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The Malawi University of Business and Applied Sciences (MUBAS) was officially established under the MUBAS Act of 2019, positioning itself as a leading institution dedicated to fostering academic excellence, research, and innovation in the private sector. It is a premier higher learning institution in Malawi, renowned for its innovative academic and research programs. It operates with a mission to advance knowledge and professional competencies through outstanding teaching, research, and industry engagement. MUBAS enrolled its first cohort of students in 1965 under its original identity as the Polytechnic, a constituent college of the University of Malawi (UNIMA). MUBAS officially became an independent university following a rebranding and restructuring process in 2021. Since then, it has expanded its impact by focusing on innovation, entrepreneurship, engineering, and applied sciences, positioning itself as a leader in education tailored to Malawi's development needs

MUBAS' vision is to be an inclusive, engaged, entrepreneurial, innovative, and research-intensive university that significantly contributes to sustainable development. Its mission focuses on providing high-quality education, research, consultancy, and community service that foster socio-economic growth. The university's core values include excellence, integrity, inclusivity, innovation, and relevance. The university has shown significant growth in academic programs and research outputs, particularly in areas such as science and technology, engineering, business, communication, and media studies. Through its various schools: School of Science and Technology, School of Built Environment, School of Business and Economic Sciences, School of Education, Communication and Media Studies, and School of Engineering, MUBAS offers diverse programs from undergraduate to doctoral levels. Its centres: Water, Sanitation, Health

and Technology (WASHTED), Management Development Centre (MDC), Institute of Continuing Education (ICE), **Business Incubation Centre** (BIC), Printing Press Centre (PPC), **Engineering and Technical** Services Centre (ETSC), Transport **Technology Transfer Centre** (TTTC), further enhance its role in addressing pressing global challenges.

This sustainability report presents MUBAS' drive in contributing to the global aspirations as guided by the 17 Sustainable Development Goals (SDGs). This 2023 MUBAS SDG report is the result of a collaborative, inclusive process across the university. The efforts on sustainability are showcased in cases of research, teaching, engagement and operations, and they all demonstrate broad commitment to sustainability at MUBAS. This report presents selected cases on sustainability activities at MUBAS; is not an exhaustive review of MUBAS' sustainability-related work.



"At MUBAS, we believe in the transformative power of education, the pursuit of innovation and research, and the impact of applying knowledge to drive progress for our communities and society at large."

Vice-Chancellor Assoc. Prof. Nancy Chitera







Lighting the Path Out of Poverty: A MUBAS **Innovation Story**

In the heart of Blantyre, where the hum of ambition meets the silence of energy poverty, the Malawi University of Business and **Applied Sciences (MUBAS)** in collaboration with the **National Commission** Science and Technology (NCST) launched a bold initiative: the **Hackathon** Challenge on Development of Sustainable Renewable **Energy Technologies (RETs).** This wasn't just a call for innovation—it was a call to action against poverty.



VC hands a dummy cheque to Hackathon Challenge awardees

For many Malawians, especially in rural communities, access to reliable energy remains a distant dream. With over 80% of the population relying on biomass and only 15% connected to electricity, the lack of clean energy is more

than an inconvenience it's a barrier to education, healthcare, and economic opportunity. MUBAS recognized that tackling this









challenge head-on could unlock pathways out of poverty.

Through Hackathon, students, researchers, and entrepreneurs were invited to design locally manufactured RET components—solar lanterns, clean cooking technologies, mini-grids, and more. These innovations were not just technical solutions; they were lifelines for families who spend their evenings in darkness, children who struggle to study without light. and small businesses that cannot grow without power.

The initiative also emphasized import substitution, reducing reliance on costly foreign technologies and creating jobs through local production. By empowering Malawians to build their own energy solutions, MUBAS is fostering economic resilience and community ownership—core principles of SDG 1: No Poverty.

With up to MWK 40 million in funding available for winning proposals, the Hackathon is more than a competition. It is a platform for inclusive development, where innovation meets impact. And as these ideas take shape,

they carry the promise of a brighter, more equitable Malawi-one where poverty is not a destiny, but a challenge to overcome.

Expanding Access to Higher Education: MUBAS Drives Poverty Reduction through Targeted Scholarships

In its ongoing commitment to inclusive education and poverty reduction, the Malawi University of Business and Applied Sciences (MUBAS) continues to champion access to higher learning through Government-Sponsored Scholarships—a transformative initiative that directly supports Sustainable Development Goal 1 (SDG 1): End poverty in all its forms everywhere.

Administered through the National Council for Higher Education (NCHE), these scholarships prioritize highperforming students from disadvantaged backgrounds and rural communities groups often excluded from tertiary education due to financial constraints.

By removing economic barriers, MUBAS is not only expanding access but also empowering youth from lowincome households to pursue academic and professional pathways that can lift them, and their families, out of poverty.

Skills Development & Employment

At the heart of MUBAS' commitment to sustainable development lies a powerful belief: poverty can be overcome through skills, innovation, and opportunity. This vision came to life as the MUBAS Business **Incubation Centre proudly** graduated 44 incubates who completed intensive training in fields such as electrical installation, tailoring and design, food processing, and entrepreneurship. These individuals, many of whom entered the program with limited resources, emerged equipped not only with technical competence but with market-ready business plans and the confidence to become job creators. Their transformation reflects MUBAS' strategic role in advancing SDG 1empowering communities to break the cycle of poverty through education and enterprise.











Key indicators highlight the persistence of hunger in Malawi. The 2024 Global Hunger Index (GHI) rated the country's hunger situation as serious, assigning a score of 21.9. Similarly, the Integrated Food Security Phase Classification (IPC) estimated that about 4.2 million people were experiencing high levels of acute food insecurity (IPC Phase 3 or above) between June and September 2024.

Supporting Staff Welfare through Food Access:

The Malawi University of Business and Applied Sciences (MUBAS) promotes staff welfare and food security through the Senior Staff Common Room (SSCR). The facility provides affordable, accessible meals and snacks throughout the day, ensuring that staff members can meet their dietary needs even when they miss meals at home. Balanced lunch options, including meat and local staples such as Nsima and Rice, are offered daily.

By making food consistently available on campus, the SSCR serves as an effective intervention to prevent and alleviate hunger among staff. It not only supports the health and well-being of employees but also contributes directly to the university's commitment to SDG 2: Zero Hunger (Indicator 2.3.5).

Student Welfare Hunger Intervention

In a continued effort to support student welfare, Malawi University of Business and Applied Sciences (MUBAS) is providing affordable meal options across campus to ensure that all students have access to nutritious food.

Students can now enjoy budget-friendly meals in the Junior Common Room (JCR), a dedicated space designed to cater to the diverse needs of the student community. In addition, various food outlets across campus have







introduced meal packages and pricing structures that accommodate students with financial constraints, ensuring that no one goes hungry while pursuing their studies.

This initiative is part of MUBAS' broader commitment to fostering an inclusive learning environment where students' well-being is prioritized. By offering accessible and affordable meals, the university aims to reduce barriers to proper nutrition and promote academic focus and overall health.

The university encourages students to take advantage of these services and provide feedback on how meal programs can be further improved to meet their needs.

Contributions to Thriving Local Economies and Sustainable Livelihoods

MUBAS is advancing SDG 2: Zero Hunger by empowering communities through skills development and entrepreneurship. The **Business Incubation Centre** provides training that enables its graduates to generate income, create jobs, and strengthen food security.

- In 2024, 44 incubates graduated after completing a threemonth training in Food Processing, Tailoring and Designing, **Electrical Installation** and Maintenance, and Entrepreneurship.
- Since its inception, the Centre has supported over 700 incubates, many of whom now run businesses that supply food, goods, and services in their communities.
- Graduates develop market-ready products and comprehensive business plans, equipping them to become job creators and contributors to local economies.

By fostering self-reliance, innovation, and sustainable livelihoods, MUBAS is strengthening local value chains and contributing to the Malawi 2063 vision of inclusive economic growth and reduced hunger.

Food Sustainability

MUBAS actively incorporates food sustainability into its lessons and training.

- The Irrigation Engineering course under Civil **Engineering equips** students with skills in designing irrigation systems and associated hydraulic infrastructure; integrating modern technologies to improve water-use efficiency, climate resilience and environmental sustainability.
- The programme fosters climate-smart agriculture, preparing graduates to address challenges of food security, water security, sustainable farming, and community resilience.



Civil Engineering students take part in the construction of Shire Valley Transformation Programme Canal (Irrigation Project) in Chikwawa District







Pioneering Advancements in **Health and Safety Education**

MUBAS is Malawi's largest provider of experts in Environmental Health and Biomedical Engineering, and the only institution offering graduate programs in Health and Behavioral Change Communication. Their innovative courses also include Occupational Safety and Health, preparing graduates to improve workplace health and tackle health issues across various industries.

One of their key collaborative efforts is the Impala project,



A MUBAS Biomedical Engineering graduate operating medical equipment at QECH

which addresses the high child mortality rates in African hospitals, partly caused by inadequate



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monitoring of vital signs. While continuous vital signs monitoring is standard in wealthy countries, it has not been widely implemented in resource-limited settings. New technologies such as vital sign sensors, bedside biomarkers, and artificial intelligence have the potential to predict, rather than just detect, patient deterioration.

The project involved an observational study of 1,000 children aged from 28 days to 60 months admitted to high dependency units at Queen Elizabeth Central Hospital (QECH) and Zomba Central Hospital (ZCH) in Malawi. It assessed how well machine learning algorithms, applied to continuous vital signs data adapted for lowresource environments, could predict critical illness events. The study also explored

the impact of biomarkers, demographic factors, hospital site, and age on the accuracy of these predictions

Assurance to Well-being through Sports

MUBAS is committed to promoting health and wellbeing within the university and the surrounding community through accessible sports and recreational activities. During the mental health awareness week, our students do sports and compete for the Vice Chancellor's Trophy after a wellness workshop. One of our key initiatives is the MUBAS Fun Walk, a monthly event that encourages participants to connect, socialize, and engage in physical exercise, sporting activities with other universities and companies. These regular activities contribute to a healthier,

more connected community by promoting well-being through social engagement and active lifestyles, reinforcing our commitment to building a healthier future for all.

Advancing Equitable Healthcare through Active Community Participation

MUBAS advances public engagement by aligning academic programs with community service initiatives that drive social development and student empowerment and contributing to the health and well-being of patients in surrounding hospitals. The students from MUBAS visited Queen Elizabeth Central Hospital and donated assorted items to over 60 patients admitted in Ward 5A and cleaned up the Gogo Chatinkha Maternity Wing surroundings.



MUBAS Staff Volleyball Team in action against National Bank of Malawi Staff Team at MUBAS Grounds in Blantyre City.







MUBAS Prepares Secondary School Students

"Education is the most powerful weapon which you can use to change the world," Nelson Mandela once said. This timeless quote continues to inspire nations such as Malawi, where education is at the heart of national development.

With this in mind, the Malawi University of Business and Applied Sciences (MUBAS) has been leading a nationwide effort to prepare secondary school students for university success through free career talks and outreach programmes.

Secondary school is a critical stage where young people make life-shaping decisions,



Mtowe Community Day Secondary School students listening to a career talk presentation by MUBAS staff.

and without proper guidance, many capable learners risk missing the opportunity to pursue university education.

Since its establishment in 2019. MUBAS has reached over twenty thousand students from secondary schools across the country, including

those in hard-to-reach areas where access to information on higher education opportunities is limited.







In 2024, the university conducted education outreach activities in secondary schools across all four regions of Malawi-Northern, Central, Eastern, and Southern. These visits included government, mission, and private secondary schools. The outreach programmes are conducted annually as part of the university's commitment to lifelong learning and community engagement.

Preparations are currently underway for the 2025 outreach programmes.

MUBAS Supports Small-Scale Miners with Comprehensive Training Programme

The department of Mining under the School of Engineering at the Malawi University of Business and Applied Sciences (MUBAS) has engaged the local community in Chenkumbi, Balaka, by providing them with a training program for artisanal lime miners.

The program, which focuses on enhancing the quality and safety of mining operations, is a collaborative effort aimed at empowering community



MUBAS official delivering a presentation during a training

members involved in smallscale lime mining.

The training program which was initiated in May 2024 began with educating miners on identifying different types of limestone based on their distinctive colors, including white, grey, and pink. This knowledge enables miners to accurately assess and value their products, securing better prices and building stronger market relationships. Additionally, MUBAS conducted drilling activities and provided hands-on training sessions on best drilling practices, emphasizing safety and efficiency.

During the training, miners learned how to safely and efficiently use drilling equipment, map the area, and interpret drilling results. These skills not only increase productivity but also minimize risks associated with mining. MUBAS emphasized strict safety protocols for handling limestone and operating machinery, ensuring miners protect themselves and their peers.

The training also highlighted the importance of environmental stewardship, encouraging miners to adopt sustainable practices that protect biodiversity and prevent land degradation. This approach underscores MUBAS' commitment to responsible mining and its dedication to fostering longterm partnerships with local stakeholders.

By empowering artisanal miners with knowledge and skills. MUBAS is driving a more sustainable and prosperous mining sector in Malawi. The training program demonstrates the university's vision of developing both its members and neighboring communities, ensuring growth that honors both people and the planet.



MUBAS officials pose with mining staff in Balaka







Inclusive Research Teams-Faculty Student Program

At the Malawi University of Business and Applied Sciences (MUBAS), gender equality is not just a policyit's a principle embedded in the institution's research culture. In a bold move to promote equity and mentorship, MUBAS has achieved a 32% female representation in its Faculty-Student-Program (FSP) "Sciencepreneur" grantfunded research teams. This milestone reflects a

Awardees pose with the VC during a Faculty Student Programme (FSP) "Sciencepreneur" Grant Awarding Ceremony at the UNIPOD on December, 19th 2024

deliberate strategy to ensure that women are not only included but empowered to lead, collaborate, and innovate across disciplines. From engineering to environmental health, female researchers are increasingly shaping the direction of inquiry and contributing to solutions that matter. This commitment aligns directly with Sustainable Development Goal 5, which calls for the empowerment of all women and girls. By requiring gender-balanced research teams, MUBAS is dismantling barriers to academic leadership and fostering a more inclusive intellectual environment. The







presence of women and girls in these teams also creates mentorship pathways for female students, encouraging them to pursue careers in science, technology, and policy. Through this approach, MUBAS is not only advancing gender equality—it is cultivating a generation of changemakers equipped to transform Malawi's development landscape.

Empower, Elevate, Excel: MUBAS Champions Gender Equality through Staff Empowerment

In a vibrant show of commitment to gender equality and inclusive leadership, the Malawi University of Business and Applied Sciences (MUBAS) hosted an empowering session for its female staff under the theme "Empower, Elevate, Excel: Women Thriving Amidst Life's Demands." Held at Mount Soche in Blantyre, the event brought together women from across the institution for a day of reflection, inspiration, and strategic dialogue.

The gathering forms part



VC presents a gift to one of the MUBAS female professors during a women's conference organised by the University

of MUBAS's broader efforts to align with Sustainable Development Goal 5 (SDG 5): Achieve gender equality and empower all women and girls, reinforcing the university's role as a transformative force in higher education.

Opening the session, Vice Chancellor Associate Professor Nancy Chitera delivered a powerful message of encouragement and institutional vision.

"We want more participation of females to transform MUBAS," she stated, urging women to pursue opportunities at every level and contribute meaningfully to the university's growth. Her remarks underscored MUBAS' strategic intent to dismantle barriers to female advancement and foster a culture where women are not only included but empowered to lead.









MUBAS Leads Innovative Partnerships for Sustainable Water, Sanitation, and **Hygiene Solutions in Malawi**

The Malawi University of Business and Applied Sciences (MUBAS) is pioneering the development of sustainable water, sanitation, and hygiene (WASH) solutions in Malawi. MUBAS is working in conjunction with global partners to address the challenges of rural WASH and to build the health of the community through its WASHTED Centre.

In Chiradzulu District, MUBAS is partnering with World Vision and Water for People



Community in Chiradzulu District using a low cost hand washing equipment

on the Water, Sanitation and Hygiene for Everyone (W4E) Project (2022-2025), combining Community-Led Total Sanitation (CLTS) with the Care Group model to improve household sanitation and hygiene.

Working with the London School of Hygiene and Tropical Medicine, MUBAS









is also leading research to evaluate the effectiveness of this integrated approach.

Meanwhile, in Thyolo District, MUBAS and the Royal College of Surgeons in Ireland (RCSI) are implementing the Surg-

Water Project, funded by Science Foundation Ireland. The project pilots solar water disinfection biotechnology (SODIS) in rural healthcare facilities, providing a sustainable backup water supply for maternal and newborn care services.

Together, these initiatives highlight MUBAS's role in shaping practical, evidencebased solutions to ensure safe water, improved sanitation, and healthier communities across Malawi.



The Solar Water Disifenction Equipment set up at Thekerani Health Centre in Thyolo









Advancing Sustainable Energy Education at MUBAS

The Malawi University of Business and Applied Sciences (MUBAS), through its Department of Mechanical Engineering, established a Master of Science in Sustainable Energy program with support from DFID (now UKAID) via the University of Cape Town. Now in its fourth cohort, the program equips graduates with advanced knowledge in renewable energy systems, with a particular emphasis on offgrid solutions tailored to rural electrification.

As part of their thesis work, students are required to develop either a functional product or software tool that addresses real-world energy challenges. Notable research outputs include:

- **Energy Consumption** Modeling: A multivariable linear regression model was developed to monitor energy usage in rural communities, exemplified by the Mthembanji Solar Microgrid case study.
- **Hybrid System Design:** Students are actively designing optimal hybrid renewable energy systems for remote areas in Malawi, using tools such as HOMER and multicriteria decision analysis.

Beyond technical training, the program aims to foster access to cuttingedge research, innovative technologies, and sustainable investment opportunities in clean energy-contributing to Malawi's broader energy transformation goals.

MUBAS Driving Renewable Energy Innovation and Community Empowerment in Malawi

MUBAS proudly serves as the chair of the advisory board for a nationwide committee focused on the development of mini-grids. In this role, the



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institution provides essential technical guidance and support to local communities, helping to enhance access to reliable and sustainable energy solutions.

Additionally, MUBAS plays a leading role in collaborating with the Malawi Bureau of Standards to establish and develop renewable energy standards, for example, the solar and wind technologies standard ensuring quality and safety across Malawi's growing renewable energy sector. As active engineers within the Renewable Energy sector, MUBAS facilitated the development of a mini grid at Chisi Island which is already in use. MUBAS continues to support community-based initiatives, demonstrated by the generous donation of a solar-powered water pump to the Mdeka Women's Agricultural cooperative through the CEANGAL project. Through this same project, MUBAS awarded



grants to innovators in the renewable energy who worked worked on projects such as Solar powered chaff cutter for livestock feed and a Biogas digester to provide reliable energy for cooking and lighting for remote areas.

Through the advisory committee of Africa Mini grid project, MUBAS enhanced the construction of Mwansambo Mini Grid in Ntcheu. In addition, as a member of steering committee catalyzing distributed renewable energy for Agriculture in Malawi (AG-Energy project) which is running three projects; Phata solar powered irrigation for sugar in Chikwawa, Solar powered cold storage for milk in Thyolo, Mulanje and Chiradzulu & Solar powered irrigation in Salima (LIFUWU irrigation scheme), MUBAS has taken a leading role in the successful implementation of these projects. These contributions emphasize MUBAS' commitment to leveraging renewable energy technologies to improve agricultural productivity and empower local women farmers.







Venture Capital for Graduate-led Start-ups

The Malawi University of Business and Applied Sciences joined forces with a leading commercial Bank in Malawi, FDH Bank, to promote Entrepreneurship among final year undergraduate students. In the 10-year Memorandum of Understanding between the two institutions. a Graduate Start-up programme coordinated by the MUBAS Entrepreneurship Centre was launched to empower youthful final

Launch of FDH Bank Plc and FOR **MUBAS Graduate Start-Ups Program** FDH Bank Ple The MUBAS Vice-Chancellor (second right) co-signs an MoU with the FDH Bank Managing Director (far left)

year students with Venture Capital to establish business enterprises upon graduation. This deliberate move promotes an entrepreneurship culture within the University but

also promises sustainable job creation for the wider society.







Venture Creation through Business Incubation

Responding to the shrinking job market in the formal sector in Malawi, the Malawi University of Business and **Applied Sciences has** championed Business Incubation efforts through its Incubation Centre to empower the citizenry with practical skills to tackle various societal challenges. Since its establishment, the Incubation Centre has benefitted over 700 incubates in various fields such as Electrical Installation and Maintenance, Tailoring and Designing, Food Processing and Entrepreneurship. This initiative contributes to Malawi's long-term development aspirations of fostering self-reliance, confidence, and



entrepreneurship among graduates.

Financial Management Skills for Self-Employed Women

The Management **Development Centre** at MUBAS has taken an in business in financial management to boost the growth and sustainability of their enterprises. Since inception, Centre has seen a tremendous rise in the number of business women seeking these trainings as they equip them with skills enabling them not to misuse their capital but direct it towards achieving efficient outcomes. These trainings involve management of working capital, business data, creditors, financial tips and services among other aspects. With wellmanaged businesses, the Centre envisions prosperous business women who are able to contribute substantially to inclusive and sustainable economic growth and development.

initiative to train women



The Manager of the MUBAS Management Development Centre (left) presents a certificate to a participant (second left) alongside MDC's partners





Transformative Innovations and Advancements in **Technology**

The University Innovation Pod (UNIPOD) at the Malawi University of Business and **Applied Sciences (MUBAS)** continues to position itself as a driving force for transformative innovation in Malawi. In 2024, UNIPOD has strengthened its partnerships with key institutions and industries, turning bold ideas into practical solutions that address national challenges while advancing the Malawi 2063 agenda.

Through a collaboration with the Kamuzu University of Health Sciences (KUHeS), UNIPOD is pioneering the development of a breath collector device that promises to revolutionize medical diagnostics and health research in Malawi. In partnership with the National Bank of Malawi, UNIPOD is spearheading the local fabrication of plastic spare parts, reducing reliance on imports and enhancing industrial efficiency. Engagements with the Blantyre Water Board are set to introduce virtual tours of major water pumping plants. improving transparency and public awareness. Meanwhile, the Malawi Revenue Authority (MRA) has turned to UNIPOD to deliver a drone refresher training program, equipping teams with advanced monitoring

capabilities. UNIPOD is also working with Pyxus Agriculture on drone-enabled forestry management, providing cutting-edge tools for sustainable land use. Other innovations underway include the design of a bitumen sprayer for road construction efficiency and the fabrication of a potato grading machine to support agribusiness productivity. These projects embody UNIPOD's vision to transform Malawi into a hub of homegrown innovation, bridging academia, industry, and communities to deliver solutions that are impactful, sustainable, and globally competitive.







Partnerships for Sustainable Innovation and Industry

At the Malawi University of Business and Applied Sciences (MUBAS), the University Innovation Pod (UniPod) recognizes that partnerships are the foundation of a thriving innovation ecosystem. By collaborating with government, industry, and development partners, UniPod expands its capacity to nurture groundbreaking ideas, accelerate technological solutions, and directly contribute to the Malawi 2063 agenda. These partnerships not only amplify UniPod's impact but also create pathways for young innovators to transform their ideas into tangible outcomes that benefit communities and industries alike.

One key initiative is UniPod's engagement with the Junior Science, Technology, and Innovation (JSTI) Clubs, led by the Directorate of Science, Technology, and Innovation (DSTI) under the Ministry of Education. This program introduces science. technology, and innovation to learners in primary and secondary schools, fostering curiosity and problem-solving skills from an early age.

UniPod has been identified as a strategic partner to support this transformative national program, laying the foundation for Malawi's next generation of innovators.

In collaboration with the **National Commission for** Science and Technology (NCST). UniPod is coorganizing a Hackathon on Renewable Energy Technologies. This event challenges young innovators to design sustainable energy solutions that address Malawi's pressing energy needs while contributing to global efforts on renewable energy adoption. UniPod is also partnering with the Office of the Vice President to scale up a software prototype for managing public sector reforms. Building on its track record with solutions like the Local Revenue Management Information System (LoRMIS) for Mwanza software, UniPod advised and supported the office to refine this tool to strengthen efficiency and accountability in public service delivery.

Through the Zantchito Project, UniPod provides incubatees with access to advanced prototyping and small-scale manufacturing facilities. This collaboration

empowers entrepreneurs to refine product designs, develop working prototypes, and prepare for market entry, while benefiting from UniPod's technical expertise and mentorship.

Together, these partnerships embody UniPod's vision of transforming Malawi into a hub of inclusive, sustainable, and competitive innovation. By connecting young minds with opportunities, resources, and mentorship, UniPod is not only addressing today's challenges but also building the resilient innovation ecosystem that Malawi 2063 envisions. In partnership with Nkhwazi Aeros, UniPod hosted the Ethio-Malawi Drone Camp, a 5-week immersive program introducing 21 participants, including 13 young women, to drone technology. The camp offered hands-on training in piloting, data collection, and analysis, while showcasing applications in agriculture, environmental monitoring, and mapping. Beyond technical skills, the initiative promoted STEM capacity building, fostering problemsolving, collaboration, and innovation to prepare participants for real-world challenges.









Breaking Barriers: Sarah Khudze and the STEM **Movement at MUBAS**

At the Malawi University of Business and Applied Sciences (MUBAS), the push for gender equality in science and technology has found a passionate champion in Sarah Khudze, a lecturer in Computer Sciences and a lead facilitator in <u>STEM</u> outreach. Through the Skills for A Vibrant Economy (SAVE) project, Sarah has spearheaded campaigns across Malawi to encourage

girls—especially in rural and underserved communities—to pursue careers in Science, Technology, Engineering, and Mathematics (STEM). Her work directly addresses the gender gap in STEM education. challenging long-held stereotypes and empowering girls to see themselves as future engineers, scientists, and innovators.

Sarah's approach goes beyond awareness. She and her team have engaged both in-school and out-of-school youths through hands-on activities, science clubs, and mentorship programs, ensuring that STEM is



Karonga St Mary's Girls Secondary School students during the session







accessible and inspiring. By sharing success stories of women thriving in STEM fields, she's helping girls reimagine their potential and take bold steps toward post-secondary education. Her efforts not only support MUBAS' institutional mission but also advance SDG 5 by promoting inclusive education, breaking gender norms, and building a pipeline of female talent ready to transform Malawi's development landscape.

Special Needs Inclusion

- Support for Students with Disabilities: MUBAS has admitted students with special needs and offers tailored academic support
- Community-Based Research: Funds research addressing povertyrelated issues through its **Internal Research Grants** aligned with Malawi's Implementation Plan (MIP1).

- Skills Development: Provides short courses and vocational training to empower low-income communities with employable skills
- Goal: Promote equity and access to higher education

Institutional Support & Fee Waivers

- Internal Assistance: Some departments offer limited fee waivers or work-study options based on merit or need
- **Application: Students** may apply through the Registrar's Office or Student Affairs

Bridging the Gap: MUBAS and Gift of the Givers **Empower 1.000 Students Through Essential Support**

On 20 August 2025, the Malawi University of Business and Applied Sciences (MUBAS), in partnership with the Gift

of the Givers Foundation, provided essential supplies to over 1,000 financially vulnerable students. The donation, which included necessities to support academic and personal wellbeing, was part of an ongoing collaboration that began in 2022.

During the handover ceremony, key figures such as Mrs. Sherif Mia (Country Director, Gift of the Givers Malawi) and Mrs. Getrude Sitolo (Dean of Students) emphasized the importance of the initiative and the growing needs within the student population of over 6,000 students, which require support, though only a fraction could be reached due to limited resources. Students expressed heartfelt gratitude, noting the impact on their educational journey.

This initiative reflects a broader commitment to equity and inclusion, helping bridge socio-economic gaps and enabling students to pursue their studies with dignity and resilience.



Gift of the Givers team, MUBAS officials, student and beneficiaries during the symbolic handover of basic needs.







Promoting Sustainable Communities by Leveraging Research and Collaborative Partnerships

At MUBAS, we champion interdisciplinary research and innovation that transforms communities into inclusive, safe, resilient, and sustainable spaces. Our faculty-led projects tackle pressing urban challenges, from reducing flood risks in Zomba City and Nsanje District to shaping practical solutions that safeguard lives and livelihoods. Partnering with global and local stakeholders, including Oxfam Malawi, UN-Habitat, city councils, and

district assemblies, we ensure that our research creates direct, real-world impact. Our strong commitment to SDG 11 (Sustainable Cities and Communities) has earned the University strategic collaborations and recognition at both national and international levels. Formal partnerships with Jefferson University and memoranda of understanding with city councils and district assemblies highlight MUBAS' role as a trusted partner in driving sustainable urban development. Beyond research, MUBAS actively integrates sustainability into teaching, operations, and community engagement, reinforcing our vision of shaping cities that are not only resilient today but also

prepared for the future.

UNIPOD: Local Solutions for Sustainable Communities

UniPod's special mentorship programs are designed to nurture young innovators by offering targeted guidance, technical support, and structured pathways to transform creative ideas into practical solutions for national and regional challenges. These programs refine technical skills, connect innovators with resources, and ensure projects are scalable and impactful. A notable example is Gift Gloss,







a student from Malowa Community Day Secondary School (CDSS) in Salima, who developed a robot using photogenic, electric field, and hydro contact mechanisms. Through UniPod's three-day mentorship and project assessment, he received valuable insights and recommendations to further enhance his innovation, demonstrating UniPod's commitment to empowering future innovators.

Empowering Future-built Environment Professionals

MUBAS is dedicated to equipping students with the knowledge and practical skills necessary to create cities that are inclusive, safe, and sustainable. Through programs in physical planning, land surveying, and urban development, students actively engage in real-world projects addressing pressing urban challenges such as



Gift Gloss at the UniPod experimenting with various technologies

inadequate infrastructure, environmental vulnerability, and rapid population growth. For instance, students have worked on initiatives to improve drainage systems in flood-prone areas of Zomba, designed safer pedestrian pathways in Lilongwe, and developed community-oriented housing models that promote energy efficiency and resilience. International collaborations. such as the Memorandum

of Understanding (MOU) with Jefferson University, further broaden students' perspectives by exposing them to global best practices in sustainable urban development. These partnerships facilitate knowledge exchange, joint research, and cross-cultural learning, enhancing students' ability to design urban spaces that are functional, equitable, and environmentally sustainable. At the local level, MUBAS has an MOU with Nsanje district assemblies on research collaboration to address severe climatic risks such as flooding experienced in the district every rainy season. Through these projects and collaborations, MUBAS students develop critical problem-solving, technical, and leadership skills, preparing them as future professionals capable of shaping resilient, inclusive, and sustainable cities. This work directly supports the Malawi 2063 agenda, contributing to the national vision of modern, safe, and thriving urban communities that benefit all citizens.









Industrialisation for Sustainable Lime Production

The University has embarked on an ambitious project to venture into <u>limestone</u> mining and setting up a lime manufacturing factory through its subsidiary company, MUBAS Commercial Limited (MCL). The venture promises to contribute significantly to import substitution of lime-based products from high-quality lime deposits at Chemkumbi Village in Balaka, Malawi estimated at 25 million metric tonnes. While also contributing to the financial independence of the University, the venture



also engenders sustainable production of lime as it establishes high quality lime manufacturing unlike the production of traditional lime on which the community

depended on but poses







environmental and health hazards. Members of the community are therefore expected to benefit from both economic gains as well as gains in health and environmental sustainability

MUBAS Council for Sustainable Utilization of Resources

The University has various developmental projects, facilities and productive resources at its disposal

and seeks to realise their maximum potential while being used sustainably. Under the guidance of the University council, these resources are being used to sustain the operations of the University and to serve the public better. These resources include the University Innovation Pod (UniPod) which provides a space for innovators and creative works to help solve social challenges through inventions and ideation, the MUBAS Industrial Park

which offers training and the production of tomato puree and fruit juices locally, as well as Mining Engineering Laboratories with state-ofthe-art equipment providing tests to the construction industry and other related fields of built environment.



Chairman of MUBAS Council (Second right) and other council members visit the Mining **Engineering laboratory at MUBAS**







Climate Action

The Malawi University of Business and Applied Sciences (MUBAS) is contributing significantly to SDG 13: Climate Action through its participation in the <u>Sustainable and Healthy</u> Food Systems in Southern Africa (SHEFS-SA) Project. This 6-year initiative, funded by the Wellcome Trust and runs for 72 months, starting in February 2024. The project brings together partners from Malawi, South Africa, Zimbabwe, and the UK to strengthen climate resilience in African food systems.



Visit to SVTP by UKZN and Malawi SHEFSSA team

The Project Investigates

- Climate change impacts on food systems, nutrition, and health.
- Strategies for building resilience in vulnerable communities through
- climate-smart mitigation and adaptation solutions.
- The health benefits and risks of scaling up climate







- policy interventions across governance levels.
- Leverage points in food systems for reducing greenhouse gas emissions while improving nutrition and health outcomes.

Practical Solutions:

Development of scalable innovations such as decision-support tools and community-based adaptation measures.

Capacity Building: Training of early-career researchers to lead future climate-health initiatives.

Policy & Community Engagement:

Translating research into actionable strategies for policymakers and communities.

Expected Outcomes

- Just transition strategies for sustainable and equitable climate action.
- Strong Community of Practice on Climate and Health in Malawi and Southern Africa. New generation of Malawian climate leaders and researchers.

MUBAS is driving climate resilience by combining research, innovation, training, and policy engagement. Through SHEFS-SA, the university is not only advancing SDG 13 but also contributing to related goals such as SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-being), and SDG 6 (Clean Water and Sanitation)

Workshop on Disaster Preparedness

Through its facilitation of a on disaster preparedness, the Malawi University



Sciences (MUBAS) makes a strategic contribution to SDG 13: Climate Action, specifically to Target 13.1: "Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters." By convening government bodies, the healthcare sector, businesses, NGOs, and local communities, MUBAS serves as a critical platform for building collective climate resilience. The workshop's focus on pre-disaster engagement and preparedness—through roundtables discussing environmental hazards, policy incentives, and community empowermentdirectly addresses the need to proactively adapt to climate-induced disasters like floods and droughts. Furthermore, the simulation exercise on responding to a catastrophic flood scenario provides practical, collaborative training for stakeholders to improve coordination and response strategies, thereby strengthening the adaptive capacity of systems and communities. By bridging the gap between knowledge, policy, and local action, MUBAS is actively helping to integrate climate change measures into national policies and planning, thereby reducing Malawi's vulnerability to the increasing impacts of the climate crisis.







MUBAS Champions Environmental Health and Sustainability

On September 26, 2024, MUBAS joined the Malawi **Environmental Health** Association (MEHA) in commemorating World **Environmental Health** Day under the theme "Environmental Health: Creating Resilient Communities through Disaster Risk Reduction and Climate Change Mitigation and Adaptation."

The activities included an anti-littering and anti-thin plastic campaign and a



Students and Staff cleaning Ndirande Market during the World Environmental Health Day

market cleaning exercise at Ndirande Market in collaboration with Blantyre City Council. These actions raised awareness of the dangers of poor waste

disposal and thin plastics, which often pollute rivers and



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water bodies, threatening aquatic biodiversity.

By engaging students, local authorities, and community members, MUBAS reinforced its contribution to SDG 14: Life Below Water, while advancing its broader sustainability agenda that combines research, education, and community partnerships to address environmental challenges.

MUBAS' Journey in Safeguarding Lakes, Rivers and Streams

At the Malawi University of Business and Applied Sciences (MUBAS), the story of protecting rivers and streams is not just about science, it is about people, communities, and the life that depends on water.

Across Malawi, rivers provide more than just water; they nourish crops, sustain fisheries, and support countless families who rely on irrigation for their livelihoods. Yet, these ecosystems face increasing threats from pollution, overuse, and destructive practices. At MUBAS, through its Water, Sanitation, Hygiene and Technology Enterprise Development (WASHTED) Centre, we have taken it as our responsibility to stand at the frontline of protecting and enhancing aquatic ecosystems, ensuring that they remain healthy and resilient for generations to come.

One of our strongest commitments lies in education and awareness. Under WASHTED, outreach activities bring together local and national communities to talk openly about the dangers of unsustainable water use, and pollution. These conversations not only highlight the challenges but also inspire communities to take action in safeguarding the rivers they depend on.

MUBAS also works hand in hand with industries and local communities, finding ways to balance economic activity with environmental protection. By engaging directly with partners, WASHTED helps to maintain and expand ecosystems that are home to a rich diversity of plants and animals.

MUBAS believes in leading by example. Through WASHTED,

the University has rolled out plans to reduce plastic waste on campus. By tackling plastic at the source, we are preventing it from finding its way into rivers and streams, where it threatens aquatic

Beyond classrooms and laboratories, WASHTED staff and students organize and support events that celebrate rivers and promote their sustainable use. These events become spaces where people reconnect with nature, share knowledge, and commit to protecting aquatic resources.

Most importantly, our efforts are deeply rooted in collaboration with communities. Together, we nurture a shared sense of responsibility, reminding ourselves that rivers are more than waterways, they are lifelines, deserving of care and protection.

Through WASHTED, MUBAS is weaving a story of hope and resilience, one that shows how universities can play a meaningful role in protecting life below water while empowering communities to safeguard their future.



Identification of waste piles along surface water sources



Students cleaning around Campus during the 2024 Keep MUBAS Clean Campaign







MUBAS Provides Strategic Expertise in Shaping Malawi's National Biodiversity Strategy and Action Plan

The Malawi University of Business and Applied Sciences (MUBAS) made significant contributions to the national stakeholder consultation meeting organized by the Ministry of Natural Resources and Climate Change, by providing expert technical input to refine the preliminary National Biodiversity Strategy and Action Plan (NBSAP) targets for alignment with the **Kunming-Montreal Global** Biodiversity Framework.

Our representative played a key role in ensuring the targets were specific, measurable, achievable, relevant and time-bound (SMART), offering critical analysis on sustainable use and agriculture targets, and advocating for a robust monitoring framework that integrates geospatial data and citizen science. Furthermore, MUBAS successfully positioned itself as a vital knowledge partner, securing an invitation to join the NBSAP **Technical Committee** and initiating plans for collaborative research, thereby strengthening the university's strategic role in supporting evidence-based biodiversity policy and capacity building in Malawi.

MUBAS Goes Green

Through its institution-wide tree planting exercises, the Malawi University of Business and Applied Sciences (MUBAS) makes a direct and multifaceted contribution to Sustainable Development Goal 15: Life on Land, which focuses on protecting, restoring, and promoting sustainable use of terrestrial ecosystems. By planting over 1400 indigenous and adaptive tree species like M'bawa and pine across its campuses in Blantyre and Lilongwe, MUBAS is taking concrete action to









MUBAS staff planting a tree together with her family at the University's site in Lilongwe

restore degraded forests and integrate biodiversity values into its operational landscape. The initiative, championed by leadership, goes beyond mere planting, to emphasize the critical need for nurturing the trees to maturity, thereby ensuring sustainable

management and longterm survival of these ecosystems. Furthermore, by engaging staff, students, and local community leaders, MUBAS fosters community participation and shared responsibility for conserving biodiversity, recognizing that the

benefits of trees-from oxygen and soil manure to protection from cyclones are vital for human wellbeing and ecosystem resilience, aligning perfectly with the core objectives of SDG 15.



MUBAS staff and students pose for a photo with government officials after a tree planting exercise at the University's main campus in Blantyre







Grievance Redress Training for Construction Project Preparation

Through its Grievance Redress Mechanism Committee, the Malawi University of Business and Applied Sciences (MUBAS) trained various stakeholders in the construction industry on potential grievances in the

construction area before the commencement of onsite activities. The training involved a broad spectrum of stakeholders from the Malawi Police Service, the Ministry of Health, the Ministry of Gender and local chiefs in addition to MUBAS staff. The training was poised to strengthen access to justice and protection of rights, build effective, accountable, and inclusive institutions as well as enhance community participation and empowerment. This initiative is part of MUBAS' plans to construct a new campus in the capital city, Lilongwe to enhance its capacity and reach across the nation.



Delegates pose for a group photo during the training



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2024 MUBAS Students Representative Council

Inclusive Governance through the Students **Representative Council**

The University has a vibrant Students Representative Council (SRC) that is responsible for the welfare of all students at MUBAS. The SRC is elected annually in the second semester of the academic year. The SRC acts as a bridge between the administration and the student's body. The Council is composed of both Council members and regular members. The Council itself consists of the Executive Committee. Directors and Representatives. The SRC also makes representation at the highest level of governance in the university to encourage innovation and inclusivity.

Management Engages Parents and Guardians during Orientation

MUBAS welcomed its new students in 2024 through a comprehensive orientation programme on the various university structures, facilities and resources. MUBAS management engaged parents and guardians during the orientation programme to collaborate with the University in shaping the future of their wards. This deliberate gesture not only promotes inclusive and participatory decisionmaking but also enhances institutional transparency, integrity and trust.



Newly enrolled MUBAS students listen attentively during the orientation sessions





Stakeholder Consultation in Development of **University Programmes**

At the Malawi University of Business and Applied

Sciences (MUBAS), we place great importance on engaging with diverse stakeholders as a central aspect of our programme development and institutional growth. We recognise that higher education exists to serve society, and therefore

our programmes must be responsive to the evolving needs of industry, government, and communities. Through structured stakeholder consultations, MUBAS ensures that our teaching, research, and outreach remain relevant, demanddriven, and aligned with national development priorities.

Stakeholder engagement is embedded in our processes of curriculum design, policy formulation, and programme review. By involving professional



Department of Land Economy and Quantity Surveying staff pose for a group photograph during the consultations.



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bodies, employers, industry experts, alumni, and government representatives, we are able to integrate practical insights, market requirements, and regulatory standards into our academic offerings. This collaborative approach not only enriches the quality of our programmes but also enhances the employability of our graduates and strengthens the University's contribution to Malawi's development agenda, including Malawi 2063.

A recent example is the

consultation process undertaken by the Department of Land **Economy and Quantity** Surveying. The Department convened stakeholders from both the public and private sectors, including construction firms, government ministries, professional boards, and development partners, to review the content of newly designed postgraduate programmes. This process involved critical feedback on the Master of Science in Construction Project Management (MSc in

CPM) and the Doctor of Philosophy in Construction Management (PhD in CM). The consultative forum provided a platform for dialogue on industry trends, skills gaps, and emerging challenges in the construction sector. The valuable input received has been integrated into programme design, ensuring that these new qualifications address current and future needs of the profession. Such engagements reaffirm MUBAS's commitment to inclusivity, relevance, and excellence in higher education.

Collaboration for Entrepreneurship Development

MUBAS entered into collaborative efforts with the University of Strathclyde to strengthen Entrepreneurship activities in both universities. This entails a collaborative relationship between the Hunter Centre for **Entrepreneurship Strategy** and Innovation at the University of Strathclyde and the Entrepreneurship Centre at MUBAS. Through this working relationship, students are able to participate in peer-to-peer coaching with possibilities of staff and student exchange visits as well as a participatory approach from both universities to explore entrepreneurship challenges and identify funding opportunities for highpotential start-up ventures.



Entrepreneurship Strategy and Innovation (University of Strathclyde) symbolically makes a collaborative gesture with the MUBAS Entrepreneurship Centre Manager







About this Report

This report highlights a fraction of the initiatives undertaken by the Malawi University of **Business and Applied Sciences** (MUBAS) to advance the UN Sustainable Development Goals (SDGs). Covering activities from the 2024 calendar year, the data was gathered between November 15 and December 15, 2024. Comprehensive details on MUBAS's contributions to the SDGs through research, teaching, collaborations, and

operations are available on its website.

The activities highlighted in this report have been identified and selected through comprehensive consultations with key stakeholders from all schools: School of Science and Technology, School of Built **Environment, School of Business** and Economic Sciences. School of Education, Communication

and Media Studies, and School of Engineering; and all Centres: Water, Sanitation, Health and Technology (WASHTED), Management Development Centre (MDC), Institute of Continuing Education (ICE), **Business Incubation Centre** (BIC), Printing Press Centre (PPC), **Engineering and Technical** Services Centre (ETSC), and Transport Technology Transfer Centre (TTTC).





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"When research outputs and innovations from our staff and students are harnessed through interdisciplinary collaboration, an all-inclusive sustainable future is possible."

Deputy Vice-Chancellor Prof. Ishmael Kosamu Research & Innovation Week, 2024

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Innovate Create Generate