodora N. Cabasan, and Bernadeth T. Borja</i> – Screening of Potential Endophytes as Biocontrol Agent Against Major in Emerging Leaf Diseases of Rubber
2nd place: Jessie Elarde, Edward A. Barlaan, Efren E. Magulama – Development of Corn Hybrids and Synthetic with Tolerant to Herbicide
3rd place: <i>Tamie C. Solpot and Harem R. Roca</i> – Development and optimization of Innovative Tissue Culture Systems for ‘Cardava’ Banana

Category 2 (Innovation)
1st place: Anna Jean S. Garcia, Honey Vincent Valle, Daryl Mae Mamon, Leonard Paleta, Jupiter Pilingco, Roel Valenton, Jeaneth Licaros, Jonald Pimentel, Philip Benjamin, Rowel Madio, Leorence Tandog, and Debbie Marie Verzosa – Statistical Tool Selector (Stat Select): A Mobile App for Faculty, Students and Researchers
2nd place: Abubakar A. Murray, Sedra Murray and Lorelyn Joy N. Turnos – New Formulation of BAR and Liquid Soap from Selected Industrial Crops with Potential Anti-Microbial Activities
3rd place: Mark Al-Jamie J. Muttulani, Lorelyn Joy N. Turnos, and Leila S. Moscoso – Innovative Growing of Corn Microgreen (<i>Zea mays</i>) as Potential New Food for Commercialization
Category 3 (Development)
1st place: Marilyn S. Painagan, Tito T. Tidula, Benhamin I. Mamalo, Jonnah Mae. A Casalan, Jaloden B. Marohom, and Janice M. Bangoy – Optimization of Irrigation Flow Through Conduit Microhydropower to Generate Electricity for Off-Grid Barangay of Kabacan, Cotabato
2nd place: Girlie D. Batapa, Ashley Collen Ortiz, and Hazel Ann S. Soriano – Development of Contextualized Instructional Materials in Teduray
3rd place: Pia Amabelle M. Flores and Rowell Nitafan – USM Lifer 2 Project: USM & Ligawasan Marsh Innovative Fishbased Products and Establishing Relevant Community Collaboration
Category 4 (Extension)
1st place: Mary Rodelyn A. Cariaga, Metche Anne C. Logronio, and Romiel P. Basan - Juan Food: Enabling 4Ps Beneficiaries Through Community Garden in Support for Household Food Security and Livelihood as Response to COVID-19 Pandemic
2nd place: Melchie G. Palapar, Maribelle T. Piamonte, and Shirl Mae M. Bebit – Knowledge and Skills Advancement for the Ambulant Food
3rd place: Jacinta T. Pueyo, Altair R. Neri, and Vivekeh D. Bat-og - HOPE (Holistic Opportunities for Progress and Empowerment) for Student Mother

Table 7b. List of outstanding projects in CY 2023 during the 43rd RDE in-house review in poster presentation.

POSTER COMPETITION
Category 1 (Basic Research)
1st place: Josephine R. Migalbin, Bernadith T. Borja, Neil Dave Pep Sumaya, Ritchel O. Torres and Stephanie Deguilmo - Lactic Acid Bacteria (LAB) Production as Inoculant for Silage Making
2nd place: Tamie C. Solpot, Ma. Teodora N. Cabasan, Bernadith T. Borja, and Jomarie Abubakar – Endophytic Fungi as Potential Biocon against the Dreadful Pestalotiopsis Leaf Fall

Category 2 (Innovation)
1st place: <i>Pia Amabelle Flores, Connie Guinmapang and Benjie Mari</i> – Digital Promotion and Screening of Local Products Or Startups in Region 12 for Technology Incubation (DOST-12 and USM ATBI Collab for Regional Development)
2 nd place: <i>Harem R. Roca, Jane R. Desamito and Divine L. Tolentino</i> – Cacao-Based Product Development and Innovation Using Cocoa Butter and Powder
3 rd place: <i>Pia Amabelle Flores and Cyrelle M. Besana</i> – USM IP-TBM Phase II: Patent Mining of Rubber Technologies thru Intellectual Property and Technology Business Management (IP-TBM) Operations of the University of Southern Mindanao
Category 3 (Development)
1 st place: <i>Pia Amabelle M. Flores and Rowell Nitaflan</i> – USM Lifer 2 Project: USM and Ligawasan March Innovative Fishbased Products and Establishing Relevant Community Collaboration
2 nd place: <i>Pia Amabelle M. Flores</i> – USM Agri-Aqua Technology Business Incubator



Figure 17. Year-end in-house review 2023, USM

3.7 Regional R&D Highlights

USM participated in the 30th Regional Symposium on Research and Development Highlights hosted by SOCCSKSARGEN Agriculture, Aquatic and Natural Resources Research and Development Consortium (SOXAARRDEC) last Dec. 12, 2023 at the University of Southern of Mindanao Agriculture Research and Development Center (USMARDC) Auditorium (Figure 18). USM as member institution of SOXAARRDEC competed for the best papers and posters for research and development categories. In 2023 R&D Highlights, are the awards obtained by USM are shown in Table 8.



Figure 18. SOXAARRDEC Regional 30th R&D Symposium

The papers and posters were evaluated by Dr. Naomi G. Tangonan, a DOST Lifetime Scientist, Dr. Lily Ann D. Lando, a professional agriculturist and a consultant and Dr. Emmanuel P. Leaño, a Professor VI from Central Mindanao University (CMU).

The 2023 theme was: “Innovate, Integrate, Elevate: Transforming Regional AANR through Research and Development Excellence”. The symposium served as the venue to highlight the results of the research initiatives of the different R&D implementing agencies in Region XII. This was spearheaded by the SOCCSKSARGEN Agriculture Aquatic and Natural Resources Research and Development Consortium (SOXAARRDEC) Director Dr. Josephine R. Migalbin. The event included a total of 11 papers and 15 posters from both categories of its Consortium Member Institutions.

Table 8. List of awards received by USM faculty researchers during the SOXAARRDEC Regional 30th R&D Symposium.

Award	Research Title	Researchers
BEST PAPER		
1 st Best Paper for Research Category	Screening of Endophytes as Potential Biocontrol Agents Against Major and Emerging Leaf Diseases of Rubber	Tamie C. Solpot, Ma. Teodora N. Cabasan, Bernadith T. Borja, Melesa M. Prado, and Jomarie Abubakar
1 st Best Paper for Development Category	Optimization of Irrigation Flow through Conduit Microhydropower to Generate Electricity for Off-Grid Barangay of Kabacan, Cotabato”	Marilyn P. Calub, Tito Jun T. Tidula, Benhamin I. Mamalo, Jonnah Mae A. Casalan, Janice M. Bangoy, and Jalaloden Marohom
BEST POSTER		
Best poster research category	Endophytic Fungi as Potential Biocon against the Dreadful Pestalotiopsis Leaf Fall Disease of Rubber”	Tamie C. Solpot, Ma. Teodora N. Cabasan, Bernadith T. Borja, and Jomarie V. Abubakar
2 nd Best poster research category	Lactic Acid Bacteria (LAB) Production as Inoculant for Silage Making	Josephine R. Migalbin, Bernadith T. Borja, Neil Pep Dave N. Sumaya, Ritchel O. Torres, and Stephanie Deguilmo
3 rd Best poster research category	Fungal Endophytes as Antagonist to Foliar Diseases of Rubber	Tamie C. Solpot, Ma. Teodora N. Cabasan, Bernadith T. Borja, and Jomarie V. Abubakar

Award	Research Title	Researchers
2 nd Best poster development category	"Optimization of Irrigation Flow through Conduit Microhydropower to Generate Electricity for Off-Grid Barangay of Kabacan, Cotabato	Marilyn P. Calub, Tito Jun T. Tidula, Benhamin I. Mamalo, Jonnah Mae A. Casalan, Janice M. Bangoy, and Jalaloden Marohom
3 rd Best poster development category	USM LIFER 2 Project: USM & Ligawasan Marsh Innovative Fish-based Products and Establishing Relevant Community Collaboration	Pia Amabelle M. Flores, Rowell Nitafan, Zaibel Rose M. Tamon, and John Rey Agustin

3.5 Student research

The Research and Development Office records and indexes students’ theses. As of December 1, 2023, a total of 5,402 undergraduate and graduate theses from different colleges/units were recorded and indexed (Table 9). Out of this number, 965 and 1420 were outlines, respectively for 1st and 2nd semesters and 1714 and 1303 manuscripts, respectfully for 1st and 2nd semesters for the 2023. Thematic areas for the student research were also recorded (Figure 19).

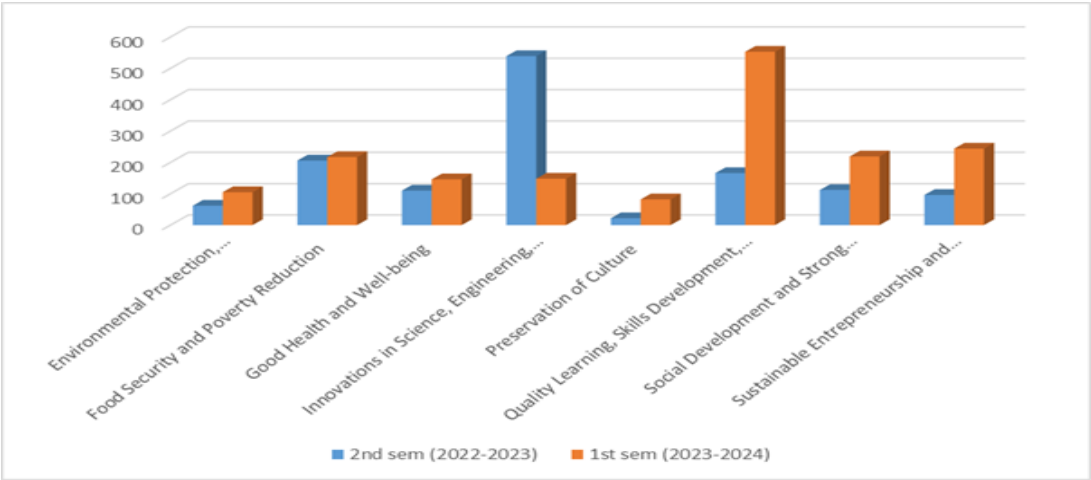


Figure 19. Number of thesis manuscript per thematic areas, CY 2023.

Table 9. Number of theses indexed in RDE indexing system as of SY 2022-2023.

College/Unit	Outline		Manuscript	
	1st	2nd	1st	2nd
College of Agriculture	52	34		135
College of Arts and Social Sciences	81	86	110	68
College of Business Development and Economic Management	143	224	277	126
College of Education	14	257	328	36
College of Engineering and Information Technology	206	122	60	266
College of Human Ecology and Food Sciences	61	24	142	8
College of Health Sciences	11	56	81	74
College of Industrial Technology	4	34	58	18
College of Science and Mathematics	3	71	53	34
College Veterinary Medicine	2	12	77	15
Institute of Middle East and Asian Studies	37	74	79	39
Institute of Sports Physical Education and Recreation		8	1	
USM-Kidapawan City Campus	343	334	311	467
Alamada Campus		2	39	
Libungan Campus		70	97	
Aleoson Campus		8		
Graduate School	8	4	1	17
TOTAL	965	1420	1714	1303

3.6 Research In-house Review for students

The 8th Research In-house Review (Figure 20) for Students was conducted at the Commercial Building on May 25, 2023. The event comprised three categories– Basic Research, Applied Research, and Social Science Research. All presentations were assessed by recognized experts. From a total of 23 oral presentations and 16 poster presentations, three winners were selected in each category. The results of the oral and poster presentations are listed in Table 10a and 10b.

Table 10a. List of outstanding student thesis in CY 2023 during the 8th Research in-house review in oral presentation.

Basic Research (Oral)
1 st place: <i>Jonah Mae F. Taping and Prof. Ma. Teodora N. Cabasan</i> - In vitro Biocontrol of <i>Fusarium odoratissimum</i> causing Panama Wilt using <i>Cardaba</i> Fungal Endophytes)
2 nd place: <i>Brian Stanly M. Calpito and Prof. Efren E. Magulama</i> - Combining Ability Analysis of Five Varieties of Adlay (<i>Coix lacryma-jobi</i> L.)
3 rd place: <i>Ricardo E. Iguales and Pamela B. Villanueva</i> - Media Exposure, Risk Awareness on Climate Change and Attitude of College Students to Climate Change Mitigation: A Correlational Analysis
Applied Research (Oral)
1 st place: <i>Arnel Glenn B Jimenez and Dr. Maricel G. Dayaday</i> - A GPT-3 Powered Natural Language Mathematical Expression Parser
2 nd place: <i>Mary Cris R. Contiñedo, John Lorenz Fernandez, John Lloyd D. Paguntalan, Jerwin D. Fermin, Lester Jan G. Ramos, and Jimmy D. Rama</i> - Tiger Grass Pollen Separator
3 rd place: <i>Abiador, John Denver B. and Assoc. Prof. Joeseeph S. Quisado</i> - Evaluation of Bioefficacy Potential of Unknown Fungal Entomopathogens against Brown Planthopper (BPH), <i>Nilaparvata lugens</i> (Hemiptera: Delphacidae)
Social Research (Oral)
1 st place: <i>Jareeza H. Kamag and Rowell N. Nitafan</i> - Sincerely, Professor X: Anecdotes of Retired Academics After Public Service
2 nd place: <i>Kimberly C. Bernales and Prof. Hazel Ann S. Soriano</i> - Scientific Curiosity and the Level of Awareness on Sustainable Development Goals among BSE Students
3 rd place: <i>Juan Justin D. Gonzales and Saima M. Andil</i> - Narratives Behind the Thrust for Mobility: Impingement of International Labor Migration on the Household of Overseas Filipino Workers (OFWs)

Table 10b. List of outstanding student thesis in CY 2023 during the 8th Research in-house review in poster presentation, with their advisers.

Basic Research (Poster)
<i>1st place: Donita Rose T. Devilleres & Tamie C. Solpot</i> - New Records of Leaf Spot Diseases of Coffee Threatens Nursery Seedlings
<i>2nd place: Rahima S. Talib, Meriam M. Rubio and Renee Jane A. Ele</i> - Exploring the Antimicrobial Activity Of Endophytic Fungi From Lotus Plant (<i>Nelumbo nucifera</i>)
<i>3rd place: Jason L. Silapan & Joeseeph S. Quisado</i> - Host Range Testing on High Value Crops as Potential Alternate Host Plant for <i>Unaspis mabilis</i> Lit & Barbecho (Hemiptera: Diaspididae)
Applied Research (Poster)
<i>1st place: Argene P. Fernandez</i> - Phytochemical Analysis of Nutrush (<i>Scleria scrobiculata</i> Nees and Meyen) Leaf Extract and Evaluation of Its Angiogenic and Anti-Cancer Activities
<i>2nd place: Jovan Panganiban & Ivy M. Pasquin</i> - Molecular Characterization of F1 Progenies of Uf18 X Br25 Cacao (<i>Theobroma cacao</i> L.) Cross Using Simple Sequence Repeat (SSR) Markers
<i>3rd place: Randy C. Manayaga & George F. Gamolo</i> - Cacao Pod Cutting and Seed Separating Machine
Social Science Research (Poster)
<i>1st place: Jake P. Boston and Khristine Garcia</i> - Breaking Social Norms: Lived Stories of the Unmarried Elderly
<i>2nd place: Althea Mohidda Pantog and Krizler Tanalgo</i> - Human-Bats Interactions During the Covid-19 Pandemic in Caves of South Central Mindanao, Philippines: Implications for Post-Pandemic Management
<i>3rd place: Francis D Castro and Estella Barbosa</i> – Healthscapes in the Spotlight: A Social Semiotics Inquiry



Figure 20. Student in-house review 2023

4. RDE Capability and Outputs

4.1 Capacity Building for Faculty and Researchers

The RDE conducted workshops for faculty and researchers on RDE-related skills. These workshops were facilitated by Research and Development Office, Extension Services Office and Research Publication Services Office under the Office of the Vice President for Research Development and Extension in collaboration with the academic units and the SOCCSKSARGEN Agriculture, Aquatic and Natural Resources Research and Development Consortium (SOXAARRDEC). List of training or workshops conducted, facilitated and attended are shown in Tables 11 and 12.

Table 11. List Training/Workshop/ Seminar conducted by the RDE group on CY 2023.

Title of Training/Workshop/ Seminar	Organizer	Participants	Date	Venue
Friday-Write Day	RPSO	Faculty and Full-time Researchers	March 03, 2022	ESO Conference Room
Friday-Write Day	RPSO	Faculty and Fulltime Researchers	March 31, 2023	ESO Conference Room
Seminar -Workshop on Thesis Advising, Referencing and Basic Statistical Techniques	RDE	USM-KCC faculty	August 7, 2023	USM-KCC
Training Program on Research, Micro-Credentials and Extension Projects	OVRDE and RPSO	USM faculty members	July 24-28, 2023	USM Commercial building
Seminar-Workshop on Research Proposal Writing	USM Microbiology Society	USM Microbiology Students	November 17, 2023	USMARDC Auditorium
USM inception meeting for RDE	RDE	Faculty researchers	January 13, 2023	USMARDC Auditorium

Table 12. Trainings/seminar/conferences/meetings attended by the RDE personnel on CY 2023.

Training/Seminar/ Conference	Name	Place	Date
National Board and President	Debbie Marie Versoza	Philippine Council of Mathematics Teacher Educators (MATHTED, Inc.)	July 1, 2020-present
Proceedings Committee, Midyear In-house Review	Debbie Marie Versoza	University of Southern Mindanao	April – July 2023
Proceedings Committee, Year-end In-house Review	Debbie Marie Versoza	University of Southern Mindanao	September – November 2023

Training/Seminar/ Conference	Name	Place	Date
Proceedings Committee, National Organic Agriculture Conference	Debbie Marie Versoza	National Organic Agricultural Program (NOAP)	May 2022 – March 2023
Working Committee	URDEC	UPLB Training	June – July 2023
Working Committee	URDEC	Student Parangal	
PASUC Annual Convention: Fostering Innovation and Collaboration in SUCs Towards Increasing Competitiveness and Sustainability	Ma. Teodora N. Cabasan	SMX Convention Center Manila, Pasay City	August 9-11, 2023
PAEPI National Convention: Empowering Extension Professionals Towards Social Transformation and Food Security	Ma. Teodora N. Cabasan	Metro Hotel, Tagbilaran City, Bohol	August 16-18, 2023
3 rd international Conference on Futures Thinking Towards Sustainable Development Goals	Ma. Teodora N. Cabasan	Online- Cagayan State University, Tuguegarao City	December 22, 2023
Webinar on biotechnology applications and impact on the Philippine Livestock industry	Efren E. Magulama	Online	Jan 31, 2023
Webinar on opportunities and benefits of aquaculture/Fishery biotechnology to the Philippine Aquaculture/Fishery Industry	Efren E. Magulama	Online	Mar 31, 2023
Basic and applied molecular techniques for high value crops training (Participant)	Mary Grace S. Balbuena	Biotechnology Unit, USMARDC	April 19, 27-28, 2023
Better tools for better rice varieties: modernizing rice genetic improvement (Participant)	Mary Grace S. Balbuena	Rice Science & Technology Webinar Series Part 2	June 29, 2023 via zoom
Training on research design, extension, and microcredentials	Efren E. Magulama	USM/Com	July 23, 2023
Training on Cacao under Coconut Based Farming System-7 batches, (Resource Speaker)	Janice M Bangoy	ATI, PRDP/ USM Kabacan, Cotabato	Aug 29, 2023 (1) Sep 12, 2023 (2) Sep 19, 2023 (3) Oct 3, 2023 (4) Nov 7, 2023 (5) Nov 21, 2023 (6)

Training/Seminar/ Conference	Name	Place	Date
			Dec 6, 2023 (7)
Training-Workshop on Policy Brief Writing (Participant)	Janice M. Bangoy	SOXAARRDEC, Viajera Hotel, Tandingan So. Cot.	December 14-16, 2023
USM Exhibit at DA Farmers Forum (Resource Person)	Janice M Bangoy	DA,SOXAARRDEC, Viajera Hotel, Tandingan So. Cot	December 13, 2023
DA Farmers Forum (Resource Speaker)	Nenita E. Olero	DA,SOXAARRDEC, Viajera Hotel, Tandingan So. Cot.	December 13, 2023
Training on Retooling NCT Rice. NIA Region 7, Tagbilaran City, Bohol Participant:	Nenita E. Olero	NCT Rice	
Training Course on Open Pollinated Variety (OPV) Corn Seed Production and Certification for Seed Inspectors, ATI Satellite Center, Region XII, USM Compound, Kabacan, Cotabato on. Resource Persons:	Jessie G. Elarde & Nenita E. Olero	USM-ATI	May 23-26, 2023
Training on Desuckering of Cardava Banana and Macro-Propagation Techniques in Producing plantlets for Cardava Banana. Carmen, Cotabato, Resource Person:	Nenita E. Olero	Carmen	October 4, 2023
Training on Organic Corn Seed Multiplication and Mungbean Production. USMARD Center, USM, Kabacan, Cotabato. Resource Person:	Nenita E. Olero	USMARDC	October 10-11, 2023
Basic Statistical Techniques for thesis advisers/ Resource person	EEMagulama	USM-KCC	August 7, 2023
Processing of Banana Chips, Processing of Chocolate and Processing pomelo wine	Elnora Flores	High Value Crops processing center	March 22, 2023
Training of Trainer on Cacao Fermentation, Drying and Bean Grading	Sheena B. Lucena	Agriculture Training Institute, USM	Feb. 1-10, 2023
Future's thinking "Strengthening College based futures thinking"	Abubakar A. Murray	Graduate School	September 26-28, 2023

Training/Seminar/ Conference	Name	Place	Date
UPLB “Training program on Research, Micro-credentials, and extension Projects”	Abubakar A. Murray	Commercial Building	July 24-28, 2023
Document Tracking System Training	Abubakar A. Murray and Quennie Ane T. Baduel	Commercial Building	August 3, 2023
Webinar on Going green: Sustainable Initiatives in the Digital Age and Sharing of Best Practices of the Shared Service Facilities (SSF) cooperators and MSMEs	Angelo Mortera and Sencil Mutan	Via Zoom	August 30, 2023

4.2 Publication of Research Outputs

In 2023, USM was able to produce 49 - peer-reviewed articles published in Scopus-indexed or WoS. Publications generated a total of 289 citations in 2023 (Table 13).

Table 13. Publications of Faculty in 2023.

No.	Title of Article	Author(s)	Name of Book/Journal	Vol. No. / Issue No.	Type of Publication
1	Soil Contamination with Zoonotic Geohelminths: Emerging Risks in the Philippines	Jan Clyden B. Tenorio	Infectious Microbes & Diseases	6(1):10.1097/IM9.000000000000138	International (WoS/Scopus)
2	Derivational and Inflectional Morphemes of Cebuano and English Pop Songs: A Contrastive Analysis	Brandon N. Obenza, Gideon S. Sumayo , and Teresita Q. Adriano	Advance Journal of Education and Social Sciences	8(12), 1-15	
3	The Appointment of Clarita Carlos as Philippine President’s National Security Adviser: A Sentiment Analysis	Gideon Sumayo and Danilo Baradillo	Psychology and Education: A Multidisciplinary Journal	14(10), 1241-1251	

No.	Title of Article	Author(s)	Name of Book/Journal	Vol. No. / Issue No.	Type of Publication
4	Challenging the Hegemony of Western Science via Culturally Relevant Science Teaching	Karizza Jane B. Pejaner and Sally B. Gutierrez	AsTEN Journal of Teacher Education	7	International (Scopus)
5	Katawagang Kultural sa Panliligaw, Pamamanhikan at Kasal ng Erumanen ne Menuvu	Jonhrey V. Sitoy, Radji A., Macatabon , and Dominador B. Maquillan, Jr.	E-DAWA, An International Multidisciplinary Research Journal	3(2), 119-132	
6	Understanding the intention of consuming of halal food products using the theory of planned behaviour	Nerissa G. Dela Viña	Philippine Academy of Management E-Journal	6(2), 76-92	Peer-reviewed
7	Development of a novel optimization algorithm for a microstrip patch antenna array	Fredelino A. Galleto Jr. , Aaron Don M. Africa, Ara Jyllian A. Abello, Joaquin Miguel B. Lalusin	Indonesian Journal of Electrical Engineering and Computer Science	33(1)	International (Scopus)
8	Distributive Justice, Psychological Empowerment and Job Autonomy's Influences on the Organizational Commitment of Tertiary School Leaders	Paul John B. Ongcoy	International journal of organizational leadership	12, 329-348	International (WoS)
9	Fungal endophytes as potential biocontrol agent of Panama disease of banana	Jonah Mae F. Taping, Bernadith T. Borja, Bryan Lloyd P. Bretaña, Maria Elena N. Tanabe and Ma. Teodora N. Cabasan	Egyptian Journal of Biological Pest Control	33(84)	International (WoS/Scopus)

No.	Title of Article	Author(s)	Name of Book/Journal	Vol. No. / Issue No.	Type of Publication
10	Effective conservation of subterranean-roosting bats	Melissa Meierhofer, Joseph Johnson, Janette Perez-Jimenez, Fernanda Ito, Paul Webela, Sigit Wiantoro, Enrico Bernard, Krizler Tanalgo , et al.	Conservation Biology	1-12	International (WoS/Scopus)
11	Effective conservation of subterranean-roosting bats	Melissa B. Meierhofer, Joseph S. Johnson, Janette Perez-Jimenez, Fernanda Ito, Paul W. Webela, Sigit Wiantoro, Enrico Bernard, Krizler C. Tanalgo , Alice Hughes, et al.	Conservation Biology	https://doi.org/10.1111/cobi.14157	International (WoS/Scopus)
12	Groundwater is a hidden global keystone ecosystem	Anton Brancelj Bolpagni, David Brankovits, Cene Fišer, Vasilis Gerovasileiou, Christian Griebler, Simone Guareschi, Grant C Hose, Kathryn Korbel, Elisabeth Lictevout, Florian Malard, Alejandro Martinez, Matthew L Niemiller, Anne Robertson, Krizler C Tanalgo , et al.	Global Change Biology	30(1), e17066	International (WoS/Scopus)

No.	Title of Article	Author(s)	Name of Book/Journal	Vol. No. / Issue No.	Type of Publication
13	Leaping Forward or Crawling Backward? Efforts and Biases in Amphibian and Reptile Research on a Megadiverse Faunal Region in the Philippines	Sumaira S Abdullah, Kier Celestial Dela Cruz, Lothy F Casim, Angelo Rellama Agduma, Krizler Cejuela Tanalgo	Conservation	3(3), 363-378	International (Scopus)
14	Canine Hookworms in the Philippines-Very Common but Very much Neglected in Veterinary Research	Jan Clyden B. Tenorio	Frontier in Veterinary Science	10	International (Scopus)
15	Behavioral Influence on Halal Food Consumption of Millennial Consumers	Jalaloden B. Marohom and Julito G. Fuerzas	Journal of Halal Science, Industry and Business	1(1), 40-58	
16	Proficiency, Anxiety, and Corrective Feedback Preferences among ESL Learners	JC Thaddeus Gamboa Provida & Glyn B. Gabano-Magbanua	Modern Journal of Studies in English Language Teaching and Literature	5(1), 1-22	Not peer-reviewed
17	First report of <i>Pseudopestalotiopsis theae</i> causing leaf spot of robusta coffee in the Philippines	Neil Pep Dave N. Sumaya, P. Il M. Caluban, Bernadith T. Borja	New Disease Report	48(2)	International (Scopus)
18	The MOBIOS+: A FAIR (Findable, Accessible, Interoperable and Reusable) database for Mindanao's terrestrial biodiversity	Krizler Cejuela Tanalgo, Kier Celestial Dela Cruz, Angelo Rellama Agduma, Jeaneth Magelen V. Respicio, Sumaira S. Abdullah, Renee Jane Alvaro-Ele, Bona Abigail Hilario-Husain,	Biodiversity Data Journal	11: e110016, 1-13	International (WoS/Scopus)

No.	Title of Article	Author(s)	Name of Book/Journal	Vol. No. / Issue No.	Type of Publication
		Meriam Manampan-Rubio, Sedra A. Murray, Lothy F. Casim, Athea Mohidda M. Pantog, Shiela Mae P. Balase, Rallyessa Mohann A. Abdulkasan, Chasty Andrea S. Aguirre, Nadjmussahar L. Banto, Sheila Mae M. Broncate, Ace D. Dimacaling, Gerald Vince N. Fabrero, Asraf K. Lidasan, Analiza A. Lingcob, Ariane M. Millondaga, Kathlene Faye L. Panilla, Crystal Queen M. Sinadjan, Norlaine D. Unte			
19	Ultrastructural evidence of telocytes in the embryonic chick heart	Khan Lamanero Junatas, Liesbeth Couck, Hanna Tay, Fred Sinowatz, Wim Van Den Broeck	Anatomia Histologia Embryologia		International (WoS/Scopus)
20	Assessment Practices among College Instructors: Implications for Advancing Professional Development in Assessment Strategy Trainings	Khadiguia O. Balah	International Journal on Integrated Education	6(7), 89-106	

No.	Title of Article	Author(s)	Name of Book/Journal	Vol. No. / Issue No.	Type of Publication
21	Exploring Muslim College Students' Experiences: Implications for Appropriate Integration of Secular and Madrasah Education for Academic Achievement and Personal Development	Khadiguia O. Balah	International Journal of Social Science and Humanities Research	11(2), 322-331	
22	A Tracer Study of AB Psychology Graduates' Employment Outcomes for Batches 2017-2020: Effects of Pandemic and Bases for Program Enhancement	Khadiguia O. Balah	Journal of Humanities and Education Development	5(3), 73-85	
23	Fungal Endophytes as potential biocontrol agent of Panama disease of banana	Jonah Mae F. Taping, Bernadith T. Borja, Bryan Lloyd P. Bretaña, Maria Elena N. Tanabe, Ma. Teodora N. Cabasan	Egyptian Journal of Biological Pest Control	33(84)	International (Scopus)
24	On Perfect Italian Domination in Graphs	Leonard Paleta & Ferdninand P. Jamil	Discrete Mathematics, Algorithms and Applications	2350085	International (WoS/Scopus)
25	Sex Ratio, Age Structure and Parasitism in <i>Unaspis mabilis</i> (Hemiptera: Diaspididae) in the Philippines	Celia dR. Medina, Luis Rey I. Velasco, Joeseeph I. Quisado , Joel P. Limson, Darlyn B. Posas and Bryan V. Novio	AGRIVITA, Journal of Agricultural Science	45(2), 381-394	International (WoS/Scopus)

No.	Title of Article	Author(s)	Name of Book/Journal	Vol. No. / Issue No.	Type of Publication
26	<i>Nigrospora sphaerica</i> causing Leaf Blight Disease of Cacao in the Philippines	Jill D. Villanueva, Tamie C. Solpot & Naomi G. Tangonan	Indian Phytopathology	https://doi.org/10.1007/s42360-023-00653-6	International (Scopus)
27	A Tracer Study of AB Psychology Graduates' Employment Outcomes for Batches 2017-2020: Effects of Pandemic and Bases for Program Enhancement	Khadiguia O. Balah	Journal of Humanities and Education Development	5(3), 73-85	
28	Exploring Muslim College Students' Experiences: Implications for Appropriate Integration of Secular and Madrasah Education for Academic Achievement and Personal Development	Khadiguia Ontok-Balah	International Journal of Social Science and Human Research	11(2), 322-331	
29	Rising From Adversity: Unveiling Filipino Muslims' Motivation and Interest In Pursuing Career Success Through Education	Khadguia O. Balah	International Research-Based Education Journal	5(2), 240-255	
30	Pagtatagpo ng Kasaysayan at Panitikan sa mga Tugtulan ng mga Sinaunang Maguindanaon	Shandra Gonsang	TALA	6(1), 101-130	Peer-reviewed
31	Measures of health and association, and epidemiologic transition—fundamental	Jan Clyden B. Tenorio	Journal of Livestocks Science	14, 204-210	International (WoS)

No.	Title of Article	Author(s)	Name of Book/Journal	Vol. No. / Issue No.	Type of Publication
	concepts for veterinary public health specialists				
32	Leaping Forward or Crawling Backward? Efforts and Biases in Amphibian and Reptile Research on a Megadiverse Faunal Region in the Philippines	Sumaira S. Abdullah, Kier Celestial Dela Cruz, Lothy F. Casim, Angelo Rellama Agduma, and Krizler Cejuela Tanalgo	Conservation	3(3), 363-378	Peer-reviewed
33	Who is publishing in ecology and evolution? The underrepresentation of women and the Global South	Alice C. Hughes, Kay Zin Than, Krizler C. Tanalgo , et al.	Frontiers in Environmental Science	11:1211211.	International (WoS)
34	Early twenty-first century biodiversity data pinpoint key targets for bird and mammal conservation in Mindanao, southern Philippines	Dela Cruz, K. C., Abdullah, S. S., Agduma, Angelo. R., & Tanalgo, Krizler C.	Biodiversity	1-18	International (Scopus)
35	Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines	Angelo Rellama Agduma, Francisco Gil Garcia, Ma Teodora Cabasan, Jonald Pimentel, Renee Jane Ele, Meriam Rubio, Sedra Murray, Bona Abigail Hilario-Husain, Kier Celestial Dela Cruz, Sumaira	Regional Sustainability	4(2), 203-213	International (Scopus)

No.	Title of Article	Author(s)	Name of Book/Journal	Vol. No. / Issue No.	Type of Publication
		Abdullah, Shiela Mae Balase, and Krizler Cejuela Tanalgo			
36	Importance of Knife Sharpness during Slaughter: Shariah and Kosher Perspective and Scientific Validation	Pavan Kumar, Ahmed Abubakar Abubakar, Jurhamid Columbres Imlan , et al.	Animals	13(11), 1751	International (WoS)
37	Fruit Color Preference of Frugivorous Birds in an Agroecosystem in Southcentral Mindanao, Philippines	Navel Kyla B. Balasa, Jirrizo O. Roquero, Asraf K. Lidasan, Lothy F. Casim, Angelo Rellama Agduma , and Krizler Cejuela Tanalgo	Birds	4(2), 190-201	Peer-reviewed
38	Molecular phylogeny of Cercopidae (Hemiptera, Cercopoidea)	Elorde S. Crispolon Jr. (h-index 1), Adeline Soulier- Perkins and Eric Guilbert	Zoologica Scripta, Wiley	00, 1-23	International (WoS/Scopus)
39	Important underground roosts for bats in Bulgaria: current state and priorities for conservation	Stanimira Delevera, Maksim Kolev and Krizler C. Tanalgo	Biodiversity Data Journal	11: e98734	International (WoS/Scopus)

No.	Title of Article	Author(s)	Name of Book/Journal	Vol. No. / Issue No.	Type of Publication
40	Are we hunting bats to extinction? Worldwide patterns of hunting risk in bats are driven by species ecology and regional economics	Tanalgo, K. C. , Sritongchuay, T., Agduma, A. R. , Dela Cruz, K. C., & Hughes, A. C.	Biological Conservation	279, 109944	International (WoS)
41	Species richness, extent and potential threats to mangroves of Sarangani Bay Protected Seascape, Philippines	Agduma, Angelo R. and Cao, K.F.	Biodiversity Data Journal	11, e100050	International (WoS/Scopus)
42	Uncovering the effects of COVID-19 mask wearing on bird flight initiation distance in urbanized areas in the Southern Philippines	Gerald Vince N. Fabrero, Leanne Jay S. Manceras, Angelo R. Agduma and Krizler C. Tanalgo	Animals	13(8), 1289	International (WoS/Scopus)
43	Molecular dissection of connected rice populations revealed important genomic regions for agronomic and biofortification traits	Alvin D. Palanog, Chau Thanh Nha, Gwen Iris Descalsota-Empleo , et al.	Frontiers in Plant Science	14	International (WoS/Scopus)
44	Selecting safe zone for threatened species conservation: a case study of a watershed in the southern Philippines	John Aries G. Tabora , Rico C. Ancog, Patricia Ann J. Sanchez, Mark Dondi M. Arboleda, Ireneo L. Lit Jr. and Cristino L. Tiburan Jr.	Annals of GIS	29(4), 569-584	International (WoS/Scopus)
45	The last stand of a watershed forest in Southern Philippines: a case study of land cover and biodiversity	John Aries G. Tabora , Rico C. Ancog, Patricia Ann J. Sanchez, Mark Dondi M. Arboleda, Ireneo	Biodiversitas Journal of Biological Diversity	Vol 24(3), 1438-1449	Scopus

No.	Title of Article	Author(s)	Name of Book/Journal	Vol. No. / Issue No.	Type of Publication
		L. Lit Jr., And Cristino L. Tiburan Jr.			
46	A dataset of true mangrove records in Sarangani Bay Protected Seascape, Philippines. Version 1.7.	Agduma AR and Cao K-F	Biodiversity Data Journal	https://doi.org/10.15468/pz5yp6	International (WoS/Scopus)
47	Species richness, extent and potential threats to mangroves of Sarangani Bay Protected Seascape, Philippines	Agduma AR and Cao K-F	Biodiversity Data Journal	11: e100050.	International (WoS/Scopus)
48	Understanding bat ecosystem services on a global scale requires caution and wider collaboration: a critical evaluation of Ramírez-Fráncel et al. (2022)	Krizler C. Tanalgo , Kim Mcconkey, Paul Racey, Sheema Abdul Aziz, Tuanjit Sritongchuay, Alice C. Hughes and Tammy Mildenstein	Integrative Zoology	18(2), 385-390	International (WoS/Scopus)
49	Back to in-person classes in the Philippine basic education: threading the opportunities and limitations in the teaching of Physical Education	Ruben L. Tagare, Jr.	Retos: nuevas tendencias en educación física, deporte y recreación	47, 986-993	International (WoS)
50	Predator types, urbanization, and tree cover drive top-down control of herbivorous and carnivorous preys in an urban agroecosystem	Lidasan, A. K., Roquero, J. O., Balasa, N. K. B., Agduma, A., Ele, R.J. A.. & *Tanalgo, K.C.	EcoScience	1-11	International (WoS)

Note: In blue font are USM students as co-authors.

Table 14. USM published papers with citations in 2023.

No.	Article	Authors	Number of Citations in 2023
1	Zinc and iron nutrition status in the philippines population and local soils	Palanog, Alvin D., Calayugan, Mark Ian C., Descalsota-Empleo, Gwen Iris ,, Reinke, Russell	15
2	The Critical Importance of Old World Fruit Bats for Healthy Ecosystems and Economies	Aziz SA, McConkey KR, Tanalgo K ,, Lim VC and Racey PA	15
3	Genome-wide association mapping in a rice magic plus population detects QTLs and genes useful for biofortification	Descalsota, Gwen Iris L. , Swamy, B. P. Mallikarjuna, Zaw, Hein, Inabangan-Asilo,, , Lalusin, Antonio B.	14
4	Stability and G × E analysis of zinc-biofortified rice genotypes evaluated in diverse environments	Inabangan-Asilo, M.A., Mallikarjuna Swamy, B.P., Amparado, A.F. , Descalsota-Empleo, Gwen Iris , Amparado et al.	13
5	Genetic mapping of QTL for agronomic traits and grain mineral elements in rice	Descalsota-Empleo, Gwen Iris , Amparado, Reinke, Russell, Swamy, B.P. Mallikarjuna	12
6	Genetic Analysis of Agronomic Traits and Grain Iron and Zinc Concentrations in a Doubled Haploid Population of Rice (<i>Oryza sativa</i> L.)	Calayugan, Mark Ian C., Formantes, Andrea Kariza, Amparado, Amery, Descalsota-Empleo, Gwen Iris ,, Diaz, Ma. Genaleen Q.	12
7	Identification of genomic regions associated with agronomic and biofortification traits in DH populations of rice	Swamy, B.P.Mallikarjuna, Descalsota, Gwen Iris L. , Nha, Chau Thanh, Amparado, Amery, Inabangan-Asilo, Mary Ann, Manito, Christine, Tesoro, Frances, Reinke, Russell	11
8	Mapping global conservation priorities and habitat vulnerabilities for cave-dwelling bats in a changing world	Tanalgo, K.C. , Oliveira, H.F.M., Hughes, A.C.	11

No.	Article	Authors	Number of Citations in 2023
9	Characterization of gelatin from bovine skin extracted using ultrasound subsequent to bromelain pretreatment	Ahmad, Tanbir, Amin Ismail, Siti Aqlima Ahmad, Khalilah Abdul Khalil, Elmutaz Atta Awad, Teik Kee Leo, Jurhamid C. Imlan , and Awis Qurni Sazil	10
10	Comparative toxicity, phytochemistry, and use of 53 Philippine medicinal plants	Clemen-Pascual, L.M. , Macahig, R.A.S., Rojas, N.R.L.	10
11	Effects of ultrasound assisted extraction in conjugation with aid of actinidin on the molecular and physicochemical properties of bovine hide gelatin	Ahmad, T., Ismail, A., Ahmad, S.A., ... Imlan, J.C. , Sazili, A.Q.	8
12	Climate-induced stressors to peace: A review of recent literature	Simangan, D., Lee, C.Y., ... Tandog, L.	8
13	Zinc-biofortified rice: A sustainable food-based product for fighting zinc malnutrition	Swamy, B.P.M.Nha, C.T., ...Min, Y.M.M., Descalsota-Empleo, Gwen Iris Inabangan-Asilo, M.A.	8
14	Wood chips and wheat straw as alternative biofilter media for denitrification reactors treating aquaculture and other wastewaters with high nitrate concentrations	Saliling, Willie Jones B. , Westerman, Philip W., Losordo, Thomas M.	7
15	Bird diversity and structure in different land-use types in lowland south-central Mindanao, Philippines	Tanalgo, K.C. , Pineda, J.A.F., Agravante, M.E., Amerol, Z.M.	6
16	Responses of intertidal nematodes to short-term anoxic events	Steyaert M., Moodley L., Nadong T. , Moens T., Soetaert K., Vincx M.	5
17	Effects of slaughter knife sharpness on blood biochemical and electroencephalogram changes in cattle	Imlan, J.C. , Kaka, U.Goh, Y.-M., ...Quaza Nizamuddin, H.N., Sazili, A.Q.	5
18	Bat cave vulnerability index (BCVI): A holistic rapid assessment tool to identify priorities for effective cave conservation in the tropics	Tanalgo, K.C. , Tabora, J.A.G. , Hughes, A.C.	4

No.	Article	Authors	Number of Citations in 2023
19	Evaluation of resistance and tolerance of rice genotypes from crosses of <i>Oryza glaberrima</i> and <i>O. sativa</i> to the rice root-knot nematode, <i>Meloidogyne graminicola</i>	Cabasan, M.T.N. , Kumar, A., De Waele, D.	4
20	The potential of bat-watching tourism in raising public awareness towards bat conservation in the Philippines	Tanalgo, K.C. , Catherine Hughes, A.	4
21	Monsters in our food: Foodborne trematodiasis in the Philippines and beyond	Tenorio, J.C.B. & Molina, E.C.	4
22	Comparison of migration, penetration, development and reproduction of <i>Meloidogyne graminicola</i> on susceptible and resistant rice genotypes	Cabasan, M.T.N. , Kumar, A., De Waele, D.	3
23	Histopathology of the rice root-knot nematode, <i>Meloidogyne graminicola</i> , on <i>Oryza sativa</i> and <i>O. glaberrima</i>	Kumar, A., Bellafigore, S., Cabasan, M.T.N. , De Waele, D.	3
24	Bats of the Philippine Islands—A review of research directions and relevance to national-level priorities and targets	Tanalgo, K.C. & Hughes, A.C.	3
25	Life cycle of the rice root-knot nematode <i>Meloidogyne graminicola</i> at different temperatures under non-flooded and flooded conditions	Fernandez, L., Cabasan, M.T.N. , De Waele, D.	3
26	Priority-setting for Philippine bats using practical approach to guide effective species conservation and policy-making in the anthropocene	Tanalgo, K.C. , Hughes, A.C.	3
27	Banana suitability and Fusarium wilt distribution in the Philippines under climate change	Salvacion, A.R., Cumagun, C.J.R., Pangga, I.B., ... Solpot, T.C. , Aguilar, E.A.	3
28	Crystallographic patterns in Philippine indigenous textiles	De Las Peñas, M.L.A.N., Garciano, A., Verzosa, D.M. , Taganap, E.	3

No.	Article	Authors	Number of Citations in 2023
29	Comparison of the penetration, development and reproduction of <i>Meloidogyne graminicola</i> , and analysis of lignin and total phenolic content in partially resistant and resistant recombinant inbred lines of <i>Oryza sativa</i>	Galeng-Lawilao, J., Kumar, A., Cabasan, M.T.N. , De Waele, D.	3
30	Wildlife hunting by indigenous people in a Philippine protected area: A perspective from MT. Apo National Park, Mindanao Island	Tanalgo, K.C.	3
31	Species richness of trees in disturbed habitats within a protected area and its implications for conservation: The case of Mt. Apo Natural Park, Mindanao Island, Philippines	Zapanta, B. R., Achondo, M. J. M. M., Raganas, A. F. M., Fritzie, A., Delima, A. G. D., Mantiquilla, J. A., & Salvaña, F. R. P.	3
32	Technology in teaching speaking and its effects to students learning English	Sosas, R.V.	3
33	Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines	Agduma, A. R., Garcia, F. G., Cabasan, M. T., Pimentel, J., Ele, R. J., Rubio, M., ... & Tanalgo, K. C.	3
34	Theoretical studies of the O(3P) + ethane reaction	Troya, D., Pascual, R.Z. , Garton, D.J., Minton, T.K., Schatz, G.C.	2
35	Human-bat interactions in caves of South Central Mindanao, Philippines	Tanalgo, K.C. , Teves, R.D., Salvaña, F.R.P. , Baleva, R.E., Tabora, J.A.G.	2
36	Genetic dissection of grain nutritional traits and leaf blight resistance in rice	Descalsota-Empleo, G.I. , Noraziyah, A.A.S., Navea, I.P., ...Chin, J.H., Mallikarjuna Swamy, B.P.	2
37	Cropping system diversification for food production in Mindanao rubber plantations: A rice cultivar mixture and rice intercropped with mungbean	Honrade R.F. , Hondrade, E., Zheng, L., ...Vera Cruz, C.M., Garrett, K.A.	2

No.	Article	Authors	Number of Citations in 2023
38	Small Things Matter: The Value of Rapid Biodiversity Surveys to Understanding Local Bird Diversity Patterns in Southcentral Mindanao, Philippines	Tanalgo, K.C. , Achondo, M.J.M.M., Hughes, A.C.	2
39	The effects of sea and road transport on physiological and electroencephalographic responses in brahman crossbred heifers	Zulkifli, I., Abubakar, A.A., Sazili, A.Q., Imlan, Jurhamid C. , ...Nizamuddin, H.N.Q., Mitin, H.	2
40	Schistosoma japonicum infections in cattle and water buffaloes of farming communities of Koronadal City, Philippines	Tenorio, J.C.B. , Molina, E.C.	2
41	Occurrence of <i>Fusarium oxysporum</i> f. sp. cubense tropical race 4 and other genotypes in Banana in South-Central Mindanao, Philippines	Solpot, T.C. , Pangga, I.B., Baconguis, R.D.T., Cumagun, C.J.R.	2
42	Physiological and electroencephalogram responses in goats subjected to pre-and during slaughter stress	Raghazli, R., Othman, A. H., Kaka, U., Abubakar, A. A., Imlan, J. C., Hamzah, H., ... & Goh, Y	2
43	Effects of initial nematode population density and water regime on resistance and tolerance to the rice root-knot nematode <i>Meloidogyne graminicola</i> in African and Asian rice genotypes	Cabasan, M. T. N. , Kumar, A., & De Waele, D.	2
44	Male terminalia of Cercopidae (Hemiptera, Cicadomorpha): towards a consensus terminology	Le Cesne, M., Crispolon, E , Soulier-Perkins, A.	2
45	Mapping quantitative trait loci of <i>Meloidogyne graminicola</i> resistance and tolerance in a recombinant inbred line population of <i>Oryza glaberrima</i> × <i>O. sativa</i>	Lawilao, J. G., Swamy, B. M., Kumar, A., Cabasan, M. T. N. , & De Waele, D.	2
46	Modeling the Impact of Deficit Irrigation on Corn Production	Painagan, M.S. , Ella, V.B.	2

No.	Article	Authors	Number of Citations in 2023
47	Effects of Nanoformulated Plant Growth Regulator on Culturable Bacterial Population, Microbial Biomass and Enzyme Activities in Two Soil Types	Basay Jr, C. P., Paterno, E. S., Delmo-Organo, N., Villegas, L. C., & Fernando, L. M	2
48	Crop rotation sequencing to minimize yield losses of summer-irrigated lowland rice in Myanmar caused by the rice root-knot nematode <i>Meloidogyne graminicola</i>	Win, P.P., Kyi, P.P., Maung, Z.T.Z., ... Cabasan, M.T.N. , De Waele, D.	2
49	A preliminary study on bats in a small-scale mining site in south central Mindanao, Philippines	Tanalgo, K.C. , Casini, L.F., Tabora, J.A.G.	2
50	Landscape-level effects on pollination networks and fruit-set of crops in tropical small-holder agroecosystems	Sritongchuay, T., Dalsgaard, B., Wayo, K., ... Tanalgo, K.C. Orr, M.C., Hughes, A.C.	2
51	Theoretical studies of the O(3P) + methane reaction	Troya, D., Pascual, R.Z. , Schatz, G.C.	1
52	Effect of sowing date and harvest timing on seed vigour in garden pea (<i>Pisum sativum</i> L.)	Castillo, A.G. , Hampton, J.G., Coolbear, P.	1
53	Soil and litter nematode diversity of Mount Hamiguitan, the Philippines, with description of <i>Bicirronema hamiguitanense</i> n. sp. (Rhabditida: Bicirronematidae)	Qing, X., Bert, W., Steel, H., Quisado, J. , De Ley, I.T.	1
54	Native Philippine Heterorhabditis indica isolates from banana and rice fields and preliminary results of their virulence against the larvae of super worm (<i>Zophobas morio</i> Fabricius Coleoptera: Tenebrionidae)	Navarez, M.L., Sangcopan, R., Aryal, S., Sumaya, N.P.D. ...Bhat, A.H., Sumaya, N.H.	1
55	Effects of stocking and transport conditions on physicochemical properties of meat and acute-phase proteins in cattle	Abubakar, A. A., Zulkifli, I., Goh, Y. M., Kaka, U., Sabow, A. B., Imlan, J. C., ... & Sazili, A. Q.	1

No.	Article	Authors	Number of Citations in 2023
56	Host status of rotation crops in Asian rice-based cropping systems to the rice root-knot nematode <i>Meloidogyne graminicola</i>	Win, P. P., Kyi, P. P., Maung, Z. T. Z., Myint, Y. Y., Cabasan, M. T. N. , & De Waele, D	1
57	Survey and identification of entomopathogenic nematodes in the province of Cotabato, Philippines, for biocontrol potential against the tobacco cutworm, <i>Spodoptera litura</i> (Fabricius) (Lepidoptera: Noctuidae)	Dichusa, C. A., Ramos, R., Aryal, S., Sumaya, N. P. D., & Sumaya, N. H	1
58	Effect of single or dual inoculation of the arbuscular mycorrhizal fungus <i>Glomus mosseae</i> and root-nodulating rhizobacteria on reproduction of the burrowing nematode <i>Radopholus similis</i> on non-leguminous and leguminous banana intercrops	Van der Veken, L., Cabasan, M. T. N. , Elsen, A., Swennen, R., & De Waele, D	1
59	More on perfect roman domination in graphs	Paleta, L.M. , Jamil, F.P.	1
60	Reproductive, pathogenic and genotypic characterisation of five <i>Meloidogyne graminicola</i> populations from the Philippines on susceptible and resistant rice varieties	Cabasan, M.T.N. , Kumar, A., Bellafigliore, S., & De Waele, D	1
61	DarkCideS 1.0, a global database for bats in karsts and caves	Tanalgo, K. C., Tabora, J. A. G., de Oliveira, H. F. M., Haelewaters, D., Beranek, C. T., Otálora-Ardila, A., ... & Hughes, A. C.	1
62	Phylogenetic analyses and cross-infection studies of Phytophthora species infecting cacao and durian in South-Central Mindanao, Philippines	Solpot, T. C., & Cumagun, C. J. R.	1

No.	Article	Authors	Number of Citations in 2023
63	The effect of temperature on resistance in African rice (<i>Oryza glaberrima</i> Steud.) genotypes to the rice root-knot nematode <i>Meloidogyne graminicola</i>	Cabasan, M.T.N. , Bellafiore, S., Kumar, A., De Waele, D.	1
64	Early twenty-first century biodiversity data pinpoint key targets for bird and mammal conservation in Mindanao, Southern Philippines	Dela Cruz, K.C.,, Abdullah, S.S., Agduma, A.R., Tanalgo, K.C.	1
65	Stem Hydraulic Traits are Decoupled from Leaf Ecophysiological Traits in Mangroves in Southern Philipp	Agduma, A.R. , Jiang, X., Liang, D.-M., Chen, X.-Y., Cao, K.-F.	1
66	Bioretention Systems Optimization and Design Characterization Model Using Fuzzy Rough Set Theory	Galleto, F.A. , Cabatuan, M.K., Africa, A.D.M., ...Culaba, A.B., Navaluna, Jay M. , Redillas, M.C.F.R.	1
67	Influence of tea- <i>Pleurotus ostreatus</i> intercropping on soil fungal diversity and community structure	Ma, Z., Tanalgo, K.C. , Xu, Q. ,...Pan, G., Wang, R.	1
68	<i>Campylobacter jejuni</i> from farm to fork: Campylobacteriosis and chicken meat	Tenorio, J.C.B., & Flores, V.I.I.D.	1
69	First report of <i>Pythium cucurbitacearum</i> causing fruit rot of durian in the Philippines	Solpot, T.C. , & Cumagun, C.J.R.	1
70	Conservation ecology of birds in Mt. Hilong-hilong, a Key Biodiversity Area on Mindanao Island, the Philippines	Gracia, A.G, Mohagan, A.B., Burlat, J.C., ...Calising, R., Tanalgo, K.C.	1
71	Determinants of productivity and technical efficiency of upland rice farming system in Sarangani Province, Philippines	Balogbog, K.J.M., Gomez, N.U.	1
72	Comparison of item difficulty estimates in a basic statistics test using ITM and CTT software packages in R	Pimentel, J.L. & Villaruz, M.L.A.	1

No.	Article	Authors	Number of Citations in 2023
73	In situ measurement of methane flux from residential compost using automated static chamber and electrochemical sensor	Suasin, M.P., Villaverde, J.F.	1
74	Back to in-person classes in the Philippine basic education: threading the opportunities and limitations in the teaching of Physical Education	Tagare, R.L.	1
75	Effect of ZnO and CuO Nanoparticles on Culturable Bacterial Population, Microbial Biomass, and Enzyme Activities in Two Soil Types	Basay, C.P., Delmo-Organo, N., Villegas, L.C., ...Granada, S.M.J.M., Paterno, E.S.	1
76	Electronic Waste (E-Waste) Management of Higher Education Institutions in South Central Mindanao, Philippines	Dayaday, M.G., & Galleto, F.A.	1
77	Anthelmintic efficacy of mango seed extract on porcine gastrointestinal nematodes	Reyno, S.R.T., Gonzaga, L.J.A., Gonzaga, E.A.	1
78	On the Observed Blattellid (Blattodea) Pollinivory on <i>Hippeastrum puniceum</i> (Lam.) Voss (Amaryllidaceae) in Southcentral Mindanao, Philippines	Tanalgo, K.C.	1
79	Observations on the potential of an endophytic fungus associated with cacao leaves against phytophthora Palmivora	Sadoral, J.P. & Cumagun, C.J.R.	1
80	Schistosomiasis Japonica in Animals in the Philippines and its Veterinary Public Health Importance	Tenorio, J.C.B., Manalo, D.L., Molina, E.C.	1
81	Sound to electric energy generating device	Dayaday, M.G., Olivo, J.-J.S.	1
82	Cytotoxicity of <i>Cryptosula zavjalovens</i> Kubanin extract against breast cancer cell line MCF7	Gonzaga, L.J.A., Cavaco, I., Fortunato, H.	1

No.	Article	Authors	Number of Citations in 2023
83	Rapid assessment of epiphytic pteridophyte biodiversity in Mt. Apo Natural Park, North Cotabato Province, Philippines: a comparison of disturbed and undisturbed forests	Cano-Mangaoang, C., Bretaña, B.L.P., Amoroso, V.B.	1
		TOTAL	289

Table 15 shows the list of publications of faculty members. In CY 2023, 44 papers/articles were published in peer-reviewed/ISI/Scopus-indexed journals. These were endorsed for publication incentive by the URDEC after evaluation. The RPSO facilitated incentives for 28 USM faculty/researchers, amounting to PhP 687,324.08.

Table 15. List of 44 papers/articles with publication incentives submitted by 28 faculty researchers in 2023.

Title of Paper	Journal/ Publisher/ Date	Authorship	Classification	Incentive (Php)
1. Jacinta Pueyo				
Moms Too Soon: Status and Challenges of Teenage Mothers-- Implications for Extension	Philippine of International Women's Studies	Jacinta Pueyo - Sole author	Web Science/Scopus Indexed Journal Published: 2022, (Publication derived from locally funded research)	50,000.00

Title of Paper	Journal/ Publisher/ Date	Authorship	Classification	Incentive (Php)
2. Maricel Dayaday				
Electronic Waste (E-Waste) Management of Higher Education Institutions in South Central Mindanao, Philippines	Environmental and Natural	Maricel G. Dayaday - Primary author 1 out of 2 authors	Scopus Indexed Journal Published: December 2022 (Publication derived from locally funded research)	25,000.00
3. Fredelino Galleto, Jr.				
Electronic Waste (E-waste) Management of Higher Education Institutions in South Central Midnanao, Philippines	Environment and Natural Resources Journal	Fredelino Galleto - Co-author 1 out of 2 authors	Scopus/ Web of Science Published: 2022 (Publication derived from locally funded research)	25,000.00
Social Media Technologies and Its Role in Sustainable Tourism Development of Asik-Asik Falls	Banwa Series A	Fredelino Galleto - Primary author 1 out of 2 authors	Peer-reviewed Journal Published: 2023	10,000.00
Bioretention systems optimization and design characterization model using fuzzy rough set theory	Water	Fredelino Galleto - Primary author 1 out of 9 authors	Scopus/ Web of Science Published: 2022	25,000.00

Title of Paper	Journal/ Publisher/ Date	Authorship	Classification	Incentive (Php)
4. Elorde Jr. S. Crispolon				
Molecular phylogeny of Cercopidae (Hemiptera, Cercopoidea)	Zoologica Scripta	Elorde Jr. S. Crispolon - Primary author	Scopus/Web of Science Journal Published: March 2023	25,000.00
Isolation, identification and virulence of the local entomophatogenic nematode <i>Heterorhabditis indica</i> in the southern Philippines against the sugarcane white grub, <i>Leucopholis irrota</i> (Chevrolat) (Coleoptera: Scarabaedae)	International Journal of Tropical Insect Science	Elorde Jr. S. Crispolon - Co-author 1 out of 6 authors	Scopus Journal Published: December 2022	5,000.00
5. Angelo Agduma				
Species richness, extent and potential treats to mangroves of Sarangani Bay Protected Seascape, Philippines	Biodiversity Data Journal	Angelo Agduma - Primary author 1 out of 2 authors	Web of Science Journal Published: March 2023	25,000.00
Are we hunting bats to extinction? Worldwide patterns of hunting risk in bats are driven by species ecology and regional economics	Biological Conservation	Angelo Agduma - Co-author 1 out of 5 authors	Web of Science Journal Published: March 2023	6,250.00
Stem hydraulic traits are decoupled from leaf ecophysiological traits in mangroves in Southern Philippines	Journal of Plant Biology	Angelo Agduma - Primary author 1 out of 5 authors	Web of Science Journal Published: 2022	25,000.00
Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines	Regional Sustainability	Angelo Agduma - Primary Author 1 out of 12 authors	Scopus-indexed Journal Published: June 2023	25,000.00
6. Francisco Gil N. Garcia				

Title of Paper	Journal/ Publisher/ Date	Authorship	Classification	Incentive (Php)
Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines	Regional Sustainability	Francisco Gil N. Garcia Co-author 1 out of 12 authors	Scopus-indexed Journal Published: June 2023	2,272.73
7. Ma. Teodora N. Cabasan				
Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines	Regional Sustainability	Ma. Teodora N. Cabasan - Co-author 1 out of 12 authors	Scopus-indexed Journal Published: June 2023	2,272.73
8. Jonald L. Pimentel				
Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines	Regional Sustainability	Jonald L. Pimentel - Co-author 1 out of 12 authors	Scopus-indexed Journal Published: June 2023	2,272.73
9. Renee Jane Ele				
Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines	Regional Sustainability	Renee Jane Ele - Co-author 1 out of 12 authors	Scopus-indexed Journal Published: June 2023	2,272.73
10. Meriam Rubio				
Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines	Regional Sustainability	Meriam Rubio - Co-author 1 out of 12 authors	Scopus-indexed Journal Published: June 2023	2,272.73
11. Sedra A. Murray				
Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines	Regional Sustainability	Sedra Murray - Co-author	Scopus-indexed Journal	2,272.73

Title of Paper	Journal/ Publisher/ Date	Authorship	Classification	Incentive (Php)
		1 out of 12 authors	Published: June 2023	
12. Bona Abigail Hilario-Husain				
Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines	Regional Sustainability	Bona Abigail Hilario - Co-author 1 out of 12 authors	Scopus-indexed Journal Published: June 2023	2,272.73
13. Shiela Mae Balase				
Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines	Regional Sustainability	Shiela Mae Balase - Co-author 1 out of 12 authors	Scopus-indexed Journal Published: June 2023	2,272.73
14. Gwen Iris D. Empleo				
Molecular dissection of connected rice populations revealed important genomic regions for agronomic and biofortification traits	Frontiers in Plant Science	Gwen Iris Empleo - Co-author 1 out of 14 authors	Scopus/Web of Science Journal Published: March 2023	1,923.08
Landscape-level effects on pollination networks and fruit-set of crops in tropical small-holder agroecosystems	Agriculture, Ecosystems and Environment	Krizler C. Tanalgo - Co-author 1 out of 8 authors	Web of Science Journal Published: 2023	3,571.43
15. Krizler C. Tanalgo				
Are we hunting bats to extinction? Worldwide patterns of hunting risk in bats are driven by species ecology and regional economics	Biological Conservation	Krizler C. Tanalgo - Primary author 1 out of 5 authors	Scopus/Web of Science Journal Published: March 2023	25,000.00
Important underground roosts for bats in Bulgaria: current state and priorities for conservation	Biodiversity Data Journal	Krizler C. Tanalgo - Co-author	Web of Science Journal	8,333.33

Title of Paper	Journal/ Publisher/ Date	Authorship	Classification	Incentive (Php)
		1 out of 4 authors	Published: January 2023	
Overview of priorities, threats, and challenges to biodiversity conservation in the southern Philippines	Regional Sustainability	Krizler C. Tanalgo - Co-author 1 out of 12 authors	Scopus-indexed Journal Published: June 2023	2,272.73
The potential of bat-watching tourism in raising public awareness towards bat conservation in the Philippines	Environmental Challenges	Krizler C. Tanalgo - Primary author 1 out of 2 authors	Scopus-indexed Journal Published: August 2021	25,000.00
Mapping global conservation priorities and habitat vulnerabilities for cave-dwelling bats in changing world	Science of the Total Environment	Krizler C. Tanalgo - Primary author 1 out of 3 authors	Scopus/Web of science Journal Published: 2022	25,000.00
16. Khadiguia O. Balah				
Case management and psychosocial care services for child and adolescent survivors of rape and sexual abuse	INSPIRA: Indonesian Journal of Psychological Research	Khadiguia Balah - Sole author	Peer-reviewed Journal Published: March 2023	20,000.00
17. Ruben Tagare, Jr.				
Back to in-person classes in the Philippine basic education: threading the opportunities and limitations in the teaching of Physical Education	Retos: nuevas tendencias en educación física,	Ruben Tagare, Jr. Sole author	Web of Science Journal Published: 2023	50,000.00

Title of Paper	Journal/ Publisher/ Date	Authorship	Classification	Incentive (Php)
	deporte y recreación			
Gen Z's fitness concepts and ways to be fit: Insights to strengthen student's learning experiences in tertiary physical	Journal for Educators, Teachers and Trainers	Ruben Tagare, Jr. Sole author	Web of Science Journal Published: August 2022	50,000.00
18. Debbie Marie B. Verzosa				
Development of an app and videos to support the fraction learning trajectory from grades 1-7	30 th International Conference on Computers in Education Conference, ICCE 2022	Debbie Verzosa - Primary author 1 out of 7 authors	Scopus-indexed Conference Proceedings Published: December 2022	10,000.00
Deployment of Mathematical Resources to a Philippine high school through a community LTE network	Proceedings of the Asian Technology Conference in Mathematics	Debbie Verzosa -Co-author 1 out of 7 authors	Scopus-indexed Conference ProceedingsPublished: December 2022	1,666.67
Engaging learners through data: Senso Eskwela Pilipinas	Proceedings of the Asian Technology Conference in Mathematics	Debbie Verzosa -Co-author 1 out of 8 authors	Scopus-indexed Conference Proceedings Published: December 2022	1,428.57

Title of Paper	Journal/ Publisher/ Date	Authorship	Classification	Incentive (Php)
Development of a gamified number in line app for teaching estimation and number sense in grades 1 to 7	29 th International Conference on Computers in Education Conference, ICCE 2021	Debbie Verzosa -Primary author 1 out of 6 authors	Scopus-indexed Conference Proceedings Published: November 2021	10,000.00
Designing performance tasks in mathematics using technological tools	Proceedings of the Asian Technology Conference in Mathematics	Debbie Verzosa -Co-author 1 out of 6 authors	Scopus-indexed Conference Proceedings Published: December 2021	2,000.00
19. Jurhamid C. Imlan				
Importance of knife sharpness during slaughter: Shariah and Kosher Perspective and scientific validation	Animals	Jurhamid C. Imlan - Co-author 1 out of 8 authors	Web of Science Journal Published: April 2023	3,571.43
20. Cherie Cano-Mangaoang				
Status of mangrove forest in Timaco Mangrove Swamp, Cotabato City, Philippines	Journal of Threatened Taxa	Cherie Mangaoang - Primary author 1 out of 3 authors	Web of Science Journal Published: 2023	25,000.00
21. Marilyn Painagan-Calub				
Modeling the Impact of Deficit Irrigation on Corn Production	Sustainability	Marilyn Painagan - Primary author	Web of Science Journal	25,000.00

Title of Paper	Journal/ Publisher/ Date	Authorship	Classification	Incentive (Php)
		1 out of 2 authors	Published: 2022	
22. Carlito Basay, Jr.				
Effect of ZnO and CuO Nanoparticles on Culturable Bacterial Population, Microbial Biomass, and Enzyme Activities in Two Soil Types	Philippine Journal of Science	Carlito Basay, Jr. - Primary author 1 out of 8 authors	Web of Science/Scopus Indexed Journal Published: December 2022	25,000.00
23. Joseph O. Castillo				
Efficacy of Aktrine 4.6 SL (matrine) for the control of major insects pest of rice	Journal of Agriculture, Research, Development, Extension and Technology	Joseph O. Castillo - Primary author 1 out of 2 authors	Peer-reviewed Journal Published: December 2022	10,000.00
24. Jay M. Navaluna				
Bioretention systmes optimization and design characterization model using fuzzy rough set theory	Water	Jay M. Navaluna - Primary author 1 out of 9 authors	Scopus/ Web of Science Published: 2022	3,125.00
25. Mark Al-jamie Muttulani				

Title of Paper	Journal/ Publisher/ Date	Authorship	Classification	Incentive (Php)
Grape (<i>Vitis vinefera</i> L.) propagation using different types of cuttings and root-initiating substances	Journal of Agriculture, Research, Development, Extension and Technology	Mark Al-jamie Muttulani - Sole author	Peer-reviewed journal Published: 2022	20,000.00
26. Neil Pep Sumaya				
Isolation, identification and virulence of the local entomopathogenic nematode <i>Heterorhabditis indica</i> in the southern Philippines against the sugarcane white grub, <i>Leucopholis irrota</i> (Chevrolat) (Coleoptera: Scarabaeidae)	International Journal of Tropical Insect science	Neil Pep Sumaya - Sole author 1 out of 6 authors	Scopus/ Web of Science Journal Published: 2022	5,000.00
27. Jan Clyden Tenorio				
Risks, hazards, harm and risk analysis: A brief introductory overview for veterinarians	Journal of Livestock Science	Jan Clyden Tenorio - Sole author	Scopus/ Web of Science Journal Published: 2022	50,000.00
28. Estella Barbosa				
The semiotics of the peace rituals (Pomaas Atag to Kosunayan) of Obo Manobo People	International Journal of Language and Literary Studies	Estella Barbosa - - Sole author	Peer-reviewed Published: 2022	20,000.00

4.3 USM-managed peer-reviewed journal

4.3.1 The Journal of Agricultural Research, Development, Extension and Technology (JARDET)

As of December 2023, the Research Publication Services Office (RPSO) facilitated 20 articles for publication in the Journal of Agricultural Research, Development, Extension, and Technology (JARDET) (Table 16). Of the 20 JARDET articles, 7 were published for the fifth volume (Figure 21) with sufficient quality and within the scope of JARDET. These articles undergone external peer review. These are available in print and online at <https://www.jardet.usm.edu.ph/index.php/jardet/issue/view/5>.

Table 16. List of articles submitted for JARDET, Volume 5, 2023.

Article Title	Authors	Pages
Physicochemical compositions of fluid milk products made from refrigerated, frozen-thawed, and blast frozen-thawed cow’s milk	Ma. Czarina R. Moreno and Olivia C. Emata	1-8
Enhancing productivity of sakurab (<i>Allium chinense</i> G. Don) using corn stalk mulch and suitable fertilizer type	Adley L. Masnar, Ardriel A. Baladjay and Efren E. Magulama	9-22
Farming amidst climate change: The contextual vulnerability of farmers in Cotabato, Philippines	Thea Kersti Condes Tandog and Leornece Condes-Tandog	23-46
Knowledge and attitude of farmers and extension agents to Bambara nut production in North-central, Nigeria	Deborah Adedoyin Olabode, Israel Ogunlade and kemi Funmilayo Omotesho	47-63
Estimation of supply and demand of rubber in Cotabato Province, Philippines	Jennet R. Mag-aso and Francisco Gil N. Garcia	64-75
A critical review of the extraction methods of value-added products derived from rambutan (<i>Nephelium lappaceum</i>) seeds	Elmer James Catubig, Dominica Dacera, Kriza Faye Calumba, Dann Marie Del Mundo	76-85
Propagation and productivity evaluation of Anthurium (<i>Anthurium andraeanum</i>) using organic fertilizers in tropical conditions	Mark Al-jamie J. Muttulani, Lorelyn Joy Turnos-Milagrosa	86-95



Figure 21. Front cover of the 2023 issue of JARDET

4.3.2 Other BOR-approved peer-reviewed journals

To increase its visibility in the area of research, the University of Southern Mindanao expanded opportunities for publication and dissemination of research findings. The journal Studies in Natural and Applied Sciences (SNAPS) under the College of Science and Mathematics started to accept articles for review in 2023 and intends to launch the new volume in 2024.

In 2023, the new journals approved by the BOR are as follows; the Journal of Business, Economics and Governance Studies (JBEGS) under the College of Business, Development Economics and Management; and the Journal of Education and Community Development (JECD) under the Graduate School (Figure 22). Researchers both within and outside the University are invited to submit their contributions. This is managed by the University Research Publication Services Office.



Figure 22. Newly approved journals of USM in 2023.

4.4 Status of Intellectual Property Assets Generated as of CY 2023

A total of 58 IP assets were monitored by the Intellectual Property and Technology Business Management (IPTBM) Office. Of these, 24 are utility models, 20 copyrights, 2 trademarks and 1 patent (Table 17).

Table 17. List of IP assets generated through RDE of USM with the status as of CY 2023

NO.	TECHNOLOGY	TYPE OF IP ASSET/ TECHNOLOGY STAGE
1	Formulation for Blue Ternate Liquid Soap and the process thereof	IP filed With Utility number 2-2020-000136

NO.	TECHNOLOGY	TYPE OF IP ASSET/ TECHNOLOGY STAGE
2	Coffee Substitute	IP filed With Utility number 2-2020- 050376
3	Bar Soap Composition	IP filed
4	ADC – Animal Diet Calculator Feed mixer	Copyright filed With Utility number 2022-01304-N-TCCR
5	Method for Enhancement of Tissue Culture Propagation Protocol Using Male Bud/ Floral Apex of Banana	At pre-commercialization stage
6	Propagation of rubber rootstocks via microcutting	Technology Pitched
7	Chili Corn Halal Chevron and The Process Thereof	At pre-commercialization stage
8	Garlic-Enhanced Halal Chevron Jerky and the Process Thereof	At pre-commercialization stage
9	Sweet-Cured Halal Chevron and The Process Thereof	At pre-commercialization stage
10	Composition of Molasses Mineral Salt Block Fortified with <i>Glericidia sepium</i> Leaf Powder and the Process Thereof	IP filed, registered with UM number 22021050825
11	Composition of Molasses Mineral Salt Block Fortified with Tubli (<i>Derris elliptica</i>) Root Powder and the Process Thereof	IP filed, registered with UM number 22021050826
12	Formulation of feed Additives using Azolla for Native Chicken	IP filed, registered with UM number 22021050823
13	Formulation of Betel Nut Capsule as Antihelmintic for Goats	IP filed, registered with UM number 22021050893
14	Product of Making Marinated Smoked Catfish (<i>Clarias gariepinus</i>) and the Process Thereof	At pre-commercialization stage
15	Method for Identification, Detection and Quantification of Banana Bunchy Top Virus Using Digital PCR	IP filed, Utility Model with application number 22022050910
16	Method for PCR- based Identification and Detection of Banana Bunchy Top Virus in Banana Varieties	IP filed, Utility Model with application number 22022050911
17	Method for Profiling and Identification of True Criollo Cacao Types	IP filed, Utility Model with application number 22022050912
18	Method for Identification and Detection of Banana Bunchy Top Virus using Quantitative real-time PCR	IP filed, Utility Model with application number 22022050913

NO.	TECHNOLOGY	TYPE OF IP ASSET/ TECHNOLOGY STAGE
19	Method for Profiling and Identification of Philippine Palm Species	IP filed, Utility Model with application number 22022050914
20	Method for Identification, Detection and Quantification of Fusarium Wilt Disease Pathogens in Banana Using Digital PCR	IP filed, Utility Model with application number 22022050915
21	Method for Identification and Fingerprinting of Philippine Coconut Varieties	IP filed, Utility Model with application number 22022050916
22	Method for Identification and Fingerprinting of Philippine recommended Cacao Varieties	IP filed, Utility Model with application number 22022050917
23	Method for Identification and Detection of Panama Disease Pathogens in Banana using Quantitative Real-Time PCR	IP filed, Utility Model with application number 22022050918
24	Method for Identification and Detection of Moko and Bugtok Disease Pathogen in Banana using Quantitative Real-Time PCR	IP filed, Utility Model with application number 22022050919
25	Method for Identification, Detection and Quantification of Moko and Bugtok Disease Pathogen in Banana Using Digital PCR	IP filed, Utility Model with application number 22022050920
26	Method for identifying Robusta Coffee Variety using SSR Markers	IP filed, Utility Model with application number 22023050019
27	Method for identification of Robusta (Coffea canephora) coffee variety using PCR	IP filed, Utility Model with application number 22023050018
28	Method for identifying phenotypic and genotypic characteristics of Robusta coffee variety	IP filed, Utility Model with application number 22023050017
29	Process of Making Kulitis-Vanilla Icecream	IP filed, Utility Model
30	Product of Making Kulitis- Vanilla Ice Cream	IP filed, Utility Model
31	Product of Fermentation Methods in Coffee Berries	IP filed, Utility Model
32	Modification of Fermentation Methods in Coffee Berries	IP filed, Utility Model
33	Development and Evaluation of 3 in 1 Charging Welding, and Starting Aid (CWS) Machine	Copyright registered with Certificate No. C-2020-00566
34	Milenyong Asyano	Copyright registered with Certificate No. C-2020-00569
35	3 in 1 Charging, Welding, and Starting aid (CWS) Machine Operating Manual	Copyright registered with Certificate No. C-2020-00567
36	Manual on Macro- propagation Technique: An Alternative Way of Producing Quality Planting Materials of Lakatan	Copyright registered with Certificate No. C-2020-00571

NO.	TECHNOLOGY	TYPE OF IP ASSET/ TECHNOLOGY STAGE
37	Network Profile for Pipe Network using mycode.m	Copyright registered with Certificate No. C-2020-00564
38	Illustration on Optimization of Hydraulic Pressures in Pipe Networks using h.newton rhapsod technique	Copyright registered with Certificate No. C-2020-00565
39	Pressure Optimization for Pipe Network using h- optimization.m	Copyright registered with Certificate No. C-2020-00563
40	Computer Program for Modal Outflows using wds_outflow3.m	Copyright registered with Certificate No. C-2020-00378
41	Faces of Biodiversity, Nurturer of Life's Bounty	Copyright registered with Certificate No. C-2020-00570
43	ECE Reviewer Android App: e-Reviewing	Copyright registered with Certificate No. C-2020-00253
44	Automated System for Organizational Election	Copyright registered with Certificate No. C-2020-00254
45	Tudtulan, Uret at Teterama	Copyright registered with Certificate No. A-2021-01706
46	Market Analysis and Positioning of Processed Halal Chevron Food Products	Copyright registered with Certificate No. 2022-00314-I-TCCR
47	Halal Chevron Food Products Cookbook	Copyright registered with Certificate No. 2022-00312-A-TCCR
48	Business Plan for Halal Chevron Food Products	Copyright registered with Certificate No. 2022-00316-I-TCCR
49	Investment Brochure for Halal Chevron Food Products	Copyright registered with Certificate No. 2022-00316-I-TCCR
50	Positioning Halal Chevron Food Products	Copyright registered with Certificate No. 2022-00313-A-TCCR
51	Study on the Utilization and Assessment of Marang Fruit (<i>Artocarpus Odoratissimus</i> Blanco) production in Mindanao	Copyright registered with Certificate No. 2022-01305-A-TCCR
52	ADC – Animal Diet Calculator FeedmixJR	Copyright registered with Certificate No. 2022-01304-A-TCCR
53	Alugan A Maguindanaon	Copyright registered with Certificate No. 2022-01518-A-TCCR
54	Instructional Materials on How to Operate the 3 in 1 Charging, Welding, and Starting Aid (CWS) Machine"	IP filed, Copyright with application number 6-2020-680011
55	Powerpoint Presentation for Optimization of Hydraulic Pressures in Kabacan	IP filed, Copyright with application number 6-2020-680004
56	Journal of Agricultural research Development and Technology	IP filed, Registered Trademark
57	University of Southern Mindanao USM Foods	IP filed, Registered Trademark

NO.	TECHNOLOGY	TYPE OF IP ASSET/ TECHNOLOGY STAGE
58	Method for Antibiotic Residue Detection	IP filed, Patent

4.6 RDE Events and Related Information

On recording of RDE events, the RPSO took charge of the development of the USM RDE website (<https://www.usm.edu.ph/rde/>) and Facebook page (<https://www.facebook.com/profile.php?id=100069370001584>). The USM RDE FB page and/or USM RDE website featured 33 timely announcements and news articles related to RDE activities (Table 18).

Table 18. RDE News posted on FB page and/or website.

No.	News title	Date posted
1	Dr. Cañolas and Dr. Crispolon Share Research Findings in Colloquium	January 18, 2023
2	USM Faculty and Researchers Receive Best Poster Award in International Rubber Conference	February 25, 2023
3	USM Receives Funding from DOST-XII for Four RDE Projects	March 08, 2023
4	Griffiths University Professor Chengrong Chen to Deliver Lecture at USM	March 12, 2023
5	USM-KCC houses first FabLab in SOCCSKSARGEN	April 17, 2023
6	NIA, DLS IA, DA-M'LANG, and USM SIGN MOA FOR IA MODEL FARM	April 24, 2023
7	APCoRE 2023 Hybrid International Conference with the theme "Sustainable Research and Education: Trajectories, Hopes, Alarms and Expectations", organized by the Asia-Pacific Consortium of Researchers and Educators (APCoRE), in partnership with ASIST, SEAMEO-TED and SEAMEO CECCEP to be held on August 29-31, 2023.	April 26, 2023
8	Research Colloquium with Dr. Tanalgo, Dr. Casim, Dr. Salvaña and Dr. Rubio	April 26, 2023
9	CONGRATULATIONS Lydia M. Clemen-Pascual for receiving the Outstanding Scholarly Work Award in the School of Science and Engineering during the Ateneo de Manila University (ADMU) Scholarly Work Awards Ceremony!	June 02, 2023

10	USM Undergraduate Students Publish Their Work in Scholarly Journals	June 08, 2023
11	CDA Partners with USM to Enhance Cooperative Education and Training	June 09, 2023
12	Jonah Mae F. Taping, National Champion and Al-hamsour K. Matanog, National Finalist in the Best Thesis Competition on Crop Biotechnology 2023!	June 10, 2023
13	USM and ICRC Collaborate on Ocular Visit and Site Validation in Brgy. Saniag for Sustainable Corn Farming	June 15, 2023
14	MIDYEAR IN-HOUSE REVIEW - July 20, 2023 Deadline of submission of abstracts and narrative reports - July 13, 2023	June 20, 2023
15	Tumutok at makinig sa ikatlong edisyon ng Ugnayan Natin sa Radyo! Makakasama natin si Dr. Cherie C. Mangaoang , Project Leader ng isa sa mga Outstanding 2022 Extension Project mula sa University of Southern Mindanao, College of Science and Mathematics, Department of Biology. Alamin ang kanilang proyekto at mga nagawa sa komunidad.	June 20, 2023
16	USM Receives Plaque of Appreciation from LGU Upi, Maguindanao del Norte for COVID-19 Prevention Project	June 21, 2023
17	SOXAARRDEC evaluates 34 CotSU RDE Papers	June 26, 2023
18	In celebration of DOST-PCAARRD's 12th year, we invite you to a National Policy Forum on the Ridge-to- Reef Approach to Land use and Development Planning.	June 26, 2023
19	USM-ESO Launches TekTalk: Sharing Agricultural Innovations for Social Sustainability	July 03, 2023
20	CONGRATULATIONS Dr. Elorde S. Crispolon, Jr.! Recipient of the Stephen G. Reyes Memorial Award by the Philippine Association of Entomologists, Inc.	July 04, 2023
21	CONGRATULATIONS!!! Region 12 Shines with 3rd Place Triumph in the CHED SUC Fair 2023	July 15, 2023
22	USM and Korean-based NGO sign MOU to Support Durian Industry	July 18, 2023
23	[RDE NEWS] USM Joins Newly Created MINSUPALA-IRDC Innovative Research and Development Consortium	July 21, 2023
24	USM First University in Mindanao to Participate in UPLB OIDHE Training	July 27, 2023
25	SIGNING OF A MEMORANDUM OF AGREEMENT BETWEEN USM AND ISLAMIC RELIEF	August 02, 2023
26	[RDE NEWS]	August 19, 2023

	International Consortium Presents Sustainable Agroecosystems Research and Policy at University of Southern Mindanao	
27	[UPCOMING CONFERENCE] 1ST INTERNATIONAL MULTIDISCIPLINARY RESEARCH & EXTENSION CONFERENCE (IMREC 2023) Endorsed by the Philippine Association of State Universities and Colleges	August 23, 2023
28	[RDE NEWS] CA Faculty Serve as Resource Persons During First Regional Conference on Research-Based Economic Agricultural Technologies and Enterprise (Re-Create 1)	September 10, 2023
29	New RDE Office in USM! USM Institutionalizes Intellectual Property, Technology Transfer and Business Development Office; Marohom Designated as Head	September 12, 2023
30	USM Cacao Post-Harvest Center Inaugurated	September 20, 2023
31	Barlaan, Tanalgo gain S&T Awards from DOST-PCAARRD	November 11, 2023
32	USM Presentations and MOA Signing Held during National Cacao Congress	November 21, 2023
33	43rd RDE In-house Review Conducted	December 5, 2023

5. RDE Policies and Guidelines: MOA, MOU and Resolutions

RDE policies and guidelines are continuously improving by reviewing and updating the RDE chapter of the USM code and the RDE manual. This was reviewed by the University Research Development and Extension Committee (URDEC) which was chaired by the university president and co-chaired by VPRDE together with the RDE directors as committee members.

URDEC is also responsible in crafting resolutions for RDE-related matters and reviewing of memorandum of agreement (MOA) and memorandum of understanding (MOU) to be endorsed for approval. Table 19 listed 21 MOA and 6 MOU reviewed and endorsed by URDEC.

Table 19. MOA and MOU reviewed and endorsed by URDEC.

MOA 2023					
No.	TITLE	COLLABORATOR	LEVEL	NATURE OF COLLABORATION	DURATION/ REMARKS
1	Multi-location adaptation trial for the irrigated lowland inbred entries (NCT-MAT)	DA-PhilRice	National	Research project (Fund: 290, 400.00)	1 year only, January 03-December 29, 2023
2	Productivity Assessment of Robusta Coffee Applied with Organic and Inorganic Fertilizer in Mindanao	DA-BAR	National	Research project (Fund: 3,109,088.40)	1 year only, March 2023 to March 2024
3	SOCCSKSARGEN (SOX) Industry, Energy, Emerging Technology Research and Development Consortium (SOXIEERDC)	DOST –PCIEERD, DOST XII, CFCST, CSU, MSU-GSC, NDDU, NDMU, NDU, SKSU, DBM XII, DTI XII, NEDA XII, NIA XII	National	Research and Development activities	On-going engagement from March 01, 2023
4	Biological Diagnostic Tool for Vulnerable Agroecosystems: Nematode Community Analysis as an Approach to Access Sustainability of Agricultural Practices	DOST-REGION XII	Regional	Research project (Fund: 999,396.20)	1 year only, March 2023 to February 2024
5	Developing Land Management Options for Diverse Cacao-based System in Mindanao (MOU)	UNORKA Mindanao, Barangay Local Government of Sirib, Calinan District Davao and GGGI-BKCF	Regional	Research and extension activities	1 year only, March 2023 to November 2024

MOA 2023					
No.	TITLE	COLLABORATOR	LEVEL	NATURE OF COLLABORATION	DURATION/ REMARKS
6	Development and Characterization of Halal Feeds for Broiler Chicken Production	DOST-REGION XII	Regional	Research project (Fund: 850,000.00)	1 year only, March 2023 to February 2024
7	Digital Promotion and Screening of Local Products or Startups in Region 12 for Technology Incubation	DOST-REGION XII	Regional	R & D project (Fund: 350,000.00)	1 year only, March 2023 to August 2023
8	Implementation of Upgraded Consultancy Service and Technical Assistance for MSMEs thru Consultancy Agricultural Productivity Enhancement (CAPE) Program in Region 12	DOST XII	Regional	Consultancy service project (Fund: 900,000.00)	On-going engagement from 2023
9	Snap Testing Assay for Screening Antibiotic Residues in Milk	DOST-REGION XII	Regional	Research project (Fund: 1,000,162.80)	1 year only, March 2023 to February 2024
10	MOA with Pamahalaang Bayan ng Upi	Pamahalaang Bayan ng Upi	Local	Extension activities	1 year only, from March 2023
11	MOA with National Irrigation Administration, DLS Irrigation Asso. INC and Mlang Municipal Agriculture Office	NIA	Local	Research and extension activities	1 year only, from April 1, 2023
12	Regional Intellectual Property and Technology Business Management (IPTBM) in SOCCSKSARGEN through the RAISE Program	DOST-PCAARRD	Regional	Research project (Fund: 6,247,288.00)	2 years only, from October 1, 2023 to September 30, 2025

MOA 2023					
No.	TITLE	COLLABORATOR	LEVEL	NATURE OF COLLABORATION	DURATION/ REMARKS
13	Establishment of Regional Agri-business Hub (ABH) in SOCCSKSARGEN through the RAISE Program	DOST-PCAARRD	Regional	Research project (Fund: 2,480,800.00)	2 years only, from October 1, 2023 to September 30, 2025
14	Enhancement of the Agri-Aqua Technology Business Incubator (ATBI) in University of Southern Mindanao (USM) through the RAISE Program	DOST-PCAARRD	Regional	Research project (Fund: 3,830,200.00)	2 years only, from October 1, 2023 to September 30, 2025
15	Establishment of Regional Knowledge Management (KM) Hub in SOCCSKSARGEN through the RAISE Program	DOST-PCAARRD	Regional	Research project (Fund: 2,528,000.00)	2 years only, from October 1, 2023 to September 30, 2025
16	MOA with DA-PRRI titled "Etiology Detection and Management Strategies against Pestalotiopsis Disease of Rubber"	DA-PRRI	Local	Extension projects	1 year only
17	MOA with Philippine Cacao Industry Association, Inc.	PCIC	Local	Research and extension activities	5 years
18	Regional Yarn Production and Innovation Center (RYPIC)	DOST-PTRI	Regional	Research and Development activities	September 13, 2023 to September 30, 2024
19	MOA with Fabrecorp Industries Incorporated	Fabrecorp Industries Incorporated	Local	Research and extension activities	4 months

MOA 2023					
No.	TITLE	COLLABORATOR	LEVEL	NATURE OF COLLABORATION	DURATION/ REMARKS
20	Indigenous Phosphorus and Potassium Solubilizing Microorganisms as Potential Enhancer of Phosphorus and Potassium Uptake of Corn	DA-BAR	National	Research project (Fund: 3,000,000.00)	july 2023 to March 2024
21	Establishment of the University of Southern Mindanao Agricultural & Biosystem Machinery Testing and Evolution Center	DA-BAFE	National	Research and Development (Fund: 1,200,000.00)	until revoke

MOU 2023					
No.	TITLE	COLLABORATOR	LEVEL	NATURE OF COLLABORATION	DURATION/ REMARKS
1	MOU with Center for Asian Mission for the Poor Asia (CAMP ASIA)	CAMP ASIA	International	Exchange of expertise	On-going engagement, from 2023
2	MOU with Local Government Unit of Kabacan	LGU Kabacan	Local	Research and extension activities	Until revoke, 2023
3	Optimization of irrigation flow through conduit micro-hydropower to generate electricity for Off-grid barangay of Kabacan, Cotabato (MOU)	LGU Kabacan and DOST-PCIEERD	Local	Research project (Fund: 996,776.00)	5 Months only, April 2023 to October 2023
4	MOU with International Committee of the Red Cross (ICRC)	Red Cross	Local	Research project (Fund: 601,562.00)	8 months only, August 31, 2023 to March 2024

MOU 2023					
No.	TITLE	COLLABORATOR	LEVEL	NATURE OF COLLABORATION	DURATION/ REMARKS
5	MOU with Iranun Peace and Development Council (IPADC)	IPADC	Local	Research and extension activities	Until revoke, 2023
6	MOU with UNORKA Mindanao	UNORKA Mindanao	Local	Research and extension activities	1 year, 2023

Table 20. List of Manuals Approved by the Board of Regents

55-A series of 2023	Approval of the Journal of Education and Community Development (JECD), to be managed by the Graduate School
55-B series of 2023	Approval of the Journal of Business, Economics and Governance Studies (JBEGS), to be managed by the College of Business, Development Economics, and Management
55-C series of 2023	Approval of the Amendments to Policy Guidelines on the Awarding of Incentives (provision of incentives for students and advisers who publish in peer-reviewed publications)
Series of 2023	Approval of the revised RDE manual

6. Services Rendered to the Community

To implement sustainable extension programs, projects and activities in the communities, various training courses/ techno fora/exhibit and activities were conducted as shown in Table 21.

6.1 Training courses/ techno fora/exhibit/field tour conducted

Table 21. The USM Extension list of training courses/ techno fora/exhibit/field tour conducted and facilitated in CY 2023.

Training Title	No. of Beneficiaries	Beneficiaries	Date
Seminar on Training Management	15	AgEcon Student Interns	Jan. 24, 2023
Seminar on Print Media Design and Layout	15	AgEcon Student Interns	Jan.24,2023
Seminar on Project Management	15	AgEcon Student Interns	Jan. 25, 2023
Research Colloquium	73	USM Students	Jan.27, 2023
Seminar-Workshop on Creating and Delivering an Effective Presentation	15	AgEcon Student Interns	Feb. 3, 2023
Seminar on Financial Guide to Achieve a Brighter Life	15	AgEcon Student Interns	Feb. 9, 2023
Seminar on Developing Effective Print-Based IEC Materials	18	USM-CMAHS Students	Feb. 16, 2023
Seminar-Workshop on Effectively Facilitating Adult Learning	9	AgEcon Student Interns	Feb.17, 2023
Seminar-Workshop on Conflict Management and Leadership Style	16	ESO Devcom Interns	March 3, 2023
Seminar on Fundamentals of Photography and Videography	12	AgEcon Student Interns	March 14, 2023
Seminar on Training Management	11	AgEcon Student Interns	March 30, 2023
Seminar on Training Management	9	AgEcon Student Interns	April 4, 2023

Training Title	No. of Beneficiaries	Beneficiaries	Date
Eggciting Enterprise: A training on Mallard Duck-Egg Production for the Livestock-Based Economic Enterprise Development (LEED) in Sultan Kudarat Province Farmers/ Raisers	24	SK Farmers/Duck raisers	April 11-13, 2023
Seminar on Print Media Design and Layout	18	ESO Devcom Interns	April 11, 2023
Seminar on Effective Communication Skills	14	ESO Devcom Interns	April 13, 2023
Seminar-Workshop on How to Write News Feature Article	16	ESO Devcom Interns	April 17, 2023
Seminar on Money Management	18	ESO Devcom Interns	April 20, 2023
Training Workshop on Micro-Hydro Power System Maintenance	15	Pisan IA Officers and Members	Sept. 26, 2023
Farmers Field Day	100	Farmers, LGU	Sept.27, 2023
2022 Regional Science and Technology Week Celebration (SOX Booth)	600	Students, farmers, private & public sectors, LGUs, SUCs	Oct. 11-13, 2022
2022 Regional Science and Technology Week Celebration (USM Booth)	600	Students, farmers, private & public sectors, LGUs, SUCs	Oct. 11-13, 2022
7th Sustainable Ecological Agriculture (SEA) Summit and World Food Day Celebration	500	LGUs, NGAs, Academe, NGOs, farmers, advocates and practitioners of organic agriculture	Oct. 19-21, 2022
Training on Research Design and Statistics	35	CMI R&D Cluster representatives	Oct. 25, 2022

Training Title	No. of Beneficiaries	Beneficiaries	Date
Regional Research Symposium for Farmers and Fisherfolks (RRSFF) in collaboration with DA-ADPO	400	Farmers and Fisherfolks, Academe, NGAs, NGOs	Oct. 27, 2022
Seminar on Intellectual Property Rights	35	CMI R&D Cluster representatives	Nov. 17, 2022
Training on Crop (Cacao) Production and Management	30	Farmers	Nov. 22, 2022
Training on Fish Production and Product Development	30	Farmers/Fisherfolks	Nov. 22, 2022
29th Regional Symposium on Research and Development Highlights	150	CMIs, researchers & other stakeholders	Dec. 9, 2022
Orientation Workshop for AANR Digitization and Administration & Management of the e-Library Database	20	USM Librarians	May 03-04, 2023
Capacity Building for Disease Surveillance and Monitoring of Pestalotiopsis Leaf Fall Disease in Rubber	30	Farmers, AEWs, PLGUs, LGUs of Cotabato Province	July 05, 2023
Training of Trainers on Rubber Production, Processing and Marketing for HVCDP Focal Persons in Region XII by the Agricultural Training Institute Region XII (ATI XII) in collaboration with SOXAARRDEC	20	HVCDP Focal Persons in Region XII	July 17-21, 2023
Training on Organic Aquaculture for Tilapia and Hito Production by Southern Christian College in collaboration with SOXAARRDEC	35	Farmers and Fisherfolks	July 18-20, 2023
Launching/Farmers Forum on the preparation for El Nino Phenomenon conducted in 4 provinces of Region XII (Cotabato, South Cotabato, Sultan Kudarat and Sarangani)	300	Farmers and Fisherfolks, PLGUs, LGUs	Aug. 2023

Training Title	No. of Beneficiaries	Beneficiaries	Date
Lakbay-Palay sa DA-Philrice Midsayap (SOXAARRDEC booth)	100	Farmers, LGUs, farm schools, and other stakeholders	Aug. 10, 2023
Regional Science Technology and Innovation Week (RSTW) 2023 (SOXAARRDEC booth)	500	Students, farmers, private & public sectors, LGUs, SUCs	Sept. 13-15, 2023
2nd USM Technology Forum and Product Exhibition/Farmers' Field Day	200	Students, farmers professionals from Gov't & Private Sectors, LGUs	Sept. 25-29, 2023
Davao Agri Trade Expo (DATE) 2023	500	Students, farmers, entrepreneurs from private & public sectors, LGUs, SUCs	Sept. 28-30, 2023
CHED SUC Fair 2023, SM City Iloilo	300	students, entrepreneurs, farmers	July 10-13, 2023
DA-BAR National Agri-Fisheries Technology Forum and Product Exhibition	500	Students, farmers, entrepreneurs from private & public sectors, LGUs, SUCs	Aug. 14-17, 2023
Lakbay-Palay sa DA-Philrice Midsayap (USM RDE Booth)	100	Students, farmers, entrepreneurs from private & public sectors, LGUs, SUCs	Aug. 10, 2023

Training Title	No. of Beneficiaries	Beneficiaries	Date
North Cotabato Kalivungan Festival @ Amas, Kidapawan City	200	Students, farmers, entrepreneurs from private & public sectors, LGUs, SUCs	Aug. 25-October1, 2023
2nd USM Technology Forum and Product Exhibition/Farmers' Field Day (USM RDE Booth)	200	Students, farmers, entrepreneurs from private & public sectors, LGUs, SUCs	Sept. 25-29, 2023
Regional Science Technology and Innovation Week (RSTW) 2023 (USM RDE booth)	300	Students, farmers, private & public sectors, LGUs, SUCs	Sept. 13-15,2023
Seminar-Workshop on Thesis Advising, Referencing and Basic Statistical Techniques @ USM KCC Hall	80	USM KCC Faculty	Aug. 7, 2023
Strengthening College-based Futures Thinking Capacity Building	55	USM Faculty and Full time researcher	Sept. 26 & 28, 2023
Workshop on the Development of Facilitator's Guide on Cacao Production and Postharvest under Coconut-based Farming Systems	20	USM experts	July 31-Aug. 04, 2023
Training of Trainers (Tot) For Cacao Production and Postharvest Under Coconut-Based Farming Systems	30	Farm owners & LSAs	Aug. 28-Sept. 01, 2023
Training of Trainers on Cacao Production, Fermentation, Drying, And Bean Grading	40	Farm Owners & Managers	Sept. 11-15, 2023
Training For Cacao Production and Postharvest Under Coconut-Based Farming Systems	30	Demo Farm Owners & Managers	Sept. 18-22, 2023

Training Title	No. of Beneficiaries	Beneficiaries	Date
Training For Cacao Production and Postharvest Under Coconut-Based Farming Systems	30	Demo Farm Owners & Managers	Oct. 02-06, 2023
Training on VCO Processing and VCO Enhanced Soap	22	Women in Columbio, SK	Sept. 21-22, 2023
Training on Sampling Techniques and Practical Identification of Selected Faunal Species in Columbio, Sultan, Kudarat	20	Cumbio Residents, MENRO	Oct. 6-7/2023
Training on Sampling Techniques and Practical Identification of Selected Faunal Species in Columbio, Sultan, Kudarat	20	Cumbio Residents, MENRO	Aug. 28-Sep 1, 2023
Training on Cacao	40	Cacao Farmers, Technicians, focal persons	Sept. 11-15, 2023
Training on Cacao	41	Cacao Farmers, Technicians, focal persons	Sept. 18-22, 2024
Training on Cacao	36	Cacao Farmers, Technicians, focal persons	Nov. 6-10, 2023
Training on Cacao	45	Cacao Farmers, Technicians, focal persons	Nov. 20-24, 2023
USM Exhibit (RDTech Center) -MASTS	500	MASTS visitors	Nov. 22-26, 2023
Training on Cacao	50	Cacao Farmers, Technicians, focal persons	Dec. 4-8, 2023
DA Farmers Forum & Product Exhibition	200	Reg 12 Farmers	Dec. 13, 2023
Seminar-Workshop on IEC Print Development	10	GGPB Project Team & beneficiaries	Dec. 22, 2023
Training on Policy Brief Writing	30	CMI of SOXAARRDEC	Dec. 14, 2023
TOTAL	7,412		

6.2 Clients served by RDE

Table 22. Number of clients served by the USM RDE in 2023.

Nature of Services	Number of clients
USMARDC, Central Lab	86
USMARDC Office	23
PICRI	687
RDO	3,051
ESO	1,943
OVPRDE	3,332
TOTAL	9,122

6.3 IEC developed by the Extension Services Office in 2023

Table 23. List of IEC materials developed in 2023.

Items	Multimedia (FB) 27
1	Knowledge and Skills Advancement (KASA) Project for Ambulant Food Vendors
2	Chemikiting Kabuhayan Empowers, Columbio, Sultan Kudarat
3	Empowering Farmers through Powerful: Harnessing Energy Resources for Sustainable Developments
4	USM Technology Forum Shines Light on Innovation
5	USM Joins Regional Celebration of Science, Technology, and Innovation 2023
6	USM Showcases Innovation at the National Agriculture and Fisheries Technology Exhibition 2023
7	USM Participates in ATI’s FGD on the Agriculture and Fisheries System
8	MOA Signed for Humanitarian and Development Projects Between the USM and IRW-Philippines

Items	Multimedia (FB) 27
9	USM Extension Personnel Participate in 3-Day Training on Research Design, Extension, and Micro-credentials
10	TESDA Scholars Embark on Agricultural Crop Production Training
11	USM ESO Holds First Tribute to Graduating Volunteers of 2023
12	Solid Waste Integrating E-Waste Disposal (SWIPED)
13	Promoting Resilient OPV Corn Seed Production for Enhanced Economic Development and Sustainability (PROSEEDS)
14	Maguindanao Communities Embrace Strategic Planning Workshop for Sustainable Development
15	Virgin Coconut Oil (VCO) and VCO-Enhanced Soap
16	Empowering Farmers Through Powerful: Harnessing Energy Resources for Sustainable Livelihoods
17	Cacao Diseases and Management
18	Scientific Research on Coffee Production and Management
19	Going Bananas
20	Analysis of the Philippine Agriculture and Fisheries (AFE) System Landscape
21	Improving Teaching Methods for Asaatids in Barangay Aringay, Kabacan, and Cotabato
22	Development of Facilitators Guide on Cacao Production and Postharvest Processing Techniques under a Coconut-Based Farming System
23	Basic Extension Management
24	Training on Research Design, Extension and Micro-credential
25	Reduce, Reuse, Recycle Using Glass Bottle Shredder
26	Farmers Field School (FFS): Technology Delivery System for Enhancing Skills of Farmers in Swine Production and Artificial Insemination
27	BIO-NIHAN Para sa Kalikasan: Promoting Holistic Biodiversity Conservation Through Community Partnership
	Print (1)
28	Dad Kafdalam Kontra Covid-19
	Videos (9)
	Tektalk 2023

Items	Multimedia (FB) 27
29	TekTalk Episode 1 - Agricultural Innovations of USM towards Sustainable Development
	TeknoGiya 2023:
30	June 2, 2023 TeknoGiya sa Radyo Season 3 - Episode 1 - Rubber Tapping and Latex Processing
31	Pilot Episode - Ugnayan Natin Year 2, May 17, 2023
32	Pilot Episode Teknogiya sa Radyo Season 3, May 19, 2023 - Season 3 Rubber Tapping and Latex Processing
	Ugnayan Natin 2023:
33	June 14, 2023 Ugnayan Natin Season 2, 2023 - SWIPED Solid Waste and Integrating Program for E-Waste Disposal
34	June 21, 2023 - Ugnayan Natin Season 2 Episode 3 - Bionihan para sa kalisakan - Promoting Holistic Biodiversity Through Effective Community
35	May 31, 2023 Ugnayan Natin Season 2, 2023 Tablea -Pangkabuhayan para sa Kotabatenong Pamayanan
36	Pilot Episode - Ugnayan Natin Year 2, May 17, 2023

7. Awards

7.1 Student Awards related to RDE

Table 24. List of Awardees for Publication during Student Awards

Student	Publication
1. Asraf Lidasan	Fruit color preference of frugivorous birds in an agroecosystem in Southcentral Mindanao, Philippines, <i>Birds</i> , 4(2), 190-201.
2. Gerald Vince N. Fabrero	Uncovering the effects of COVID-19 mask wearing on bird flight initiation distance in urbanized areas in Southern Philippines, <i>Animals</i> , 13(8), 1289
	Dropped interest: Generation Z students' demotivating reasons on gradual dislike on sports and recreation, <i>Sportis</i> , 9, 98-124.
4. Jirizza O. Roquero	Fruit color preference of frugivorous birds in an agroecosystem in Southcentral Mindanao, Philippines, <i>Birds</i> , 4(2), 190-201.

Student	Publication
5. Kier C. Dela Cruz	Are we hunting bats to extinction? Worldwide patterns of hunting risk in bats are driven by species ecology and regional economics, <i>Biological Conservation</i> , 279, 109944. Early twenty-first century biodiversity data pinpoint key targets for bird and mammal conservation in Mindanao, Southern Philippines, <i>Biodiversity</i> , 24(3), 146-163. Overview of priorities, threats and challenges to biodiversity conservation in the southern Philippines, <i>Regional Sustainability</i> , 4(2), 203-213.
6. Navel Kyla B. Balasa	Fruit color preference of frugivorous birds in an agroecosystem in Southcentral Mindanao, Philippines, <i>Birds</i> , 4(2), 190-201.
7. Sumaira S. Abdullah	Early twenty-first century biodiversity data pinpoint key targets for bird and mammal conservation in Mindanao, Southern Philippines, <i>Biodiversity</i> , 24(3), 146-163. Overview of priorities, threats and challenges to biodiversity conservation in the southern Philippines, <i>Regional Sustainability</i> , 4(2), 203-213.

7.2 Faculty and Staff Awards related to RDE

Table 25. List. Awardees (73) for Gawad Lathala (Publication) for the Araw ng Parangal 2023

Awardees with 1-4 publications (61)			
1	Agduma, Angelo R.	32	Manceras, Rhodora S.
2	Alucilja, Renel M.	33	Migalbin, Josephine R.
3	Baladjay, Arndiel A.	34	Molina, Elizabeth C.
4	Barbosa, Estella B.	35	Murray, Sedra A.
5	Barlaan, Edward A.	36	Muttulani, Mark Al-jamie J.
6	Basan, Romiel John P.	37	Navaluna, Jay M.
7	Basay, Carlito P. Jr.	38	Navarro, Frederick John B.
8	Besana, Cyrelle M.	39	Ontok-Balah, Khadiguia

9	Borja, Bernadith T.	40	Painagan, Marilyn S.
10	Calibayan, Maria Luz D.	41	Paleta, Leonard M.
11	Casim, Lothy F.	42	Pascual, Lydia C.
12	Castillo, Joseph O.	43	Pascual, Ronald Z.
13	Crispolon, Elorde C.	44	Pecho, Jasmin A.
14	Datucali, Nasrudin M.	45	Pimentel, Jonald L.
15	Dayaday, Maricel G.	46	Pueyo, Jacinta T.
16	Duka, Jeannie U.	47	Rubio, Meriam M.
17	Ele, Julius Jerome G.	48	Sadoral, Joan P.
18	Esberto, Ma. Dely P.	49	Sales, Emma K.
19	Flores, Josephine R.	50	Saliling Willie Jones B.
20	Flores, Pia Amabelle	51	Sanchez, Carlito B.
21	Flores, Vrenelie III	52	Soriano, Hazel Ann S.
22	Galleto, Fredelino A. Jr.	53	Sumael, Monaira I.
23	Garcia, Francisco Gil N.	54	Sumaya, Neil Pep Dave N.
24	Gonzaga, Elsa A.	55	Tagare, Ruben Jr. L.
25	Gonzaga, Loveille Jun A.	56	Tanabe, Maria Elena
26	Gunsayan, Esmaira G.	57	Tandog, Leorence C.
27	Jumao-as, Cromwel M.	58	Tangonan, Naomi G.
28	Junatas, Khan L.	59	Tidula, Tito Jun T.
29	Lumbao, Lilian A.	60	Tulud, Donnie M.
30	Mag-aso, Jennet R.	61	Turnos, Nicolas A.
31	Manceras, Leanne Jay S.		

Awardees 5 or more publications			
1	Bretaña, Bryan Lloyd P.	7	Sepelagio, Elma G.
2	Cabasan, Ma. Teodora N.	8	Solpot, Tamie C.
3	Descalsota-Impleo, Gwen Iris	9	Tabora, John Aries G.
4	Imlan, Jurhamid C.	10	Tanalgo, Krizler C.
5	Mangaoang, Cherie C.	11	Tenorio, Jan Clyden B.
6	Salvaña, Florence Roy P.	12	Verzosa, Debbie Marie B.

Table 26. List of Awardees (18) for Gawad Likha (IP Asset and creative work) for the Araw ng Parangal 2023.

No.	Awardee	No.	Awardee
1	Arjay S. Agbunag	10	Jalaloden B. Marohom
2	Amme Rose Blonto-Nonol	11	Riceli C. Mendoza
3	Ivy Mar B. Cabornida	12	Joefranie G. Ocampo
4	Lloyd Anton Von M. Colita	13	Paul John B. Ongcoy
5	Melecio A. Cordero, Jr.	14	Eugene G. Ranjo
6	Michael D. Derla	15	Harem R. Roca
7	Francisco Gil N. Garcia	16	Emma K. Sales
8	Ryan Z. Gonzaga	17	Yvonne V. Sailing
9	Magno M. Gonzales	18	Willie Jones B. Saliling

Table 27. List of awardees (68) for Gawad Likha for the Araw ng Parangal 2023

Awardees with Externally Funded RDE Projects of Below 5M			
1	Atok, Geoffray R.	24	Mag-aso, Jennet R.
2	Baladjay, Arndiel A.	25	Mamalo, Benjamin I.
3	Bangoy, Janice M.	26	Manceras-Tejero, Leanne Jay S.
4	Bello, Rhenalie N.	27	Mangaoang, Cherie C.
5	Besana, Cyrelle M.	28	Molina, Elizabeth C.
6	Bolotaolo, Kathleen Ivy.	29	Monderin, Marcos E.
7	Borja, Bernadith T.	30	Muttulani, Mark Al jamie J.
8	Cabornida, Ivy Mar B.	31	Ocasion, Leandreux D.
9	Calub, Marilyn P.	32	Pahm, Sandra Joy P.
10	Candolita, Maria Irinea S.	33	Pasquin, Ivy M.
11	Cariaga, Mary Rodelyn A.	34	Ranis, Jane B.
12	Casim, Lothy F.	35	Sadoral, Joan P.
13	Castillo, Joseph O.	36	Salvaña, Florence Roy P.
14	Dela Viña, Nerissa G.	37	Balbuena, Marry Grace N.
15	Dulay, Cheryl Y.	38	Solpot, Tamie C.
16	Ele, Julius Jerome G.	39	Sumael, Monaira I.
17	Empleo, Gwen Iris D.	40	Tabora, John Aries G.
18	Estilloso, Eimer M.	41	Tamon, Florie Jane M.
19	Evangelista, Conrado C.	42	Tanabe, Maria Elena N.
20	Gacus, Roy B.	43	Tandog, Leorence C.
21	Gomez, Norma U.	44	Tidula, Tito Jun T.
22	Gonzaga, Loveille Jun A.	45	Valdez, Lorna G.

23	Jumao-as, Cromwel M.		
Awardees with Externally Funded RDE Projects of 5M -Below 20M			
1	Alucilja, Renel M.	8	Lucena, Sheena B.
2	Basoy, Jigzcel Divine F.	9	Marohom, Jalaloden B.
3	Cabantug, Rezin G.	10	Migalbin, Josephine R.
4	Cabasan, Ma. Teodora N.	11	Saliling, Willie Jones B.
5	Cena, Romulo L.	12	Tangonan, Naomi G.
6	Dayaday, Maricel G.	13	Garcia, Francisco Gil N.
7	Flores, Pia Amabelle M.		
Awardees with Externally Funded Extension Projects			
1	Cañolas, Mary Joy S.	3	Panday, Samsudin S.
2	Imlan, Jurhamid C.	4	Turnos-Millagrosa, Lorelyn Joy N.
Awardees with Externally Funded Projects of 20M Above			
1	Barlaan, Edward A.	4	Cahatian, Purificacion O.
2	Sales, Emma K.	5	Garcia, Adeflor G.
3	Pascual, Lydia C.	6	Roca, Harem R.

7.3 Other national and international awards related to RDE

- Dr. Edward A. Barlaan (Professor Emeritus) bagged prestigious awards during the celebration of the 51st anniversary of the Department of Science and Technology - Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (DOST-PCAARRD) on November 10, 2023 at Elvira O. Tan Auditorium, PCAARRD, Los Baños, Laguna. He won the **Best Research Paper, (1st place)** with his paper titled "DNA Probe Kits for Detection and Monitoring of Banana Disease Pathogen in Digital PCR or Quantitative Real-Time PCR: A Boost to Banana Industry." He represented the University of Southern Mindanao and carried the banner of the SOCCSKSARGEN Agriculture, Aquatic, and natural Resources Research and Development Consortium (SOXAARRDEC). Dr. Barlaan was given a plaque and Php 200,000 while USM and SOXAARRDEC received Php 50,000 and Php 40,000 respectively.



Photo: 2nd from the right-Dr. Tanalgo

- Dr. Krizler C. Tanalgo, along with his co-researchers, Dr. John Aries Tabora and Dr. Alice Catherine Hughes, were recognized for their exceptional contribution to the field of Natural Resources and Environment with their internationally published paper titled "Bat Cave Vulnerability Index (BCVI): A Holistic Rapid Assessment Tool to Identify Priorities for Effective Cave Conservation in the Tropics." Representing the University of Southern Mindanao, the paper was bestowed the distinguished **Elvira O. Tan Award for Outstanding Published Paper in the Natural Resources and Environment Category**. He received a plaque and Php 100,000.



Photo: 2nd from the right-Dr. Tanalgo

- Thesis Advisee awardees- at the National Level.

Thesis Student	Award	Paper
Jonah Mae Taping	First- National Best Thesis- Competition on Crop biotechnology 2023	In vitro biocontrol of <i>Fusarium odoratissimum</i> causing Panama wilt using cardaba fungal endophytes
Al-hamsour K. Matanog	Finalist- National Best Thesis Competition on Crop biotechnology 2023	Bioformulation of microbial consortium derived from fungal endophytes of rubber (<i>Hevea brasiliensis</i>) against <i>Corynespora cassiicola</i> causing <i>Corynespora</i> leaf fall disease



Photo: Middle-Ms. Taping; 2nd from the right-Mr. Matanog

- The University of Southern Mindanao (USM) project: "Solid Waste Integrating E-Waste Disposal" (SWIPED), spearheaded by Dr. Maricel G. Dayaday, alongside Engr. Fredelino A. Galleto Jr. and Engr. Saque Amilbahar, won the 2023 URS National Research and Extension Advocacy Conference for Change (NREACH), "BEST PAPER" in the Extension-Environmental Preservation category, last November 15-17, 2023 at the Dumagat Hall, URS Main Campus, Tanay Rizal, Philippines, participated both in-person and via Zoom.



Photo: Engr. Amilbahar (left) and Engr. Dayaday

- Associate Professor Lloyd Anton Von M. Colita, MEAL, SMRIL's research paper entitled "Framing Marcos Jr.'s SONA: Comparative Study of Online News in the Philippines" was adjudged as Best Research Paper during the 1st International Campus Media Research Conference held on November 8-9, 2023 at Grand Astoria Hotel, Zamboanga City.



- Best poster award on the study 'New Colletotrichum species infecting rubber in the Philippines and the potential of endophytic fungi as biocontrol against the pathogen', by Bernadith Borja, Ma. Teodora N. Cabasan, Melesa Prado, Jomarie Abubakar and Tamie Solpot, during the 2023 International Rubber Conference in Kuala Lumpur, Malaysia. This study is supported the DOST-PCAARRD.
- Engr. Jay M. Navaluna, a faculty from the College of Engineering and Information Technology (CEIT) of USM, earned best student presentation award during the 20th IWA International Conference on Diffuse Pollution and Eutrophication (IWA DIPCON) 2023 held in EXCO Daegu, Korea on December 5-8, 2023, with his platform presentation titled: ***"Prediction of Event Mean Concentration Pollution of Low Impact Development (LID) Designs Using Artificial Neural Networks (ANN)."***



8. Future Directions of RDE

- To sustain the increase of funds from collaboration for RDEI activities and projects,
- To secure 50% increase in the number of personnel with access to RDE funds.
- To increase the number of students involved in funded research projects and RDI Centers.
- To strengthen RDE capability of faculty and researchers by conducting at least two seminars, workshops, and trainings per year from 2023 to 2028.

- To increase the level of knowledge creation by:
 - increasing the number of peer-reviewed articles published by USM faculty, researchers, and students
 - increasing the number of citations
 - increasing the number of faculty with publications or IP assets
- To increase visibility of USM-managed journals by
 - having at least 3 peer-reviewed USM-managed journals, and indexing at least 2 of them in reputable indexes, by 2028
 - increasing the number of views to the RDE website
 - increasing the number of news articles submitted to the USM Monitor and other print media
- To intensify the university IP assets by increasing the number of research creative outputs registered as IP rights (patent, UM/ Industrial Design) and utilized for commercial and industrial purposes and train USM constituents in IP protection and licensing
- To strengthen RDEI Facilities of the university and establish new research and innovation centers and office: Regional Yarn Innovation Research Center, University of Southern Mindanao Agricultural and Biosystems Machinery Testing and Evaluation Center, Food Lab Center, Intellectual Property and Technology Business Management Office.
- Strengthen outreach activities and establish guidelines/procedures
- Conduct capacity building on: Basics of Extension Education, Community engagement project proposal preparation, Community organizing, Impact assessment, Publication of extension projects to referred Journals
- Organize USM Experts and expand their involvement and impact to the community and region
- Sustain the dissemination and promotion of USM technologies and generated knowledge through online platform or TekTalk, printed materials and research colloquium

RESOURCE GENERATION AND ENTREPRENEURIAL SERVICES

EXECUTIVE SUMMARY

The University of Southern Mindanao (USM) envisions quality and relevant education for its clientele to be globally competitive, culture-sensitive and morally responsive human resources for sustainable development. Hence, it continuously develops, implements and sustains relevant programs, projects and activities (PPAs) which accelerate socio-economic development, promote harmony among diverse communities and improve quality of life through instruction, research, extension and resource generation. in its service areas in Mindanao.

Consistent with the resource generation function of the university, the University Resource Generation and Entrepreneurial Services (URGES) – earlier known simply as Production and later as Agro-industrial Production Services (AIPS) – is established to sustain local income in support to the PPAs of the University under its other major functions of instruction, research and extension. The URGES undertakes this mandate primarily through the Business Development Center (BDC) and University Health Services (UHS).

The URGES, through the BDC, UHS and HRDT as key support players, endeavors to continuously enhance its agri-based and service-oriented income generating PPAs (IG-PPAs) where wholesome and competitive technologies and innovations are blended, synchronized and utilized. This is to ensure that the IG-PPAs of the University can sustain their financial viability state, promote decent human-environment relations, produce quality products and services that are affordable and sensitive to the culturally diverse customers, and showcase technologies and innovations for possible adoption by the clientele.

In cognizance of the foregoing which manifests the well-rounded distinctiveness and expanded sphere of the University resource generation agenda and in anticipation of more efficient and effective implementation and sustainability of its IG-PPAs, this USM Manual of Operations for Resource Generation (USM-MORG) has been developed to serve as a guide especially of the URGES Unit and its support instrumentalities to anticipate quality performance of their respective functions, duties and responsibilities.

BUSINESS DEVELOPMENT CENTER

Business Development Center (BDC) is the production unit of the University which is headed by a Director assisted by Project Managers and Project Development Officers (PDOs). The BDC is under the office of the Vice President for Resource Generation and Entrepreneurial Services. The BDC undertakes resource-generation activities, the income of which forms part of the special trust fund of the University. It supervises and monitors all the activities of the various Agri and Non-Agri business projects of the University and implements all pertinent policies, rules and regulations promulgated by the URGMC and approved by the USM-BOR. In addition to its resource generation functions, the BDC also provides an appropriate venue for training students enrolled in agribusiness and technical or special courses, provides areas and facilities for conducting basic and applied research, and provide sources of information to bolster the research and extension program of the University.

At present BDC has five existing Agricultural IGPs: AVAS Rubber, **corn, oil palm, fruit crops and land rental** and five non-agricultural IGP's (**Hostel, Café Martina, UPC, DXVL and Canteen**).

OIL PALM



Oil palm production in Southern Mindanao, Philippines particularly in North Cotabato has continuously gained popularity among farmers, especially with the profitable return of investment compared to other plantation crops. The success of oil palm is closely associated with sound and proper cultural management practices.

The University of Southern Mindanao Oil Palm Production Project is located at PICRI/Lumayong, Main Campus occupying more or less seventy (70) hectares, and maintained by sixteen (16) competent field workers.

The project also serves as the training ground for the College of Agriculture students of the University for cultural management of oil palm production during their bridging program as well as during NC II assessment for some unit of competencies of the ACP qualification.

Project Activities

Activities undertaken in the project includes round weeding around the palm, fronds removal, fertilization, harvesting, hauling, and gathering of fronds after harvest. Delivery and marketing FFBs were at Univanich oil palm milling plant at Carmen, Cotabato.

The project earned **P5,270,932.85** with the total expenses of **P4,461,603.22** and a net cash available of **P 809,329.63**

Plans and Project for 2024

- With the end effect of following its cultural practices (Deleafing on time, fertilizer application, slashing, herbicides application) the oil palm could generate more income this 2024.
- With the USM President's support as regard to logistics, these could translate to tapping the potential of the oil palm when it comes to yield performance.



Recommendation

- On time availability of needed inputs fertilizers and herbicides
- Venturing alternative buyer
- Replanting and scouting of possible expansion areas to sustain the production and income
- Repair Tractor Trailer for hauling FFB rehabilitation
- Repair Forward Track for Delivery of FFB at Univanich Carmen North Cotabato.

AVAS RUBBER

The USM-AVAS Rubber Complex is located within Arakan Valley Complex with a total number of 4,091 hectares (Pres. Roxas and Arakan Valley municipality). The area was founded by late Hadji Bai Fatima Plang in the late 60s.

The Arakan Valley Complex known as USM-AVAS Rubber Complex is mostly occupied by tenants or squatter/settlers. The AVAS Rubber Complex only has a remaining 185 hectares being occupied. Out of this area, only 44 hectares more or less, are planted with rubber of different sizes/age and clones. Almost 10 years ago, the management requested to cut down old and unproductive 18 hectares trees, and plan to replace coconut and oil palm trees and other crops such as cacao and coffee, and little banana for consumption and shade for cacao and coffee.

An estimated area of 50 hectares more or less agri-land is presently utilized by USM-AVAS, occupied by old school buildings, office, motor pool, crop building, school plaza and presently planted with oil palm 9 years old (1.75 hectares), and occupied with staff housing and has road network. A scattering of trees, such as Gmelina, mahogany, paper tree (Palcata), acacia and fruit trees, are planted along creek and riverbank and natural drainage and resettlement areas for tappers and staff families of USM-AVAS employees and settlers. Lately, settlers have become a problem because of uncontrolled house improvement/construction.

The project is manned by two (2) regular employees and four (4) Contract of Service (COS). A total of only twenty-four (24) tappers are employed at present and eight (8) of them produce latex at 60-40% sharing in favor of the project. In the previous years (2012-2015), the project produced a high net income due to higher price of rubber cuplump/coagulum.

Project Staff

Permanent		
1.	Rowena B. Otadoy	Clerical/paper works, follow up office transactions and maintain office cleanliness. Assist area monitoring and supervision.
2.	Fe S. Calvo	In-charge in recording of daily latex and cuplump collection. Field inspection and assist area monitoring and supervision.
Contract of Service (COS)		
Farm Guard (2)		
1.	Venjo Linog	Area monitoring, inspection and safeguard of USM properties and entry of settlers.
2.	Jemar Mayormonte	
Latex Collector (1)		
1.	EdminPayo	Daily latex collection from the area to the barn and maintenance.

Field Worker (1)

1. Danny Boy Putongan - Area maintenance, spare tappers and other related works of the project.

Notable Accomplishments

For 2023, the projects gross receipts amounted to to **one million four hundred three thousand six hundred four pesos and fifty five cents (php 1,403,604.55)**.

Challenges

From the start of CY-2020, AVAS Rubber Project experienced a decrease in production due to the following:

1. Lack of tappers due to low price of rubber
2. Wintering period
3. Low latex production
4. Delayed arrival of farm inputs (fertilizers, chemical and tapping paraphernalia).
5. Lack of mode of transportation for hauling latex and cuplump from the area to the barn.
6. Lack of manpower
7. Most of the area is in need of total area slashing and clearing

Recommendation

1. Immediate purchase of single motorcycle and farm inputs especially fertilizers herbicides, acid, gasoline and tapping materials.
2. Rehiring of Job Order/COS personnel like farm workers for area maintenance, security guards for guarding and area monitoring.

3. Total area slashing/clearing
4. Construction/improvement of any structure of settlers is strictly prohibited and implemented.
5. Construction of storage building for cuplump and coagulum.

FRUIT CROPS

Fruit crops are one of the agricultural IGPs of the University, most of them occupying the land USMARC at the main campus. The plants mainly serve instructional purposes and as laboratory area for Agriculture and other students of the University. The area is often visited by students, farmers and visitors from other schools and surrounding municipalities and provinces.

It was expanded to become an IGP, its income augmenting the income of the University. The project is composed of mango, rambutan, durian, mangosteen, lanzones, and just recently, banana-lakatan production. All fruit trees are now on their fruit-bearing age. The total area for all fruit trees and banana-lakatan is 11.5 ha , 8.5 ha for fruit crops. The Project is currently manned by one Project-in-Charge and one Job Order personnel.

Number of personnel involved

During the first two quarters, of 2023 fruit projects were maintained and operated by seven (7) Job farm workers supplemented by other agricultural IGP field workers as needed.

Notable accomplishments

- Application of fertilizers across the different project areas after more than five (5) years of no fertilization
- Slash weeding was done in all the projects. Cleaning of trees and cutting of hedges were also done to maximize availability of sunlight.
- Pruning/clearing of unwanted and non-productive branches were done especially among old fruit trees.

Fruit Project



LANZONES USMARC AREA



MANGOSTEEN USMARC AREA



RAMBUTAN USMARC AREA



LANZONES AGRICULTURE AREA



LANZONES SWINE AREA

Land Rental Project Financial Performance for 2023.

GROSS INCOME	EXPENSES	NET INCOME
P2,745,153.50	P420,109.43	P2,325,044.07

BDC CORN

In 1980, the Corn Seed Production Project started to showcase the technologies generated by USM Corn Research and Outreach Program. The 26.8 hectares of available areas at USMARC were utilized for this project. In 2003 the corn project expanded to Ranso with an area of 20 hectares. Due to the high demand for corn seeds and with the unity and hardworking of corn project personnel the project expanded again in 2007 into 5 hectares in the housing area.

As time goes by there were other projects existed and other corn areas were converted into other crops. In 2002, the 10 hectares portion USMARC of corn area was converted into fruit crops. By the year 2008, areas from USMARC near USMARC gate highway with 10 hectares area altered into rice crop. Additionally, in the same year, areas from housing, riverside, and USMARC with a total of 30 hectares wereconverted to oil palm production. There are remaining 25 hectares utilized for corn production.

In the year 2015-2016, the project incurred a shortfall delivery of 3,096 bags of registered seeds of USM Var 10 to the Department of Agriculture Region XI due El Niño phenomenon and rat infestation, which resulted in the downfall of the project in 2017. Mr. Joel C. Valencia took over the project in May 2018 with the assistance of Dr. Margie B. Galang. With the 15 personnel retrenched working in the project due to an income deficit, six personnel were recalled helping in the operation of the corn project. The shortage delivery of seeds to DA-XI was completed in July 2019. The generated income for 2020 amounting to PhP2,054,000.00 was not enough to pay the negative balance of the project which was incurred in the previous years of operation.

Through hard work and cooperation with the Team, the project had recovered.

BDC – CORN PERSONNEL

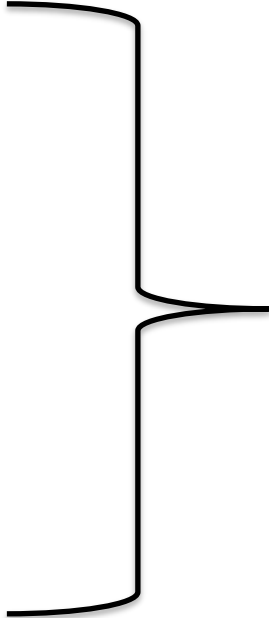
BDC CORN PERSONNEL		DESIGNATION	STATUS OF APPOINTMENT	% INVOLVEMENT IN THE PROJECT
1	EFREN E. MAGULAMA	Head	Permanent	10
2	NENITA E. OLERO	Assistant Head	Permanent	20
3	PERFECTO S. GARCIA, JR.	Farm Foreman	Permanent	50
4	ZAIN M. BALAYMAN	Security Guard I/Farm Worker/Technical	Casual	30
5	JOANNE E. DURAN	Project Assistant	COS	100
6	LASIB K. SOLAIMAN	Light Equipment Operator	COS	100
7	ARMAN E. DIAZ	Farm Worker	COS	100
8	ROGER M. DELA CRUZ	Farm Worker	COS	100
9	MARJUN B. REYES	Farm Worker	COS	100
10	TATO S. PANGA	Farm Worker	COS	100
11	MOHAMAD M. BALAYMAN	Farm Worker	COS	100

ACCOMPLISHMENT

- Delivered 170 bags USM Var 10 and 300 bags USM Var 5 to LGU Bagumbayan, Sultan Kudarat, Kidapawan and Arakan, Cotabato amounting to P540,500.00.
- Harvested 6,000 kgs of USM Var 10 at Block D3, D4 and D6 seeds for delivery to LGU Bagumbayan, Sultan Kudarat, Kidapawan and Arakan, Cotabato amounting to P575,000.00
- Harvested 500 kgs of Glutinous seeds at Block D9 amounting to P70,000.00

Inventory

A.1 Seeds

Variety	No. of packets/kilo	Price per kilo	Expected Income
Breeder Seeds:			
USM Var 5	564 packets	 BREEDER SEEDS	
USM Var 6	284 packets		
USM Var 7	184 packets		
USM Var 9	212 packets		
USM Var 10	584 packets		
USM Var 24	448 packets		
USMARDC Glut 1	328 packets		
USM NCH 33	50 kgs		
Ay 125	20 kgs		
Ay148	40 kgs		
Dy 270	40 kgs		
GR 1	200 kgs		
GR 2	300 kgs		
GR 3	250 kgs		
Foundation Seeds			
		80.00	4,800.00
USM Var 6	60 kgs	80.00	16,000.00
USM Var 10	200 kgs	80.00	6,400.00
USM Var 12	80 kgs	80.00	6,400.00

Variety	No. of packets/kilo	Price per kilo	Expected Income
USM Var 24	80 kgs	80.00	8,000.00
USM Var 5	100 kgs	80.00	6,400.00
USM Var 7	80 kgs	80.00	6,400.00
USM Var 9	80 kgs	150.00	30,000.00
Glutinous Corn	200 kgs		
TOTAL			84,400.00

A.2 Commercial Grains

Variety	No. of kilos	Price per kilo	Expected Income
Commercial Grains	1,600	15.00	24,000.00

A.3 Inputs

Item	Unit	Quantity	Price	Total
1. Agricultural Inputs**	0	0		-
2. Fuel	Liters	845.86	72.00	60,902.60
		Grand Total		60,902.60

** PO on the process

A. Standing Crop:

Variety/Location	No. of Hectares	Date Planted/ Date Harvested	Expected Harvest (kgs)	Price per kilo (Php)	Expected Income
USM Var 24ht Breeder Seeds/Block B5	0.25	Sept 05, 2023/ Dec 14-19, 2023	500	-	-
Glutinous Corn/ Block D9	1.0	Sept 05, 2023 Dec 3, 2023	2,000	150.00	300,000.00
USM Var 10/ Block A4	0.75	Aug 17, 2023/ Nov 25-30, 2023	2,000	60.00	120,000.00
USM Var 10/ Block A5	0.5	Sept 21, 2022/ Jan 6, 2023	1,250	60.00	75,000.00
USM Var 10/ Block A2	1.0	Aug 24, 2023/ Dec 1-7, 2023	2,500	60.00	150,000.00
USM Var 5/ Block D10	3.0	Oct 16, 2023/ Jan 29-30, 2024	7,500	60.00	450,000.00
TOTAL					1,095,000.00

Other Accomplishments:

- Planting of USM Var 10and USM Var 5 seed maintenance and improvement.
- Crop improvement of parent lines of single and three cross hybrids (USM NCH 33 and 35) by incorporating genes carrying traits for herbicide tolerance.

- Planting of USM Var 24 and USM Var 6 with tolerance to herbicide for seeds distribution.



- USM and International Committee of the Red Cross (ICRC) forged a Memorandum of Agreement last September 13, 2023, for Organic Corn Seed Multiplication project at Saniag, Ampatuan, Maguindanao. Ten farmers beneficiaries of the project were trained for corn seed production at USMARDC last October 12, 2023.



- The USM-ICRC Team composed of Dr. Efren E. Magulama, Ms. Nenita E. Olero, Dr. Mary Joy S. Cañolas and Ms. Janice M. Bangoy continuously monitored the organic seed multiplication of USM Var 6 at Brgy. Saniag, Ampatuan, Maguindanao.



Barangay Saniag, Ampatuan, Maguindanao overview.



One of the set-ups of 10 farmer-partners. USM Var 6 intercropped with mungbean at Purok 4B, and Leonen, Brgy. Saniag, Ampatuan, Maguindanao, respectively.

ISSUES/CONCERNS:

- Experiencing low demand for OPVs due to new technologies of herbicide tolerance hybrids.
- Irrigation equipment is badly needed especially during dry months.
- Need to improve the seed storage to maintain seed viability for a longer period.

LAND RENTAL

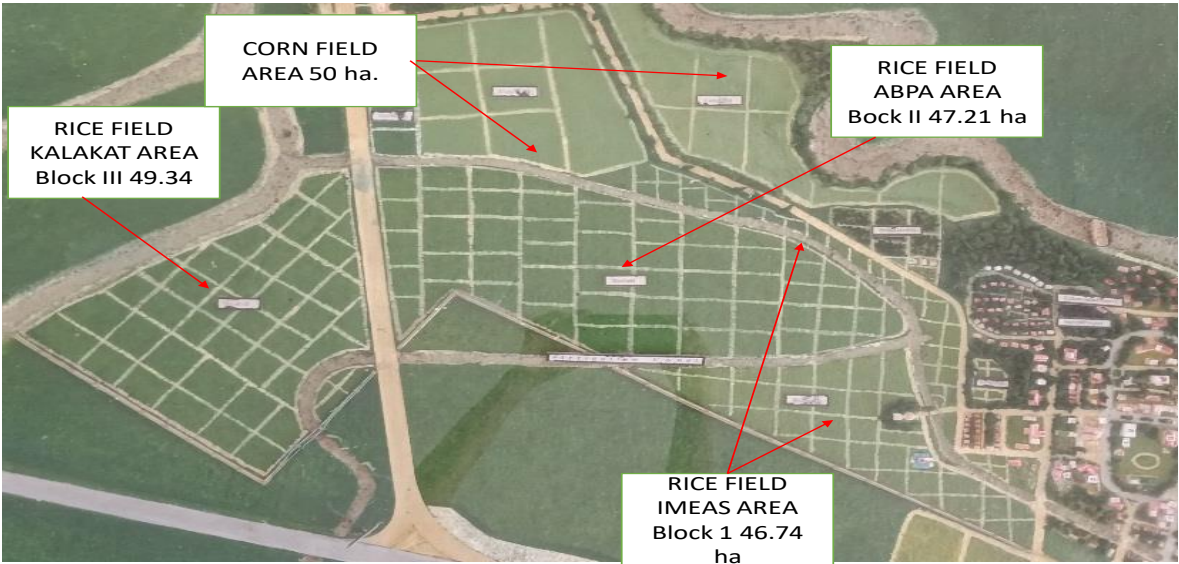
The area for the land rental starts from the IMEAS down to Kalakat. With a total area of 152.79 ha. more or less and presently cultivated by 190 farmers. The area is being traverse by the irrigation canals and roads, could be planted with rice the year round as irrigation water is readily available as scheduled.

The rice land rental is being manned by three (3) permanent employes of the University, namely Zainol Gonsang Farm Forman and Baser Kadingilan, Farm worker II, the University is Collecting 15% share of the gross yield.

Land Rental Project Financial Performance for 2023.

Gross Income	Expenses	Net Income
P 376,550.00	P 297,745	P78,804.46

Sketch of Land Rental Area



Plans and Projections for 2023

- The strict imposition of the 15% share of the University
- To see to it that collected share is not the second-drum of the rice thresher, as it is not the quality one.
- Immediate drying of the collected share.
- Immediate disposal thru bidding the collected shares
- P 400,000.00 projected income

Problem Encountered:

- Low collection of USM share due to some farmers occupants are not giving the right share to the University 15% of the gross production



ABPA AREA



IMEAS AREA



KALAKAT AREA

Land Rental Project Financial Performance for 2023.

Gross Income	Expenses	Net Income
P 15,270,798.33	P 12,740,227.52	P 2,530,570.81

UNIVERSITY CATERING AND ACCOMMODATION SERVICES



UCAS is one of the income generating projects of the University under non-agricultural category. One of the thrusts of the University is to support classroom instruction with actual exposure, most especially in the BS Hospitality Management program. The UCAS serves two (2) functions—production and instruction.

The unit has twenty-two (22) quad sharing rooms, 3 Function Halls, LPO Pavilion in Hostel compound.

Manpower

The hostel currently has 15 personnel manning the operations of the unit

Future Directions

Additional desirability to the clients depends on the infrastructure and other service offered by this establishment. It is planned that we will be constructing a CAUCUS CENTER worth EIGHT MILLION PESOS (Php8,000,000.00) subject to progressive construction to be placed. The budget for the said project will be sourced out from the profit or income of the USM Hostel. The inclusion of the USM Hostel Accommodation to accept more guests. We also have the plan to re-landscape the Lawn of the USM Hostel.. For this, we will also have a good representation of how the clients choose USM as venue for trainings and etc. After the construction of the CAUCUS CENTER and re-landscaping of the lawn of the Hostel, more guests and visitors will visit USM. It also planned that in order for us to accommodate the 500 guest at a time, a FOUR storey building (40 bedrooms) will be constructed as venue for future conventions and conferences. LPO Pavilion that can accommodate 300 guests, a venue for conventions, reunions & Acquaintance parties and other social functions. The objectives why we want to have this LPO Pavilion to address the demands of the clients based on the time and the conducts of different functions. It is a state of the art building in the heart of the University.

Actual Accomplishment

- Procurement of kitchen gadgets
- Procurement Bedroom amenities
- Procurement of Dining room paraphernalia
- Minimal Repair of plumbing and electrical
- Lighting and wiring of Hostel Kitchen and Office.



Caucus Center (proposed)



Four (4) Storey Hostel

The USM Hostel needs more amenities, recreation and modernized buildings, so that we can cater the needs and satisfaction of our clientele compared before. Contrast to the other hotels, a capital is needed in order for them to have a progress plans and output. The USM hostel had already embarked good business relations in many clienteles. Income speaking, Hostel considered being the Gold of the University. Income-wise, the USM Hostel is considered the cream of the crop of the University.



**FOOD SERVICE
ACTIVITIES**



**FOOD SERVICE
ACTIVITIES**



KITCHEN ACTIVITIES







The DXVL 94.9 Kool FM initially served as an information, communication, and entertainment medium for its designated coverage areas. Currently, it is affiliated with the Philippine Broadcasting Service – Bureau of Broadcast Services, a state-run network. It supports the government in disseminating information through newscasts and plugs concerning community development projects. These projects encompass rural industries, self-help programs, beautification and nutrition, energy and conservation, ecological initiatives, and human resource development.

Moreover, the station serves as a vital medium for addressing the diverse needs of local communities, inspiring and motivating them to share success stories pertaining to social and economic endeavors designed to enhance their quality of life. It provides monitoring reports on the progress of development projects, focusing on national, provincial, municipal, and barangay-level initiatives. It also serves as a venue for airing USM-related news, activities, programs, and projects.

Lastly, the station serves as a laboratory facility for DevCom students and other students at USM to further develop their skill in radio broadcasting and related fields. This offers valuable experience and hands – on training opportunities to enhance their proficiency in the radio industry

The office performed the following as its program components:

1. Newscast latest national and local (provincial, municipal, and barangay-level) news, events, and developments.
2. Play music and provide entertainment

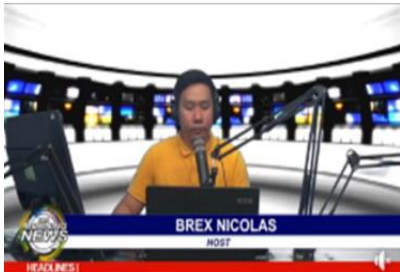
- 3. Air plugs concerning community development projects and achievement of sustainable development goals (SDGs)
- 4. Maintain and update the official Facebook of DXVL
- 5. Scout for advertisers, and produce and play advertisements/commercials
- 6. Sell block time to program producers
- 7. Air USM-related news, activities, programs, and projects.
- 8. Serve as laboratory for USM students

From January to December 2023, DXVL has achieved the following:

- 1. Broadcasted latest national and local (provincial, municipal, and barangay-level) news, events, and developments.

52 weeks x 5 = 260 days (minus 3 days for holy week, 2 days for Christmas and 2 days for New Year)
Off air - 7 days
248 broadcast days

NATIONAL	LOCAL			SPECIAL COVERAGE	
	Provincial	Municipal	Barangay	National	Local
744	744	1, 488	185	3	12



2. Played music and provided entertainment

MUSIC	ENTERTAINMENT		
	Inday Will Always Love You	Kool Timebayan	Quiz ng Bayan
130 songs per day	205	175	124



3. Aired plugs concerning community development projects and achievement of sustainable development goals (SDGs)

PLUGS	
Community Development Projects	Achievement of SDGs
8	15

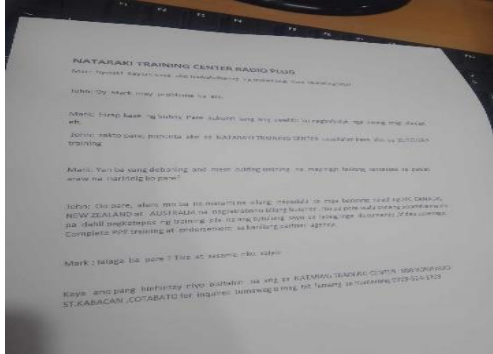
4. Maintained and updated the official Facebook of DXVL



Facebook Posting	Quantity
No. of post per day	2
Total no. of post per week	10

5. Scouted advertisers, and produced and played advertisements/commercials

No. of Advertisers
28



6. Sold block time to program producers (organizations)

No. of Program Producers
7



7. Aired USM-related news, activities, programs, and projects.

Category	Quantity
News	250
USM radio program	36 episodes



8. Served as laboratory for USM students

Academic Program	Quantity
BS DevCom	173
BSIT	12

9. Financial Statement

Cash Collection		1, 349,643.82	
Accounts Receivable		<u>222,596.00</u>	
Total Collections		1,572,239.82	
Less: Expenses			
Direct Expenses	800,126.68		
Other Expenses	465,256.42		
Common Expenses	195,812.30	<u>(1,461,195.40)</u>	
Net Income		<u>Php. 111,044.42</u>	

UNIVERSITY MULTIMEDIA PRODUCTION CENTER (UMPC)

Operating since 2003, the University Multimedia Production Center (UMPC) is an income generating project which offers printing and binding of workbooks and laboratory manuals. It also offers printing of office forms, brochures, bulletin information, exam questionnaires and research survey materials. Moreover, it also produces video and multimedia productions for the university and outside clients. UMPC is the brainchild of USM Department of Development Communication and it also serves as the venue of internship for senior DevCom students.

Since 2010, the Center occupied the former University Veterinary Hospital for its workbook printing & releasing and video productions. But in 2021, it transferred to its new building, near DXVL-FM and the Office of Students Affairs for easier and nearer access to its clientele - the students.

The year 2022 was a good year for UMPC. Reducing the spread of COVID 19 led to the opening of the University to face-to-face classes and transactions. With USM students backed inside the classrooms - two years after the COVID-19 pandemic forced schools to close – an increase in the production of subject modules and workbooks was expected.

The Center produced and released more than 20,000 workbooks. Sold at an average unit price of Php140., UMPC generated a gross income of Php 3,030,365.00



The year 2022 was also an active year in producing multimedia presentations for UMPC. Numerous offices and units in the University requested for production assistance and support. These programs were aside from the mandated activities to be covered, documented and produced by our office.

For 2022, UMPC produced the following video programs, either recorded or live streamed over the social media such as Facebook and YouTube: University Recognition Program, RGES In-Focus Video Briefer, the Plang Day Celebration Program, University Orientation Briefer, University Commencement Exercises, Tribute to Retirees, Civil Service Day Celebration, State of the University Report, the University Foundation Day Celebration Program and many more.

For the next years, it intends to strengthen its operations in both print and video productions thru equipment upgrading and storage digitization. It also plans to promote its products and services using social media and direct marketing strategies.

Based on data from the Department of Education (DepEd), over 28 million students, both from private and public schools, have enrolled for this academic year.

PERSONNEL.Presently, the Center has three (3) employees. Its manager is a permanent faculty-employee of the university under the Department of Development Communication, College of Science and Mathematics (CSM). Since 2016, Prof. Allan C. Facurib is running the operations of the project and has a load displacement of 6.0 units as project manager.

Its two (2) other employees serve as Multimedia Assistants on Job Order status, namely:

The hiring of a student under SPL (Student-Paid Labor) arrangement was already approved by the University President. The SPL would be responsible for the janitorial works in the building. Currently, its SPL is Mr. Herman A. Balbin, a 3rd year BPA student from the College of Agriculture.

Occasionally, UMPC also hires labor workers in *pakyaw* basis to work on the production of workbooks. For 25 working days, these labor workers work on printing, collating, binding and trimming subject manuals and workbooks ordered by various colleges of the university. For SY 2019-2020, collectors were not hired due to budget constraints. Usually, collectors work as cashiers posted in the University Cashier's Office.

For the August 2023 Workbook Production, the following were hired:

PRODUCTION WORKERS *(on pakyaw basis)*

Name of Worker	Workbooks Produced	Cost of Work per Workbook	Wage per Worker
1. Agrave, Leonardo	2,500	P9.00	P22,500.
2. Balbin, Ronaldo	2,500	P9.00	P22,500.
3. Reyes, Maylene	2,500	P9.00	P22,500.
4. Bernardino, Jay	2,500	P9.00	P22,500.
5. De Jesus, Wilma.	2,500	P9.00	P22,500.
6. Rivera, Jester	2,500	P9.00	P22,500.
		TOTAL	P135,000

VIDEO PRODUCTIONS. For SY 2020-2021, UMPC has written, shoot and edited the following audio-visual presentations:

- (1) USM Graduation;
- (2) USM Orientation on New Academic Guidelines;
- (3) USM Civil Service Day Online Video;
- (4) University President’s 7-Year Accomplishment Report; and the
- (5) CFCST Video Briefer *(with the consent of the Univ. President)*

PROBLEM ENCOUNTERED. Majority (75%) of the orders for printing of workbooks were made by authors/compiler in the middle of the first semester, SY 2020-2021 which resulted to the delay of production of these subject manuals – as well as selling and releasing to students. With this, about 60% of the printed workbooks were not sold.

ACTION TAKEN. UMPC reported the problem to the University President. He called the attention of the deans of colleges and requested for the utilization of these unsold workbooks for the second semester, SY 2020-2021. The President also ordered UMPC not to print until inventory of workbooks are completely sold.

FINANCIAL STATEMENT. Please see attached Statement on Financial Performance secured from USM Accounting Office.

UMPC Project Financial Performance for 2022

Collection	Expenses	Net cash available
P 4,719,702.00	P 2,942,538.65	P 1,777,163.35

CANTEEN PROJECT

There are twelve canteens inside the University being closely monitored and assessed by the Business Development Center. Colleges and unit are the one directly managing the day to day operations of their respective canteens. These canteens are needed for the accreditation of different colleges and also provide additional income for the employees of the said colleges. The canteens belong to the support units of the university and an ISO 9001-2015 accredited. As an ISO certified , the operator should comply with the statutory requirements set by the specific agencies and the food safety standards in operating the canteen.

The canteen workers are enjoined to observed personal hygiene and good practices in the food preparation and handling. For the operator to provide safer and quality foods of affordable price for the students, faculties, staffs of the university and other clients. All canteen establishments inside the university are also enjoined to observe the “ Halal” concept of food preparation for culture sensitivity.

CANTEEN Financial Performance for 2023

Collection	Expenses	Net cash available
P 931,659.66	P 156,999.71	P 774,659.95



CANTEEN PROJECT



FINANCIAL PERFORMANCE NOVEMBER 2022 TO OCTOBER 2023

PROJECT	GROSS INCOME COLLECTION	EXPENSES	NET INCOME
AGRICULTURAL PROJECT			
PALM OIL	5,270,932.85	4,461,603.22	809,329
AVAS RUBBER	1,403,604.55	1,298,522.23	105,082.51
CORN	757,395.08	1,794,964.04	-112,430.85
FRUIT CROPS	2,745,153.50	420,109.43	2,325,044.07
LAND RENTAL	376,550.00	297,745.00	78,804.46
NON-AGRICULTURAL PROJECT			
HOSTEL	15270798.33	12740227.52	2530570.81
DXVL	1,572,239.82	1,461,195.40	111,044.42
UMPC	4,719,702.00	2,942,538.65	1,777,163.35
CANTEEN	931,659.66	156,999.71	774,659.95

UNIVERSITY HEALTH SERVICES

In the past two years, the University of Southern Mindanao Hospital faced challenges obtaining its LTO on time, leading to a 2-3 month cessation of operations and impacting finances. However, this year, the LTO was secured in November 2023 by addressing the root cause of the acquisition perplexity. Financial instability also arose from unaddressed Return to Hospital (RTH) charts, numbering around 637 initially. Presently, RTH charts have dropped to less than 20, with 7 paid and others pending disposition. Denied payments are limited to 6 charts, mainly due to single-period confinement, which is unavoidable.

The hospital addressed the issue of expired medical supplies and medicines by swapping with other health facilities to extend their expiry dates. Despite challenges, there is a significant increase in hospital census, averaging 10-12 daily admissions with an occupancy rate of 135%, surpassing the approved bed capacity of 25 per day. This has positively impacted the hospital's cash flow, and the hospital have successfully availed a MAIFIP allocation of 3,050,000.

Goals:

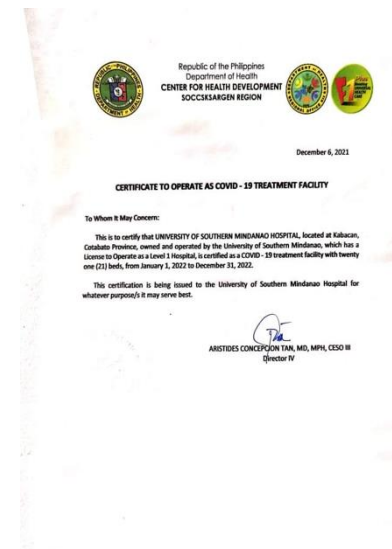
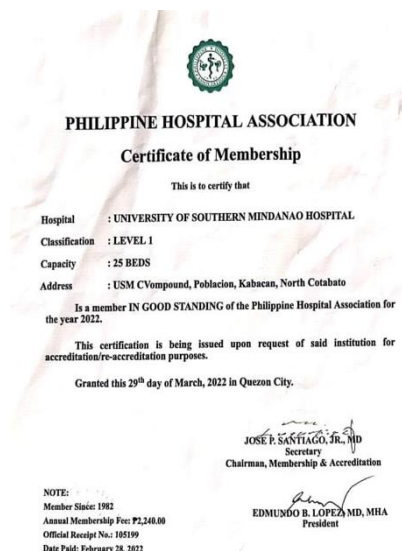
1. To increase approved bed capacity to 80.
2. To acquire level II hospital accreditation.

Objectives:

1. Enhance specialty services (Internal Medicine, Pediatrics, Obstetrics and Gynecology and Surgery).
2. Upgrade laboratory equipment (Radiology and Clinical Laboratory).
3. Upgrade Operating Room equipment.
4. Upgrade ward and private room facilities.

A. ACCREDITATION / LICENSES:

- Department of Health (DOH)– License to Operate
- Certificate of Accreditation 2022 from the Philippine Health Insurance Corporation
- Philippine Hospital Association (PHA) Accreditation



2023 Financial Performance

Gross Income	Php 17,263,622.82
Net Income (after common expenses)	Php 11,308,535.54
Net Income (after imputations)	Php 1,965,935.54

INTERNATIONALIZATION

International Awards and Recognition of USM

The Philippine Quality Award Level II (Recognition for Proficiency in Quality Management).

PQA Level II is awarded to organizations that demonstrated the implementation of quality and productivity management principles, significant progress in building sound and notable processes. The organization has documented and performed a solid approach to system-level quality and productivity management and implemented quality and productivity improvement plans and procedures.

The PQA is conferred annually to qualified organizations in the private and public sectors. Organizations which have demonstrated management excellence by the purposefulness with which it continues to improve and build upon outstanding results and excellent systems thereby achieving the highest level of performance excellence. The University of Southern Mindanao received the award last May 17, 2023 at the Malacañang Palace.

Quacquarelli Symonds (QS) World university Rankings.

QS World University Rankings is an annual publication of university rankings by Quacquarelli Symonds (QS). The QS ranking receives approval from the International Ranking Expert Group (IREG), and is viewed as one of the most-widely read university rankings in the world. The USM is awarded with 2 QS stars.

List of 100 best universities in the Philippines by EduRank.org.

The 100 best universities in the Philippines are ranked based on their reputation, research performance, and alumni impact. In the 2023 edition, USM ranked 30 out of 229 HEIs in the Philippines, 2518 out of 5830 HEIs in Asia, and 6639 out of 14,131 HEIs in the world. For Biology, USM ranked No. 22 in the Philippines, 2392 in Asia, and 5692 in the World. For Botany, USM ranked No. 17 in the Philippines, 2038 in Asia, and 4679 in the World. For Genetics, USM ranked No. 20 in the Philippines, 2409 in Asia, and 5585 in the World. For Ecology, USM ranked No. 19 in the Philippines, 2095 in Asia, and 4931 in the World. USM is the only HEI in Region XII to be included in the list.

Ranking of Web Universities (Webometrics).

The "Webometrics Ranking of World Universities" is an initiative of the Cybermetrics Lab, a research group belonging to the Consejo Superior de Investigaciones Científicas (CSIC), the largest public research body in Spain. The Cybermetrics Lab using quantitative methods has designed and applied indicators that allow us to measure the scientific activity on the Web. The University of Southern Mindanao ranked No. 28 out of 336 Philippine HEIs, in the July 2023 edition of Webometrics.

Plaque of Appreciation from CHED Regional Office XII.

CHEDRO XII recognized the significant contribution of USM in the higher education sector through internationalization initiatives, linkages, and projects which pave the way for the advancement of Philippine higher education.

University of Southern Mindanao as Host HEI of the Visiting Professors Program of the Innovation for Social Impact Partnership (ISIP) of the United Nations Development Programme.

The Innovation for Social Impact Partnership (ISIP) project aims to increase the capacity of Philippine Higher Education Institutions (HEIs) in supporting the growth and improvement of university-based startup enterprises with a clear social impact. One of the ways to achieve this is to bring in international experts through the Visiting Professors Program. The Visiting Professors Program aims to share knowledge on best practices in entrepreneurship teaching, startup enterprise mentorship, and incubator management. It also provides a meaningful opportunity for Visiting Professors to be immersed in the entrepreneurship culture in the Philippines' greater Mindanao area, and contribute to the development of the entrepreneurship ecosystem in the host universities. The VPP was implemented in USM last March 2023 with Prof. Russ Neu Wee Teck of Social Collider, Singapore.

University of Southern Mindanao as one of the lead HEIs in the establishment of the Philippine East ASEAN Growth Area Higher Education Institutions Network (PEHEIN).

The Philippine-EAGA Higher Education Institution Network (PEHEIN) is a network of Philippine higher education institutions (HEIs) that are committed to promoting and strengthening cooperation in higher education in the Brunei Darussalam, Indonesia, Malaysia and Philippines- East ASEAN Growth Area region.

FISCAL MANAGEMENT

The Office of the Vice-President for Administration and Finance (VPAF)

In the changing landscape of higher education, fiscal responsibility and prudent financial management have remained at the core of our mission. This report highlights the university's commitment to transparency and accountability in managing the university's resources. This shows key financial indicators, budgetary allocations, expenditure patterns, and the measures taken to achieve our financial goals. Through disciplined financial stewardship, we have aimed to maintain a robust financial position, ensuring our ability to fulfill our academic, research, and community engagement objectives.

The Vice President for Administration & Finance (VPAF) assisted the University President in the general supervision of the operations of the fiscal and administrative affairs of the University in accordance with the existing government and University policies, guidelines, rules and regulations. The office of the VPAF supervised, coordinated and monitored the activities of the administrative, financial and support services officials and employees of the university.

FINANCE OFFICES

The **Finance Management Services Office** assists in the evaluation, analysis and substantiation of the validity, exactness and completeness of all financial documents, transactions and claims for payment of the University in order to ensure that each conform with the requirements set forth by the existing pertinent laws, policies, rules and regulations. It concerns the preparation, review, certification of the correctness and submission of all financial reports to various agencies. The FMS consists of three offices under it, the Accounting office, Budget office and the Cashier's Office.

The **Accounting Office** is responsible for recording, pre-auditing of all disbursement transactions of the University. This unit is tasked to certify the completeness of the supporting documents and the amount claimed is proper. The said unit is also in-charge in the preparation of timely submission of all financial reports and remittances to the proper authorities as well as the appropriate response to COA Audit Memorandums.

The **Budget Office** is responsible for the preparation of the annual budget of the University. Budget Execution Documents (BEDs) for general Fund (01) submitted to the DBM Regional office, Congress and Senate and on the other hand the Program of Receipts and Expenditures (PRE) for local funds (05, 06, 07) will be passed to the Board of Regents (BOR) for approval. The said unit is also in-charge in certifying as to allotment availability and obligating specific transactions for the purpose indicated in the Obligation Request Slip (ORS) for Fund 01 and Budget Utilization Request and Status (BURS) for funds 05, 06, and 07.

The **Cashier's Office** is responsible for the payment of all approved disbursement vouchers, payroll, and remittances. This unit is also in-charge of the collections and deposits such to the agency bank account within the duty hours or on the first hour of the following banking day.

CORE FUNCTIONS OF THE UNIT

- 1. Supervise the preparation of the Annual, Supplemental and Special Budget of the University in consultation with the concerned project in-charge and the University President/VP for Admin and Finance supported with subsequent relevant justifications and details, Fiscal Year 2023:

Fund 01	836,644,404.74
Fund 05	230,992,873.27
Fund 06	59,600,077.44
Fund 07	21,376,485.01
TOTAL	1,148,613,840.46

- 2. Supervise distribution and allocation of funds to the various units, projects, and programs of the University in accordance with its duly approved annual Appropriation.

Fund 01 - commonly known as the General Fund, mandated by Republic Act (RA) No. 10924, General Appropriations Act (GAA) series of 2020
Fund 05 – known as the local fund of the University, mandated by the Letter of Instructions (LOI) 872, includes the collection from Tuition Fees, Laboratory Fees, Fiduciary Fees and other fees from students
Fund 06- known as the Income Generating Projects (IGP) of the University, mandated by LOI 872
Fund 07 - known as the Trust Receipts

3. Support the University President and the VP for Admin & Finance in gathering pertinent documents and validations of budget proposals to the various concerned working groups or authorities during Budget inquiry and other round-table gathering.
4. Facilitating timely response to the Commission on Audit for all Audit Observation Memorandum (AOM)
5. Supervise the preparation and submission of reports on Finance Management matters as required by various concerned authorities/agencies.

Administrative Management

1. Documents and Reports

- Receiving of documents: Include Job Orders, Purchase Requests, Disbursement Vouchers, Purchase Orders, Payrolls and others.
2. Processing of Documents/Reports
Routinary Reports
3. Submission of Annual Budget Execution Documents (BEDs)
 - accomplished thru the online Unified Reporting System (URS). Online generated copies are submitted not later than the deadline set by the DBM Central Office.
 - contains the Financial Plan of the University (BED 1) and Monthly Disbursement Program (MDP) (BED 3) as per GAA guidelines
4. Quarterly report on Financial Accountability Reports (FARs 1, 1A, 1B, 2, 2A, and 5)
 - accomplished thru the URS and online generated copies are submitted to the DBM regional Office XII every 25th day of the month after the end of the quarter
 - contains: Statement of Appropriations, Allotment, Obligations, Disbursements and Balances (FAR 1), Summary of Appropriations, Allotment, Obligations, Disbursement and Balances by Objects of Expenditures (FAR 1A), List of Allotment and Sub allotments (FAR 1B)Statement of Approved Budget, Utilizations, Disbursement and Balances (FAR 2, Summary of Approved Budget, Utilizations, Disbursements and Balances by Objects of Expenditures (FAR 2A), and Quarterly Report of Revenue and Other Receipts (FAR 5)
5. Flash Performance Monitoring Reports and Financial Accountability Reports (FAR 4 accomplished thru the URS and the online generated copies are submitted every 10th day of the following month and contains Monthly Report of disbursement (MRD) under FAR 4. On the otherhand, flash performance report, shows percentage of utilized and disbursed amount of the annual allotment
6. Annual Budget Preparations contains the Budget Preparations of the University showing the actual obligation for the current year operation and three-year Program/Project/Activities budget proposal. Submitted to the DBM P Regional Office for consolidation on the due date stated by the same agency.
7. Quarterly Report on Budget Utilization submitted before the date of Board of Regents (BOR) meeting. It reflects the quarterly utilization status, cash collection balances and allotment balances for the quarter.

8. Budget Utilization Request and Status (BURS) and Obligation Request and Status (ORS which is issued for Fund 01 while BURS is used for Funds 05, 06 and 07. It means that when a voucher is issued with ORS/BURS, the transaction has an available allotment, utilization is permissible and constrained to be paid by the government for the purpose.
9. Issuance of Certificate of Availability of Funds to verify that the transaction has an allocation.
10. Preparation of Remittances to concerned agencies for all funds
11. Preparation of Value Added Tax (VAT) Certificate to suppliers for all funds
12. Preparation of Report of Collection - Report of Collection and Deposits for Fund 05, 06, and 07 are submitted on the 5th day of the following month. Preparation of report of Accountability for Accountable forms for all funds
13. Report of Accountability for all funds including externally fund projects are submitted on the 5th day of the following month.
14. Preparation of Cash Disbursement Report by Cashier's Office submitted to the Accounting Office for recording in the CashDisbursement Journal for all funds
15. Preparation of report of checks issued and canceled for all funds submitted on the 5th day of the following month
16. Issuance of Official Receipts for all transactions of payment, deposits and refund are all subject to issuance of Official Receipts.
17. Preparation and recording of deposit slips to logbook to be received by LBP
18. Recoding of Official Receipts to cash receipts records for all funds where all official receipts are tracked in the Cash Receipts Record (CRR)
19. Payment of Payrolls and Vouchers for all funds for payments of labor, services, wages, salaries, scholarships, grants and Reimbursements made are to be recorded to the Cash Disbursement
20. Recording of Payrolls and vouchers to Cash Disbursement record for all funds to suppliers/clients
21. Preparation, issuance and releasing of checks for all funds
22. Delivery of checks for remittances and suppliers' remittance to GSIS, HDMF, Philhealth, COTELCO, PLDT, BIR and etc..
23. Preparation of Check Disbursement Journal submitted every 10th day of the following month
24. Preparation of Collection and Deposit Report submitted every 10th day of the following month
25. Preparation of General Journal - Posting to the General Ledger all transaction from the books of original entry - every 10th day following monthPreparation of replenishment report
26. Preparation of LDDAP-ADA issued to suppliers/clients charge against General Fund (Fund 101)

- 27. Preparation of Financial Reports like trial Balance, Statement of Financial Performance, Statement of Financial Position, Statement of Cash Flows, Statement of Changes in Government Equity and Notes to Financial Statements prepared
- 28. Preparation of Bank Reconciliation report - Releasing of all documents for issuance of check and for payment in cash, and all other transactions for all funds

OFFICE OF THE BIDS AND AWARDS COMMITTEE (BAC)

The Bids and Awards Committee (BAC) is responsible for overseeing the procurement process for infrastructure, goods and services projects. Its main functions include procurement planning, bidding process, bid evaluation, awarding of contracts, contract management, and dispute resolution.

Projects Approved or Confirmed by the Board of Regents in 2022

147th Regular Meeting of the USM Governing Board last March 30, 2022

Title /Project	Contractor	Contract Amount (P)	Fund Source	Resolution Number
Approved Infrastructure Projects (7)				
1. Construction of Food Processing and Innovation Center Building	Pader Construction and Supp	12, 171,907.11	Fund 01	Resolution No. 24A, series of 2022
2. Completion of College Agriculture Building	GRECO Construction and Supply	9,873,907.28	Fund 01	Resolution No. 24B, series of 2022
3. Upgrading of High Value Crops Processing Laboratory	THEL Construction and Supplies	1,740,200.84	Fund 07 (DA-BAR ACEF)	Resolution No. 24C, series of 2022
4. Upgrading of Tissue Culture Facility	COFEJOK Construction and Supply Corp	1,641,274.32	Fund 07 (DA-BAR ACEF)	Resolution No. 24D, series of 2022
5. Supply, Delivery and Installation of Structured Cabling for PPDS	Arckit Builders and Supply Kidapawan City	974,400.00	Fund 05-AF	Resolution No. 24E, series of 2022

Title /Project	Contractor	Contract Amount (P)	Fund Source	Resolution Number
6. USM Goat Multiplier Breeder Farm –Goat Artificial Insemination Laboratory Building	NGP Construction Toril, Davao City	2,393,703.02	Fund 07- DA National Livestock Program	Resolution No. 24F, series of 2022
7. Supply, Delivery and Installation of Structured Cabling for Commercial Buildin	RPR 1030 Corporation Tacurong City	1,383,687.00	Fund 05 -AF	Resolution No. 24G, series of 2022
Approved Contracts for Goods (Equipment) Projects (9)				
1. Supply, Delivery & Installation of DRRM CCTV Equipment and Connectivity	Comfac Corporation Davao city	1,398,000.00	Fund 05- Admin Cost	Resolution No. 25A, series of 2022
2. Supply, Delivery and Installation of Various Electronics Equipment for Commercial Building	Better Components, Inc. Davao City	1,676,302.00	Fund 05-AF	Resolution No. 25B, series of 2022
3. Supply and Delivery of Various Equipment for Tissue Culture	Jetmed Enterprise Davao City	1,535,000.00	Fund 07- Saba/Cardava	Resolution No. 25C, series of 2022
4. Supply & Delivery of Forty (40) Units Desktop (Small Form Factor) for e-Administration Services	Micro-D International, Inc. Davao City	1,994,000.00	Fund 05- Admin Cost	Resolution No. 25D, series of 2022
5. Supply, Delivery, Installation, Testing & commissioning of One Unit Brand New Generator Set for S&T Building	Jetmed Enterprise Davao City	917,700.00	Fund 05-AC	Resolution No. 25E, series of 2022
6. Supply, Delivery and Installation of Various Air-conditioning Units for Food Processing and Innovation Center Building	Melgene Aircon Marketing & Services Koronadal city	715,050.00	Fund 01	Resolution No. 25F, series of 2022
7. Supply, Delivery and Installation of Multiple Scanning Thermal Camera System	Systems Controls Instrumentations, Inc. Ayala, Alabang	900,000.00	Fund 01	Resolution No. 25G, series of 2022

Title /Project	Contractor	Contract Amount (P)	Fund Source	Resolution Number
8. Supply, Delivery and Installation of Equipment for the Upgrading of Local Area Network including CHEFS	RPR 1030 Corporation Tacurong City	2,050,000.00	Fund 01	Resolution No. 25H, series of 2022
9. Supply and Delivery of Two (2) Units Server System	Micro-D International, Inc. Davao city	1,275,776.00	Fund 07- CHED Smart Campus Project	Resolution No. 25I, series of 2022
Approved Contract for Services Project (1)				
1. Engagement of Security Services Contractors/Providers (SCC) for USM Main Campus, USM-KCC & USM-Buluan Campuses	COSEDA Security Services Tacurong City	10,455,055.60	Fund 01, 05, 06 & 07	Resolution No. 25I, series of 2022
Confirmed Awarding of Contracts for Goods and Services Project (7)				
1. Supply & Delivery of Various Textbooks for KEPLRC	Serv Enterprises Antipolo city	ABC: P473,188.00 Bid Price P400,771.00 169 items	Fund 05-AF	Resolution No. 27A (1), series of 2022
	Megatexts Phils., Inc. Davao City	ABC: P333,689.08 Bid Price: P283,559.00 75 items	Fund 05-AF	Resolution No. 27A (2), series of 2022
	Mind Mover Publishing House, Inc. Quezon City	ABC: P38,737.00 Bid Price: P35,335.00 12 items	Fund 05-AF	Resolution No. 27A (3), series of 2022
	S&D Mind Tools, Inc. Davao City	ABC: P8,728.10 Bid Price: P7,809.00 2 items	Fund 05- AF	Resolution No. 27A (4), series of 2022
2. Subscription of <i>e-Library</i> Resources (One Year) for KEPLRC	Megatexts Phil., Inc. Davao City	P1,470,000.00	Fund 05	Resolution No. 27B, series of 2022

Title /Project	Contractor	Contract Amount (P)	Fund Source	Resolution Number
3.Subscription of Various Journals for KEPLRC	Magazine Zone, Inc. Caloocan City	P988,315.00	Fund 05	Resolution No. 27C, series of 2022
4.Supply & Delivery of Various Medical Supplies, Drugs and Medicines & Medical Equipment (Left Items)	Titanium Pharma Kidapawan City	P2,179,000.00	Fund 01	Resolution No. 27D, series of 2022
	Argo Labs Pharma & Medical Supplies Distribution Davao City	P202,400.00	Fund 01	Resolution No. 27D, series of 2022
5. Supply & Delivery of Various Disinfectants/Sanitizers	Berovan Marketing, Inc. Mandaue City, Cebu	P1,588,770.00	Fund 01	Resolution No. 27E, series of 2022
6. Supply and Delivery of Various Drugs and Medicines	Titanium Pharma Kidapawan City	P1,227,245.00	Fund 01	Resolution No. 27F, series of 2022
7. Supply, Delivery & Installation of One Unit Mobile Shelving for ARO	PhilBlanc Company Davao City	P634,780.00	Fund 05	Resolution No. 27G, series of 2022

148th Regular Meeting of the USM Governing Board on June 20, 2022

Title /Project	Contractor	Contract Amount (P)	Fund Source	BOR Reso No.
Approved Projects (6)				
1. Supply, Delivery and Installation of Internet Connectivity –IPVPN Platform	Innove Communications, Inc.	4,914,696.00	Fund 07	Resolution No. 77A, series of 2022
2. Supply, Delivery and Installation of USM Main Campus FTTx Infrastructure and Inside Building Networks	RPR 1030 Corporation	2,891,886.65	Fund 07	Resolution No. 77B, series of 2022

3. Construction of 3-Storey CBDEM Building (Savings) Glazing of 8 Rooms	NGP Construction	648,238.61	Fund 01	Resolution No. 77C, series of 2022
4. Construction of DRRM Building (Savings) Glazing Works	NGP Construction	427,913.25	Fund 01	Resolution No. 77D, series of 2022
5. Completion of Unfinished Auditorium (Site Development, Covered Back Wall Louver, Plastering and Painting of Under Bleachers)	Arckit Builders and Supply	1,356,761.57	Fund 01	Resolution No. 77E, series of 2022
6. Supply, Delivery and Installation of Structured Cabling for PPDS	Comfac Corporation	1,180,000.00	Fund 06 Admin Cost	Resolution No. 77F, series of 2022
Approved Goods Projects (8)				
1. Supply and Delivery of Various Drugs and Medicines	Titanium Pharma	4,228,815.00	Fund 01	Resolution No. 78A-1, series of 2022
	MMJS Pharmacy	467,370.00	Fund 01	Resolution No. 78A-2, series of 2022
	Relieved Marketing	144,185.00	Fund 01	Resolution No. 78A-3, series of 2022
	Iraseth Pharmacy	10,124.00	Fund 01	Resolution No. 78A-4, series of 2022
2. Supply and Delivery of Desktop with Installed Operating Systems for Flexible Learning Hub	Micro-D International	3,584,100.00	Fund 07	Resolution No. 78B, series of 2022
3. Supply and Delivery of Various Medical Supplies and Multivitamins	Titanium Pharma	2,416,350.00	Fund 01	Resolution No. 78C-1, series of 2022
	La Forteza Pharmacy	200,110.00	Fund 01	Resolution No. 78C-2, series of 2022
4. Supply and Delivery of One Unit Brand New 15-seater Van	Toyota General Santos, Inc.	1,750,000.00	Fund 06	Resolution No. 80A, series of 2022
5. Supply and Delivery of One Unit Brand New 15-seater Van	Toyota General Santos, Inc.	1,214,520.00	Fund 06	Resolution No. 80B, series of 2022
6. Supply, Delivery and Installation of Four (4) Units Customized Laboratory Tables for the University Laboratory School	Krypton International Resources Sales and Services, Inc.	692,000.00	Fund 05	Resolution No. 80C, series of 2022

7. Supply and Delivery of Various Common Use Office Supplies and Materials	VS Tay Inc.	1,343,325.70	Fund 01	Resolution No. 80D, series of 2022
8. Supply and Delivery of Various Laboratory & X-ray Supplies and Reagents	Seiralab, Inc.	1,377,271.20	Fund 01	Resolution No. 80E, series of 2022
Approved Services Projects (1)				
1. One Year Subscription of Cloud Servers	Innove Communications, Inc.	1,026,756.00	Fund 07	Resolution No. 79, series of 2022

149th Regular Meeting of the USM Governing Board on October 06, 2022

Title /Project	Contractor	Contract Amount (P)	Fund Source	BOR Reso No.
Approved Infrastructure Projects (9)				
1. Supply and Delivery of One (1) Unit Brand New Six-Wheeler Cargo Truck	JAC Automobile	1,695,000.00	Fund 06	Resolution No. 135-A, series of 2022
2. Supply and Delivery of Various Equipment for Food Processing	Kitchen Mall (KMC) Corporation	6,148,000.00	Fund 01	Resolution No. 135-B, series of 2022
3. Supply, Delivery and Installation of Two (2) Units PRO H Hydraulic Portable Basketball Backstop,10'8" Boom	Alpha Quality	1,670,000.00	Fund 05	Resolution No. 135-C, series of 2022
4. Supply and Delivery of Common-Use Office Supplies and Materials	VS Tay, Incorporated	1,869,848.85	Fund 05	Resolution No. 135-D, series of 2022
5. Supply and Delivery of Various Drugs and Medicines	Titanium Pharma	507,600.00	Fund 05	Resolution No. 135-E1, series of 2022
6. Supply and Delivery of Various Drugs and Medicines	La Forteza Pharmacy	25,080.00	Fund 05	Resolution No. 135-E2, series of 2022
7. Supply and Delivery of Various Consumables	VS Tay Incorporated	694,992.75	Fund 05	Resolution No. 135-F, series of 2022

Title /Project	Contractor	Contract Amount (P)	Fund Source	BOR Reso No.
8. Supply and Delivery of Various X-ray Supplies and Reagents	JHCC Marketing and Allied Services	223,800.00	Fund 01	Resolution No. 135-G, series of 2022
9. Supply and Delivery of Supreme Court Reports Annotated (SCRA) Volumes 01-935	Central Books Supply, Inc.	1,215,000.00	Fund 05	Referendum No. 02, series of 2022
Approved Services Projects (1)				
1. Student Group Personal Accident and Health Insurance Plan for SY 2022-2023 for College Students, Graduate School, and Junior and Senior High School Students	Philippine British Assurance Co., Inc.	1,382,780.00	Fund 05	Resolution No. 135-H, series of 2022

150th Regular Meeting of the USM Governing Board on December 28, 2022

Title /Project	Contractor	Contract Amount (P)	Fund Source	BOR Reso No.
Approved Infrastructure Projects (1)				
1. Perimeter Fencing in Libungan Campus	NGP Construction	2,759,620.35	Fund 161	Resolution No. 173-A, series of 2022
Approved Goods Projects (5)				
1. Supply and Delivery of Various Equipment for the Upgrading of DRRM and Facilities	Faith Ventures	4,523,520.00	Fund 01	Resolution No. 174-A, series of 2022
2. Supply, Delivery and Installation of Wireless Access Point (WIFI) Systems and Networks (OSA, USG, Guidance Office, Women's and Men's Dorms)	RPR 1030 Corporation	1,498,336.50	Fund 06	Resolution No. 175-A, series of 2022
3. Supply and Delivery of ICT Equipment for Network System	Millenial Tech Computer and Office Supplies	507,000.00	Fund 05	Resolution No. 175-B, series of 2022

Title /Project	Contractor	Contract Amount (P)	Fund Source	BOR Reso No.
4. Supply and Delivery of Various Electronics Equipment for UPRIO	Millenial Tech Computer and Office Supplies	802,495.00	Fund 05	Resolution No. 175-C, series of 2022
5. Supply and Delivery of Various Textbooks for KEPLRC	Megatexts Phils. Inc.	322,700.00	Fund 05	Resolution No. 175-D, series of 2022

INFRASTRUCTURE AND PHYSICAL FACILITIES

USM believes that a conducive and well-maintained physical environment is the bedrock upon which academic excellence and student success flourish. The Physical Plant Development and Services Unit of the university plays a pivotal role in creating and sustaining a campus ecosystem that fosters learning, research, and innovation.

Below is the list of completed and on-going infrastructure projects in 2023:

	PROJECT NAME	FUND SOURCE/ YEAR	ABC	CONTRACT AMOUNT	CONTRACTOR	REMARKS
1	Completion of College of Agriculture Building	GAA/FY 2022	10,000,000.00	9,873,907.28	GRECO Construction and Supply	Completed (April 28, 2023)
2	Construction of Food Processing and Innovation Center Building	GAA/FY 2022	14,000,000.00	12,171,907.11	PADER Construction and Supply	Completed with Punchlist
3	Upgrading of Tissue Culture Facility at USM	DA-BAR (ACEF)	2,000,000.00	1,641,274.32	COFEJOK Construction and Supply Corporation	On-going
4	Upgrading of CACAO Post-Harvest Processing Center at USM	DOST-PCAARRD IDD	2,000,000.00	1,987,777.75	By Administration	On-going
5	Upgrading of High Value Crops Food Processing Laboratory at USM	DA-BAR (ACEF)	2,000,000.00	1,740,200.84	THEL Construction and Supplies	Completed with Punchlist

CLIENT SATISFACTION

The client satisfaction report for the university in 2023 provides a comprehensive analysis of feedback from students, faculty, staff, and other stakeholders. It evaluates various aspects of university services, including academic programs, administrative support, campus facilities, and overall experience. This report is instrumental in identifying strengths and areas for improvement, guiding strategic initiatives to enhance client satisfaction and ensuring the university meets the needs and expectations of its community.

Below is a summary of the Client Satisfaction Result of units for the period January to December 2023:

No.	Colleges	JAN. 2023	FEB. 2023	MARC H 2023	APRIL 2023	MAY 2023	JUNE 2023	JULY 2023	AUG 2023	SEPT. 2023	OCT. 2023	NOV. 2023	DEC. 2023	Overall Ratings
1	CA	4.92	4.90	4.96	4.85	4.96	4.85	4.95	4.88	4.91	4.97	5.00	4.50	4.89
2	CSM	4.95	4.93	4.80	4.93	4.99	4.84	4.67	4.89	4.74	4.70	4.44		4.81
3	CVM	4.90	4.90	4.89	4.93	4.87	4.84	4.90	4.86	4.94	4.95	4.94	4.88	4.90
4	CED	4.44	4.68	4.75	4.59	4.60	4.71	4.81	4.70	4.77		4.45	4.75	4.66
5	CBDEM	4.94	4.86	4.72	4.82	4.76	4.89	4.91	4.81	4.81	4.92	4.83	4.80	4.84
6	CEIT		4.78	4.78	4.54	4.65	4.91	4.89	4.76	4.76	4.68	4.88	4.74	4.76
7	CHEFS	4.51	4.71	4.85	4.52	4.78	4.29	4.95	4.70	4.77	4.71	-	4.58	4.67
8	IMEAS	4.81	4.91	4.73	4.67	4.73	4.69	4.72	4.62	4.73	4.71	4.78	4.86	4.75
9	CTI	4.79	4.86	4.85	4.74	4.88	4.88	4.63	4.76	4.69	-	-	4.98	4.81
10	CMAHS	4.72	4.50	4.73	4.84	4.81	4.72	4.71	-	-	-	4.96	-	4.75
11	GS	4.93	4.84	4.84	4.88	4.84		4.74	4.63	4.98	4.76	4.87	4.89	4.84
12	CASS		4.83	4.83	4.77	4.68	4.58	4.43	4.79	4.90	4.76	4.89	4.95	4.76

13	PALMA	-	-	-		-	-	4.94	-	-	-	-	4.80	4.87
14	ISPEAR	4.82	4.82	4.99	4.77	4.95	4.61	4.77	4.76	4.74	-	-	4.70	4.79

No.	Support Units	JAN. 2023	FEB. 2023	MARC H 2023	APRIL 2023	MAY 2023	JUNE 2023	JULY 2023	AUG 2023	SEPT. 2023	OCT. 2023	NOV. 2023	DEC. 2023	Overall Ratings
1	ARO	4.77	4.95	4.88	4.80	4.82	4.94	4.92	4.86	4.84	4.92	4.88	4.90	4.87
2	DIO	4.93	4.97	4.87	4.95	4.91	4.85	4.82	4.63	4.84	4.71	4.98	4.96	4.87
3	CASHIER	4.94	4.98	4.89	4.97	4.93	5.00	4.89	4.90	4.96	4.82	4.99	4.99	4.94
4	PROPERTY	4.98	5.00	5.00	4.90	4.95	4.99	4.90	4.90	4.97	4.99	4.99	4.96	4.96
5	ACCOUNTING	4.63	4.93	4.73	4.68	4.76	4.78	4.73	4.46	-	4.67	4.82	4.79	4.73
6	UQAC	4.50	4.73	4.62	4.85	4.61	4.52	4.94	4.96	4.36	4.54	4.81	4.78	4.69
7	PDO	4.88	4.79	-	4.79	-	4.87	4.81	4.82	-	4.95	4.88	-	4.85
8	OSA-PUBLICATION	-	-	-	-	-	-	-	-	-	-	-	-	-
9	HRMDO	4.29	4.84	4.16	4.86	4.91	4.69	-	4.92	-	4.63	4.81	4.98	4.71
10	CCD	4.91	4.93	4.84	4.67	4.70	4.88	4.92	4.80	4.87	4.90	4.78	4.98	4.85
11	OSA	4.96	4.97	5.00	4.95	5.00	-	4.79	4.96	-	4.88	4.98	4.96	4.95
12	UICTO	4.88	4.89	4.88	4.50	4.94	4.82	4.67	4.92	4.82	4.92	4.97	4.83	4.84
13	EXTENSION/ESO	4.94	4.79	4.82	4.82	4.98	-	-	4.91	4.80	4.92	4.90	4.89	4.88
14	RESEARCH/RDO	4.85	4.96	4.95	4.96	4.93	-	-	4.87	5.00	4.89	4.82	4.98	4.92
15	HOSPITAL	4.73	4.72	4.74	4.39	4.36	3.77	4.44	-	-	-	-	3.95	4.39
16	PPDS	4.86	4.46	4.50	4.63	4.80	4.85	4.89	4.79	4.81	4.71	4.95	4.96	4.77
17	ISPEAR-SPORTS	-	-	-	-	-	-	-	-	-	-	-	-	-
18	ISPEAR-SOCIO-CULTURAL	-	-	-	-	-	-	-	-	-	-	-	-	-
19	SECURITY	4.77	4.85	4.65	4.93	4.82	4.85	4.74	4.86		4.89		4.76	4.81

No.	Support Units	JAN. 2023	FEB. 2023	MARC H 2023	APRIL 2023	MAY 2023	JUNE 2023	JULY 2023	AUG 2023	SEPT. 2023	OCT. 2023	NOV. 2023	DEC. 2023	Overall Ratings
20	BAC	4.58	4.88	4.68	4.89	4.95	4.78	4.61	4.87	4.86	4.96	4.94	4.88	4.82
21	BUDGET	4.93	4.98	4.84	4.38	4.83	4.77	4.97	4.84	4.94	5.00	4.88	4.91	4.86
22	BDC	4.93	4.97	4.98	4.98	4.97	4.97	4.97	4.97	4.98	4.97	4.99	4.99	4.97
23	RECORDS OFFICE	4.40	4.87	4.82	4.68	4.80	4.76	4.90	4.92	4.90	4.88	4.88	4.91	4.81
24	OFFICE OF THE PRESIDENT	4.55	-	4.90	-	5.00	-	4.75	-	-	4.90	-	-	4.82
25	OFFICE OF THE SECRETARY OF THE UNIVERSITY AND THE BOARD OF REGENTS	-	-	-	-	-	-	-	-	-	-	-	-	-
26	VP for Admin & Finance	4.90	4.63	4.92	4.85	5.00	4.88	4.88	4.60		4.86	4.55	4.99	4.42
27	VP for Academic Affairs	4.84	4.91	4.9	4.99	4.94	4.88	4.72	4.72		5.00	4.80	4.78	4.86
28	VP for Research, Development & Extension	4.90	4.95	4.72	4.72	4.90	4.91	4.86	4.84	4.87	4.96	4.98	4.91	4.88
29	KEPLRC	4.53	-	4.7	4.73	4.58	-	-	-	-	4.67	4.45	4.51	4.60
30	USMARDC	4.77	4.82	5.00	5.00	5.00	5.00	4.58	4.23	4.79	4.80	4.97	5.00	4.83
31	PICRI	4.90	4.8	4.83	4.81	4.52	4.59	4.90	4.40	4.99	4.95	4.79	4.96	4.79
32	NSTP	-	-	4.94	4.72	4.90	4.96	4.98	-	-	-	-	4.67	4.86
33	RPSO	4.94	4.84	4.97	4.94		4.28		4.80	4.64	4.98	4.90	4.99	4.83
34	IAS	-	-	-	-	-	-	4.78	-	-	-	-	-	4.78