



Sustainability: The Fabric of Africa's Future

Advancing the SDGs and Agenda 2063
through the philosophy of *Ubuntu*



Stellenbosch
UNIVERSITY
IYUNIVESITHI
UNIVERSITEIT

forward together
sonke siya phambili
saam vorentoe

Jaarverslag vir Volhoubare Ontwikkeling
INgxelo yoNyaka yoPhuhliso oluZinzileyo
Sustainable Development Annual Report
2024/2025

Sustainability and the philosophy of Ubuntu

Stellenbosch University's (SU) institutional commitment to Sustainability and the philosophy of *Ubuntu* is powered by the integration and *weaving together* of the UN SDGs and the AU's Agenda 2063. This unified framework secures a sustainable future in *service to society*, ensuring our work is globally aligned and locally relevant.

About the SDG/2063 Impact Hub

Established in 2021, the SDG/2063 Impact Hub is housed at Stellenbosch University International (SU International). The key objectives of the Hub are to promote and advocate for the visible uptake of the UN's SDGs and the AU's Agenda 2063 for a peaceful and prosperous Africa, to communicate our contributions to the goals and introduce sustainability literacy, and to further leverage our international partnerships for progress.

✉ susdev@sun.ac.za
🌐 <https://susdev.sun.ac.za>
Our reports:



Sustainability: The Fabric of Africa's future

Advancing the SDGs and Agenda 2063 through the philosophy of *Ubuntu*

Sustainability Through *Ubuntu*4

Championing Africa's Self-Reliance Journey5

Ubuntu at the Heart of Sustainable Development7

Stellenbosch University (SU) at a Glance10

Teaching and Learning 13

Research for Impact: Advancing Knowledge in Service of Society14

Social Impact through Community Interaction 18

Environmental Stewardship20

Governance.....23

The Moonshots

#MOONSHOT 7

Africa is a Strong and an Influential Global Player..... 25

African Collaborations for a Sustainable Future 26

Africa Takes Charge 28

#MOONSHOT 1

Every AU Member state Attains at Least Middle-income Status..... 31

Alleviating Student Debt and Exclusion Through Community-led Solutions 32

A Thriving Stellenbosch..... 34

Building Resilient Education Systems 38

Advancing Health and Well-being in Africa Through Research, Innovation and Care..... 40

Building Future-ready Skills 44

Advancing Food Security and Sustainable Agriculture..... 46

Driving Water Security and Innovation for a Blue Economy50

Powering A Sustainable Future..... 52

Advancing Climate Action and Resilience 54

Protecting Life Below Water 56

Protecting Life On Land60

Reuse, Reduce, Recycle 63

#MOONSHOT 2

Africa is more Integrated and Connected 65

Strengthening Pan-African Unity and Collaboration 66

Building Strong Financial Institutions and Partnerships In, and For, Africa 68

Building Innovation, Infrastructure and Industry70

Designing Sustainable Cities and Inclusive Communities..... 72

#MOONSHOT 3

Public Institutions are more Responsive..... 76

The Templeton Prize 76

We Must Fix Our Municipalities..... 77

#MOONSHOT 4

Africa Resolves Conflicts Amicably..... 78

A More Secure Stellenbosch 78

Dialogues for Peace Building..... 79

Africa's Emerging Peace and Security Architecture.....80

#MOONSHOT 5

African Values are Explicit and Promoted 83

Honouring African Culture and Practices Through *Ubuntu*..... 84

#MOONSHOT 6

African Citizens are more Empowered and more Productive..... 87

Advancing Gender Equality and Women's Leadership 88

Empowering Youth Through Quality Education, Global Engagement and Innovation..... 90

Afterword: A Practice of Everyday Justice92

Contributors and A Vote of Thanks93



Ubuntu –
Weaving the fabric
of Africa's future

Sustainability Through *Ubuntu*

Stellenbosch University's Sustainable Development Annual
Report 2024/2025

At Stellenbosch University, our vision for sustainability is grounded in a principle that has long guided African societies: *Ubuntu*. It reminds us that we exist in relationship with others, and that meaningful progress is only possible when it is shared. This Sustainability and Development Annual Report reflects how, in this reporting period, we sought to put this philosophy into practice across our academic, environmental, and societal commitments.

Like in past years, our sustainability journey is shaped by two aligned global frameworks: the United Nations 2030 Agenda, with its call to leave no one behind, and the African Union's Agenda 2063, which imagines the Africa we want. These frameworks converge around people, planet, peace, prosperity, and partnership, and these values will continue to guide our work and inspire our community.

Research remains one of our strongest drivers of impact. Recently, our researchers advanced solutions across health, environment, technology, and social justice, contributing knowledge that is excellent and transformative.

Our learning and teaching initiatives continued to prepare graduates who are equipped for a rapidly changing world, supported by programmes such as the Diploma in Sustainable Development, the *Ubuntu* Learning Community, and the Future17 SDG Challenge that cultivate sustainability literacy and ethical leadership.

Social impact is an integral part of our identity as a university in service of society. Through community partnerships, student-led projects, and the work of centres such as the Centre for the Advancement of Social Impact and Transformation, we continued to address pressing issues of inequality, health, and empowerment.

Environmental stewardship remains central to our long-term ambition of achieving net-zero emissions by 2050. Our efforts in energy efficiency, water conservation, sustainable buildings, biodiversity protection, and responsible mobility reflect our commitment to responsible resource use and resilience.

None of this work is possible without a foundation of good governance and strong partnerships. Guided by King IV™ principles and supported by local and global collaborations, we continue to strengthen ethical leadership, accountability, and shared progress.

As we reflect on the year, we do so with the conviction that sustainability is a collective journey. *Ubuntu* teaches us that we flourish together. May this report inspire continuous action for our communities, our continent, and our shared future.

Prof Deresh Ramjugernath
SU Vice-Chancellor and Rector

Championing Africa's Self-Reliance Journey

Botho Kebabonye Bayendi, Director for Strategic Planning
and Delivery, African Union Commission

Ms Bayendi is responsible for coordinating the implementation of Agenda 2063, the framework adopted by the AU in 2013 for the socio-economic transformation of Africa over a period of 50 years.

The vision for an integrated, prosperous, and peaceful Africa, laid out in the African Union's Agenda 2063: The Africa We Want is fundamentally built on the pillars of Partnerships based on mutual respect, and the fact that Africa takes full responsibility for financing her development as articulated in Moonshot 7 of the Second Ten-Year Implementation Plan of Agenda 2063. Demanding equality on the global stage requires us to act the part, and this calls for a decisive shift towards self-reliance and away from the old culture of dependency. I commend Stellenbosch University (SU) for its proactive commitment to this continental Agenda.

As we launch into the Decade of Acceleration (2024-2033) with the ambitious "Moonshot" of middle-income status for every AU member state by 2033, universities are indeed a crucial part of the game. SU's work, particularly through the establishment of the SDG/2063 Impact Hub and its strategic sustainability advocacy and reporting, provides a model for this commitment. By purposefully aligning its efforts with the UN Sustainable Development Goals (SDGs) and our continental blueprint, Agenda 2063, SU ensures its research and outreach are contextually relevant and impactful.

Furthermore, SU's leadership in initiatives like the AU-EU ARUA-Guild CoREs demonstrates the necessary reorientation: Behaving as equal partners with common goals in transcontinental collaboration. This effort must be mirrored by a push for domestic resource mobilisation across all member states. Investing in research and education is a critical component for long-term development. We require compelling, evidence-based output that drives tangible progress towards self-reliance, and SU is answering that call with accountability and action.

See more about the vision Ms Bayendi supported during her visit to SU during the ARUA-Guild CoRE launch in 2024 under Moonshot 7 and AU Goal 20/SDG 17 on page 28.



Ubuntu:
I am because we are

Ubuntu at the Heart of Sustainable Development

Stellenbosch University's Institutional Commitment to Sustainability

The philosophy of *Ubuntu*, a principle deeply rooted in African culture that champions interconnectedness and collective humanity, guides the 2024 Stellenbosch University (SU) Sustainable Development Annual Report. Often expressed in the Nguni phrase *Umuntu ngumuntu ngabantu*, meaning *a person is a person through other people*, *Ubuntu* reminds us that our individual identity and well-being are inseparable from the collective society.

Ubuntu and Sustainable Development: A Shared Vision

Ubuntu champions the responsible use of natural resources for the benefit of future generations, simultaneously driving social and economic prosperity through collective well-being and shared dignity. At SU we have committed to advancing Sustainable Development through research, teaching, environmental stewardship, and social impact through community engagement.

The Alignment: Ubuntu and Global Agendas

At its heart, sustainability is a fundamentally relational concept, mirroring *Ubuntu*'s emphasis on the interdependence of people and the environment. At the same time, *Ubuntu* also helps promote a culture of environmental sustainability by encouraging the responsible use of natural resources, reinforcing the environmental dimension of sustainable development for future generations. This shared commitment is particularly evident in SU's inclusion of both the SDGs and Agenda 2063 in our Vision 2040.

The SDGs: Leaving No One Behind

Ubuntu is founded on a communal spirit of caring for the well-being of society, with individuals taking pride in the welfare of others rather than focusing solely on themselves. The UN's call through the SDGs to *leave no one behind* mirrors *Ubuntu*'s principle of shared humanity and reciprocity. The philosophy intrinsically supports the social dimension of sustainability by prioritising the collective well-being over individualism. The *Ubuntu* principles naturally enhance the advancement of the key social SDGs

1 to 5, namely eliminating poverty and hunger, granting access to healthcare and education, and achieving gender equality. In the same way, *Ubuntu* strongly supports the work against systemic inequality (SDG 10: Reduced Inequalities) to prioritise equality and growth grounded in dignity. *Ubuntu* also contributes to social justice through its focus on inclusivity, ethical standards, accountability, and communality for Peace, Justice, and Strong Institutions (SDG 16).

Agenda 2063 for a Peaceful and Prosperous Africa

Ubuntu provides a powerful foundation for advancing the Goals and Moonshots of Agenda 2063 for *The Africa We Want*. By reminding us that *I am because we are*, *Ubuntu* aligns naturally with Agenda 2063's focus on shared prosperity, human well-being, peaceful societies, and continental unity. It encourages people-driven development, responsive institutions, and collaborative problem-solving. These issues are central to Moonshots such as empowering African citizens, promoting African values, resolving conflict amicably, and strengthening Africa's role on the global stage. In the same way that *Ubuntu* supports the SDGs by prioritising social justice, reciprocity, and responsible stewardship, it reinforces Agenda 2063's call for an integrated, self-reliant, and sustainable Africa where the choices we make today secure dignity and opportunity for future generations.

Africa's Shared Path: The Decade of Acceleration

SU's sustainability journey aligns closely with the AU's Decade of

Acceleration (2023-2033), the Second Ten-Year Implementation Plan (STYIP) of Agenda 2063. Building upon the seven Aspirations and twenty specific goals established during the first decade (2014-2023), the STYIP has introduced seven "Moonshots." From people-driven development to responsive governance, these Moonshots give tangible expression to the Africa we want and particularly relevant to AU's 2024 theme: "Educate and Skill Africa for the 21st Century."

These Moonshots are ambitious, high-impact targets designed to fast-track progress toward the overarching Aspirations of Agenda 2063 by 2033. Building on the twenty goals, these Moonshots focus on integrated infrastructure, responsive governance and people-driven development, providing a clear roadmap for measurable results. The plan also outlines Africa's ambitions for the next decade, supported by a Theory of Change, clear governance and management frameworks to ensure bold, catalytic, and resilient delivery.

2024: The Year of Education and Skills

The AU Heart declared 2024 the year of "Educate and Skill Africa for the 21st Century" to focus their commitment on human capital development. This strategic theme supports Moonshot 6, which aims to empower African Citizens and increase productivity, as well as AU Goal 2, which emphasises the need for well-educated citizens and a skills revolution. Therefore, SU's work in this area is aligned closely with the AU's most pressing continental priority for the current year.

2030 Agenda to Leave No One Behind

In 2015, 193 UN Member States adopted the 2030 Agenda for Sustainable Development. It aims to address urgent global challenges and promote prosperity while protecting the planet. The agenda includes 17 SDGs with specific targets to achieve by 2030, balancing social, economic, and environmental dimensions of sustainable development to *leave no one behind*.

Aligning the SDGs and the Goals of Agenda 2063 and their Shared Core Values

Through their extensive overlap, these two ambitious agendas demonstrate a powerful, near-total consensus on the path to a sustainable future. The two frameworks share over 90% of their goals, unified across

five interconnected dimensions that reflect the essence of *Ubuntu*:

- **People** (social development and human well-being)
- **Planet** (environmental protection)
- **Prosperity** (inclusive economic growth)
- **Peace** (justice, good governance, stability, and strong institutions)
- **Partnership** (global and continental cooperation)

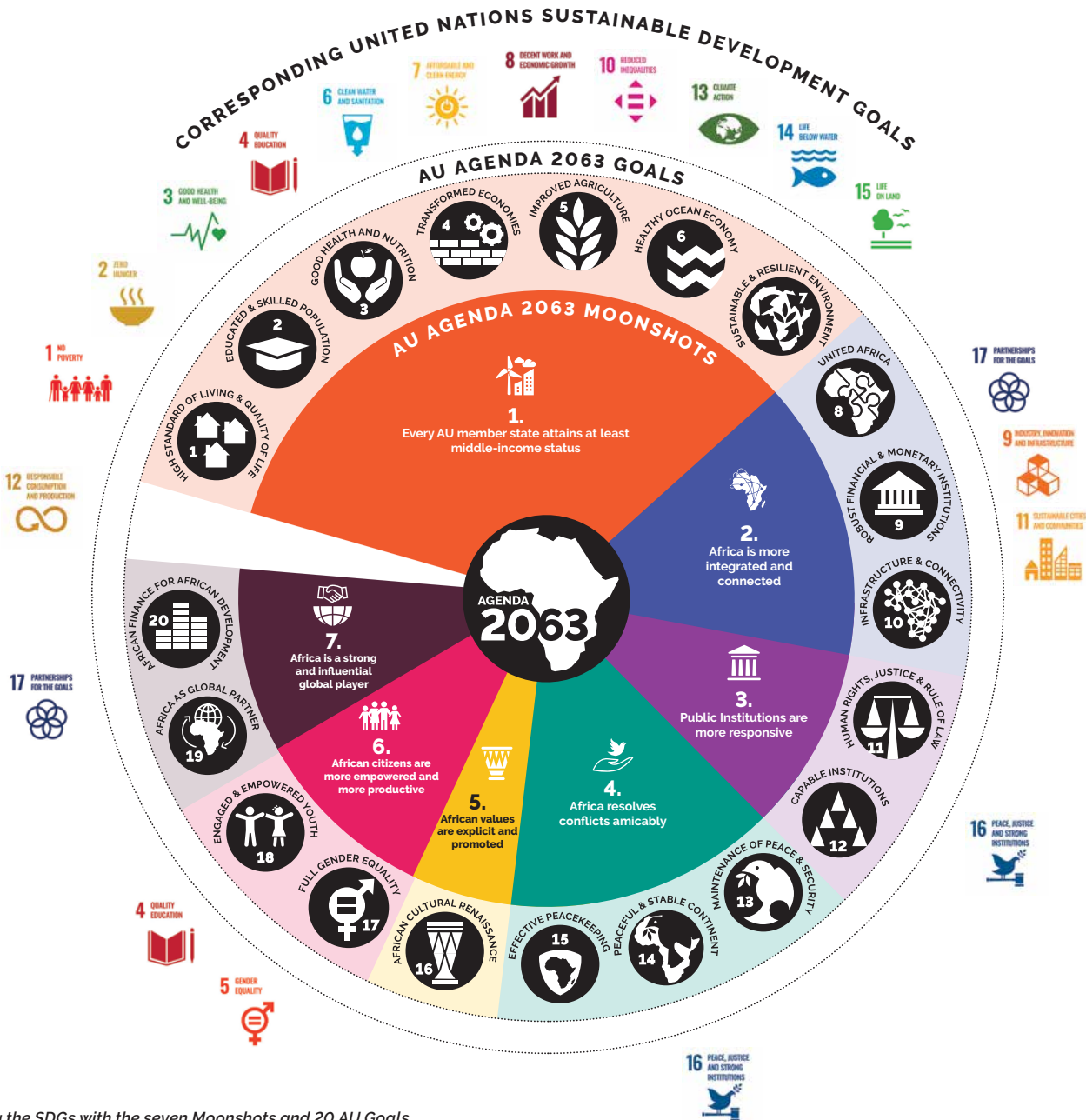
Where the Agendas Diverge

This report highlights a key difference in emphasis between the two agendas: Agenda 2063 prioritises Peace and Prosperity. Specifically, five of the AU Goals align with SDG 16, which focuses on Peace, Justice, and Strong Institutions. Moreover, its aspirations for a United Africa (Goal 8)

and advancing the African Cultural Renaissance (Goal 16) reinforce a pan-African identity and cohesion, which do not have equivalents in the SDGs. In contrast, the 2030 Agenda uniquely includes Responsible Consumption and Production (SDG 12), focusing on global resource efficiency and waste reduction.

Strategic Alignment: Agenda 2063 Goals, Moonshots, and SDGs

The following table and graphic maps the seven Agenda 2063 Moonshots and their underlying twenty AU Goals against the corresponding UN SDGs. To underscore the SU's commitment to global engagement and Partnership (SDG 17) to promote the African Agenda, we begin this strategic analysis with Moonshot 7: Africa is a Strong and an Influential Global Player.



Aligning the SDGs with the seven Moonshots and 20 AU Goals

AU GOAL		SDG	PAGE
MOONSHOT 7 - Africa is a Strong and an Influential Global Player			
7	Goal 19: Africa as a major partner in global affairs and peaceful co-existence	SDG 17: Partnerships to achieve the Goal	26
	Goal 20: Africa takes full responsibility for financing her development		28
MOONSHOT 1 - Every AU MS Attains at Least Middle-income Status			
1	Goal 1: A high standard of living, quality of life and well-being for all	SDG 1: No Poverty	32
		SDG 10: Reduced Inequality	34
	Goal 2: Well-educated citizens and skills revolution underpinned by science, technology and innovation	SDG 4: Quality Education	38
	Goal 3: Healthy and well-nourished citizens	SDG 3: Good Health and Well-being	40
	Goal 4: Transformed economies and job creation	SDG 8: Decent Work and Economic Growth	44
	Goal 5: Modern agriculture for increased productivity and production	SDG 2: Zero Hunger	46
	Goal 6: Blue/ocean economy for accelerated economic growth	SDG 6: Clean Water and Sanitation	50
	Goal 7: Environmentally sustainable climate resilient economies and communities	SDG 7: Affordable and Clean Energy	52
	Goal 6: Blue/ocean economy for accelerated economic growth	SDG 13: Climate Action	54
	Goal 7: Environmentally sustainable climate resilient economies and communities		
	Goal 6: Blue/ocean economy for accelerated economic growth	SDG 14: Life Below Water	56
	Goal 7: Environmentally sustainable climate resilient economies and communities	SDG 15: Life on Land	60
	With Aspiration 1 (No equivalent AU Goal)	SDG 12: Responsible Consumption and Production	63
MOONSHOT 2 - Africa is more Integrated and Connected			
2	Goal 8: United Africa (federal or confederate)	No equivalent SDG	66
	Goal 9: Key continental financial and monetary institutions established and functional	SDG 17: Partnerships to achieve the Goal	68
	Goal 10: World-class infrastructure that criss-crosses Africa	SDG 9: Industry, Innovation and Infrastructure	70
		SDG 11: Sustainable Cities and Communities	72
MOONSHOT 3 - Public Institutions are more Responsive			
3	Goal 11: Democratic values, practices, universal principles of human rights, justice and the rule of law entrenched	SDG 16: Peace, Justice and Strong Institutions	76
	Goal 12: Capable institutions and transformed leadership in place at all levels, cross-cutting with Governance		77
MOONSHOT 4 - Africa Resolves Conflicts Amicably			
4	Goal 13: Peace, security, and stability are preserved	SDG 16: Peace, Justice and Strong Institutions	78
	Goal 14: A stable and peaceful Africa		79
	Goal 15: A fully functional and operational African peace and security architecture		80
MOONSHOT 5 - African Values are Explicit and Promoted			
5	Goal 16: African Cultural Renaissance is pre-eminent	No equivalent SDG	84
MOONSHOT 6 - African Citizens are more Empowered and more Productive			
6	Goal 18: Engaged and empowered youth and children	SDG 4: Quality Education	88
	Goal 17: Full gender equality in all spheres of life	SDG 5: Gender Equality	90

AU AGENDA 2063 MOONSHOTS

Stellenbosch University (SU) at a Glance

SU is a leading public, research-intensive university in Africa, committed to academic excellence and impactful research. With five campuses and ten faculties, SU fosters a dynamic and multi-disciplinary environment that drives innovation and collaboration across continents. The University's proven track record of academic and research excellence positions it to lead in addressing some of the major challenges outlined in the SDGs and Agenda 2063.

Vision 2040

Stellenbosch University will be Africa's leading research-intensive university, globally recognised as excellent, inclusive and innovative, where we advance knowledge in service of society.

Mission

Stellenbosch University is a research-intensive University where we attract outstanding students, employ talented staff and provide a world-class environment, a place connected to the world, while enriching and transforming local, continental and global communities.

SU's Annual Integrated Report 2024 reflects the progress that SU made against our Vision 2040, Strategic Framework 2019 – 2024, and Institutional Plan 2024 – 2029. We report on performance according to six strategic themes against the backdrop of an eventful year for the University, our country and the academic world. The report provides

an overview of material events, risks and opportunities that shaped our performance in 2024. We aim to offer a balanced view that will enable stakeholders to gain a clear understanding of our prospects and progress against our long-term goals

While rankings will always remain contentious in our sector, SU's solid performance in the Times Higher Education (THE) World University Rankings and the QS World University Rankings in 2024 is noteworthy. We consistently maintain our position among the world's top 300 universities and hold the #2 spot on the list of Leading Universities in Africa.

Our aspirations

At SU, we are committed to maintaining the quality and excellence of our teaching, research and social impact, ensuring that we remain relevant to our community and stakeholders.

Our Vision 2040 guides us to be inclusive of all our stakeholders, with the aspiration to:

- Have an impeccable reputation as a proud African knowledge hub that serves the Continent through research, innovation and education
- Be a transformed and integrated academic community that celebrates critical thinking, promotes debate and is committed to democracy, human rights and social justice with an outward, international and future focus
- Have an all-encompassing impact on the social, financial and environmental well-being of the town, region, country and Continent, with a global reach
- In economic, social and environmental terms, be a systemically sustainable institution as a national asset that serves the diverse needs of our community



Stellenbosch University has six core strategic themes that guide the Strategic Framework 2019 – 2024. These themes inform and guide all activities and cut across all operations.

SU as a Sustainability Champion

SU, as a Higher Education Institution in Africa, contributes to Sustainability through five key pillars: Teaching and Learning, Research, Stewardship of our environment, Social Impact through Community Outreach, and Governance measures.

Education: The Engine of Sustainable Development

The spirit of *Ubuntu* reminds us that sustainability must be rooted in shared knowledge and capacity development. At SU, teaching and learning are key mechanisms for cultivating sustainability literacy and creating skilled, ethically grounded and socially conscious leaders equipped to achieve both the SDGs and the African Union's (AU) ambitious vision of Agenda 2063: *The Africa We Want*

Our commitment to this mission is aligned directly with the AU's 2024 theme: "Educate and Skill Africa for the 21st Century." SU seeks to equip the next generation with the multidisciplinary knowledge, critical thinking, and collaborative problem-solving skills necessary to creating prosperous, equitable, and

peaceful societies. The following programmes illustrate how SU integrates sustainability and *Ubuntu* principles across our academic offering– going beyond incorporating sustainability in the curriculum across our degree programmes. For example, interdisciplinary curricula are embedded in initiatives like the School for Climate Studies and Data Science and Computational Thinking – bringing together diverse fields to address real-world problems and those unique to our Continent.

Transformative Teaching and Learning

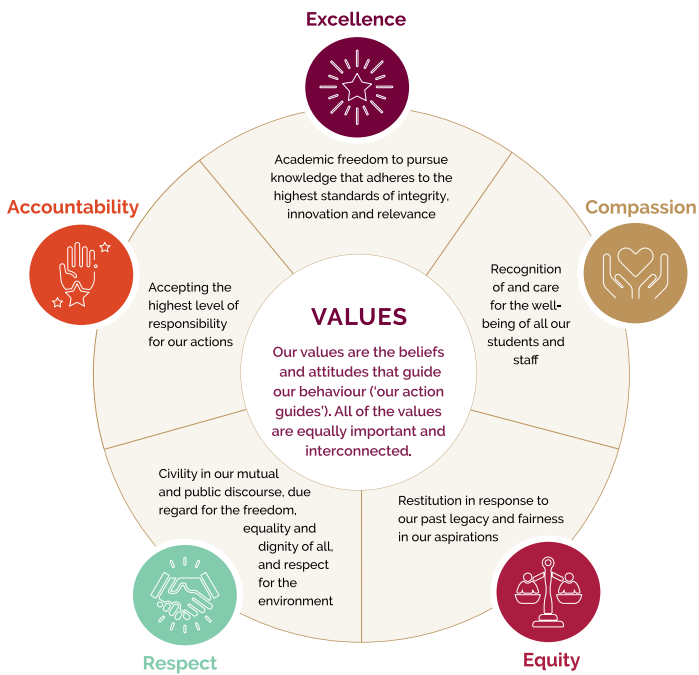
SU's institutional teaching and learning goals centre on creating a holistic student-centred, learning environment. By promoting interdisciplinary and interprofessional teaching SU empowers students to become active participants in a collaborative learning community, a place where they co-create knowledge, solve problems, and innovate alongside staff. SU fosters a culture of continuous learning: Professionalising academic teaching, integrating digital strategy for fluency and innovation, while

continuously renewing and improving its academic programmes. Through these bold initiatives, SU expands its knowledge offering to serve a diverse student community.

How SU Supports its Students

SU follows a system-of-care approach that offers holistic student-centred support services to address every aspect of student life: academic, personal and professional. In 2024, 59 student societies and clubs covered various interests and activities. Programmes such as the Strengths, Opportunity, Agency, and Resilience (SOAR) mentorship initiative cultivate interdisciplinary approaches to leadership, sustainability, and innovation.

SU's wrap-around support programmes are aimed at improving the psychosocial functioning and academic achievement of underprivileged students, breaking down barriers to higher education and unlocking their full potential. These students frequently encounter many obstacles and hurdles when attempting to pursue higher education. Throughout their academic



ATTRIBUTES

Our attributes define the qualities and characteristics of the University. These eight attributes embody what we stand for.

- 1 Strategic focus with a shared vision
- 2 Agile, adaptable and responsive
- 3 All-encompassing impact
- 4 Organisational culture built on shared values
- 5 Collaborative nature and approach
- 6 Professionalism
- 7 Systemic sustainability
- 8 Entrepreneurial mindset

SU Overview

We are committed to developing versatile graduates prepared to contribute to society and the workforce:

10

faculties of which Economic and Management Sciences has the largest number of students

5

campuses in Stellenbosch, Tygerberg, Bellville, Saldanha and Worcester

35 370

undergraduate and postgraduate students

3 586

international students from more than 104 countries

4 022

full-time staff members

9 401

qualifications were awarded in 2024, the highest number in our history.

Of those,

1 585

were master's degrees, and

329

doctoral degrees.

journey, students can receive academic help from the programme, such as targeted tutoring and learning communities, to financial aid, situational assistance, job placement, and workforce readiness. Through regular check-ins, comprehensive resources for essentials like tuition and housing, and a supportive alumni network, SU ensures no student is left behind. The curriculum also emphasises students' mental and social health, career readiness, and the development of their professional networks and support systems.

One of SU's flagship programmes, the **DELL Young Leaders Programme**, was launched in 2020 as a partnership between the University and the Michael and Susan Dell Foundation. The programme equips students with the personal and professional skills they need to set them apart in a competitive job market and help them thrive in their careers. The programme has since reached 665 SU students and has achieved a 96% retention rate, with students either completing degrees or staying on track to earn them at SU.

Notably, the programme achieved a 100% placement rate in 2024, placing all 2023 graduates into meaningful employment or further study within three months of graduating.

Self-help guidance

The selfhelp.sun.ac.za web application serves as the first point of support for students, offering essential guidance on topics critical to student success, such as adjusting to university life, career advice, mental health, food security, and support for students with disabilities.

Rising Demand for Sustainability Skills Drives Record Enrolment in SU's Diploma Programme

The School of Public Leadership's undergraduate Diploma in Sustainable Development achieved a record-breaking enrolment in 2024, welcoming 44 students, nearly double the inaugural intake in 2018. This growth highlights a growing interest and demand in sustainability-related skills. The second intake of students in the Schools' advanced Diploma in Sustainable Development

also showed increased interest and enrolment. Programme leader Dr Ruenda Loots attributes this momentum to increasing job opportunities in sustainability and related fields, as highlighted by the World Economic Forum's 2023 Future of Jobs Report. Students are not merely motivated by brilliant career prospects, but by a powerful drive to create positive social and environmental impact – skills that remain uniquely human and irreplaceable by AI. The undergraduate programme's interdisciplinary nature and experiential teaching approach further contribute to its appeal and student success. It attracts passionate changemakers eager to address global sustainability challenges. Recent student achievements underscore this excellence where an alumnus of the Diploma programme was named a Young Mandela 2024 by News24, and a final-year student was selected as one of Africa's top 100 participants in the 2024 Earthshot Prize Youth Programme held in Cape Town.



The Ubuntu Learning Community class of 2024

Teaching and Learning

Dr Mary Nel, Senior lecturer: Public law. Director: Ubuntu Learning Community

Imagine a classroom where the walls of a prison dissolve into a space of shared learning, where students from vastly different worlds come together, not as inmates and university students, but as equals in the pursuit of knowledge. SU's *Ubuntu* Learning Community (ULC) is a bold social impact initiative that redefines education, reintegration, and societal transformation.

Since 2018, ULC has provided incarcerated individuals and SU students alike an opportunity to build new futures by embracing the spirit of *Ubuntu* – *I am because we are*. Inspired by Paulo Freire's conception of collaborative education as the "practice of freedom," the *Ubuntu* Learning Short Course (UL) leverages higher education for personal and societal transformation. The programme centres on *Ubuntu*'s core values: collaboration, community-building, connectedness, and critical conscientisation.

An equal number of "in" and "out" students participate in a 50-hour interdisciplinary and interactive SU-accredited short course within the prison walls of the Brandvlei Maximum Correctional Centre near Worcester. This program does more than educate: It breaks down barriers, dismantles stereotypes, and builds bridges between communities. By fostering a more inclusive,

empathetic, and safer society, it demonstrates that education is a catalyst for real change.

The UL short course has demonstrated remarkable success in building pro-social networks, changing perceptions, and equipping participants with critical thinking skills. SU students develop a deeper commitment to social justice, while incarcerated students gain confidence and educational exposure that support their rehabilitation and reintegration.

Future17 SDG Challenge: Global Partnership and Action

Since 2022, SU students have taken their place on the global stage through the Future17 SDG Challenge – a highly-impactful international initiative that builds sustainability literacy and cross-cultural collaboration. The core mission is powerful: Students form interdisciplinary, cross-cultural teams to tackle real-world sustainability challenges set by industry partners, using the SDGs as a guiding framework. SU is a founding partner of this vibrant internationalisation-at-home offering, led by QS University Rankings and the University of Exeter (UK), now made up of universities worldwide.

Students find this virtual programme to be far more than a purely academic qualification. They see it as a crucial platform for developing deep sustainability literacy while



building indispensable core professional competencies, such as critical thinking, digital strategy, and cross-cultural communication. The transformation in students' mindset is evident in their feedback:

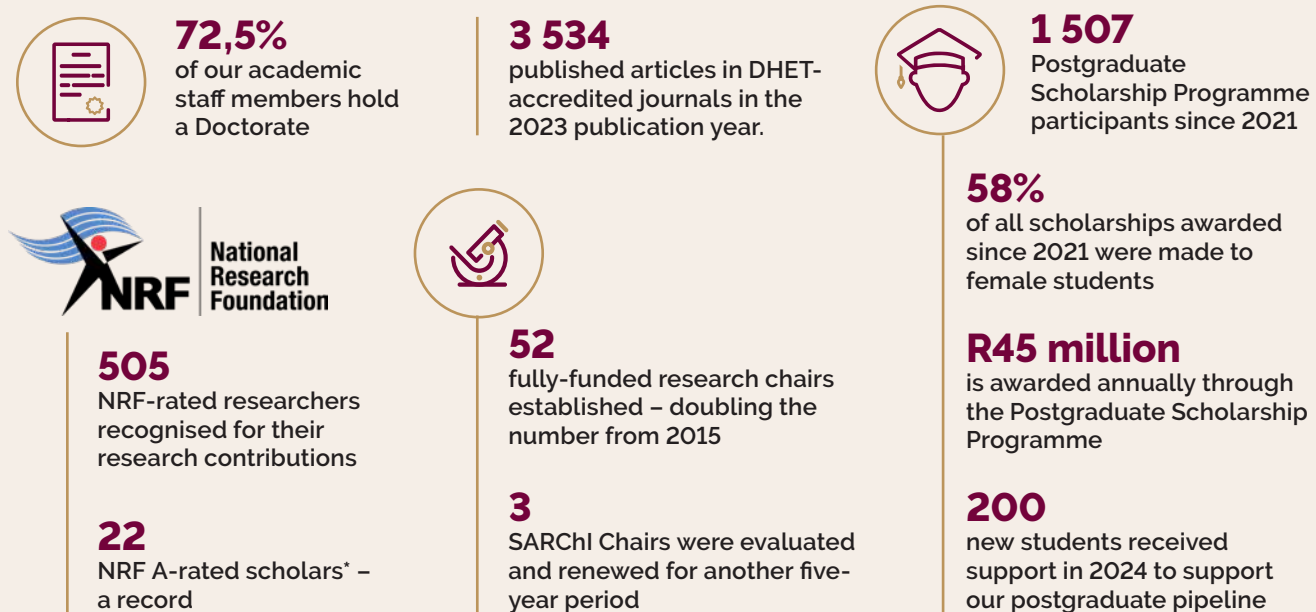
"This was the first time I truly felt like a global citizen, collaborating across time zones to tackle a problem bigger than my curriculum."

"The focus on real industry issues gave me the confidence that the skills I am learning are directly applicable to building a sustainable career."

"The challenge was transformative, teaching me not just about the SDGs, but how to be a more effective and compassionate team member across different cultures."



We have a thriving research ecosystem enabled by our world-class facilities and esteemed scholars. In 2024, SU remained among South Africa's top five research-intensive universities in terms of both research publications per capita and total research output, according to the Department of Higher Education and Training (DHET) with StatsSA:



*A-rated researchers are widely acknowledged by their peers as leading international authorities in their fields, recognised for the exceptional quality and impact of their recent research contributions. They play a pivotal role in mentoring and nurturing the next generation of researchers.

Research for Impact: Advancing Knowledge in Service of Society

At SU research is a strategic driver for change. Guided by our strategic theme, *Research for Impact*, the University is dedicated to maximising scientific, economic, social, scholarly, and cultural impact locally, across Africa and globally.

Grounded in the spirit of *Ubuntu*, our ethos recognises that knowledge gains its deepest meaning when shared for the common good. While committed to basic and disciplinary research excellence, the core focus is on interdisciplinary and transdisciplinary research that directly addresses society's toughest, most urgent challenges — from climate change and pandemics to the opportunities of big data and Artificial Intelligence (AI). SU's extensive ecosystem of research chairs, interdisciplinary schools, and innovation hubs, including the School for Data Science and Computational Thinking, School for Climate Studies, and the Centre for the Study of the Afterlife of Violence and the Reparative Quest (AVReQ), supports this mission.

The Division for Research Development

The Division for Research Development (DRD) plays a central

role in realising SU's *Research for Impact* vision across all disciplines. Serving postgraduate students, postdoctoral fellows, and established researchers, the Division provides comprehensive guidance, resources, and capacity-building to strengthen research excellence and enable success. The DRD ensures that SU's research is conducted responsibly, strategically, and for lasting societal benefit through its specialised services that span research integrity and ethics, contract and funding management, postgraduate and postdoctoral support, outputs and journal management, and the development of policies and guidelines.

In 2024, one of SU's Executive Planning Forum's key focus areas was to build on the proven success of our interdisciplinary and transdisciplinary research endeavours. We aim to design an efficient governance and operational structure to facilitate research on some of the toughest challenges faced by society today and in the future. SU has five strategic research areas and two cross-cutting themes that drive its institutional research agenda informed by the SDGs, Agenda 2063's goals, and the South African National Development Plan.

They are:

- The natural environment
- Health and human security
- Social justice and development
- Human creativity and social innovation
- Systems and technologies for the future
 - Inequality, poverty, and unemployment
 - The role of the basic or fundamental sciences

In 2024, SU secured over R66 million in three major national research grants from the NRF and DHET to advance research governance and integrity in South Africa. Key projects include:

- **Benchmarking Science Engagement (R5 million over three years):** A decade-long study to establish the scope and nature of science engagement and social impact activities among NRF-funded researchers.
- **Publications Quality Framework (R40 million):** Developing a comprehensive framework with quality assurance mechanisms to protect and enhance the integrity of research publications across all universities.



SU's Strategic Research Areas

- **Monitoring and Evaluation Support (R21 million over four years):** Providing technical assistance to the DHET in monitoring the implementation, impact, and cost efficiency of the University Capacity Development Programme (UCDP).

SU also launched two digital platforms to enhance research support:

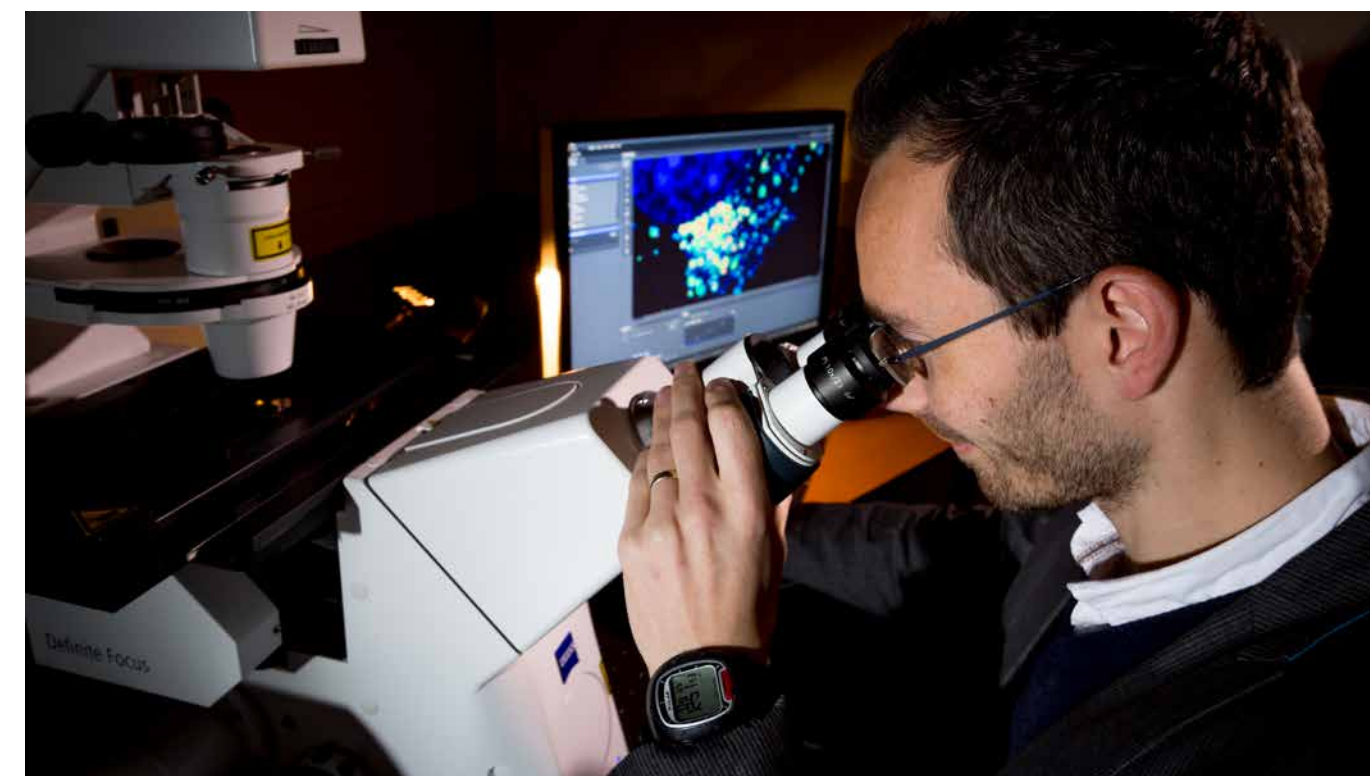
- SunDMP, a data management planning (DMP) tool that streamlines compliance for grant applications.

- Discovery is a researcher-profile platform showcasing SU academics' outputs and alignment with the SDGs and the AU's Agenda 2063 goals.

Research Outside the Box

The Public Squares initiative empowers researchers to collaborate across disciplines, explore bold ideas, and develop competitive grant proposals that address complex environmental, health, and sustainability challenges.

It emphasises solutions-oriented and collaborative research that benefits society. In 2024, 11 innovative Public Squares were selected from 27 expressions of interest to tackle pressing societal issues and strengthen the University's contribution to the SDGs and Africa's Agenda 2063, equipping researchers with the skills and networks to translate knowledge into meaningful impact.



Health and Human Security

Promoting well-being for all

We prioritise research on communicable and non-communicable diseases, disability, biomedical engineering, sports medicine, and social determinants of health.

Sustainable development goals

- 121011

Agenda 2063 goals

- 123456710

Associated SU entities

- SARChI Chair in Innovative Rehabilitation

SARChI Chair in Mycobacteromics

SARChI Chair in Food, Environments, Nutrition and Health

SARChI Chair in Paediatric Tuberculosis

SARChI Chair in TB Biomarkers

SARChI Chair in Mechanistic Modelling of Health and Epidemiology

SARChI Chair in Integrative Skeletal Muscle Physiology, Biology and Biotechnology

Sarah Turoff Endowed Chair in Schizophrenia Research
- Rand Water Chair in Public Health

Africa-Europe Clusters of Research Excellence in Genomics for Health in Africa

Centre of Excellence for Biomedical TB Research

Centre for Epidemic Response and Innovation

South African Centre for Epidemiological Modelling and Analysis

Centre for Food Safety

Desmond Tutu TB Centre

Africa Cancer Institute

Institute of Sport and Exercise Medicine

Human Creativity and Social Innovation

Driving positive change through innovation

We unlock creativity and develop innovative solutions to societal challenges like housing, education, and inequality.

Sustainable development goals

- 345678910111213141617

Agenda 2063 goals

- 123410111213181920

Associated SU entities

- SARChI Chair in Science Communication

Anton Mostert Chair of Intellectual Property

Ton and Anet Vosloo Research Chair in Afrikaans Language Practice

UNESCO Chair in Complex Systems and Transformative African Futures

UNESCO Chair in Intercultural Competences

DSI-NRF Centre of Excellence in Scientometrics and Science, Technology and Innovation Policy

Africa Open Institute for Music, Research and Innovation
- Centre for Science and Technology Mass Communication

Centre for Regional and Urban Innovation and Statistical Exploration

Chair in Science Futures

Standard Bank Centre for Agribusiness Development and Leadership

Stellenbosch Institute for Advanced Study

African Wildlife Economy Institute

Stellenbosch University Centre for Pedagogy

Confucius Institute at SU

Social Justice and Development

Building an equitable society

Our research addresses gender, racial, and cultural inequalities, while promoting human rights and dignity.

Sustainable development goals

- 12345781011151617

Agenda 2063 goals

- 1235711121317181920

Associated SU entities

- SARChI Chair in the Sociology of Land, Environment and Sustainable Development

SARChI Chair in Gender Politics

SARChI Chair in Violent Histories and Transgenerational Trauma

SA-Africa-UK Trilateral SARChI in Mainstreaming Gender for Energy Security in Urban Poor Environments

Law Trust Chair in Social Justice

HF Oppenheimer Chair in Human Rights Law
- Gys Steyn Chair in Financial Regulation Law

Centre for the Study of the Afterlife of Violence and the Reparative Quest

Centre for Research on Democracy

Bureau for Economic Research

Centre on Conflict and Collaboration

Unit for Religion and Development Research

Centre for Applied Ethics
- Centre for International and Comparative Politics

Africa Centre for HIV/Aids Management

Anti-Corruption Centre for Education and Research of SU

Centre for Social Justice

Security Institute for Governance and Leadership in Africa

Centre for Military Studies

Tackling Global Challenges

STRATEGIC RESEARCH AREAS AT SU

SU's researchers aim to produce knowledge and have a real societal impact through our five strategic research areas. Identified to assist in achieving the University's strategic goal of research for impact, these areas support the United Nations' Sustainable Development Goals and the African Union's Agenda 2063 through interconnected and interdisciplinary collaboration.

Systems and Technologies for the Future

Leading technological advancements

Our research focuses on developing new and improved systems and technologies across various sectors, including economics, business, information technology, and infrastructure.

Sustainable development goals

- 12346789111213151617

Agenda 2063 goals

- 1451012131820

Associated SU entities

- SARChI Chair in Sugarcane Biorefining

SARChI Chair in Antenna Systems for the SKA

SARChI Chair in Power Systems Simulation

SANRAL Chair in Pavement Engineering

Chair of Computational Thinking for AI

Capitec Chair of Applied AI

MacroComm Smart Utility Solutions Chair

Research Chair in the Internet of Things

National Institute for Theoretical and Computational Sciences

AUDA-NEPAD Centre of Excellence in Science, Technology and Innovation

Gibela Engineering Research Chair
- Africa-Europe CoRE in Addressing in Global and African Challenges through Methods from Artificial Intelligence, Data Science and Theoretical and Computational Thinking

School for Data Science and Computational Thinking

Centre for Geographical Analysis

Institute for Futures Research

Centre for Complex Systems in Transition

Institute for Wine Biotechnology

Institute for Biomedical Engineering

Research Alliance for Disaster and Risk Reduction

Centre for Bioinformatics and Computational Biology

Stellenbosch Phototonics Institute

The Natural Environment

Understanding and protecting our planet

Our research focuses on water, energy, food security, urban sustainability, biodiversity conservation, and mitigating environmental risks.

Sustainable development goals

- 12345679101112141517

Agenda 2063 goals

- 1234567101117181920

Associated SU entities

- SARChI Chair in Social-Ecological Systems and Resilience

SARChI Chair in Integrated Wine Sciences

SARChI Chair in Mathematical and Theoretical Physical Biosciences

SARChI in Green Hydrogen Integration and Transition

Research Chair in Management of Invasions in Protected Areas

Chair in Plant Health

Postharvest Physiology Research Chair in Deciduous Fruit

Hans Merensky Chair in Advanced Modelling of Eucalyptus Wood Formation
- AIMS-Carnegie Junior Research Chair in Data Science

Sasol Chair in Analytical Polymer Science

African Rainbow Minerals ARM Geometallurgy Research Chair

Africa-Europe CoRE in Nature-based Solutions for Climate Change Adaptation and Mitigation

Africa-Europe CoRE in Renewable Energy

Stellenbosch University Water Institute

Centre for Renewable and Sustainable Energy

Centre of Excellence for Invasion Biology

School for Climate Studies

Sustainable development goals



Source: Research Information and Strategic Initiatives Office, Division for Research Development (DRD). September 2024.

Agenda 2063 goals

1. A high standard of living, quality of life, and well-being for all citizens
2. Well-educated citizens and skills revolution underpinned by science, technology, and innovation
3. Healthy and well-nourished citizens
4. Transformed economies
5. Modern agriculture for increased productivity and production
6. Blue/ocean economy for accelerated economic growth
7. Environmentally sustainable climate-resilient economies and communities

8. United Africa (federal or confederate)
9. Continental financial and monetary institutions are established and functional
10. World-class infrastructure crisscrosses Africa
11. Democratic values and practices, the universal principles of human rights, justice, and the rule of law are entrenched
12. Capable institutions and transformed leadership are in place at all levels, cross-cutting with governance
13. Peace, security, and stability are preserved

14. A stable and peaceful Africa
15. A fully functional and operational African peace and security architecture
16. An African cultural renaissance is pre-eminent
17. Full gender equality in all spheres of life
18. Engaged and empowered youth and children
19. Africa as a major partner in global affairs and peaceful co-existence
20. Africa takes full responsibility for financing her development

Social Impact through Community Interaction

Social impact initiatives

SU is dedicated to social impact as a core expression of its institutional commitment to engaged citizenship, complementing its teaching and learning, research, and innovation efforts. This approach translates academic excellence and scholarly inquiry into meaningful contributions that advance societal well-being. Grounded in the philosophy of *Ubuntu*, which emphasises that individual flourishing is inseparable from the collective good, SU strives to co-create a just, inclusive, and sustainable society in partnership with the communities it serves. This strategic alignment ensures that social impact is central to the University's mission of producing knowledge that serves society.

The Centre for the Advancement of Social Impact and Transformation (CASIT) is a catalyst for advancing and embedding social impact across the Institution. CASIT supports and advances university-wide Social Impact Initiatives and Committees, strengthening collaboration between faculties, professional administration support services, and community

partners to ensure that engagement is purposeful, reciprocal, and sustainable. CASIT provides strategic guidance and capacity development through targeted training programmes, workshops, and short courses that build competencies in leadership, innovation, and ethical community engagement.

Furthermore, CASIT plays a pivotal role in institutionalising student engagement through initiatives such as the *Advancing Engaged Citizenship Programme* and structured volunteerism pathways. Students are able to gain practical

experience, develop transferable skills such as teamwork and civic responsibility, and have their engagement acknowledged on their academic transcripts.

These programmes enable students to apply their academic skills to real-world challenges, including those related to the SDGs and Agenda 2063. Crucially, strategic partnerships and engagements link SU directly with municipalities, NGOs, and industry to address pressing social and environmental challenges through mutually beneficial collaboration.

“The institution needs a safe space for courageous sharing without intimidation or victimisation, and improved, integrated reporting of transformation work.”

- Prof Nico Koopman (DVC for Social Impact, Transformation and Personnel), at the 2024 Transformation Indaba

Advancing health equity: Training socially responsive graduates

Some of SU's long-standing social impact initiatives include the work of the Faculty of Medical and Health Sciences' (FMHS) Clinical Services and Social Impact arm, which is dedicated to making a positive difference in the lives of our communities. This work strongly supports the FMHS's strategic vision for health equity and transformative learning. By collaborating closely with key partners such as the Western Cape and Northern Cape Departments of Health, the Faculty ensures its educational pipeline is designed to advance universal access to healthcare.

A core strategy involves training students directly in rural and underserved areas, actively embedding social impact goals into professional practice and service learning through community engagement. This approach ensures that FMHS graduates are not only clinically competent but are also socially responsive, directly contributing to healthier, more equitable communities.

A hands-on approach to biodiversity education

limbovane (meaning “ant” in isiXhosa) is an environmental education initiative within SU's Centre for Invasion Biology and School for Climate Studies. It is a high-impact educational project that leverages nature and biodiversity as its primary platform. It aims to inspire a passion for the natural environment, biodiversity and climate action among learners, while also providing comprehensive support to science educators at schools through dedicated training and the development of classroom materials. Learners can also participate in immersive camps and day programmes focused on mini-research projects in various habitats. The project team facilitates learning at the school level by guiding students to apply the scientific method to study the biodiversity found on their school grounds.

Since its inception in 2006, *limbovane* has trained more than 16 800 learners in biodiversity science, hosted more than 1 100 learners at multi-day camps, and has seen more than 790 alumni go on to study biological sciences at university level. In December 2024, the team was

recognised at the annual SU Social Impact Awards for their commitment to community engagement and capacity building in education.

On Tygerberg campus, social impact is not treated as an add-on. It is an integral part of student life and leadership. Driven by the belief that well-being and justice must go hand in hand, students have created initiatives that respond to urgent needs while strengthening connection and resilience. The Tygerberg Pantry Project ensures that food insecurity does not stand in the way of education, while Pet Therapy offers a creative approach to mental health, reminding students that care can be joyful and unconventional.

Through knitting and crochet circles, students gather in mindful spaces where creativity becomes a tool for healing and solidarity, with blankets later donated to hospitals. Career Days connect high school learners from disadvantaged communities to new opportunities, while Mandela Day activities bring residences together in acts of *Ubuntu* that serve both campus and community. Together, these initiatives weave a culture of inclusion, compassion, and sustainable change.



Environmental Stewardship

SU is committed to minimising the environmental impact of its operations: Collaboration among all SU stakeholders is vital in building a sustainable future and enhancing long-term environmental resilience. Every action, from energy efficiency and waste reduction to biodiversity protection and community engagement, reflects the Institution's commitment to living lightly on the planet. We believe that by working together, we can build a resilient University that invests wisely in climate action, and leads the way toward a sustainable South Africa.

SU's Environmental Sustainability Plan (ESP, 2020 – 2025) to achieve net zero status by 2050, emphasises the implementation of actionable projects, continuous monitoring, and timely adjustments to ensure we meet our targets effectively. It addresses eight themes:

 Energy and emissions	 Water
 Waste	 Biodiversity and land use
 Travel and mobility	 Sustainable buildings
 Goods and services	 Engagement

The eight themes that make up the SU Environmental Sustainability Plan

Guided by its ESP, SU's 2024 Sustainability Report, monitors progress against defined targets for each of its themes. In response to the risks of climate change, SU continues to invest in climate-smart infrastructure and community engagement initiatives that minimise its footprint. This report underscores SU's commitment to transparent, data-driven reporting that aligns with global standards and reinforce its vision to build a resilient, carbon neutral campus in Support of Vision 2040.

In 2024, SU made significant progress in implementing its ESP, achieving or partially meeting most of the sustainable targets, while identifying key areas to improve in 2025 and beyond.

SU achieved major milestones in reducing energy and emissions by cutting Scope 2 electricity-related emissions by 20%, from 2019 levels, supported by the installation of 1 445 kWp of renewable energy. Ongoing initiatives and optimisation projects have contributed toward the broader goal of reducing municipal electricity consumption by 10% (partially achieved). Continued investment in solar capacity and energy-efficient infrastructure remains a key focus for 2025.

Water reduction targets remain a critical challenge for SU as it is situated in a water-scarce area. Both the 40% reduction in total potable water use and 50% per-capita reduction targets (against 2015 baselines) were not achieved. Increased monitoring showed higher consumption levels, indicating the need for more aggressive conservation initiatives, awareness campaigns, and infrastructure upgrades in 2025 to reduce usage and manage leaks effectively.

Progress in biodiversity was strong, with all new landscaping areas now featuring indigenous, waterwise species in the creation of new greenbelts and conservation areas on its five campuses. Efforts to integrate Sustainable Urban Drainage System (SUDs) principles, develop management systems for conservation areas, and remove invasive species are underway but partially achieved, signalling continued progress for 2025.

Waste management continues to be one of SU's success stories. SU diverted 80% of general waste and 95% of food waste from landfill through composting and improved sorting infrastructure. However, the overall reduction in total waste generation remains a challenge, largely due to improved data accuracy revealing higher volumes than previously recorded. Expanding recycling participation and improving sorting consistency across campuses are key next steps.

SU achieved outstanding results in sustainable infrastructure. The Biomedical Research Institute (BMRI) building earned a 4-star Green Building Council of SA (GBCSA) rating, and 19 buildings across campuses received energy efficiency certification as part of the University's green building portfolio. Energy performance audits are ongoing to ensure optimal consumption among top users.

In 2024, SU successfully completed its first assessment of transport-related emissions among staff and students, which included commuting, air travel, and vehicle fleet data. These baselines will inform targeted emission-reduction strategies from 2025 onwards.

While initiatives such as Earth Week awareness campaigns, e-waste drives, and student workshops see increased engagement and participation from staff and students, full community engagement remains a challenge. Strengthening follow-up support, communication channels, and accessibility of sustainability resources will be key to ensuring every student and staff member can actively contribute to a greener SU.

Partnerships for Green Spaces

SU continues to work hand in hand with the Stellenbosch Municipality to protect and restore the natural landscapes that shape our shared environment. Guided by our Environmental Management Plan (EMP), we jointly manage the Krom and Eerste Rivers, which are ecological corridors that sustain local biodiversity and community well-being. In 2024, this collaboration extended beyond routine management to include coordinated litter clean-ups, stormwater infrastructure repairs





following severe flooding, and joint efforts to rehabilitate affected green spaces. These actions form part of a growing partnership between SU and the municipality to build climate resilience, enhance water quality, and safeguard the environmental heritage of Stellenbosch for generations to come.

**Earth Week:
Education Programme**

During Earth Week, SU celebrated the Cape Floral Kingdom's biodiversity through guided walks in Jonkershoek and on Stellenbosch Mountain, in partnership with the Garden Town programme and the Municipality. A **Story Tree Walk**, led by Prof Brian Bredenkamp and Leon Visser, invited participants to explore the fascinating history of Stellenbosch's iconic campus and Champion Trees.

Through partnerships with EcoMaties, the Cape Winelands Biosphere, and Idas Valley Trails, SU continues to champion collaboration, education, and community engagement to protect our planet and inspire sustainable action.

Community Engagement

In celebration of Nelson Mandela Day on 18 July 2024, the Environmental Sustainability Department and the rest of the SU Facilities Management team, contributed to greener, healthier learning spaces in Kayamandi. At a local nursery school, they helped establish child-friendly, water-wise gardens and provided waste bins to promote early awareness of recycling and sustainability.

In another initiative with EcoMaties society, the team joined the Idas Valley community in clearing invasive vegetation around the Idas Valley Dam and Botmaskop. This effort not only restored local ecosystems and protected biodiversity but also strengthened community connections through shared environmental action.

Campus & Community Cleanups

Under the banner *"Not my waste, but my planet,"* students took part in cleanups across town, riverbanks, and nearby beaches — combining action with education on the impact of littering. While participation data

are limited, SU aims to strengthen coordination and tracking of these student-led initiatives in future.

Promoting Maties Bikes

At the start of the year, SU encouraged students to rent a Matie Bike or opt for other non-motorised transport through info sessions and social media. By choosing these eco-friendly travel options, students helped reduce emissions, ease congestion, and promote a healthier, more connected campus community.

Student Assistant Programme

Launched at the start of the year, SUFM engaged eight students from diverse disciplines to support SU's environmental sustainability efforts. From April to November, they helped raise awareness, conducted energy audits, developed training materials, and assisted with events. Their work not only advanced campus sustainability goals but also equipped them with practical skills to drive change in their communities.

Also see the feature on the Facilities Management programmes under AU Goal 7/SDG 15.

Governance

**Council's statement on
corporate governance:**

SU, a public institution, was established in 1918 under the University of Stellenbosch Act, 13 of 1916, when Victoria College was converted into a university. The SU Council governs the institution, and its powers, responsibilities, and functions are set out in the Higher Education Act, 101 of 1997, and the SU Statute of 2019. Council has committed itself to sound governance principles set out in King IV™ to ensure that the University is managed effectively and ethically in its endeavour to be a good corporate citizen. Likewise, the University's financial reporting complies with the International Financial Reporting Standards (IFRS).

Committees of council:

- Audit and Risk Committee
- Executive Committee
- Human Resources and Remuneration Committee
- Investment Committee
- Language Committee
- Social and Business Ethics Committee
- University Council

Reporting under KING IV™

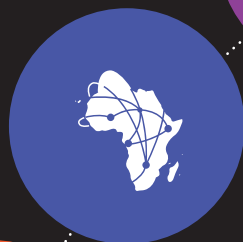
In our **2024** Annual Integrated Report, the University subscribes to the philosophy of leadership, sustainability, and corporate citizenship set out in King IV™. Applying the 16 King IV™ principles

to the University's business activities is an ongoing process, and we continuously evaluate progress. These sixteen principles emphasise ethical and effective leadership, accountability, stakeholder inclusivity, and sustainable value creation.

**Council approved the
University's financial
sustainability**

At its meeting on 17 June 2025, Council approved the Annual Integrated Report 2024, compiled in accordance with the guidelines of the International <IR> Framework and King IV™ principles.

THE MOONSHOTS



#MOONSHOT 7

AFRICA IS A STRONG AND AN INFLUENTIAL GLOBAL PLAYER

We begin this annual report with Moonshot 7 because partnerships for progress are at the very core of what we do at SU International. To us, this is more than an aspiration; it is a commitment to the narrative that "Africa takes charge." Moonshot 7 envisions an Africa that stands as a strong and influential global player, built on collaboration, peaceful co-existence, and self-reliance. These foundations mirror the spirit that individual progress is inseparable from collective advancement and that genuine partnerships must be equitable, reciprocal, and rooted in shared humanity.

This Moonshot represents a future where Africa leads its own progress, drives its own innovation, and invests in its own sustainable future. It is about building bridges – between nations, disciplines, and people, that reflect the essence of *Ubuntu*: Connection, compassion, and co-creation. Through these partnerships of purpose, Africa can step confidently onto the global stage as a collaborator and changemaker, shaping a peaceful and prosperous world for all.





AU Goal 19:
Africa as a major partner in global affairs and peaceful co-existence



SDG 17:
Partnership for the Goals

African Collaborations for a Sustainable Future

Partnerships play a crucial role in SU's strategy for sustainable development. As a research-intensive Institution rooted in Africa, SU collaborates with 384 universities and research institutes across 69 countries to drive innovation, inclusive development, and global cooperation.

In 2024, this commitment is evident through initiatives spanning digital health, policy coherence, doctoral training, and collaborative teaching. These efforts position SU as a local anchor and a global player. The partnerships embody the five Ps of sustainable development: People, Planet, Prosperity, Peace, and Partnership. They directly contribute to SDG 17 (Partnerships for the Goals) and AU Goal 19, thereby strengthening Africa's role in global affairs and promoting peaceful coexistence.

Policy Innovation Lab at the School for Data Science and Computational Thinking

Prof Willem Fourie is the founding director of the Policy Innovation Lab at SU's School for Data Science and Computational Thinking, and the inaugural Chair in Policy Innovation.

In line with SU's vision to produce societally-impactful research and innovation, the School for Data Science and Computational Thinking launched the Policy Innovation Lab in April 2024. This innovative initiative focuses on the use of artificial intelligence to enhance coordination, coherence, and efficiency in national policy-making, focusing on SDG 17 as its entry point. The Policy Innovation Lab actualises this vision

through the prototyping of artificial intelligence tools, capacity building, research and the convening of in-person and virtual engagement.

The Policy Innovation Lab builds on the mandate of the School for Data Science and Computational Thinking to pursue interdisciplinary research and innovation with tangible societal impact in partnership with The Presidency of South Africa, the German Government and the Gates Foundation. By doing so, it embodies the spirit of partnership that undergirds Moonshot 7.

'Since the Lab's establishment in 2024, we have been working with our Government partner to unlock to the potential of AI in many ways – from producing AI-driven prototypes to strengthen policymaking to developing tailored capacity building interventions', says Prof. Willem Fourie, inaugural Chair of Policy Innovation, project lead of the Policy Innovation Lab. The tools prototyped by the Lab include automated summarisation, comparative policy analysis, research synthesis, citizen-generated data processing and media analysis. These tools enable the branch to process large volumes of data and track progress in near real time.

The Lab has also led research initiatives examining the use of AI and digital tools in Brazil, India, Kenya and South Africa, identifying good practices that can be emulated elsewhere. To build in-house capacity, the Lab offers free webinars, workshops and tailored training for civil servants in policy costing, digital literacy and responsible AI use.

This collaboration advances SDG17 in several ways. By improving data availability and quality, for example, it supports Target 17.6 on data, monitoring and accountability. Its training programmes align with Target 17.9, which focuses on capacity building in developing countries. Co-designing solutions with government meets Target 17.17 concerning partnerships. Finally, synthesising citizen-generated and open-data sources strengthens evidence bases in line with Target 17.18 on reliable, disaggregated data.



Dr Itai Makone, Prof Willem Fourie and Monique Bennett (Policy Innovation Lab) at a multistakeholder roundtable during South Africa's G20 presidency.



The Goalkeepers Community South Africa Network at the Gates Foundation offices in Johannesburg, South Africa.

KEY CONTRIBUTIONS AND HIGHLIGHTS

Policy Innovation Lab and South African Sustainable Development Goals Initiative

The Policy Innovation Lab is a member of the Sustainable Development Goals Initiative (SDGi), a partnership between government, academia and civil society. SDGi, funded by the GIZ, focuses on bridging the gap between academia and policymakers by harnessing the expertise of South Africa's public universities, strengthening the capacity of government to drive evidence-based policy development, and supporting inclusive dialogue.

In this context, the Policy Innovation Lab has convened various expert roundtables and collaboration workshops. In October 2024, for example, the Policy Innovation Lab and the German Institute of Development and Sustainability (IDOS) hosted a workshop in Stellenbosch, to exchange insights on how South African policymakers can strengthen evidence-based policymaking and enhance their policy advisory processes, drawing on IDOS' expertise.

Recognised as one of the world's leading institutions in sustainable development research and policy advice, IDOS engaged with The Presidency's Policy and Research Services (PRS) branch of The Presidency to explore ways of strengthening advisory capabilities across South Africa's institutions.

Policy Innovation Lab Supporting the Preparation for South Africa's G20 Presidency

The Policy Innovation Lab arranged a series of Digital Dialogue webinars to support South Africa's G20 presidency. The first of these webinars, held in 2024, brought together globally respected experts to explore how South Africa could effectively

navigate its G20 presidency starting in 2024, amidst growing geopolitical fragmentation. Presenters from OECD, ODI Global, SAIIA and Chatham House examined strategies to align South Africa's priorities with the G20's overarching mission and offered practical insights into the challenges and opportunities ahead. A key topic of discussion was how South Africa might navigate competing priorities, rising geopolitical tensions and systemic challenges linked to climate change and economic inequality. As the first African nation to lead the G20, South Africa has a unique opportunity to champion Africa's agenda, which includes sustainable industrialisation, regional integration, digital transformation, and reforms to global institutions aligned with the African Union's Agenda 2063.

National Institute for Theoretical and Computational Sciences (NITheCS)

The NITheCS, hosted at SU, officially launched in April 2024, is a pan-African consortium of 24 universities and the African Institute for Mathematical Sciences (AIMS). It supports advanced research in astronomy, bioinformatics, climate science, and quantum computing. Under the leadership of Prof Francesco Petruccione, recipient of the Order of the Star of Italy in 2024, the institute nurtures African talent, promotes scientific collaboration, and aligns closely with the aspirations of Agenda 2063 to become a global player that takes charge of its own development.

Stellenbosch University Hosts the First National Goalkeepers Community Network

Stellenbosch University, through its Policy Innovation Lab (School for Data Science and Computational Thinking), with the SDG/2063 Impact Hub (SU International), is proud to host the Goalkeepers South Africa Community network, the first national

Gates Foundation GOALKEEPERS

platform of its kind internationally. The Goalkeepers movement, launched in 2017 by the Gates Foundation, aims to accelerate progress on the SDGs, with a focus on Goals 1–6: ending poverty and hunger, improving health, education, gender equality, and access to water and sanitation.

The South African community members bring together change-makers from across society to exchange ideas, acknowledge achievements, support new projects, and share their contributions in their fields of expertise. Through community events, design thinking workshops, purposeful networking sessions, and training in advocacy and leadership, the network is already building a vibrant space for collaboration.

The Secretariat at Stellenbosch University plays a central role in steering this initiative. Prof Willem Fourie provides strategic direction through the Policy Innovation Lab (School for Data Science and Computational Thinking); Corina du Toit leverages her role as Programme Manager of the SDG/2063 Impact Hub (SU International) to bring capacity development support and networking to the forefront, while Tinashe Chikunichawa (Policy Innovation Lab) supports coordination and engagement with Goalkeepers on the ground.

Digital Health Africa Conference

Organised by SU's School for Data Science and Computational Thinking and the Division of Clinical Pharmacology, the Digital Health Africa Conference, landmark inaugural conference, focused on the role of AI and data science in healthcare. In partnership with Pharmacometrics Africa and the Fundisa African Academy of Medicines Development, it explored digital innovations for equitable health access in Africa.



AU Goal 20:
Africa takes full responsibility for financing her development



SDG 17:
Partnership for the Goals

Africa Takes Charge

As Africa accelerates towards self-reliance, partnerships are emerging as the cornerstone of transformation. The African Union has called on universities to lead this shift by mobilising knowledge, innovation, and finance to power local and continental development. SU's leadership in the Africa-Europe Clusters of Research Excellence (CoREs) epitomises this vision, positioning African institutions not as aid recipients but as equal partners shaping global research agendas. Through networks like the ARUA-Guild CoREs, the AC21 Legacy Symposium, and the Pan-Africa Universities Summit, SU continues to bridge continents and disciplines, advancing the AU-EU Innovation Agenda and Agenda 2063.

AU Challenges Universities to Lead Africa's Self-Reliance Journey

Botho Kebabonye Bayendi is the Director for Strategic Planning and Delivery at the African Union Commission (AUC). In this capacity, she plays a key role in coordinating the implementation of the African Union's Agenda 2063, ensuring that its goals are translated into actionable strategies across member states and continental bodies. She is recognised championing Africa's self-reliance and global partnership agenda.

In a milestone for continental collaboration, SU hosted the inaugural Africa-Europe Clusters of Research Excellence (CoRE) Conference in October 2024. The gathering marked a new chapter in Africa-Europe scientific partnership, aligning the African Union's Agenda 2063 and the European Union's Innovation Agenda under a shared vision of co-created knowledge and equitable collaboration.

During the conference, 21 CoREs involving 120 institutions in 42 countries were announced, to engage in collaborative research projects. As key implementation vehicles, the CoREs advance the AU-EU Innovation Agenda by:

- Mobilising **research consortia** across Africa and Europe;
- Creating **networks of excellence** that elevate African institutions; and
- Addressing **grand societal challenges** through joint, well-funded initiatives.

As part of the proceedings, senior AU official **Botho Kebabonye Bayendi**, Director of strategic planning and delivery, delivered a message to the delegates that Africa cannot demand equality on the global stage without acting the part. She emphasised that universities have a key role to play in shifting the Continent towards greater self-reliance and away from the old culture of dependency.

"So, we want the second decade to be one of acceleration," she told the audience.

"Our moonshot is middle-income status for every AU member state by 2063. For that, we need all hands on deck, and universities are a crucial part of the game."

The gathering further highlighted SU's growing stature as a premier African research partner, strengthened by deliberate international collaborations and transcontinental networks. She underscored SU's leadership in the African Research University Alliance and the Guild of European Research-Intensive Universities (ARUA-Guild) and the Africa-Europe Clusters of Research Excellence (CoREs), which are aligned with the EU-AU Innovation Agenda, the UN SDGs and AU Agenda 2063 and address major societal challenges such as climate change, health, AI, and renewable energy. The conference also served as a platform for advancing international collaboration and cutting-edge research initiatives.

The 21 joint clusters, co-led by universities from both continents, address key societal challenges through interdisciplinary partnerships. These efforts are strategically aligned with the AU-EU Innovation Agenda and underscore the shared commitment to the SDGs. A standout initiative is SU's co-leadership in delivering 1 000 African PhDs over the next decade, significantly contributing to Africa's future progress.

SU co-leads the following four Clusters:

- Artificial Intelligence, Data Science, and Theoretical and Computational Thinking with Uppsala University
- Genomics for Health in Africa with the Universities of Tübingen and Bern
- Nature-based Solutions for Climate Change Adaptation & Mitigation with the Universities of Cape Town and Bologna
- Renewable Energy with Ghent University
- Additionally, SU is a partner (but not co-lead) in the Multimorbidity cluster.



Participants at the 2024 inaugural Africa-Europe Clusters of Research Excellence (CoRE) Conference

The Future of African Higher Education

SU co-hosted the inaugural Pan-Africa Universities Summit, with the University of Pretoria at its Future Africa Campus (April 17 – 18, 2024), exploring the future of African higher education and asking whether African universities are equipping their students for success. Key themes included sustaining progress, entrepreneurship and equity, digital transformation, academic and industry partnerships, ethical leadership, and continental cross-sector collaboration. Bringing together stakeholders from academia, industry, and government, the event reinforced SU's role in shaping a sustainable African higher education ecosystem and strengthened its strategic positioning with African university leaders keen to partner with SU.

Closing a Chapter, Opening New Paths: The AC21 Legacy Symposium

In March 2024, Stellenbosch University International (SUI) co-hosted the final Academic Consortium 21 (AC21) Legacy Symposium with the Universities of Strasbourg (France) and Freiburg (Germany), bringing together global and African partners to spotlight university-led innovation and collaboration aligned with the SDGs.

The symposium specifically focused on SDGs 3 (Good Health and Well-being), 7 (Affordable and Clean Energy), and 9 (Industry, Innovation and Infrastructure). Presentations highlighted solutions developed in and for the Global South, showcasing innovations such as cassava-ash bio-concrete in Nigeria, and jackfruit biogas, and ceramic water filters, illustrating how universities and communities co-create sustainable solutions using locally available resources.

In her opening remarks, Prof Hester Klopper, SU's former Deputy Vice-Chancellor for Strategy, Global and Corporate Affairs, affirmed that AC21



AC21 at LaunchLab



Prof Bob Nash chairing a panel

provided a platform for North-South and South-South partnerships. She highlighted the long-standing ties with institutions in Asia, Europe, the US, and growing connections across Africa. Universities from Uganda, Angola, Kenya, Ghana, Cameroon, and Nigeria participated, reflecting a burgeoning Pan-African research network rooted in self-reliance and community-responsive innovation.

SU led the SDG 3 track with a keynote from Prof Bob Mash, Head of the Department of Family and Emergency Medicine at SU's Faculty of Medicine and Health Sciences (FMHS), on the intersection of climate change and health, while Prof Melanie Arndt from Freiburg and Prof Bertrand Rose from Strasbourg led discussions on SDG 7 and 9 respectively. The symposium's format, which consisted of short,

Botho Kebabonye Bayendi, Director, Strategic Planning and Delivery, African Union Commission

focused keynotes and concise presentations, kept sessions dynamic and audience engagement high.

A standout presentation by Dr Kolawole Adisa Olonade (University of Lagos) showcased a circular innovation model using cassava waste to produce bio-cement. This approach not only provides a scalable, low-carbon infrastructure solution, but also economically empowered women in cassava-harvesting communities. This project exemplifies African-led, community-rooted development, resonating strongly with AU Goal 20's call for Africa to finance and drive her own development.

Though AC21 as a formal network concluded with this symposium, its legacy of collaboration lives on—especially through its deep alignment with Africa's development priorities. The event, organised by SU International and coordinated by the SDG/2063 Impact Hub, also served as a prelude to the release of SU's 2022/2023 Sustainable Development Annual Report, underscoring the University's commitment to research for impact.



Dr Kolawole Adisa Olonade (University of Lagos)



Unlocking Invisible Gold: Dr Steve Chingwaru's PhD Digs Deeper

Dr Steve Chingwaru's geometallurgy research for his PhD calculated that Johannesburg's mine dumps contain R450 billion worth of unexploited gold – what is potentially the world's largest invisible gold resource. Featured internationally, his work offers economic regeneration, job creation, and environmental justice — demonstrating how academic research can transform real-world industries.

Dr Steve Chingwaru, a 26-year-old PhD graduate from Stellenbosch University, has uncovered an estimated 460 tonnes of gold hidden in six billion tonnes of mine tailings in and around Johannesburg. His groundbreaking research not only opens the door to extracting R450 billion worth of gold from waste but also introduces safer and more sustainable recovery methods that could significantly reduce acid mine drainage and environmental degradation.

"Historically, the low concentration of gold inside tailings was considered too low grade to be of value. But now that extensive mining has depleted most of the high-grade concentration of gold, it's becoming unfeasible to mine as some shafts are already reaching 4 km underground. Looking for gold in low-concentration sources is becoming more viable," Chingwaru notes.



Dr Steve Chingwaru

Chingwaru's work combines economic opportunity with environmental regeneration by demonstrating how reprocessing mine waste can yield valuable by-products like copper, cobalt and nickel, all while addressing long-standing pollution challenges. His research contributes to South Africa's transformation towards a green economy and could create new jobs in mining innovation, waste processing and environmental remediation—advancing a model of regenerative economic growth.



Participants at the AC21 Legacy Symposium

#MOONSHOT 1

EVERY AU MEMBER STATE ATTAINS AT LEAST MIDDLE-INCOME STATUS

Moonshot 1 calls for shared prosperity across the African continent where *no one is left behind*, and where social and environmental well-being are seen as inseparable. These foundations of *Ubuntu* remind us that a society's wellbeing depends on the dignity and prosperity of all its people. To ensure that every AU Member State attains at least middle-income status, Africa must meet basic human needs while caring for both people and planet that sustains us. This vision includes ending poverty and hunger, ensuring good health and wellbeing, providing access to quality education, clean water and sanitation, and creating opportunities for decent work and inclusive economic growth while not exceeding the limits of our shared Mother Earth.





AU Goal 1:

A high standard of living, quality of life and well-being for all



SDG 1:

No Poverty

Alleviating Student Debt and Exclusion Through Community-led Solutions

Financial insecurity remains one of the largest obstacles to student success in South Africa. At SU, the fight against poverty and exclusion is central to our contribution to SDG 1: No Poverty and AU Goal 1: Achieving a high standard of living, quality of life and well-being for all. We evaluate our contributions by investing in research, financial aid, student support, and community anti-poverty partnerships that reduce poverty and widen opportunity. Our initiatives include innovative debt relief campaigns, new models to support the “missing middle,” and student-led digital innovation that strengthens social protection systems. Here, SU demonstrates how higher education can drive socio-economic resilience and inclusive development.

Students Expose SASSA Grant Fraud

Joel Cedras, a BSc Computer Science student at SU, uses technology to drive social impact, showcasing how ethical innovation can fight poverty and create lasting change. Through his platform joelcedras.dev he develops digital systems for non-profits and small businesses, expanding access to opportunities in the digital economy.

Veer Bishen Gosai, a geoinformatics and computer science student at SU, is using digital innovation to fight inequality, showing how technology can reduce poverty and create opportunity. He is the founder of Taptic, a South African educational technology company whose flagship platform SA Papers, provides free educational resources to Grade 1 to 12 students.

In 2024, two first-year Computer Science students at SU, made national headlines for their role in uncovering vulnerabilities and fraud in South Africa's social grant system. Veer Gosai and Joel Cedras exposed weaknesses in the administration of the Social Relief of Distress (SRD) grant distributed by the South African Social Security Agency (SASSA) on behalf of the State.

Through independent investigation and ethical hacking, they used publicly available internet resources. Motivated by a shared interest in using technology for public good, they employed their coding skills, developed in high school and refined during their university studies, to explore how the system could be manipulated and exploited. Their findings revealed large-scale fraud and significant weaknesses in grant verification processes, which they reported through investigative articles published by news agency GroundUp. Their work was so impactful that they were invited to present to Parliament's Portfolio Committee on Social Development and received public commendation from the Minister of Social Development.

Their commitment to strengthening digital governance and public accountability speaks directly to SDG 1, which aims to end poverty in all its forms, and to AU Goal 1, which emphasises social protection and equitable access to services. By identifying flaws in one of the country's most important poverty alleviation programmes, these students are helping protect South Africa's most vulnerable communities from exclusion, exploitation, and administrative failure. Their work is a further reminder of how higher education institutions such as SU can contribute to good governance, digital innovation, and ethical public service – essential building blocks for inclusive and sustainable development.

“We had to put South Africa first.”

– Joel Cedras

Joel Cedras and Veer Bishen Gosai

KEY CONTRIBUTIONS AND HIGHLIGHTS

Prof Thuli Madonsela: Tackling Student Financial Insecurity

In 2024, Prof Thuli Madonsela, Director: Centre for Social Justice at SU, spearheaded various initiatives tackling student financial insecurity. In February she led a group of supporters for the #Action4Inclusion (#A4I) campaign on a 7-kilometre hike in the Banghoek Conservancy in their effort to raise money and create awareness for students who are struggling with debt to continue their studies. Later in June, Springbok Rugby legend Tendai “Beast” Mtawarira joined her and a group of more than thirty people for the annual 16 km Social Justice Walk to raise awareness and funding for students with historical debt. The walk had become a flagship fundraising and inclusion event, uniting community, sport, and academia in the commitment to ensure no student is left behind.

Palissander Choir Concert for #Action4Inclusion

Under the baton of Prof Thuli Madonsela, SU partnered with the acclaimed Palissander Chamber Choir in October 2024 for a special #Action4Inclusion benefit concert to raise funds for students with debt. The event brought together thought leaders, CEOs, members of the public and media, all united by the mission to support students facing financial challenges.

Collateral-backed Study Loans for the Missing Middle

In February 2024, SU launched an innovative loan model to support



Dr Marietjie Lutz en route to Stellenbosch for the #MoveForFood programme

the “missing middle” – students who do not qualify for NSFAS funding (as their household income is above R350 000), yet cannot afford university fees. Through a new study loan application portal, in partnership with banks and facilitators like Student Hero, Manati, and Fundi, these students now have access to collateral-backed loans in an effort to ease South Africa's higher education affordability crisis.

Move4Maties at the Comrades Marathon

Sixty staff, students, and alumni from SU ran the Comrades Marathon on 9 June 2024, to raise funds for students in financial need. Collectively, the campaign not only raised substantial funding but also amplified national attention on the struggles of the ‘missing middle’ students.

Wheels of Opportunity

Inspired by the resilience of one of her students, chemistry lecturer Dr Marietjie Lutz cycled 600 km from George to Stellenbosch to raise bursary funds for undergraduate BSc students who struggle with homelessness and food insecurity. With her family riding beside her, she raised over R38 000 for SU's #MoveForFood initiative, demonstrating the difference one educator can make.



Prof Thuli Madonsela with a group of #Action4Inclusion supporters during their annual hike to raise awareness for student debt.



AU Goal 1:

A high standard of living, quality of life and well-being for all



SDG 10:

Reduced Inequalities

A Thriving Stellenbosch

The World Economic Forum's Global Risk Report 2025 ranks inequality as the seventh most significant global risk likely to impact society over the next two years. Inequality, poverty, and unemployment are key challenges affecting South Africa. Marginalised communities, including BCI (Black, Coloured, Indian) candidates, women, and people with disabilities, have historically been disproportionately excluded from higher education opportunities.

A thriving SU is an institution that is inclusive, accessible, and committed to redress. SU is committed to reduced inequalities and addresses this through research, student access, inclusive policies, and transformative programmes. Our efforts include conducting rigorous research on inequality and disability justice, growing enrolment of first-generation and international students from developing countries, and targeted support for staff and students with disabilities.

Through the Equality Unit and Centre for the Advancement of Social Impact and Transformation (CASIT), SU enforces measures against discrimination and advances equity in line with national transformation benchmarks. Flagship initiatives such as the Division of Disability and Rehabilitation Studies, the Transformation Indaba, the Equality Unit's work on discrimination and gender-based violence, and the *Hardekraaltjie* and Walter Parry redress projects highlight how SU uses teaching, research, and community engagement to confront historical and structural exclusion to advance both the 2030 Agenda and the AU Agenda 2063.

To drive comprehensive transformation, SU consults various guiding documents that align with national transformation parameters and barometers:

- **SU's Transformation Policy** advances transformation in our various institutional entities.

- **The Institutional Employment Equity (EE) Policy** promotes equal opportunity and fair treatment by eliminating unfair discrimination.
- **Our Employment Equity Plan** provides a recruitment and retention roadmap to achieve employment equity.
- **The Code for Employment Equity and Diversity** stipulates operational guidelines to eliminate barriers to the appointment of employees from designated groups.
- **Code 2040**, SU's code of ethics, is a mechanism to guide and manage organisational integrity and an ethical culture.
- **The Employee Assistance Programme (EAP)** enhances employee and workplace well-being and effectiveness.

They relay into our strategic themes.



Prof Lieketseng Ned, Head of the Division of Disability and Rehabilitation Studies

Driving Disability Inclusion for a Just Society

Prof Lieketseng Ned is an Associate Professor and Head of the Division of Disability and Rehabilitation Studies in the Department of Global Health at FMHS. As a pioneer in gender and disability justice, Prof Lieketseng Ned was named a Distinguished Young Woman Researcher in the Human and Social Sciences at the prestigious 2024 South African Women in Science Awards. Her work is shaping inclusive policy and training future scholars in ethical health systems.

The World Health Organisation reports that globally, people with disabilities face systemic inequities, such as poorer health outcomes, limited access to education and employment, and higher levels of poverty and violence. In South Africa, these challenges are stemming from the legacy of apartheid, with black women in rural areas often carrying the heaviest burden.

At SU's Division of Disability and Rehabilitation Studies, we document these lived experiences of inequities to push for inclusive policies, legislation and strong disability inclusive systems. We equip practitioners with the skills to deliver disability-inclusive services and to challenge oppressive structures. Our work draws on various disciplines concerned with how societies function and change at both collective and individual levels, such as political studies, social anthropology, sociology, psychology, philosophy, as well as disciplines in health sciences, law, and education, reflecting the belief that disability is a social justice issue. Each year, we have a diverse group of students, beyond health, who want to advance their understanding of disability into broader societal transformation.

Our greatest strength lies in our people: three of our staff members

—an Associate professor, a senior lecturer and a postdoctoral fellow — who bring the invaluable perspective of lived disability experience to SU, ensuring that transformation is impactful. The Division has made significant strides in driving transformation within the faculty and across the University by:

- Infusing critical knowledge of disability as a social justice issue into FMHS curricula;
- Providing constructive critique to strengthen disability inclusion in FMHS operations and programmes;
- Continuing to play an advocacy and advisory role in transformation at the University towards becoming a disability-inclusive institution.

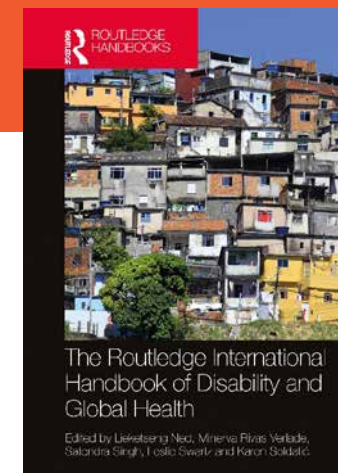
KEY CONTRIBUTIONS AND HIGHLIGHTS

Student Enrolment

In 2024, the Rectorate approved the establishment of an overarching Strategic Enrolment Management (SEM) steering committee to oversee the alignment of policies, strategies, plans and practices that ensure optimal student access and success. This includes many efforts in our research, teaching and social impact agendas that focus on enhancing individuals' and communities' quality of life.



The 2024 group of SUNRISE fellows at their inaugural meeting.



Developing Talented Staff

SU is dedicated to developing talented staff, investing R3,6 billion in salaries and benefits (2023: R3,3 billion). This commitment includes health and wellness initiatives and training to attract, develop and retain exceptional individuals.

Future Professors

The Stellenbosch University Research and Innovation Strategic Excellence (SUNRISE) funding initiative supports mid-career academics on the path to becoming professors. In 2024, the first cohort of 35 was selected for their outstanding achievement and scholarship. As many of SU's senior academic staff will retire in the next decade, the programme aims to establish a vibrant community of high-performing peers who can become the nucleus of a rejuvenated, inclusive, and supportive SU academic cohort. Over the course of the two-year programme, we hope to graduate up to 120 participants.

Disability Justice at the Forefront

From policy implementation and staff training to media advocacy, we have placed disability inclusion at the centre of SU's equity work. For Casual Day 2024, we ran a campaign with the theme: *"I See You,"* benefiting individuals with disabilities. This

annual campaign highlighted the importance of visibility, inclusion, and dignity for individuals with visible and invisible disabilities. The SU Disability Unit hosted an online panel discussion led by students with less visible disabilities, who shared insights about challenges on campus and in schools. The session called for more staff training, flexible learning approaches, and greater awareness of people with disabilities at SU. Through our fundraising efforts, SU supported the Stellenbosch Work Centre for Adult Persons with Disabilities.

Accessibility

SU strives to make our campus accessible for people of all abilities. Currently, 28% of our buildings have accessibility ramps and entrances. We provide disability toilets, lifts, evacuation chairs and accessible residence rooms where possible.

Transformation Indaba and the Systemic response to inequality at SU

Concrete steps toward inclusive institutional culture and accountability across all SU environments

Prof Nico Koopman, the Deputy Vice-Chancellor: Social Impact, Transformation and Personnel, guides SU's engagement with society, promotes inclusivity and transformation within the Institution, and manages the Centre for the Advance of Social Impact and Transformation (CASIT), the Human Resources Division, and Campus Health, ensuring a holistic environment for staff and students. His role is vital in driving initiatives for social betterment, enabling strategic partnerships, and ensures the University's resources contribute to a more equitable and just society.

Indaba

The Institutional Transformation Committee oversees transformation projects. Eight of SU's ten faculties and all the responsibility centres had established transformation committees by 2024.

Under the leadership of Prof Koopman and the Institutional Transformation Committee (ITC), more than 160 staff and students gathered in October 2024 for the Transformation Indaba. This annual event is an opportunity to reflect on the progress



Tactile paving on SU Campus to allow for independent navigation for individuals with visual disabilities

made with transformation at SU. The theme, *Accountability Matters*, prompted discussions centred around concrete actions towards deepening transformation at SU and sustaining the gains that have been achieved so far. The 2024 Indaba was significant as it took place before the institutional transformation policy was approved and while a new transformation plan was being developed.

The Equality Unit

SU's Equality Unit serves as the primary contact point for all complaints related to social injustice, unfair discrimination, sexual harassment, victimisation, racism, and abuse. Staff and students can also access services, training and interventions to combat gender violence and HIV/Aids, and receive support with issues related to the LGBTQIA+ community.

Transformative *lenlcounters*

In November 2024, the Faculty of Arts and Social Sciences' Transformation Committee, in collaboration with the Committee for the Institutional Response to the Ikhamepel Commission's Recommendations (CIRCoRe), hosted a symposium on *transformative*



Transformation Indaba participants

lenlcounters to critically explore the forces driving and resisting institutional cultural change at SU. The event created a platform for the University's community to engage in open, constructive dialogue about transformation, highlighting progress and persistent challenges in creating a more inclusive academic environment.

Redress in Action

Honouring Walter Parry: Redress Through Memory

SU hosted the inaugural *Walter Parry Memorial Lecture* in May 2024, marking a significant act of epistemic and restorative justice, and SU's commitment to inclusion and redress. Walter Hazel Parry (1913–1966), a brilliant physicist and later inspirational mathematics teacher at the former Lückhoff High School in Stellenbosch, had long been excluded from formal university recognition due to apartheid barriers. The lecture celebrated Parry's life and contributions, acknowledged his unofficial (and somewhat secretive) collaboration with SU's Department of Physics, and symbolically re-entered his story into SU's institutional memory. Going forward, Parry's legacy will be embedded in the *Lückhoff Living Museum*.

Hardekraaltjie Redress Project

More than 700 individuals buried at the Hardekraaltjie cemetery, now the site of SU's Tygerberg Medical Campus, were honoured at the launch of "*Landscapes of Dispossession – Stories of Hardekraaltjie Cemetery as Told by People from Tiervlei-Ravensmead*" through the landmark publication produced as part of SU's restitution commitments. Dr Therese Fish, Vice-Dean: Clinical Services and Social Impact at SU's Faculty

of Medicine and Health Sciences, notes: "This book serves as a powerful reminder of our past and is also a call to recognise and support marginalised voices whether through focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices or social determinants of health."

New Rock Artwork at Tygerberg Campus: A Symbol of Diversity and Change

As part of the SU's redress initiatives, SU unveiled a significant new art installation in May 2024 at the entrance to the FMHS's Clinical Building on the Tygerberg campus. Created by acclaimed South African artist Jenna Burchell, the artwork features an historic stone repaired in

the Japanese "Kintsukuroi" (golden joinery) style. The installation extends beyond the central stone, with phrases in eleven official South African languages and Braille are engraved into the surrounding bricks in a *kraal* (corral) formation. The artwork symbolises SU's ongoing commitment to diversity, inclusivity and addressing past injustices. Dr Leslie van Rooi, Senior Director: Social Impact and Transformation at SU, said: "The new artwork is a powerful symbol of our journey. It embodies our rich linguistic tapestry, reflecting the very nature and purpose of our University community. It also acknowledges our past and the path we're forging towards a more inclusive future."



Dr Leslie van Rooi, artist Jenna Burchell, Prof Elmi Muller and Prof Nico Koopman at the unveiling of the new rock artwork.



The Lückhoff School where Parry taught.



AU Goal 2:
Well-educated citizens and skills revolution underpinned by science, technology and innovation



SDG 4:
Quality Education

Building Resilient Education Systems

Education is central to SU's contribution to sustainable development and Africa's Agenda 2063 vision of "Educate an African fit for the 21st Century". SU demonstrates impact through influential research on early childhood development, lifelong learning, and equity in education, ensuring that evidence informs policy and practice. Through the Faculty of Education, we graduate qualified teachers at primary and secondary school level each year, expanding the pool of professionals who strengthen South Africa's education system. To deepen impact, SU forges partnerships with universities across Africa and globally, facilitated by its Centre for Collaboration in Africa at SU. These collaborations expand student mobility, joint research, and shared innovation projects adding to our international footprint.

Beyond formal qualifications, SU invests heavily in lifelong learning opportunities, from global online programmes on StellenboschX to public-facing lecture series such as Nobel in Africa, creating access to high-quality knowledge for wider society. Further ensuring access, we prioritise ways for first-generation students to have access to support during their educational journey, while ensuring that our curricula emphasise digital readiness, interdisciplinary problem-solving, and ethical leadership.

Educate an African Fit for the 21st Century

The African Union chose the theme: "Educate an African fit for the 21st Century: Building resilient education systems for increased access to inclusive, lifelong, quality, and relevant learning in Africa" for 2024.

In his reflection on Africa Day on 25 May 2024 former SU Rector and Vice-Chancellor Prof Wim de Villiers underscores the crucial role of education in shaping a resilient, skilled, and future-ready African citizenry. SU aligns its efforts with both SDG 4 and AU Goal 2, working to expand access to inclusive, lifelong, and high-quality learning opportunities. The University is dedicated to equipping students with the skills and competencies needed to thrive in the 21st century.

Recognising the need for nearly 230 million jobs in Africa to require digital skills by 2030, SU invests in curriculum innovation and

technology integration to prepare students for emerging global and local realities. Interdisciplinary programmes, critical thinking modules, and hands-on experiences in innovation labs encourage students to become agile problem-solvers and ethical leaders.

SU Academics Shine in National Teaching Recognition

Two SU academics from the FMHS received national recognition for advances in pedagogical innovation through Higher Education and Training bodies: Prof Faadiel Essop received the prestigious 2024 Teaching Advancement at Universities (TAU) Fellows Award, while Prof Nicola Plastow earned a commendation in the 2024 National University Teaching Awards (NUTA).

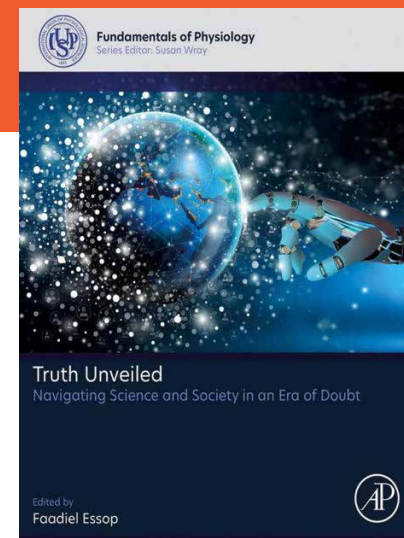
Education as a Bridge for Science and Society

Prof Faadiel Essop is at the Division of Medical Physiology at the Faculty of Medicine and Health Sciences and the director and co-founder of the Centre for Cardio-metabolic Research in Africa (CARMA).

Prof Essop, from the Department of Medical Physiology, was awarded the prestigious 2024 TAU Fellows Award in recognition for his exceptional contributions to higher education pedagogy in South Africa. This award recognises his commitment to challenging scientific elitism and promoting multilingualism in medical education. His work exemplifies SU's contribution to SDG 4 and aligns strongly with AU Agenda 2063 Goals 2 and 18, which promote a well-educated, empowered, and innovation-driven youth.



Prof Faadiel Essop,
Division of Medical Physiology



Prof Essop brings a unique perspective to the discipline by blending deep scientific expertise with transformative teaching methods that stimulate critical thinking, inclusivity, and student engagement. His approach reflects a commitment to developing future-ready graduates in the health sciences—students who are both scientifically proficient and socially responsive. He believes that teaching in the health sciences is not just about transmitting knowledge—it's also about igniting curiosity, cultivating empathy, and empowering students to become agents of change in their communities.

Essop said he was humbled and happy to receive the 2024 award: "I am grateful to the TAU committee for viewing the body of my work in such a positive light," he said. "It is certainly a great honour to be recognised for the impact of my efforts in the teaching and learning sphere which aim to encourage students to think about wider contexts relating to biomedical sciences and clinical medicine. I also wish to pay homage to all the students I have taught and mentored (and learnt from!) at under- and postgraduate levels and to my wonderful colleagues that I have had the privilege to work with over the last few years."

His integration of academic excellence with a nuanced understanding of equity in education has created a legacy of impactful teaching and leadership. This approach is exemplified in his recent book project focusing on broader contexts influencing (bio) medical disciplines: *"Truth Unveiled – Navigating Science and Society in an Era of Doubt."* Edited by Essop, it brings together international experts to address the growing disconnect between scientific and medical knowledge and public understanding. The volume is

relevant for researchers, educators, and practitioners navigating an increasingly complex information landscape. It particularly addresses medical researchers and clinicians who must maintain public trust while acknowledging scientific uncertainty.

KEY CONTRIBUTIONS AND HIGHLIGHTS

Graduating Career-ready Graduates

In 2024, SU awarded **9 401** qualifications, of which **1 585** were master's degrees, and **329** doctoral degrees.

StellenboschX: Taking SU Knowledge Global

StellenboschX is a collaboration between SU and edX, a world-leading online learning platform founded in 2012 by Harvard University and the Massachusetts Institute of Technology (MIT), to deliver high-quality online courses to a global audience. From higher education practice, human resources management to multilingualism, equity, AI integration, and professional development StellenboschX opens doors to lifelong learning opportunities that serve society. Learners can audit courses for free or earn a verified certificate for career advancements — all through flexible, self-paced, on-demand learning that fits seamlessly into any schedule or curricula.

- The Division for Learning and Teaching Enhancement designed StellenboschX: AI in Higher Education course series tailored for higher education practitioners to gain insight into the evolving landscape of AI in education.

Our World-Class Facilities and Residences

Creating spaces where students thrive, staff excel, and communities connect:



492
buildings

23
libraries



105
residences

29 853
lecture room seats



3 059
library workspaces



1 361
CCTV cameras for safety

2
campus clinics



59
student societies and clubs





AU Goal 3:
Healthy and
well-nourished
citizens



AU Goal 3:
Good Health
and
Well-being

Advancing Health and Well-being in Africa Through Research, Innovation and Care

At SU, health and well-being extend beyond traditional clinical solutions. Our researchers and practitioners tackle complex systems, address social inequality, and confront health issues linked to climate change. From world-class diagnostic innovation, maternal and child health, digital health, to rural outreach, SU's work towards good health and well-being reflects a holistic and inclusive commitment to provide access to health care resources. In 2024, SU research, teaching, and community engagement redefined access to care and delivered breakthrough innovations to some of Africa's most pressing health challenges.

Our FMHS is located at the Tygerberg Teaching Hospital, the second largest hospital in South Africa. In addition to intrinsic involvement in the clinical services provided at the hospital, faculty staff and students also offer clinical services at various other health facilities distributed across the province.

Prof Clive Gray, of the Division of Immunology in the Biomedical Research Institute is a cellular immunologist whose area of expertise is HIV and AIDS, is widely known for his passion for immunology, a discipline which "connects nutrition, metabolism, physiology, pathology and all areas of health" and which he believes does not get enough attention in Africa.

Prof Gray is currently leading a transformative scientific and capacitybuilding initiative to tackle HIV's impact on maternal and child health in Africa. His team has secured a grant of R28 million from the Fogarty International Center, which is part of the U.S. National Institutes of Health (NIH). This funding supports the multidisciplinary, international, and intercontinental African HIV training programme known as *Next Generation Training in HIV Research: Immunity in the First 1000 days in mother-infant dyads* (TIGRIS).

Their TIGRIS programme integrates clinical and laboratory research to uncover how HIV disrupts

immune function during pregnancy and early life, particularly at the placenta, which serves as a critical immunological interface. This work builds on Prof Gray's notable track record and contributes to filling a global research gap in reproductive immunology, deeply relevant in African contexts. "Reproductive immunology (interactions between the immune system and reproductive processes) in the context of HIV infection is a largely under-developed field globally and specifically in Africa, where the majority of the world's pregnant people with HIV live. Understanding the impact of maternal HIV infection on the developing baby in the womb and after birth is the focus of TIGRIS" says Gray.

Additionally, the initiative aims to train 45 postgraduate and postdoctoral fellows collectively across South Africa and Eastern Africa, including countries like Benin, Kenya, Malawi, and Uganda. Collaborating with leading institutions such as the Mayo Clinic, Harvard, Stanford, Cambridge, Oxford, and others, mentors will support rigorous studies by these emerging researchers. Gray explains: "The trainees will also further our understanding of how HIV disrupts the health of mothers and newborns as well as the functions of the placenta."

In July 2024, Prof Gray was awarded the prestigious Harry Oppenheimer Fellowship Award. The fellowship along with a grant of R2,5-million, is awarded to scholars of the highest calibre who are engaged in cutting-edge and internationally significant research. Rebecca Oppenheimer, chair of the Oppenheimer Memorial Trust said of their selection: "Prof Gray's research has the potential to revolutionise our understanding of how the human placenta functions and, from that, uncover new pathways to improving mother-child health. We are excited to watch this story unfold."



Prof Clive Gray



KEY CONTRIBUTIONS AND HIGHLIGHTS

SU Fighting TB

South Africa has one of the highest tuberculosis (TB) burdens globally and SU is playing a leading role in advancing diagnosis, prevention, and treatment through our Desmond Tutu TB Centre based at our FMHS. Innovative, accessible solutions are essential for closing the gaps in diagnosis and treatment, particularly in under-resourced and rural areas. SU's contributions offer a strong emphasis on vulnerable populations and designing applications that can be effectively utilised in the field. The University combines high-tech solutions with essential social insight, contributing to a more just and effective public health response to TB for our communities and beyond.

Improving Lung Health After TB

Two out of three adolescents diagnosed with pulmonary tuberculosis (TB) experience lung abnormalities even after successfully completing treatment for this disease, explains Dr Marieke van der Zalm, study lead at SU's Desmond Tutu TB Centre. "This is even more sobering given that each year, an estimated 850 000 adolescents develop TB, with about 90% living in low- and middle-income countries like South Africa. The study, published in the prominent medical journal, *The Lancet's* series; *eClinicalMedicine*, highlights the need for additional strategies to include adolescents in studies investigating prevention and treatment of TB-associated

respiratory morbidity. This is in addition to the work of Dr Susan Purchase from the Desmond Tutu TB Centre, who sheds light on the unique challenges children face when being treated for drug-resistant TB.

Decentralised, Accessible TB Testing

SU researchers are among the first in South Africa to pilot home-based TB testing using mobile GeneXpert devices, modified from the models already in use in clinics. This is a significant breakthrough, as many TB cases go undetected due to barriers in accessing clinic-based testing. Home testing offers a more inclusive solution that can reach underserved rural and urban communities to test for TB proactively, offering treatment to larger groups of patients, earlier on in the disease's progression.

Digital Screening Innovation

The *CAGE-TB* project led by SU's *Clinical Mycobacteriology and Epidemiology (CLIME) Group* is developing a **mobile app** that uses audio analysis to detect cough patterns indicative of TB. Featured in *Nature Africa*, this tool aims to fast-track diagnoses by identifying high-risk patients who need further testing, reducing clinic congestion and diagnostic delays. The research team comprises more than thirty skilled professionals from SU (South Africa), the Amsterdam Institute for Global Health and Development (Netherlands), Makerere University (Uganda) and the University of Gottingen (Germany), with diverse expertise crucial to the project's success.



Prof Therese Fish addressing stakeholders about the Central Karoo InReach programme

Light and Smiles to the Central Karoo

The *Central Karoo InReach* project brings together university partners, the public health sector, non-governmental organisations (NGOs), and private companies who collaborated to provide cataract surgery and primary care dental services to patients from the Central Karoo region. Spearheaded by FMHS's Dr Therese Fish and Prof Karin Baatjes, this multi-partner initiative has successfully eliminated years-long waiting lists for cataract surgeries and dental care in rural Beaufort West. This project demonstrates how university-led care can change lives beyond campus. "We recognised an opportunity to leverage our resources and connections to support the health system and alleviate some of the challenges they are currently experiencing," said Baatjes. "At the same time, we're exposing our registrars [medical specialists in training] to non-complicated eye surgery, and our undergraduate medical students to the rural healthcare environment."

Digital Health Africa and Mental Health Innovation

The hybrid Digital Health Africa Conference was hosted at SU's BMRI in 2024. This event provided a significant opportunity to showcase how we address the unique challenges Africans face, while capitalising on the opportunities for transformation and innovation in healthcare delivery. At the same time, researchers launched mental

health apps for PTSD and investigated the role of social media in youth mental health, contributing to global policy debates.

SU Achieves Platinum Status for FISU Healthy Campus

In June 2024, SU became South Africa's first university to receive platinum certification from the Federation of International University Sport (FISU). The award recognises the institution-wide commitment to student and staff health, prioritising physical, mental, and social well-being for students, faculties, and staff. It also encourages universities to develop policies and programmes that promote inclusivity, safety, and positive social connections. Ilhaam Groenewald, Chief Director Maties Sport said: "It is a testament to our commitment to excellence and desire to provide the highest level of service and support to be recognised as one of the healthiest campuses in Africa." Maties Sport collaborated on the certification with Campus Health, Human Resources Wellness and Centre for Student Communities,

Facilities Management, Risk Management and Campus Security, SUNCOM and the Stellenbosch University Wellness Committee.

Midwives: A Vital Climate Solution

Dr Doreen Kaura, of the Department of Nursing and Midwifery at our FMHS shares how midwives promote sustainable healthcare and childbirth practices in Africa. These practices minimise environmental impact while safeguarding communities. At a time when climate change is exacerbating vulnerabilities across Africa, midwives embody a holistic and environmentally sound approach to healthcare from family planning service, to natural, non-invasive childbirth practices that minimise environmental impact, to supporting breastfeeding initiatives.

Campus Health

We prioritise student and staff well-being by investing in several health and wellness programmes and occupational health initiatives,

such as audiometric tests, medical screenings, and radiation screening examinations.

Through our campus health services we provided:



6 353
doctor visits
(an increase
from 5 673
in 2023)

8 469
nurses' visits
(2023: 9 915)

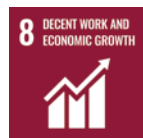


835
vaccinations





AU Goal 4:
Transformed
economies and
job creation



SDG 8:
Decent Work and
Economic
Growth

Building Future-ready Skills

SU drives inclusive growth and enhances employability through research, innovation, and practice that prepare graduates for the future of work while contributing to transformed economies. In terms of employment practices, SU invests significantly in staff wellbeing, spending R3,6 billion on salaries and benefits in 2024, alongside policies for equal opportunity and secure contracts for a thriving workforce. The Institute for Futures Research (IFR) conducts cutting-edge studies on emerging trends and the futures of employment in sectors.

To enhance student employability, SU expands real-world experience through work-integrated learning placements and supporting the development of platforms like Gradlinc, a national graduate employment service with over 15 000 users, that bridge the gap between academia and the labour market. SU also invests in innovation ecosystems, supporting social entrepreneurship initiatives that assist local enterprises tackling youth unemployment and food delivery challenges.

Imagining the Futures of Work

Dr Doris Viljoen is the Director of the Institute for Futures Research (IFR) at Stellenbosch Business School, where she also teaches in Futures Studies and Strategic Foresight

In our efforts to support the attainment of SDG 8 and AU Goal 4, it is important for universities to go beyond teaching relevant theory and conducting cutting-edge research. They must also engage with the grey spaces of uncertainty, facilitate important conversations, and imagine alternative futures for the economic activities of individuals and organisations. The IFR at Stellenbosch Business School (SBS) has been doing research and facilitating workshops to imagine multiple plausible futures for more than fifty years.

In recent years, the IFR completed six projects within the realm of SDG 8 and AU Goal 4. For the Retail Association and NEDLAC a few years ago, and more recently for the Chemicals Industry Education and Training Authority, the IFR researched emerging trends and the influence of enabling technologies on work and skills development, and crafted scenarios representing alternative futures. The South African Typographical Union contracted the IFR to explore alternative futures of the printing industry in South Africa, focusing on employment and the future of work within the industry, as well as the ongoing role of the workers' union.

Another project focused on the holistic and systemic nature of human development, with a strong emphasis on human aspirations and socio-economic development in Eastern Cape Province. Additionally, the IFR investigated the potential roles of humans and the types of economic activities that they could perform in the future agriculture value chain of

South Africa, looking closely at the future of work in the agricultural sector.

Gig work, characterised by on-demand, task-based engagements, is a blossoming phenomenon. Dr Viljoen completed her PhD research in 2024, taking a multi-domain approach and using a wider lens to also include gig work occurring outside of digital platforms. Her research identified eight pivotal factors to develop four archetype scenarios of gig work in South Africa towards 2035.

The IFR aims to deepen conversations about important issues and to facilitate the development of insights into the interplay and interdependencies among driving forces across different domains. Moreover, it contributes to people's understanding of how and why different futures could emerge over the longer term, and their respective roles in shaping the future South Africa.



Dr Doris Viljoen, Director, Institute for Futures Research

KEY CONTRIBUTIONS AND HIGHLIGHTS

Young Entrepreneurship Programme (YEP)

The Young Entrepreneurship Programme (YEP), led by Adolph Neethling (Department of Business Management), aims to cultivate the next generation of entrepreneurs by inspiring high school learners from disadvantaged communities in and around Stellenbosch. Along with his colleague Sabrina Matthee, a lecturer in Entrepreneurship and Small Business Management, they equip their participants with confidence and business skills. During a week-long YEP workshop held over the June-July 2024 school holidays, Grade 10 learners from Kayamandi, Makapula, Lückhoff, Stellenzicht, and Cloeteville High Schools worked in teams to develop start-up ideas and business plans. They received guidance from SU mentors and partners from the University of Applied Sciences Utrecht, in the Netherlands.

Work-Integrated Learning Through SU-Shoprite Partnership

In December 2024, SU and Shoprite marked a milestone in their long-standing partnership with the graduation of the first Data Science students trained to tackle real-world retail challenges.

Armed with access to a unique dataset of 14 million Shoprite sales transactions, the students applied their skills to solve complex problems that mirror the fast-paced retail industry. Guided by Debbie Vigario, Head of Engineering at Shoprite Group, and her team of engineers, the project bridged academia and industry in showcasing how collaboration can fuel innovation and prepares graduates for immediate impact in society.

Social Innovation Ecosystems for Local Enterprise

With Ranyaka Trust and the Stellenbosch Civil Advocacy Network (SCAN), SU supports training for entrepreneurs addressing community-level challenges, from youth unemployment to urban food delivery. These workshops develop ideas into viable social ventures through impact-driven



Adolph Neethling and Sabrina Matthee being recognised for their contributions, alongside the other recipients in the 2024 Social Impact Awards.

business models.

SU collaborates with the Division for Transformation and Social Impact on Volunteerism management and is excited about the new stakeholder engagement platform where organisations would be able to log their volunteer needs and which can then be matched to resources within the University.

Gradlinc Career Exploration Series

SU spinout company Gradlinc is an innovative graduate career development platform and job portal that connects employers, graduates and universities country-wide on a national cloud-based platform. In its first year of operation, more than 4 200 students and 250 companies signed up, boasting more than 15 000 active users in 2024. "The story of Gradlinc is one of developing African solutions for African problems, bringing the solution to those who can benefit. It's a testament to the collective effort required to address graduate employment in South Africa," said Lizane Füzy, the former General Manager of Gradlinc.

The platform registers daily sign-ups from university students nationwide, representing 23 of the 26 public universities in South Africa. Gradlinc has extensive efforts to onboard students from private universities and institutions. In addition to matching graduates and employers, the platform also recognises volunteer work and workshop attendance, allowing students to earn points reflected as badges on their profiles, making it easier for employers to recognise employable talent.

Sex Work is Work

Dr. Marna Lourens is a researcher and lawyer at Stellenbosch University's Centre for Social Justice. Her work focuses on the decriminalisation of sex work in South Africa, advocating for a fundamental shift in how the law views and treats sex workers. She argues for their rights to be recognised and protected under the Constitution.

Dr. Lourens aligns her research with a transformative justice agenda, aiming to bring sex workers into the social and legal mainstream. Through her PhD research, titled "Towards transformative justice for un-coerced adult female sex workers in South Africa", and her activism, she motivated that sex work should be viewed as legitimate work, deserving of labour protection, healthcare access, and social rights. She also highlights the discrimination and abuse sex workers face, including barriers to healthcare and police harassment, and advocates for reforms that would make sex work safer and more socially accepted.

Her work not only challenges societal stigma but also seeks to empower sex workers like Hlubi, a young woman featured in her research, who proudly wears a T-shirt that reads, "Sex work is work." By aligning with advocacy groups such as the Treatment Action Campaign, Dr. Lourens works to ensure that sex workers are not only seen but also have the legal protections they need to live without fear of violence or discrimination.



AU Goal 5:
Modern
agriculture
for increased
productivity
and production



SDG 2:
Zero Hunger

Advancing Food Security and Sustainable Agriculture

Stellenbosch University mobilises knowledge, innovation and sustainable practices to help combat hunger, food insecurity, and a lack of access to nutrition, while working towards the transformation of African agriculture. Through world-class research in AgriSciences, SU contributes to modernising agriculture, supporting food system reform, and strengthening climate-smart farming. Our AgriSciences Faculty has been recognised as the top Faculty in Africa, graduating 551 AgriScientists in 2024, in addition to coordinated research, advocacy, and community-led initiatives.

On campus, initiatives like the student-led soup kitchen, #Move4Food campaign, and subsidised meals for NSFAS-funded students tackle student hunger directly, affirming food as a right and not a privilege. Beyond campus, our impact extends into society through engagements, including the Centre for Social Justice's International Summit on Hunger and the Constitution, doctoral research on the competitiveness of South Africa's fruit canning industry, the *Van Brood en Water* documentary highlighting hidden hunger in fishing communities, and the CoVE in Climate Smart Agriculture project, for sustainable farming skills.

Nourishing Our Community Through Food

Francisca Darkoh is a Master's student in Physiological Sciences and Mandela Rhodes Scholar at SU.

At the heart of SU's SDG 2 contribution is the understanding that hunger is more than just a technical problem of food supply. Francisca Darkoh, a Masters student in Physiological Sciences and Mandela Rhodes Scholar at SU, is tackling student hunger with compassion and resourcefulness. What started in 2024 as a small soup kitchen with two bags of flour for *vetkoek*, has evolved into a regular food

initiative that serves hundreds of nutritious meals during high-stress academic periods, including exams. Through her food business, Share Bite SA, partnerships with sponsors, and the student community Listen, Live and Learn (LLL) programme, she is helping reduce food insecurity and create spaces for connection and dignity on campus.

Her efforts are rooted in a philosophy of *Ubuntu* and gratitude, shaped by her own journey through hardship, including a life-altering illness in 2022. Rather than seeing food as merely charity, Darkoh sees it as a means to build community, inspire leadership in others,



Francisca Darkoh setting up for a soup kitchen at her LLL House.



2024 annual International Social Justice Conference and Summit at the Cape Town International Convention Centre



KEY CONTRIBUTIONS AND HIGHLIGHTS

United Action for the Right to Food

At the heart of SU's contribution to food security is the understanding that hunger is not merely a technical problem of food supply; it represents a social justice crisis that requires institutional courage, collaboration and foresight. Prof Thuli Madonsela, Director of the Centre for Social Justice (CSJ) at SU, is a leading voice on the topic of *the right to food*.

The CSJ's October 2024 annual **International Social Justice Conference and Summit on Social Justice, Hunger and the Constitution** brought together leading academics, policymakers, government officials, and private sector representatives. Sessions highlighted that hunger in South Africa stems not from food scarcity, but from systemic failures and inequities, poor policy implementation, and a failure to uphold the constitutional right to food.

Key themes from the event included interrogating the legal framework for food security, policy implementation gaps and the pressing need for government accountability. Prof Madonsela linked the right to food to the social justice principles that the Constitutional Court has repeatedly stated are fundamental to the Constitution's societal blueprint.

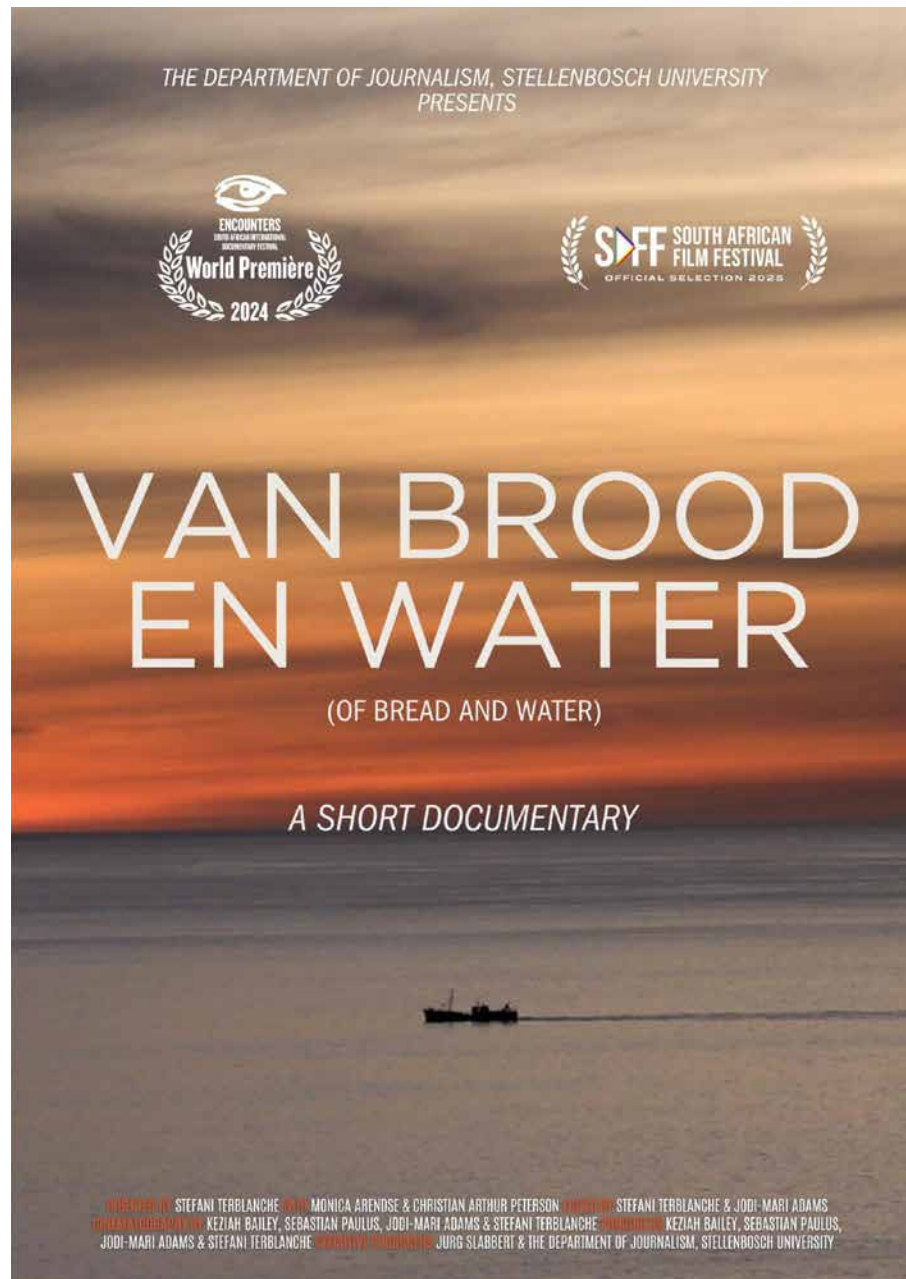
A recurring theme throughout the events was the necessity of collective responsibility. One-third of the country's food is wasted due to inefficiencies in distribution and access. Discussions covered how SU's research contributions focus on aligning food security efforts with constitutional and SDG frameworks, promoting legal reforms to support food donations, and calling for government accountability and private sector participation. The summit concluded on an optimistic note with participants pledging to undertake united, coordinated and accelerated global and domestic action to end hunger at SU by 2030.

and ensure that no one is left behind. She champions the idea that good food is a right, not a privilege, and that small, student-led actions can drive powerful, systemic change. As Darkoh puts it: "I want to serve food that's delicious and nutritious – food I'd serve to the Rector. We play music, we laugh, we build community. That's the heart of it."

Through her work, Darkoh embodies the spirit necessary to eliminate hunger and food insecurity, leading the way in showing how one person can make a significant impact. Her advice to students who want to make a difference is to start small, even if the conditions aren't necessarily perfect. "You don't have to be the loudest person in the room. Small actions matter. And if you don't fit into someone else's box, make your own."

"You don't have to be the loudest person in the room. Small actions matter. And if you don't fit into someone else's box, make your own."

– Francisca Darkoh



Student Documentary *Van Brood en Water*

Four SU journalism students produced a deeply moving portrait of a small-scale West Coast fishing family for a student project. The 11-minute documentary, *Van Brood en Water* (Of Bread and Water), explores the daily life, work, and relationships of a local fisherman in a local fishing community. The film has been selected for screening at the prestigious annual Encounters South African International Documentary Festival. It captures the precarious livelihoods and hidden hunger in marginalised communities, bringing food insecurity into mainstream cultural consciousness.

Affordable Meals for NSFAS Students

To tackle food insecurity and the insufficient funds for NSFAS (National Student Financial Aid Scheme) students at the end of the last semester in 2024, SUNCOM's Food Services and Compliance Office created an affordable meal option for NSFAS students living in the Stellenbosch campus residences. This initiative laid the groundwork for establishing a permanent meal programme for NSFAS students in 2025. Key modifications will be made to ensure that students have access to affordable, nutritious, and safe meals within the allocated budget throughout the year, while also



SUWI and Faculty of Science Aquaponics systems to grow food

promoting financial sustainability and resource optimisation at Stellenbosch University.

Southern Africa Food Lab – Faculty of AgriSciences

Since 2009, the Southern Africa Food Lab, part of the Food Security Initiative at SU, has convened diverse, influential stakeholders to address food challenges in the Southern African food region. In 2024, the Food Lab's projects included the Woza Nami project, aimed at enhancing nutrition and food security in communities around the eThekweni Municipality, and the Nourished Child research project. The Food Lab also supports policy makers in agroecological food systems. Additionally, the impactful African food dialogue series on African Food Systems helps to promote dialogues between Africa's preeminent food policy thinkers and researchers at various public lectures, such as those at the 2024 International Social Justice Conference and Summit.

Food Carbon Tracking Software – An African First

SU's Compliance and Catering Office has piloted a carbon footprint tracking software called Klimato, making SU the first African university to track and record the carbon footprint of meals and ingredients. The team tested the software to reduce carbon emissions and encourage sustainable practices



Centres of Vocational Excellence (CoVE) in Climate Smart Agriculture training group

within its operations through climate-smart procurement practices.

TVET Agriculture Training & Climate Smart Farming

The Erasmus project, Centres of Vocational Excellence (CoVE) in Climate Smart Agriculture in South Africa, offered various training sessions for horticulture students and teachers at various Technical and Vocational Education and Training (TVET) colleges in South Africa. This initiative engaged local farmers and agribusinesses with the CoVE hubs and supported emerging farmers pursuing climate-smart horticulture.

The offerings included work-integrated learning for students and courses like *Innovative Agriculture: Transforming the Future of Farming*. These programmes aim to build capacity in food-insecure areas and prepare a new generation of climate-resilient and sustainable farmers.



AU Goal 6:
Blue/ocean economy for accelerated economic growth



SDG 6:
Clean Water and Sanitation

Driving Water Security and Innovation for a Blue Economy

Water scarcity will continue to shape the future of public health, urban development, and environmental justice. In response to the fears surrounding the Day Zero Drought in the Western Cape, SU continues to lead high-impact water and sanitation projects with entities like the SU Water Institute (SUWI). These initiatives combine research excellence with responsible campus operations and community engagement.

SU's flagship training initiatives, such as the Centres of Vocational Excellence in Water and Climate-Smart Agriculture, and the €5 million ACEWATER III project on transboundary water management across Africa, significantly contribute to improving access to water and sanitation.

On campus, water management is a key component of our Environmental Sustainability Plan. We actively manage consumption and reduce it through leak detection systems, greywater plants, efficient fittings, and alternative water sourcing. This effort has earned our Tygerberg and Bellville campuses recognition from the City of Cape Town for water management excellence. Innovations such as the desalination plant and stormwater reuse demonstrates SU's commitment to sustainable water use.

Building Water and Climate Resilience through Skills Development and Innovation

The Stellenbosch University Water Institute is a multidisciplinary research institute established to address South Africa's and the African continent's pressing water-related challenges.

SU's Water Institute (SUWI), established in 2010, continues to address South Africa's water challenges through interdisciplinary research, partnerships with industry and Government, and human capital development. Through its publications, training, and field projects, the SUWI addresses urban sanitation, equitable access to water, and water efficiency. It serves as a knowledge hub on water quality and innovation, linking engineers, environmentalists, and social scientists.

Central in their training efforts are two SU-certified Short Courses to strengthen technical knowledge among professionals managing water infrastructure. The first course, Treatment Process Management at Water Works, focuses on the core principles and management concepts of water and wastewater treatment. It equips tutors, trainers, engineers, and government officials with the knowledge and skills needed to select and apply these processes effectively. The second course, Water Quality Management and Risk Assessments at Water Works, is designed for water professionals to coordinate and implement risk-based water safety and operational activities.

In 2023 and into 2024, the SUWI and its partners launched several flagship initiatives aimed at upskilling for climate-smart agriculture and water resilience:

- **Climate-Smart Agriculture Capacity Building:** In collaboration with Maastricht School of Management, SU trained TVET staff and students in water optimisation and climate-smart agriculture. The outputs included digital learning platforms, high-tech greenhouses, and multi-stakeholder partnerships.
- **Centres of Vocational Excellence (CoVE):**
 - The **CoVE in Water**, launched in May 2023, is the first of its kind outside the EU and connects regional TVETs, universities, industry, and government to align training with the needs of the labour market.
 - The **CoVE in Climate-Smart Agriculture**, co-funded by the EU, supports digital and sustainable skills development for students at three South African colleges in partnership with SU, European universities and commercial agriculture players.
- **Orange Knowledge Programme Initiatives:** These projects integrate **renewable energy and efficient water use** in greenhouse-based vegetable production, combining practical training, entrepreneurship, and industry-aligned education to improve employment outcomes for TVET students. This training ultimately empowers the graduates to establish their own businesses within the agriculture sector.
- **PoVE Water Risk Management Course** The Stellenbosch University Platform of Vocational Excellence in Water hosted a three-day short course at the Faure Water Treatment Plant near Stellenbosch in August 2024. The initiative demonstrated SU's commitment to skills development and knowledge exchange on water safety. It brought together diverse stakeholders to



ACEWATER III project initiation workshop in April 2024, Nairobi, Kenya

tackle real-world water challenges to enhance the quality of the local water. Participants engaged in immersive sessions, exploring best practices and cutting-edge strategies for effective water quality management and risk assessment.

KEY CONTRIBUTIONS AND HIGHLIGHTS

Water Management

SU's five campuses are located in water-stressed areas, making sound water management a critical aspect of the University's Environmental Sustainability Plan. We use filtered water from the municipality, as well as water from rivers, dams and lakes, including groundwater, stormwater, and rainwater for drinking, hygiene and irrigation purposes. Our extensive water infrastructure comprises 16 boreholes, 29 km of potable water lines, and 28 km of stormwater lines. To optimise water consumption, we have installed efficient fittings, smaller toilet systems, a greywater plant, smart water meters and alternative water sources. Additionally we have implemented a rigorous leak detection system.

City Awards for Water Management Excellence

The City of Cape Town recognised SU's Tygerberg and Bellville campuses for their efficient water

usage and management strategies. Tygerberg reduced potable water use by 40% and the Bellville campus used water from the adjacent deep lake to supply water to the desalination plant, which resulted in a substantial reduction of potable water with minimal supply from the grid city of Cape Town. These innovations are rooted in a green business plan conceptualised more than a decade ago, which has now evolved into the current Environmental Sustainability Plan.

ACEWATER III: R100 Million for Transboundary Water Solutions

Through the SANWATCH Secretariat, based at the Centre for Collaboration in Africa, SU leads a €5 million (approximately R100 million) project funded by the European Commission. This project, focused on improving transboundary water management across Africa between 2024 and 2027. Launched on 15 April 2024, in Nairobi, Kenya, the project brings together twenty partner institutions under the AUDA-NEPAD umbrella to enhance capacity, produce applied research, and shape policy on sustainable water governance and equity.

One of the ACEWATER III projects concluded in 2024 was the Geographical Science for Resilient Communities, Ecosystems and Livelihoods under Global Environmental Change (GORILLA)



3rd GORILLA conference, in December 2024, Kampala, Uganda

conference for African Resilience through Water Science. Co-hosted by Makerere University in Kampala (Uganda), the gathering of practitioners and researchers focused on ecosystems, and livelihoods for water resilience and cross-border collaboration.

WASA 2024 - 2028

The Water Security in Africa (WASA) programme (2024-28) seeks to make a sustainable contribution to improving water supply, wastewater management, and the preservation of natural ecosystems in Africa. The launch conference for WASA's research programme took place in September 2024 at SU, attracting over 100 participants. During the conference, water sector experts from Germany and Southern Africa discussed solutions to the urgent challenges to improve water management, supply and re-use in southern Africa.



2024 WASA conference participants at STIAS, Stellenbosch



AU Goal 7:
Environmentally sustainable climate-resilient economies and communities



SDG 7:
Affordable and Clean Energy

Powering A Sustainable Future

SU connects its research efforts to its **Environmental Sustainability Plan**, which aims to reduce emissions and promote the use of renewable energy. On campus, SU installed solar capacity across various sites in 2024 and decreased electricity consumption by cutting Scope 1 and 2 emissions. SU's Centre for Renewable and Sustainable Energy Studies (CRSES) and the Electric Mobility Laboratory drive national leadership in renewable energy and clean transport solutions. Additionally, SU offers public training initiatives such as free solar workshops in Kayamandi, to ensure that the energy transition builds equity and resilience.

Driving Africa's Clean Mobility Transition 6 000 km of sunshine-powered transport

Prof Thinus Booysen is a Professor at the Faculty of Engineering and Research Chair in the Internet of Things. He is also the director of the MTN Mobile Intelligence Lab, and the Electric Mobility Lab, and Co-founder of GreenX Engineering.

Stellenbosch University's Electric Mobility Laboratory, under the leadership of Prof. Thinus Booysen, is at the forefront of Africa's clean transport revolution, pioneering practical, African-centred innovations to accelerate the transition to clean energy in the transport sector.

In October 2024, the lab captured international attention by supporting a 6 000 km solar-powered electric motorbike expedition from Nairobi to Stellenbosch, in partnership with Kenyan company Roam. The journey showcased African ingenuity in renewable mobility and raised awareness for clean transport during South Africa's Transport Month. The motorbike, coined the Roam Air, was built in Kenya specifically for urban African use and operated entirely on solar energy throughout the 6 000 km journey.

Booyesen said that the expedition highlighted the immense potential of electric mobility powered by renewable energy to transform livelihoods across Africa. "Clean energy solutions not only contribute to environmental sustainability but can also provide significant economic and social benefits. By reducing reliance on fossil fuels and lowering transportation costs, solar-powered electric mobility has the potential to enhance the quality of life in rural and urban communities alike," he said.

Beyond this symbolic feat, the lab is spearheading the conversion of internal combustion engine vehicles to electric alternatives that are tailored for local needs. A major milestone was the conversion of a 65-seater diesel bus into a fully electric vehicle, in partnership with Golden Arrow Bus Services, the South African National Energy Development Institute (SANEDI), the Department of Science and Innovation, and other stakeholders. The retrofitted bus retains its original weight and structure, is roadworthy, and will undergo further performance testing as part of the city of Cape Town's public transport system.

Prof Thinus Booysen, a professor and the chair in the Internet of Things at the Faculty of Engineering at SU



The solar-powered electric motorbike en route from Nairobi to Stellenbosch

KEY CONTRIBUTIONS AND HIGHLIGHTS

Centre for Renewable and Sustainable Energy Studies (CRSES) – 2024 Highlights

Under the leadership of Professor Cristina Trois, SU's Centre for Renewable and Sustainable Energy Studies (CRSES) continues to play a leading role in advancing South Africa's energy transition through research, capacity-building, and strategic partnerships for sustainable energy systems.

In 2024, CRSES achieved several key milestones:

- **SASEC 2024 & FUTURA Hydrogen Campus Announcement**
CRSES hosted the Southern African Sustainable Energy Conference (SASEC) in Somerset West, bringing together global energy experts to explore renewable energy innovations. During the conference, SU and the University of Groningen jointly announced the launch of the FUTURA Hydrogen Campus Southern Africa, which positions SU at the cutting edge of green hydrogen research and development.
- **Hydrogen Innovation Hub Launched**
As part of SU's broader green hydrogen strategy, the University launched the Hydrogen Innovation Hub in 2024 to drive applied

research, partnerships, and infrastructure development for hydrogen technologies within the Southern African context.

- **SA Energy Visualisation Platform**
CRSES developed and launched the South African Energy Visualisation Platform, an open-access digital tool that offers intuitive energy data visualisations. The platform improves transparency, policy literacy, and data accessibility for researchers, policymakers, and the public.
- **Public Training in Solar Tech and Energy Audits**
Through free workshops and the BRECCS programme, SU trained unemployed youth in Kayamandi on renewable energy systems. These initiatives not only help build skills but drive social equity in the energy transition.

Prof Mark Swilling Appointed to Eskom's National Transmission Company

This appointment to South Africa's newly formed National Transmission Company reflects the impact of SU's Centre for Sustainability Transitions (CST) on policy and systems design. Prof Mark Swilling's role underscores SU's leadership in shaping the country's energy transition and implementing the Transmission Development Plan.



Prof Mark Swilling is a Professor at the Centre for Sustainability Transitions and a SARChI Chair in Urban Governance and Energy in Africa





AU Goal 6:
Blue/ocean economy for accelerated economic growth



AU Goal 7:
Environmentally sustainable climate-resilient economies and communities



SDG 13:
Climate Action

Advancing Climate Action and Resilience

To actively contribute to climate action and resilience, SU harnesses its world-class research, advocacy, sustainability education, infrastructure, partnerships, and practical steps toward a low-carbon future. In 2024, SU researchers advanced global understanding of climate resilience by positioning microbes as nature's hidden climate allies, thereby catalysing collaborations in Africa and worldwide. Our School for Climate Studies hosted international dialogues focused on extreme weather, and collaborative projects linked climate change to public health and planetary systems.

On campus, SU committed to sustainability through its Environmental Sustainability Plan, transition to renewable energy, and curriculum innovations that embed climate literacy across our various disciplines.

At the same time, students and staff carried climate action into public spaces: from the Earthshot Youth Prize, where they shared African perspectives on climate change with Prince William, and contributing to major conferences like ISME19 in Cape Town, which spotlighted African science on the world stage.

Science and Stewardship in the Age of Crisis

From Microbiomes to Climate Action: SU's African-led Approach to Sustainability

Prof Thulani Makhalanyane is at the Department of Microbiology (Faculty of Science) and School for Data Science and Computational Thinking. He is the Programme Lead: Microbiome Innovation, Centre for Epidemic Response and Innovation (CERI)

In 2024, Prof Thulani Makhalanyane has led multiple initiatives that position microbes as key agents in climate mitigation. Highlights include calling for equitable microbiome research partnerships across Africa, co-hosting ISME19 in Cape Town, and received the prestigious Silver Medal of the South African Society of

Biochemistry and Molecular Biology for his outstanding contribution to the field through his African Microbiome Project.

Through our innovative work in environmental microbiology, microbial ecology, and data-driven science at SU, we contribute to developing climate resilient communities and economies, while championing the relevance of African-led research. Our research seeks to understand the role microbial communities — communities of bacteria, single-celled microorganisms, fungi and viruses that live together in a shared environment —, play in ecosystems and human health. We also investigate how their interactions with their environment influence critical ecosystem services, such as carbon cycling and climate regulation.

Equitable African Partnerships for Research

Africa is home to some of the most diverse and unique microbiomes on the planet. However, these microbial communities and our researchers are severely underrepresented in global research efforts. To address this imbalance, leading African scientists proposed a framework in *Microbiome research in Africa must be based on equitable partnerships* (*Nature Medicine*, May 2024). This framework calls for establishing strong local research leadership with the support of Government



Prof Thulani Makhalanyane is a Gates Foundation Goalkeeper, accelerating progress towards the SDGs.

and funders, to create more ethical, equitable research partnerships between African and international researchers.

At SU, our research at the African microbiome research group seeks not only to uncover this microbial diversity, but also to ensure that the knowledge produced is African-led, ethically conducted, and locally relevant for the communities we serve. We have previously highlighted the need for increasing studies on African microbiomes. As Africans, we must be at the forefront of these studies because they directly impact our communities and ecosystems. We need equitable partnerships to achieve meaningful and sustainable research outcomes.

Microbes in the Fight Against Climate Change

In 2024, we joined a coalition of 18 microbiologists from 24 countries to publish a landmark article across 14 journals advocating for the fast-tracked deployment of microbial "vaccines". These nature-based solutions aim to mitigate climate change. The role that African microbiomes can play to rehabilitate degraded ecosystems and improve climate resilience in agriculture and aquaculture was once again emphasised. These include microbiome-based tools to enhance carbon sequestration in soils and oceans, reducing methane emissions by livestock farms and landfills, providing alternatives to fossil fuels through microbial bioenergy, act as natural agents, breaking down pollutants on land and water, and produce natural fertilisers to replace synthetic nitrogen.

SU also co-hosted the 19th Symposium for the International Society for Microbial Ecology (ISME) in Cape Town in August 2024, marking the first time it was held in Africa. The event is the most important global conference focusing on microbial ecology in the environmental, medical and biotechnological fields. As one of the world's largest microbiome science gatherings, it provided us the platform to amplify African science, connect local scholars with global leaders, and highlight the importance of our Continent's unique microbial systems. Additionally, we hosted the 3rd annual African Microbiome Symposium at Tygerberg in August.



Prince William with the Earthshot Prize Climate Leaders Youth Programme in Cape Town, South Africa, with Lesedi Monnanyane to his right.

KEY CONTRIBUTIONS AND HIGHLIGHTS

Integrated Responses to Extreme Climate Events in Developing Economies

The School for Climate Studies at SU, together with the South African Alliance for Collaboration on Climate and Earth Systems Science (ACCESS), the Scientific Committee of Problems of the Environment (SCOPE) of the International Science Council, and the Centre for Science and Technology of the Non-aligned and Other Developing Countries (NM-S&T Centre), hosted a landmark international conference focusing on integrated responses to the growing threat of Extreme Climate and Weather Events (ECWE) in developing economies.

The conference affirmed the critical role of transdisciplinary collaboration, predictive climate science, and early warning systems in addressing ECWE in the Global South, directly aligning the need to take climate action and create resilient communities. A set of actionable recommendations was developed to be shared with governments and civil society.

Climate Change and Health

A research project led by Dr Houriiyah Tegally (SU), Prof Thulani Makhalanyane, who is also a member of the Gates Foundation Goalkeepers community, and Dr Moritz Kraemer (University of Oxford), hosted by the School for Climate Studies in collaboration with the Centre for Epidemic Response and Innovation (CERI) and the School

for Data Science and Computational Thinking, investigates how shifting climate conditions induce migration and catalyse the transmission of arboviral diseases such as Dengue, Zika, and Chikungunya in vulnerable African communities. The UK's Medical Research Foundation supports this project, which forms part of a broader effort to address the health impacts of climate change through data-driven, transdisciplinary research. The team will work across multiple public health and research institutions in South Africa and Kenya, as well as clinical research sites in West and Central Africa, making the research outputs directly relevant to decision-makers.

Earthshot Youth Meets UK Royalty

Lesedi Monnanyane, a Diploma in Sustainable Development student at SU, had a remarkable opportunity as one of the top 100 participants in Africa for the Earthshot Prize Youth Programme. He had a once-in-a-lifetime opportunity to discuss climate change challenges with Prince William, the heir apparent to the British throne, and founder of the Prize. Monnanyane, describes the experience as "unforgettable". He was particularly impressed by the Prince's energy and said: "(Prince William) showed genuine interest in the ideas and stories shared by the youth involved in the programme. I felt both humbled and inspired to be in the presence of someone who not only represents change but is actively working to drive it on a global scale."



AU Goal 6:
Blue/ocean
economy
for accelerated
economic growth



SDG 14:
Life Below Water

Protecting Life Below Water

South Africa's marine environment is very diverse due to the convergence of two major ocean currents: the cold, slow-moving Benguela Current and the warm, fast-flowing Agulhas Current. This interaction creates a special habitat that supports a high level of biodiversity. SU is continuously strengthening its role as a hub for ocean science, blue/ocean innovation, and coastal resilience. In 2024, our scholars advanced knowledge through pioneering work on coastal vegetated ecosystems, such as seagrass and salt marsh carbon sinks, which also informs South Africa's greenhouse gas inventory and supports Africa's first seagrass restoration nursery. The African Microbiome research group highlighted how Antarctic microbial research underpins global climate resilience, while geochemists co-authored a *Nature* paper on zinc cycles in the Southern Ocean, linking trace metals to global carbon absorption.

Additionally the Southern Ocean Seasonal Experiment and vibration science on the SA Agulhas II sea vessel contributed to critical engineering and ecological insights for safer polar expeditions and a deeper understanding of ocean dynamics. In recognition of our innovative conservation efforts, the SharkSafe Barrier, a non-lethal kelp-inspired shark deterrent, won an M&G Greening the Future Award.

Vegetated Ecosystems Essential to Curb Climate Change

Prof Sophie von der Heyden is a Professor of Marine Genomics and Conservation, with a wide research interest spanning ecological genomics, marine and freshwater ecology, biodiversity sciences and the conservation of natural ecosystems.

As a terrestrial species, we do not value the ocean and its various provisioning ecosystem services enough. One significant service is the ocean's ability to absorb and store carbon dioxide, a key focus in the von der Heyden Lab. Our research particularly aims to understand the contribution of Coastal Vegetated Ecosystems (CVEs), such as seagrass meadows and salt marshes, in mitigating climate change. This involves quantifying the organic carbon stored in the sediments of these ecosystems. By assessing both the carbon content and the area covered by seagrass meadows and salt marshes, we can estimate their carbon storage potential and their contribution to the national Greenhouse Gas (GHG) inventory.

However, the mitigation potential of coastal vegetated ecosystems is severely threatened by their population declines due to human-driven impacts associated with coastal development, which include habitat loss, pollution and changes in estuarine flow dynamics, as well as climate change impacts such as sea level rise and more frequent warming events. To help safeguard CVEs, our work examines the conservation and management of seagrasses

through restoration efforts, by replanting seagrasses in areas where meadows have been lost.

We have established Africa's first nursery-based propagation of the seagrass *Zostera capensis*, and showed that this species can successfully be grown in land-based aquaculture systems. This approach minimises the negative impacts on natural donor meadows during restoration activities. In addition, we have sequenced the first genome of an African seagrass and are using this genetic data in combination with screening the genomic diversity of multiple populations, to potentially select 'climate-resilient' plants for our restoration efforts. Through partnerships with organisations such as South African National Parks and CapeNature, our work offers exciting opportunities for translating scientific research into impact.



Prof Sophie von der Heyden



Members of the Von der Heyde research group working in Coastal Vegetated Ecosystems

KEY CONTRIBUTIONS AND HIGHLIGHTS

SharkSafe Barrier Wins Environmental Innovation Award

Born from Dr Sara Andreotti's PhD research, SharkSafe Barrier (Pty) Ltd is the world's first non-lethal shark deterrent, designed to mimic kelp forests. In 2024, this innovation was honoured at the *Mail and Guardian* Greening the Future competition for their work in the Water and Ocean category.

Aquaponics: Conserving Water for Sustainable Food Production

Research on aquaponics systems, led by Henk Stander, from the Faculty of AgriSciences, has shown that this method is a promising solution for producing food in an environmentally friendly way. Aquaponics is a sustainable farming system that combines fish farming (aquaculture) with soilless plant cultivation (hydroponics) in a closed loop where each benefits the other.

In this setup, fish waste is converted by bacteria into nutrients for plants, while plants filter the water for the fish. This efficient system uses far less water than traditional farming, eliminates the need for chemical fertilisers, and reduces waste.



The SharkSafe Barrier

Given the growing concerns about agriculture's impact on land, water, and climate, aquaponics offers a viable alternative to traditional farming. It conserves up to 90% more water than soil farming and reduces land use, cuts carbon emissions through local, energy-efficient food production, eliminates synthetic fertilisers and minimises pesticides, recycles nutrients to reduce waste, supports carbon sequestration through plant growth, and is resilient to climate change by operating in controlled environments.

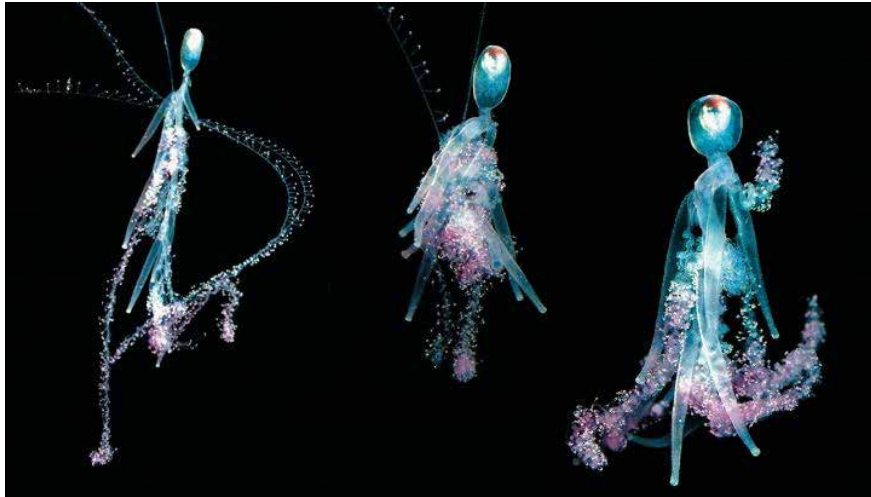


Dr Sara Andreotti (right) in the field

Siphonophore Discovery – Seen for the First Time in SA Waters

Dr Jannes Landschoff, a Research Fellow at SU's Department of Botany and Zoology, and his colleagues discovered various colonies of the marine organism siphonophore *Rhizophysa eysenhardtii* in False Bay in 2024. This marked the first documented presence of this species in SA. The finding was part of the 1001

Seaforest Species initiative, which is supported by and in collaboration with the Save Our Seas Foundation. These siphonophores, along with other small organisms make up the foundation of the food chain and play vital roles in nutrient cycling and biodiversity. Landschoff said: "Our findings underscore the need to safeguard marine biodiversity and improve documentation of rarely observed species."



Rhizophysa eysenhardtii

Zinc, Oceans and Climate: SU in Nature

The Southern Ocean plays a crucial role in global phytoplankton productivity, which is responsible for absorbing atmospheric carbon dioxide. A recent study published in Science highlights the significant but often overlooked role of inorganic zinc particles in these cycles, providing the first field-based evidence for this connection. Zinc is an essential micronutrient critical to many biochemical processes in polar phytoplankton blooms. When these blooms perish, zinc is released back into the environment, continuing its cyclical journey. This novel approach to studying the oceanic Zinc cycle now opens the door for further investigations into other important micronutrients. Three researchers from the Department of Earth Sciences at SU were key contributors alongside colleagues from the USA and Germany. The research group noted: "Like Zinc, the distribution of copper, cadmium, and cobalt may also be affected by climate-induced changes in the future."



Zinc cycle research field work on the SA Agulhas II vessel.

Prof Anriëtte (Annie) Bekker is a prolific scientist whose research centres around the vibration produced by machinery and structures. She leads the Sound and Vibration Research Group at SU's Department of Mechanical and Mechatronic Engineering. This group studies how data from mechanical sensors and engineering models on board a polar vessel can help seafarers make more informed decisions to enhance the safety of ship operations.

Their research specifically focused on how the vibration of a vessel, caused by ice and waves, impacts its hull structure and propulsion



The Sound and Vibration Research Group departing Table Bay harbour, South Africa.

system, as well as the humans on board. These studies are conducted on board the South African sea vessel, the *Agulhas II* – Africa's only polar supply and research vessel. "For ship responses to make sense, we have observed and recorded [qualities of] the waves and ice in the ship environment. Our data adds insight that can inform decisions

regarding the efficiency and safety of ship operations and adds to our knowledge about the ability of scientists to work productively on board," Bekker explained.



Digital transformation of the SA Agulhas II



AU Goal 7:
Environmentally sustainable climate-resilient economies and communities



SDG 15:
Life on Land

Protecting Life On Land

Our campuses are located in the heart of the Cape Floral Kingdom in the Western Cape, rich in Fynbos flora. The area is one of the world's richest botanical biodiversity hotspots and contains various protected UNESCO World Heritage sites. We balance our operations and urban development with conservation to protect this beautiful and unique plant kingdom. To ensure a positive environmental impact, we need to mitigate and adapt to the challenges of biodiversity loss, climate change, and urbanisation. Our SU Botanical Garden, South Africa's oldest university botanical garden, plays a vital role in conserving rare and endangered species, supporting research, and raising public awareness about biodiversity and ecological stewardship.

Green Guardians: Protecting Biodiversity on Campus and Beyond

Institutionally, our Environmental Sustainability Department at our Facilities Management Division drives our operational inputs to conserve life on land and build a climate resilient university. We link nature, the environment, and the ecosystems in which we operate to maximise their effectiveness. Our strategy focuses on reducing waste, optimising water use, improving air quality, and minimising our footprint to help secure a sustainable future. At the same time, we contribute to biodiversity research, invasive species management, ecological restoration, wildlife conservation, and environmental heritage.

In 2024, both university grounds and conservation areas on our campuses (The Duthie Reserve, Koloniesland, and Coetzenburg areas) were actively managed under our Environmental Management Plan. More than 84 hectares of open space and 20 000 metres of footpaths on Stellenbosch Mountain are maintained annually, while specialist management ensures mountain bike trails meet international standards. Erosion and stormwater damages are repaired using natural drainage methods, and rivers such as the Krom and Eerste are managed with the municipality through clean-ups and flood recovery.



The SU Facilities Management team with volunteers at Helderberg Hospital

Sustainable landscaping guides the campus aesthetic, with efficient irrigation, water-wise planting of endemic plants, and composted mulch improving soil quality and reducing water loss. Trees are replaced when removed to maintain canopy cover for cooling, carbon storage, and air quality. Hard landscaping favours local, durable materials, pervious pavements, and robust, low-maintenance designs. Restoration projects include integrated pest management, bird and bat habitats, and pilot work to replace lawns with meadows better suited to local biodiversity.

Tree planting is a valued tradition across campuses: From remembrance events at our Tygerberg Medical campus, to legacy projects in Worcester and annual tree giveaways led by our Chief Operating Officer. New buildings such as the Jan Mouton Learning Centre and the BMRI were built on brownfield sites, such as old parking areas, and existing buildings are refurbished to limit development pressure on greenfields. Fire safety is supported through fire breaks across all campuses.



KEY CONTRIBUTIONS AND HIGHLIGHTS

Community Engagement, Biodiversity and Land Conservation

Off-campus, the final stage of a three-year fynbos restoration project at the Helderberg Hospital in Somerset West allowed for 397,5 m² of barren soil to be turned into a fynbos garden. A total of 2 158 plants were planted from 33 different indigenous fynbos species. This project was a collaboration between Stellenbosch University, the Western Cape Department of Health & Wellness, and Greenpop, and forms part of a fynbos corridor extending from Table Mountain to the Helderberg range. Species used included sand olives, passerina, wild rosemary, and metalasia.

Termite Mounds Reveal 34 000 Years of Carbon Storage

Scientists from the Departments of Soil Science and Earth Sciences at SU have uncovered the world's oldest, inhabited termite mounds along the Buffels River in Namaqualand, Northern Cape, South Africa.



These mounds are rewriting our understanding of prehistoric life, climate and carbon storage. Called *heuweltjies* (little hills), these termite mounds are still inhabited by the southern harvester termite, *Microhodotermes viator*, explains Dr Michele Francis, the lead author of the study.

Recent radiocarbon dating has revealed that these mounds are far older than any previously known, with some dating as far back as 34 000 years – that's older than the iconic cave paintings in Europe and even predates the Last Glacial Maximum, when vast ice sheets covered much of the northern hemisphere. This trumps the previous oldest inhabited mounds from Brazil of 4 000 years by 30 000 years.

"The discovery of the world's oldest termite mounds in Namaqualand is a testament to the incredible history hidden beneath our feet. These



mounds not only illuminate the past but also offer vital clues for our future and carbon sequestration. As we continue to uncover the secrets of these ancient structures, they stand as a reminder of the delicate interplay between climate, environment, and life on Earth," concluded Dr Francis.

Open-Air Forest Laboratory: EucXylo's IMPACT Site

SU launches IMPACT Open-Air Laboratory

In September 2024, the Hans Merensky Chair in Advanced Modelling of Eucalypt Growth and Wood Formation (or EucXylo) at Stellenbosch University (SU) officially opened its Intensive Monitoring of Planted And Competing Trees (IMPACT) Open-Air Laboratory (OAL) on Lourensford farm near Somerset West. This laboratory is a centrepiece of the EucXylo programme housed within SU's Department of Forest and Wood Science and led by Prof Dave Drew.

The IMPACT OAL is one of the first intensive, long-term monitoring programmes on Eucalyptus trees in South Africa. This ten-hectare



In 2024, SU's Facilities Management team led a biodiversity walk on Stellenbosch Mountain. Staff, students and residents of Stellenbosch joined the walk.



The Monitoring of Planted And Competing Trees (IMPACT) Open-Air Laboratory (OAL) student team with DVC Prof Sibusiso Moyo (left)



A quiver tree in an extreme, water-scarce area

research facility boasts cutting-edge monitoring technology, including state-of-the-art sensor systems connected to the Internet of Things (IoT), laser scanners, drones, remote sensing systems including advanced LiDAR (Light Detection and Ranging) technology and detailed characterisation of site and environmental variables.

Speaking at the launch, Prof Drew said the project's goal is "to monitor the growth and physiological responses of the trees over time at different levels of competition allowing for a detailed understanding how they grow and form their wood. "Our vision is to harness the cutting edge in the monitoring technology, to create new data sets at this scale that will contribute to global research objectives and environmental management, and to create a platform for collaboration and data sharing."

Wild Animals Can Benefit People

On World Wildlife Day (3 March 2024), Dr Francis Vorhies and Dr Wiseman Ndlovu from SU's African Wildlife Economy Institute highlighted that while wild animal species should benefit people, the challenge lies in ensuring this happens sustainably, safely, and legally. International frameworks such as the Kunming-Montreal Global Biodiversity Framework (GBF) call for responsible use of wild species to support human

life, where we 'live in harmony with nature'. However, practical systems to achieve this goal are still lacking. Their research highlights the need for innovative solutions, including certification standards like FairWild and digital tools that improve traceability, to ensure that wildlife use supports both conservation efforts and human wellbeing.

Biodiversity

A large-scale international study of 120 scientists from 27 countries including SU researcher Prof Thulani Makhalanyane, aimed to understand how plants in drylands areas with extreme water scarcity survive and evolve. The study published in *Nature* (Unforeseen plant phenotypic diversity in a dry and grazed world) found that plant communities in deserts show globally exceptional adaptive diversity, with trait diversity increasing by 88% under higher aridity. This "plant loneliness

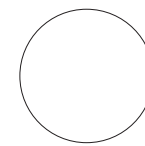


Lions in the Kruger Park

syndrome" reduces competition and unlocks unique survival strategies, offering new insights into how life on land adapts to extreme environments.

Counting of Lions in Kruger National Park Vital for Conservation

Alison Govaerts, a PhD candidate in Conservation Ecology and a member of the Wildlife Free to Roam research group, is using biometric identification methods — such as whisker spots, similar to fingerprints — to assess lion population trends in the Kruger National Park. Her research is vital for informing conservation policy, showing the impacts of climate change and land development on lion populations. Alison states: "You can't develop adequate conservation strategies for the species if you don't know how many there are and where they currently occur."



AU Goal:
No equivalent
AU Goal



SDG 12:
Responsible
Consumption
and Production

Reuse, Reduce, Recycle

SU actively works towards reducing our carbon footprint. Guided by the comprehensive and continually evolving **Environmental Sustainability Plan** and **waste management strategy**, SU successfully diverted 80% of general waste and 95% of food waste from landfill, recycling and composting more than 1 000 tonnes across its campuses in 2024. Its three-bin waste system, Material Recovery Facility (MRF), and e-waste drives demonstrate practical and effective leadership in sorting, recycling, and resource efficiency. These efforts contribute to SU's goal of sending zero waste to landfills by 2028 and achieving net zero carbon emissions by 2050, said John de Wet, SU's Environmental Sustainability Manager.

On campus, creative initiatives, such as the SU Flag Upcycling Project with Yeyethu Designer Studio, turned damaged SU banners into pencil bags while creating employment opportunities, demonstrating circular economy thinking. Involving the campus community in events like Earth Week 2024, embedded sustainability in student culture, while 18 buildings achieved Green Star ratings for low-carbon design.

From Banners to Bags: Towards a Sustainable Africa

Bulelwa Tito, heads up the Yeyethu Designer Studio with her background in fashion design and sewing.

Damaged branded banners and flags from SU have found a new purpose through a creative initiative from the Corporate Communication and Marketing Division (CCMD). In collaboration with the Co-Create Hub in Stellenbosch, SU partnered with local sewing NGO Yeyethu Designer Studio to transform these materials into pencil bags for students and schoolchildren.

Instead of contributing to landfill waste, this project reimagines discarded materials as functional products. It serves as a compelling example of responsible consumption and production. Central to the initiative is the collaboration with *Kuyasa* Horizon Empowerment NGO in Kayamandi in

Stellenbosch. Under the leadership of fashion designer Bulelwa Tito, the Yeyethu Designer Studio team repurposes damaged banners into pencil bags. These items not only created unique supplies for students at Stellenbosch, but also create employment opportunities, showcase local talent, and promote sustainable practices within the community.

According to Marguerite Cloete, SU Deputy-Director for Brand Identity. "This initiative is a living expression of SU's brand essence, which centres on impact and connectedness - socially, experimentally, and intellectually. It reflects the University's commitment to actively and intentionally pursue solutions that change the world, while doing so collaboratively and with deep social engagement." Charlene Wicomb, Brand Implementation Coordinator and project lead on the pencil bag initiative, adds that it was important to involve the community in creating a bespoke product rather than a generic one. "It's incredible to see something that was once hanging on a flagpole being used in a different and useful way."

Looking ahead, the project aims to expand its product range to include conference totes, shopper bags and decorative vases made from recycled wine and water bottles. This forward-thinking approach highlights the potential of creativity, strategic planning and community partnerships to reduce waste, lower costs and promote a circular economy.

"I am very excited about this project," says Cristal Peterson, CCMD's Marketing Director: "By turning waste into opportunity, the project not only supports environmental sustainability but also strengthens community ties and promotes innovation. It embodies the University's strategic brand platform by



Bulelwa Tito, in her Yeyethu Designer Studio

demonstrating how purposeful collaboration and creativity can lead to meaningful, lasting change.

Charlene Wicomb is the Brand Implementation Coordinator at SU's Corporate Communication and Marketing Division.

See the project video:
<https://youtu.be/2bMLyvgWLWk>

KEY CONTRIBUTIONS AND HIGHLIGHTS

Earth Week 2024: "Planet vs Plastics"

Three tonnes of waste made visible on the Rooiplein

SU's goal is to get to zero waste-to-landfill by 2028, and this target is already on track. With annual waste volumes nearing 2 000 tonnes, SU has implemented a sorting-at-source system across non-hazardous, hazardous, and food waste streams. A key component is its Material Recovery Facility (MRF), which successfully achieved the goal of 80% diversion from landfill in 2024. SU recycles 28 percent of its waste, composts 46 percent, and sends only 26% to landfill.

To raise awareness about waste reduction, various initiatives have been launched, including MRF tours, waste sorting games, education campaigns, e-waste drives, and clean-up events. Interventions like banning certain single-use plastics at events and introducing reusable bottles and tote bags aim to shift behaviour long term. At the recent international food fair, students that brought their own bowls (BYOB), received a discounted entrance ticket.

For Earth Day 2024, Facilities Management's Environmental Sustainability team built large waste towers on the Rooiplein and on the Engineering Faculty's parking lot to visualise campus waste and give students and staff an idea of how much waste is discarded daily.

Throughout Earth Week, additional events were held, including a thrift fashion show, recycling talks, a clean-up walk, an e-waste drop-off, and an Earth Day movie screening, all of which served as a vibrant call to action. The SDG/2063 Impact Hub hosted a station promoting the Future17 SDG Challenge sustainability literacy course.



International GIS Award

In July 2024, SU's Facilities Management Division (SUFM) received a Special Achievement Award in Geographic Information Management Systems (GIS) technology for their use of digital infrastructure in environmental operations, making the invisible work of campus sustainability visible. Francois Swart, SUFM's Director Development Planning and Design, noted that by "embracing GIS technology, SU has overcome challenges associated with facility management, providing a solid foundation for future facilities data integration and sustainable campus development."



Earth Day 2024 waste installations on the Rooiplein raising awareness about single-use plastic

#MOONSHOT 2 AFRICA IS MORE INTEGRATED AND CONNECTED

Moonshot 2 envisions an Africa that is seamlessly integrated and connected, a continent bound together by the spirit of *Ubuntu*, valuing interdependence, collaboration, and synergistic progress. This Moonshot calls for a united Africa with world-class infrastructure, thriving industries, and innovative technologies that link cities, regions, and people. By strengthening continental financial and monetary institutions and investing in sustainable cities and communities, Africa can unlock its collective potential, to build a connected, prosperous future where shared development and solidarity drive growth.





AU Goal 8:
United Africa
(federal or
confederate)
There is no
equivalent SDG.

Strengthening Pan-African Unity and Collaboration

The AU's Agenda 2063 explicitly identifies Goal 8 as a United Africa (Federal or Confederate) as one of its core political-integration goals. It forms part of the broader aim under Moonshot 2, to help build an Africa that is more integrated and connected based on the ideals of Pan-Africanism and the vision of an African renaissance. This Goal hopes to accelerate progress toward continental unity, increased trade, exchanges of goods, free movement of people and capital through establishing a united Africa and fast-tracking economic (and educational) integration.

Universities' Role in the AU-EU Innovation Agenda

In her opinion piece for Africa Day (25 May 2024), SU's Deputy Vice-Chancellor: Strategy and Internationalisation, Prof Hester Klopper reaffirmed SU's commitment to the principles of Pan-Africanism. These principles emphasise the prosperity, solidarity and unity of our Continent, as well as the need for cooperation amongst African nations. She recognised that our destinies are interconnected and that we can only address the challenges that we face as a Continent by working together.

Prof Klopper reminded us how the African Union (AU) and the European Union (EU) Innovation Agenda can help tackle some of the most pressing challenges facing the Continent, such as, education, health, climate change, governance, and sustainable development. Africa Day serves to reaffirm our commitment to the principles of Pan-Africanism, which encompass prosperity, solidarity and unity of our Continent, and cooperation amongst African nations. It is also a reminder that our destinies are interconnected and that we can only address the challenges we face as a Continent by working together.



Towards a More Integrated and Connected SU

Dr Nico Elema is the Director for the Centre for Collaboration in Africa at SU International.

At SU, the Centre for Collaboration in Africa (CCA) within SU International leads efforts to strengthen Africa's unity through collaboration, mobility, and science diplomacy. As such, SU ensures that its African partnerships are not only academic in nature, but also serve as strategic drivers of integration, for a united continent. The CCA builds and sustains academic bridges across the continent by leveraging bilateral agreements, research networks, and mobility programmes for staff, postdoctoral fellows, and students. Through initiatives such as the SU Africa Platform and the Africa Collaboration Grant, the Centre creates supportive environments for partnerships that advance shared learning, joint research, and innovation that align with Agenda 2063.

Moreover, the CCA plays a central coordinating role in several strategic networks that advance continental integration. It acts as the secretariat for the AUDA-NEPAD Southern African Network of Water Centres of Excellence (SANWATCHE) and the PERIPERI U consortium for Disaster Risk Reduction. These initiatives help build African scientific capacity to address shared challenges in climate, water security, and resilience. The Centre also supports networks such as the African Research Universities Alliance (ARUA), SARUA, RUFORUM, PANGeA, and ANIE, thereby expanding SU's influence across disciplines and regions.

Under the leadership of Dr Nico Elema, the CCA's work encompasses advocacy and diplomacy, representing SU in dialogues with the African Union and AUDA-NEPAD in Addis Ababa, and contributing to policy discussions that shape Africa's science and innovation landscape.

Dr Nico Elema, Director of the Centre for Collaboration in Africa, at SU International





AU Goal 9:
Key continental financial and monetary institutions established and functional co-existence

17 PARTNERSHIPS FOR THE GOALS



SDG 17:
Partnerships for the Goals

Building Strong Financial Institutions and Partnerships In, and For, Africa

SU plays a significant role in supporting AU Goal 9, which aims to establish and maintain essential continental financial and monetary institutions across the Continent. This contribution stems from its expertise in financial regulation, macroeconomic analysis, and global financial governance. Notable initiatives include the pioneering work of the Bureau for Economic Research, the newly established Chair in Financial Regulation Law, and the Centre for Sustainability Transitions' efforts to reform global financial systems. Together, these efforts promote the development of stable, transparent, and inclusive financial institutions across Africa, thereby strengthening economic integration on the Continent.

Gys Steyn Chair in Financial Regulation Law

Prof Johann Scholtz specialises in all aspects of financial services law and regulation, with expertise that extends to banking law and regulation, stock exchange and securities law, consumer protection law and anti-bribery and corruption law.

In 2023, the Faculty of Law at SU made significant strides in Africa's financial governance architecture by establishing the Gys Steyn Chair in Financial Regulation Law, which is the first of its kind in South Africa. This initiative was made possible by a generous R25 million donation from the Gys Steyn Family Trust. By collaborating with regulators, banks, and development institutions, the Chair advances both the AU's vision of integrated continental financial institutions and SDG 17, which emphasises the importance of multi-stakeholder partnerships.

In 2024, Prof Johann Scholtz, a globally recognised expert in financial services law and regulation, was appointed as the inaugural Chair. "This latest research chair places SU in a

prime position to make a substantive and lasting contribution towards the improved regulation of the financial sector," says Prof Nicola Smit, Dean of SU's Faculty of Law. "It is fitting that Scholtz, who has extensive experience in this field both locally and internationally, will pioneer a research chair that will have a significant impact on economic stability, and society in general."

Prof Scholtz's work focuses on the legal and policy frameworks that underpin resilient financial systems. This includes fintech regulation, blockchain and digital currencies, environmental, social and governance (ESG) criteria, sustainable finance, and the governance of carbon markets. One of the Chair's focal areas is to monitor global developments in regulations concerning digital currencies, open banking, blockchain, consumer protection, sustainable financing, the regulation of carbon markets, ESG considerations and climate risk management in banking and insurance sectors. "We live in a global society, and our financial markets are largely interlinked. Financial regulation can no longer be approached on a parochial basis," says Scholtz.



Prof Johann Scholtz, Gys Steyn Chair in Financial Regulation Law

"We live in a global society, and our financial markets are largely interlinked."

– Professor Johann Scholtz



Staff from The Bureau for Economic Research

KEY CONTRIBUTIONS AND HIGHLIGHTS

Why Financing Matters for Africa's Future

Achieving the SDGs, especially ending poverty (SDG 1), is not about raising more money, but about redirecting existing financial flows away from systems that deepen inequality and environmental harm. This underscores the importance of African institutions taking ownership of their financial futures. Dr Megan Davies represented the SU Centre for Sustainability Transitions (CST) at the *Financing for Sustainable Development* event in New York in December 2024. She highlighted how global financial systems are currently misallocating capital, locking economies into unsustainable production and consumption patterns that deplete resources and widen inequality. Key messages were the need to reform global financial architecture and empower public development banks to channel investment into SDG-aligned development, especially in the Global South.

Bureau for Economic Research Turns 80

In March 2024, the Bureau for Economic Research (BER) at SU celebrated its 80th anniversary, marking a significant milestone for one of South Africa's most respected economic research institutions. The celebration highlighted the BER's reputation for rigorous economic analysis and forecasting—drawing on longstanding business tendency



BER's 80th anniversary celebratory article in Business Day

surveys and macroeconomic models. Over the decades, the BER has played a key role in informing business and policy decision-making through independent and data-driven economic analysis. As it commemorates eight decades of impact, BER Director Professor Johann Kirsten said: "It's fair to say that the BER performs the function of an anchor institution to both corporate SA as well as government, and it is a role taken extremely seriously by the staff of the Bureau."



AU Goal 10:
World-class
infrastructure
that criss-
crosses Africa



SDG 9:
Industry,
Innovation and
Infrastructure

Building Innovation, Infrastructure and Industry

In 2024, SU cemented its place as one of Africa's leading innovation universities through research on industry and the entrepreneurship ecosystem, securing patents, creating spin-out companies, and increasing research income from industry. Research breakthroughs are translated into real-world impact through the Innovus Technology Transfer office and its incubator, the SU LaunchLab. This duo manages the 35 spin-out companies created since 2014. Among them, is CubeSpace, which secured R47 million in venture capital for global expansion in manufacturing control systems for satellites.

Other highlights in 2024 included large-scale infrastructure investments, such as the Muon Detector Deep Underground Laboratory, and strengthened research partnerships with industry and government, which have contributed to a 17% year-on-year growth in SU's commercial revenue. Innovative policy tools, like the Policy Lab's AI catalogue for the public sector, show how innovation can be harnessed for societal good.

Prof Nokwanda Makunga: Championing Ethical Bioprospecting and Indigenous Partnerships

Professor Nokwanda (Nox) Makunga of the Department of Botany and Zoology is a prolific scientist and a passionate science communicator and advocate for representation. Her research focuses on several medicinal plant species from the greater Cape Floristic Region, utilising biotechnological applications for the conservation of medicinal plant biodiversity.

As a medicinal plant scientist, Professor Nokwanda (Nox) Makunga is a leading voice in bioprospecting, a field that involves researching plants and other biological resources for compounds that can be used in medicine, agriculture, and industry. She employs an ethical approach that respects indigenous knowledge, blending molecular biology with ethnobotany. In her studies, she examines the mechanisms of medicinal plants while ensuring that the knowledge and livelihoods of indigenous communities that use them are protected.

This message was central to her presentation at the International Botanical Congress (IBC2024), titled *Delving into South African Medicinal Plant Treasures*. In her presentation, she highlighted South Africa's status as a global biodiversity hotspot and the wealth of untapped medicinal potential within plants such as *Sceletium tortuosum* (kanna), *Aspalathus linearis* (rooibos), and *Dodonaea viscosa* (hopbush). Her team employs cutting-edge "omics" technologies to uncover how these plants produce bioactive compounds, with traditional knowledge guiding their research. She emphasised that bioprospecting must occur alongside conservation, equitable benefit-sharing, and the recognition of cultural heritage.

Prof Makunga's research engages directly with plants long used by the Khoi and San peoples, the first inhabitants of southern Africa, illustrating how indigenous knowledge and modern science can complement each other. For example, Makunga has helped establish formal benefit-sharing agreements with these communities. A landmark agreement with the San Council ensures that they receive royalties from kanna-based products, along with non-monetary support, such as training in cultivation, grant applications, and biotrader partnerships. These programmes are also set to extend to groups like the Rharhabe Kingdom in the Eastern Cape and the Cape Bush Doctors in the Western Cape, with whom she collaborates.

In 2024 she was awarded the Impact Award at SU's Annual Innovus Award for her championing of ethical bioprospecting, which combines conservation and commercialisation to protect biodiversity while building equitable futures for communities.

Prof Nokwanda Makunga in a SU Botanical Garden greenhouse



Recipients of the SU Innovators' Awards in 2024 with Ravini Moodley, Director TTO, is from the left Dr Du Preez van Staden, Dr Ross Vermeulen, Prof Carine Smith, Erik van der Vyfer (from Von Siedels Patenting and Law firm)) and Prof Leon Dicks.

KEY CONTRIBUTIONS AND HIGHLIGHTS

Muon Detector from IP2I to Launch Cosmic-ray Research at SU and UWC

A muon (fast moving, heavy, electron-like particles) detector on loan from the Institute of Physics of the Two Infinities (IP2I) in Lyon, France, will accelerate cosmic-ray research at SU and the nearby University of the Western Cape (UWC). South Africa's Department of Science and Innovation allocated seed funding of R5 million for scientific and engineering studies to determine the merits of constructing a deep underground laboratory in the Western Cape. This would be the first of its kind in Africa and will further enhance our studies of these particles.

Innovation at SU

Through the Innovus Technology Transfer office and its incubator, the SU LaunchLab, our University has built one of Africa's most dynamic university innovation ecosystems. Established in 1998, Innovus manages technology transfer, patents, spin-out companies, and commercial ventures, while LaunchLab supports business incubation and entrepreneurship. Together they oversee **35 spinout companies** in the University's Group of Companies, whose combined revenue grew by **17% from 2023 to 2024**, with seven of them already paying dividends to SU.

SU Spinouts: Local Innovation, Global Impact

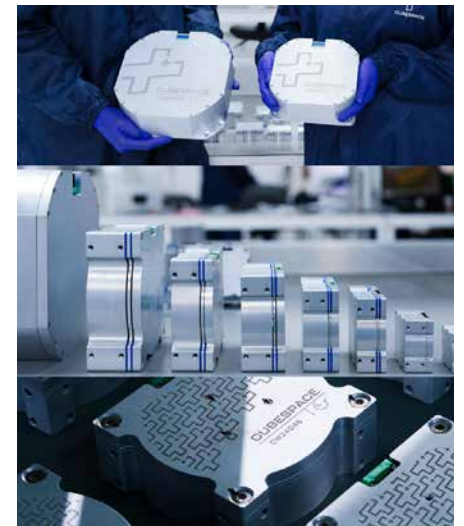
From the first bespoke polymer supplier from Africa (**Nanosene**) and sustainable biotech innovations (**Immobazyme**) to specialised school shoes for habitually barefoot South African children (**Banzifeet**), SU's spinouts are reshaping industries, driving impact in South Africa – and internationally.

Innovus Inventors Awards Celebrate 19 New Patents

At the 2024 awards, Innovus, SU's technology transfer and innovation office, recognised the commercialisation efforts of researchers and faculties whose work advanced from labs to licensed patents, prototypes, and spinouts. Innovations ranged from tuberculosis diagnostics to antifungal peptides and autophagic sensors, yielding 19 new patents. This brings the total amount of granted patents held by SU to 278 in 2024.

CubeSpace Secures R47 Million in Venture Capital Funding

SU satellite control systems spinout company CubeSpace has emerged as a leader in the microsatellite market. By leveraging its considerable experience and research and development capabilities, CubeSpace is transforming the broader satellite industry. In 2024 the company secured R47 million in funding from the University Technology Fund



Satellite components made by CubeSpace

(UTF) and Savant Venture Fund. This investment enables CubeSpace to expand its business internationally. They also moved their offices from SU LaunchLab to a bigger space that can accommodate their growing operations targeting US and European markets. "Gone are the times when satellite manufacturing is reserved for governments of large first-world countries. We have developed a modular and low-cost control system capable of controlling any size satellite, which will help researchers, private companies, and governments globally build satellites a lot quicker, with smaller teams, and at much lower cost," says CubeSpace CEO Mike-Alec Kearney.



AU Goal 10:
World-class
infrastructure
that criss-
crosses Africa



SDG 11:
Sustainable
Cities and
Communities

Designing Sustainable Cities and Inclusive Communities

Building sustainable cities connected by world-class infrastructure requires rethinking how we use space, and govern for the future, while honouring the historical significance of Stellenbosch town. Our researchers at the Research Alliance for Disasters and Risk Reduction (RADAR) work to create more disaster-resilient communities, while advances in property law help to create equitable access to land and housing. The inaugural Chair in Urban Law and Sustainability Governance connects law and lived urban reality through events, colloquia, and informal settlement walkabouts that ground theory in real-world experience. SU also invests in sustainable campuses through green-certified buildings, a low-carbon transport strategy in our Environmental Sustainability Plan, and visual redress initiatives on our campuses (see SDG 10).

Disaster-Resilient Cities and Communities

Dr Robyn Pharoah is a Senior Lecturer, and convenes RADAR's MPhil programme in Disaster Risk Science and Development as well as a Postgraduate Diploma in Disaster Risk Studies at SU

The frequency and impact of disasters are increasing globally. The threats faced by cities, settlements and key infrastructure are expected to rise significantly in the mid- and long-term due to global warming, especially in places already experiencing high temperatures, along coastlines, or with pre-existing high vulnerabilities. While it is difficult to measure the human and economic costs of disasters, research indicates that major severe weather events alone have cost the Western Cape government over R10 billion since 2003, with the Western Cape's Department of Infrastructure sustaining costs of R1.8 billion alone in 2023 and 2024. Given this context, there is an urgent need for resilient and sustainable, and climate-responsive urban development.

The Research Alliance for Disasters and Risk Reduction (RADAR) aims to play its part in building safer, more resilient communities in

the Western Cape, South Africa and Africa through postgraduate academic programmes, practitioner-focused short courses, and research. Since 2003, RADAR has conducted sixteen post-event reviews of declared and undeclared disasters in the Western Cape, providing a unique longitudinal perspective on disasters in the province, and offering unparalleled insight into its risk environment. These sixteen events alone have cost government over R7.5 billion, highlighting the financial burden of disasters. By collaborating with disaster management and other authorities in the Western Cape, Radar's research has helped to strengthen policy, decision-making and applied disaster risk reduction in the province.

Short courses on community risk assessment, disaster risk management and urban resilience have assisted to build capacity in local government, national departments, research institutions, non-governmental organisations and the African Union to understand and address risk effectively. Transdisciplinary collaborations with SU's Fire Engineering Research Unit, government and communities have also contributed to creating a groundbreaking research and implementation agenda on fire-risk reduction in informal settlements, promoting equitable urban pathways.



RADAR workshop participants



Dr Robyn Pharoah (centre) with workshops participants at SU



The Jan Mouton Learning Centre was Awarded Four Stars by the Green Building Council South Africa

KEY CONTRIBUTIONS AND HIGHLIGHTS

Our Approach to Sustainable Spaces at SU

SU's Facilities Management Division, through the **Environmental Sustainability Plan**, aims to create spaces that inspire excellence. The team is responsible for SU's physical campuses and the infrastructure that supports the buildings and the surrounding landscape. Through careful, sustainable and strategic planning ensures cost-effective maintenance and improvement of our buildings and grounds. Currently SU has a portfolio of 492 buildings, serving a combined population of 40 381 staff and students. The total gross area of these buildings is 799 211 m² and they account for 78% of the University's carbon footprint, which is estimated at 101 016 tCO₂e (tonnes of carbon dioxide equivalent). To date, 19 of our buildings have been certified as 'green' through the Green Building Council South Africa (GBCSA)-rated, while new buildings and upgrades adhere to a 4-star rating.

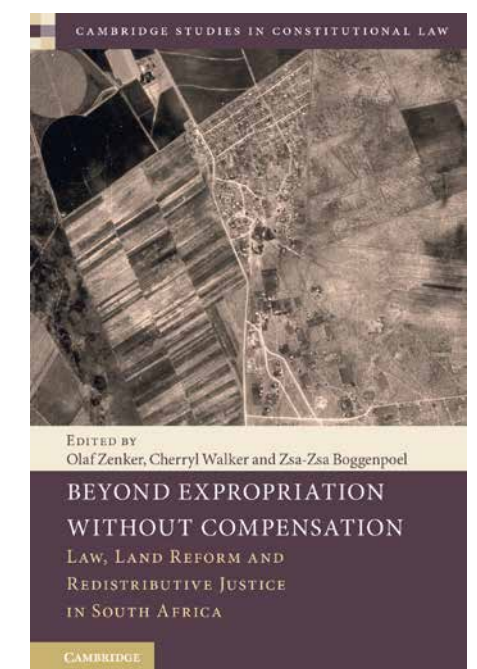
The University's sustainable transport strategy, also outlined in the Environmental Sustainability Plan, sets out to reduce transportation-related emissions. The University is also incorporating new battery-operated utility vehicles into our fleet, while the non-motorised transport route in Victoria Street is widely used and improves safety and accessibility for cyclists and pedestrians.

Democracy through Property Law

Dr. Zsa-Zsa Boggenpoel's research through the South African Research Chair in Property Law (SARCPL) aligns with SDG 11: Sustainable Cities and Communities and AU Goal 10: Reduced Inequalities, through property law to ensure sustainable, equitable cities and communities.

Her work focuses on reforming property law to ensure fair access to land and housing, particularly for marginalised groups. Her research addresses the legacy of apartheid-era property laws and advocates for a legal framework that supports land

redistribution and property rights for all. This directly contributes directly to SDG 11 by promoting sustainable urban and rural development. Additionally, it supports AU Goal 10 by





The *Where are we now?* exhibition opening commenced with a panel discussion moderated by Pearl Mamathuba (left), lecturer at the Stellenbosch University (SU) visual arts department. The panel comprised student-leaders, who reflected on the curatorial process and their contribution to the exhibition. Left to right: SU Student Representative Council chairperson Phiwokuhe Qabaka, SU student imbizo convener Ila Alberts, chief justice of the SU student court Nicole Bryant. PHOTO: Bayanda Gumedede

tackling inequalities in land ownership and access to infrastructure.

One of her key contributions in 2024 was the publication of her work on land reform and expropriation without compensation, featured in the book *Beyond Expropriation Without Compensation*. Dr. Boggenpoel brings together legal, social, and political perspectives to explore fair and transformative land redistribution. Her aim is to ensure more equitable land distribution and create inclusive communities, addressing economic disparities rooted in land ownership.

Urban Law Day and Sustainable Cities Colloquium

Since 2023, Prof Anél du Plessis, the inaugural Chair in Urban Law and Sustainability Governance, has led critical dialogue around space at SU. Her events bring together legal scholars, municipal leaders, and students to tackle issues such as infrastructure inequalities, environmental justice, and informal settlement policy. In January 2024, the Chair, in partnership with the Konrad Adenauer Foundation and UN Habitat hosted an Urban Law Day in January 2024 on the topic "The Role

of the Judiciary in Pushing the Legal Frontiers for City-level Transition and Sustainability." A key side-event was a walking tour in the local Kayamandi settlement to familiarise the local and international urban law scholars with an informal urban environment in South Africa.

First Annual National Multidisciplinary Postgraduate Student Conference on Contemporary Urban Development Questions

The 1st Annual National Multidisciplinary Postgraduate Student Conference on Contemporary Urban Development Questions was held virtually on 24 May 2024, hosted by the SU Urban Law and Sustainability Governance. The conference centered on the theme: "Social Justice and Sustainable Urban Development in the African Context." It provided a platform for doctoral and master's students from various South African universities, including SU, to present their research. The event aimed to encourage interdisciplinary dialogue among students and academics engaged in urban development, law, and related fields.

Kayamandi Walkabout

A significant side-event included a walking tour in Kayamandi, aimed at familiarising our international urban law scholars with an informal urban environment in South Africa. The activity was an essential moment to connect academic urban law with lived experience in South African cities.

Student Exhibition: "Where Are We Now?"

Art Reflecting Democracy at Thirty

This student-curated exhibition at the SU Museum used visual art and storytelling to reflect on South Africa's journey since the advent of democracy in 1994. It featured powerful pieces on gender, land, and identity, creating space for dialogue during this election year.

Open Access Week

Equal Knowledge for Equal Futures

Led by SU Library and Information Services, this initiative supported equal access to knowledge, which is particularly relevant in the digital age where urban inequality is reflected in information access and educational opportunities.

#MOONSHOTS 3 AND 4

For Africa's development to succeed, responsive public institutions and peaceful societies are non-negotiable. Five of the 20 Goals of Agenda 2063 place peace, justice, and responsive governance at the centre of Africa's long-term vision, recognising that sustainable development depends on inclusive institutions that deliver rights and stability. Guided by *Ubuntu*, Africa's approach to justice and leadership is rooted in dignity, fairness, and shared responsibility.

AND



By grounding justice and governance in *Ubuntu*, Africa nurtures systems that prioritise fairness, reconciliation, and collective well-being: An approach that strengthens democratic trust and ensures that laws protect, rather than divide, communities. Ultimately it drives a future where leadership is accountable and justice serves as a pathway to equality and peace. Moonshot 3 calls for democratic

values, human rights, and transparent leadership, while Moonshot 4 focuses on peace, stability, and conflict

resolution. Together they align with SDG 16: Peace, Justice, and Strong Institutions, affirming that without justice and security, no sustainable progress is possible.



AU Goal 11:
Democratic values, practices, universal principles of human rights, justice and the rule of law entrenched



SDG 16:
Peace, Justice and Strong Institutions

SU actively contributes to SDG 16: Peace, Justice and Strong Institutions by promoting democratic values, human rights, and accountable governance. Under AU Goal 11, SU contributes through research and teaching in human rights law, restorative justice, and intercultural competences that strengthen inclusive societies. In 2024, Prof Pumla Gobodo-Madikizela received the Templeton Prize for her global leadership in restorative justice and memory work. Under AU Goal 12, SU builds institutional capacity and ethical leadership through partnerships with Government, such as the SIU anti-corruption MOU, and research on municipal reform and professionalisation of the public sector. This includes national partnerships, such as a national MOU with the Special Investigating Unit (SIU) to strengthen anti-corruption capacity, and research-driven advocacy on municipal reform led by Prof Zwelinzima Ndevu, who is influencing discussions on professionalising South Africa's public service.

The Templeton Prize Recognition for Global Leadership in Reconciliation and Human Dignity

Prof Pumla Gobodo-Madikizela is the SARChI Chair for Violent Histories and Historical Trauma and the Founding Director of the Centre for the Study of the Afterlife of Violence and the Reparative Quest (AVReQ)

In 2024, Professor Pumla Gobodo-Madikizela, the SARChI Chair for Violent Histories and Historical Trauma and the Founding Director of the Centre for the Study of the Afterlife of Violence and the Reparative Quest (AVReQ) received the Templeton Prize. This prestigious international honour recognises individuals whose work advances our understanding of the spiritual dimension of life and human purpose. Professor Gobodo-Madikizela's selection marks a historic moment for South Africa and SU, placing her alongside former laureates such as Archbishop Desmond Tutu and the Dalai Lama.

Her work explores forgiveness, empathy, and the long-term psychological effects of historical trauma, contributing significantly to the global discourse on healing in post-conflict societies and actively contributes to AU Goal 11. Through her pioneering research, she integrates academic scholarship with humanist principles, addressing the legacy of violence with a deeply ethical approach. Her insights into trauma and forgiveness in post-apartheid South Africa have created a globally recognised model for social healing in the aftermath and trauma of conflict, a model she calls "the reparative quest." Heather Templeton Dill, president of the John Templeton Foundation, said: "The 2024 Templeton Prize winner, Dr. Pumla Gobodo-Madikizela, has a remarkable grasp of the personal and social dynamics that allow for healing in societies wounded by violence. As a psychologist, scholar, and commentator, she has served as a guiding light within South Africa as it charts a course beyond apartheid, facilitating dialogue to help people overcome individual and collective trauma. Her work underscores the importance in contemporary life of cultivating the spiritual values of hope, compassion, and reconciliation."

The award included a significant monetary component (approximately \$1.5 million/ R28 million). A portion of this funding, Prof Gobodo-Madikizela pledged back to support postgraduate education and reparative research at SU through the Nobantu and Thukela Gobodo Memorial Doctoral Scholarships, names in honour of her parents. These scholarships will be awarded for the first time for study in the 2025 academic year. Other funds will be used for the SU Research and Innovation Strategic Excellence programme (SUNRISE) programme, which aims to develop the next cohort of South African professors, and R2 million to AVReQ to support postgraduate and postdoctoral researchers.



Prof Pumla Gobodo-Madikizela, SARChI Chair for Violent Histories and Historical Trauma



AU Goal 12:
Capable institutions and transformed leadership in place at all levels, cross-cutting with Governance



SDG 16:
Peace, Justice and Strong Institutions

We Must Fix Our Municipalities Prof Ndevu on Municipal Reform

As a frequent media voice, Prof Zwelinzima Ndevu, SU's Director of the School of Public Leadership, regularly contributes to national debates about dysfunctional municipalities, service delivery, and the local government leadership through his focus on municipal governance, professionalisation, and service delivery as aligned with AU Goal 12.

In his inaugural lecture "Ambidexterity in Public-Service Leadership: A Case Study of South Africa's Government of National Unity," Prof Ndevu made a strong case for the professionalisation of South Africa's public sector as key to delivering effective and ethical services. Drawing on years of research into public administration, performance management and ethics across all three spheres of government, he highlighted the urgent need to equip public servants with the necessary skills, norms, and values. He argues: "My research focuses on how public service institution's function. The aim of my research is to make a positive impact on society by focusing on public leadership, performance management and ethics in the public sector. My interest was mainly driven by the realisation that public service is a very important enabler, and it has a crucial role in service delivery (basic services) to our communities."

Ndevu's insights are particularly relevant considering persistent challenges noted by the Auditor-General, and he stresses that politically and administratively skilled leaders are essential to navigating the tensions between radical and incremental change. His work directly supports Sustainable Cities and Communities with good infrastructure through more responsive governance.



Prof Zwelinzima Ndevu, Director, School for Public Leadership

KEY CONTRIBUTIONS AND HIGHLIGHTS

SU-SIU Partnership for Integrity

In June 2024, SU signed a Memorandum of Understanding with South Africa's Special Investigating Unit (SIU) to strengthen the national fight against corruption. The agreement focuses on training, research, community engagement, capacity building, and the exchange of expertise. By linking academic research with public institutions, the MOU supports more responsive governance, ethical leadership, and inclusive approaches to tackling corruption, positioning SU as a knowledge and skills hub for accountable governance.

The partnership was announced during the Gender and Corruption Symposium hosted by SU's Anti-Corruption Centre for Research (ACCERUS), which highlighted how corruption, and in particular sextortion, disproportionately harms women and girls. Speakers, including Prof Thuli Madonsela, stressed the urgent need for a gender lens in anti-corruption strategies and stronger protection for whistleblowers.



At the signing of the Memorandum of Understanding with South Africa's Special Investigating Unit were from the left: Prof Zwelinzima Ndevu, Prof Sibusiso Moyo, Adv Andy Mothibi (SIU Head), and Prof Pregala (Solosh) Pillay.



AU Goal 13:
Peace, Security,
and Stability
are Preserved



SDG 16:
Peace, Justice
and Strong
Institutions

Moonshot 4 recognises that true peace is not merely the absence of war, but the presence of fairness, dignity, and community healing. Three AU Goals work in sequence and synergy to ensure that peace is both locally grounded and continentally coordinated. At SU, these ideals find expression in research, innovation, and practice. From a student-developed campus safety app to pioneering scholarship in restorative justice, anti-corruption, and ethical leadership: AU Goal 13 focuses on preventing conflict by addressing root causes through strong national institutions, disarmament, and early warning systems that uphold law and order. AU Goal 14 builds on this by fostering post-conflict stability, truth, and reconciliation—laying the emotional and institutional foundations for lasting peace. AU Goal 15 strengthens the African Peace and Security Architecture (APSA), enhancing continental and regional coordination through mechanisms such as the African Standby Force, the Panel of the Wise, and the Peace and Security Council. These three AU Goals work in sequence and synergy to ensure Africa not only resolves conflicts amicably, but builds sustainable peace grounded in justice, reconciliation, and regional cooperation.

A More Secure Stellenbosch

#Ideasforchange Challenge: Stellenbosch Infrastructure, Crime, and Safety

Stellenbosch Network, in collaboration with Stellenbosch University, Launchlab, Ranyaka, SCAN and the Department of Science and Innovation's Regional Innovation Support Programme (RISP), announced the 2024 edition of their #IdeasForChange Challenge.

To help solve some of the pressing social issues, specifically relating to crime, safety, and infrastructure such as transport, traffic and mobility, the #IdeasForChange Social Innovation Challenge aims to identify, support and develop ideas business models, process flows, and technology with the potential to improve the quality of life of citizens, lessen the social and environmental impact of rapid urban development and enhance the sustainability of local ecosystems on which Stellenbosch is dependent.

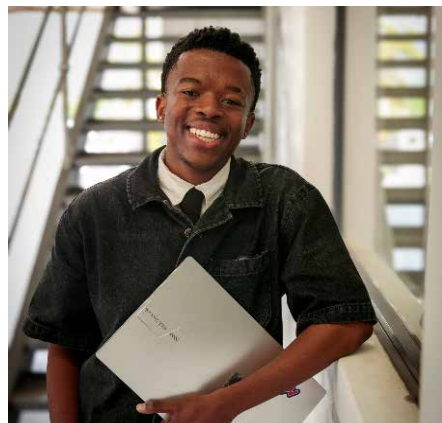
Innovating Safety in Stellenbosch with Tumelo Mokoena's *Safeguard Stellies*

Tumelo Mokoena is an undergraduate Engineering student.

When Tumelo Mokoena arrived in Stellenbosch in 2024, he was struck by both the town's vibrant student life and its bustling atmosphere as a popular tourist destination. A mugging incident involving a close friend became a powerful catalyst for Tumelo, then a first-year Engineering student at SU, to begin his entrepreneurial journey. Motivated to contribute to the safety and well-being of his new community, he developed the idea for *Safeguard Stellies* and entered it into the Stellenbosch Network #IdeasForChange Social Innovation Challenge. The #IdeasForChange Social Innovation Challenge is offered annually by Stellenbosch Network, a cross sector and interdisciplinary membership organisation that brings people together from industry, government, society and academia, including SU.

Tumelo, a passionate tech enthusiast with a keen interest in innovations like SpaceX launches, did not initially set out to become an entrepreneur. However, he soon realised that the existing security monitoring systems were unable to assist victims in time. This led to him developing *SafeGuard Stellies*, a comprehensive, three-part safety solution comprised of a:

- **Mobile App:** Featuring essential safety tools, including a panic button, location tracker, and safety tips.
- **Panic Bracelet:** A discreet device that enables users to send alerts without having to reach for their phones.



Tumelo Mokoena, Engineering student and social entrepreneur



AU Goal 14:
A stable and
peaceful Africa



SDG 16:
Peace, Justice
and Strong
Institutions

- **Drones:** Equipped with live cameras, sirens, and lights.

Although the business is still in its ideation phase, it has immense potential to improve safety in the town and beyond. As a finalist in the #IdeasForChange Social Innovation Challenge in 2024, Tumelo was awarded R20 000, which will allow him to start planning for the launch of his venture.

"Winning the #Ideasforchange Challenge was a major milestone," says Tumelo. "It gave the

project momentum, and the support from Stellenbosch Network has been incredibly encouraging." The business is now on track to launch key components like the mobile app and panic bracelets, with plans to develop drone technology in the next phase.

Partnerships with Stellenbosch University, the local municipality, and security networks will be key to scaling the business. "Our vision is to build an 'Uber for Safety,' not just for students, but for the broader Stellenbosch community," he says.

Dialogues for Peace Building

Advancing the vision of higher education and society by grounding intercultural competences in African contexts.

The UNESCO Chair in Intercultural Competencies, hosted at SU International is led by Dr Darla Deardorff. Dr Precious Simba shares how the work of the chair contributes to Ubuntu and peace building.

The UNESCO Chair in Intercultural Competences (ICC) at SU contributes to building more just, peaceful, and cohesive societies by integrating intercultural competence as both an educational framework and an ethical orientation. Building on the seminal work of Chairholder Dr. Darla K. Deardorff and emphasising African philosophies such as *ubuntu*, *ujamaa*, *ukama*, and *harambe*. Recognised by UNESCO as a think tank, the Chair views intercultural competence as a way of being, rooted in empathy, relationality, and

ethical responsibility. This perspective aligns with Sustainable Development Goal 16 (Peace, Justice, and Strong Institutions) and Agenda 2063's Goal 14, for a stable, and peaceful Africa.

Since 2023, the Chair has led capacity-building initiatives across the African continent, including UNESCO Story Circles, and the inaugural Intercultural Competences in Africa conference in Nairobi, Kenya. Through webinars and partnerships between academia and the larger community, it fosters intercultural competent leadership and repositions African knowledge systems within the global discourse.

UNESCO Chair in Intercultural Competences Core Team - Chairholder: Dr. Darla K. Deardorff, Co-Chairs: Dr. Precious Simba and Dr. Divinia Jithoo; Coordinator: Werner de Wit; Team Leads: Yenziwe Mbuyisa, Sarah Richmond.



From left: Dr Divinia Jithoo (Co-Chair), Mr Werner de Wit (Operations Coordinator), Ms Sarah Richmond (Team Lead: Peace Building), Dr Precious Simba (Co-Chair), Ms Yenziwe Mbuyisa (Team Lead: Climate Action), Dr Akuch Anyieth (Team Lead: Gender Equity), Dr Darla K Deardorff (Chairholder).



AU Goal 15:

A fully functional and operational African peace and security architecture



SDG 16:

Peace, Justice and Strong Institutions

Africa's Emerging Peace and Security Architecture

Building peace in Africa requires strong institutions, effective leadership, and coordinated efforts to resolve conflicts amicably and ensure lasting peace. The Saldanha campus's Faculty of Military Science and the Security Institute for Governance and Leadership in Africa (SIGLA) contribute to this vision.

Faculty of Military Science

SU's Faculty of Military Science is the only institution in South Africa dedicated exclusively to higher education in the military field. It educates South Africa's Department of Defence's staff and principally junior officers. The Faculty is interdisciplinary and comprises five schools, each housing various departments and programmes:

- Security and Africa Studies
- Geospatial Studies and Information Systems
- Human and Organisational Development
- Science and Technology
- Public and Defence Management

Responsible Innovation for Peace and Security

Launched in 2024 within SU's Faculty of Military Science, the Defence Artificial Intelligence Research Unit (DAIRU) is Africa's first hub dedicated to defence-related AI research. Led by Dr Moses Khanyile, DAIRU advances ethical and regulatory frameworks for military AI while training specialists to strengthen Africa's cyber resilience, border protection, and maritime security. By contributing to AU Goal 15, the unit plays a crucial role in ensuring innovation contributes to peace, stability, and sustainable security across the Continent.

Shaping Responsible Military AI

From 11–14 November 2024, SU's Faculty of Military Science and its Defence Artificial Intelligence Research Unit (DAIRU) co-hosted the South African leg of the Global Commission on the Responsible Use of Artificial Intelligence in the Military Domain (GC REAIM). This global initiative, launched by the Government of the Netherlands in 2023, aims to promote the *ethical, transparent, and accountable use of AI in defence and security contexts*. This event helped positioned SU as an active participant in shaping global norms for responsible military AI, directly contributing to AU Goal 15—the development of Africa-led institutional and operational capacity for peace, security, and mediation.

This GC REAIM gathering brought together commissioners, researchers, defence officials, and policymakers to establish a global framework for responsible AI governance and strengthen Africa's role in this conversation. Maj Gen (retired) Bantu Holomisa, the Deputy Minister of Defence and Military Veterans,

opened the event, and featured distinguished guests including H.E. Helene Rekkers, Consul General of the Kingdom of the Netherlands, and Prof M.S. Tshehla, SU's Dean of the Faculty of Military Science.

Three themed sessions structured the discussions:

- **Implications of AI for Peace, Security, and Stability:** This session explored how AI could transform defence strategies while raising legal, moral, and ethical questions about accountability and harm.
- **Ethical Considerations of AI in the Military Domain:** In this session, the focus was on Lethal Autonomous Weapons Systems (LAWS) and the need for responsible AI design within the boundaries of international humanitarian law.
- **Governance of AI in the Military Domain:** The final session addressed compliance and geopolitics, discussing how both states and industry can align with global ethical frameworks.

Maritime Security and Defence Governance

Through SIGLA, one of two dedicated research bodies at the Faculty, SU convenes local and international leaders and scholars working on maritime security, cyber governance, the civil-military relations, and defence leadership. These are all central to Africa's ability to coordinate regional peacekeeping and mediation efforts aimed at achieving stability and preventing conflict. Highlights in 2024 included collaborations with Ghana and Denmark on annual conferences addressing peace and security in the Gulf of Guinea, the Red Sea, and Southern Africa.

The 5th Sea Power for Africa Symposium to Find African Solutions for African Problems

The South African Navy, hosted the 5th Sea Power for Africa Symposium at the Cape Town International Convention Centre (October 2024) under the theme *"Good Order at Sea in the African Maritime Domain."* The event was attended by the Navy Chiefs of the majority of African nations, as the conference dealt largely with maritime security, contributing directly to SDG 15. SIGLA planned and led the academic programme with international speakers from South Africa, Norway, Ghana, Kenya, Ethiopia and



South African Minister of Defence and Military Veterans, Mrs Angelina Motshekga, with Chiefs of Navies from across the continent.

Mauritius, as well as BRICS members Brazil, India, the People's republic of China. Academic leadership from SU's Faculty of Military Science and SIGLA was strongly represented, with Prof Michelle Nel, Dr Moses Khanyile as session chairs, supported by Prof Francois Vreij during the Synthesis and Summary session.

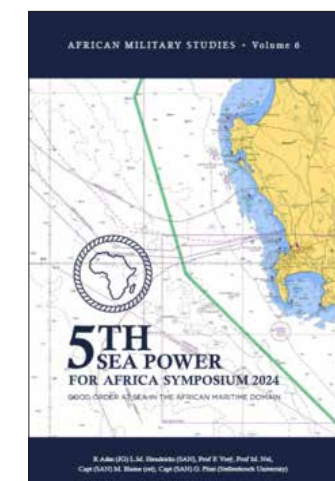
Since its inception in 2005, this symposium has become Africa's leading platform for advancing regional naval collaboration and African-led maritime governance. The 2024 gathering united Chiefs of Navies, defence officials, and maritime scholars from across Africa and further afield, to strengthen partnerships and develop shared strategies for protecting Africa's Blue Economy, ocean health, and maritime security. Minister of Defence highlighted the symposium's strategic role as the only continental forum that merges operational expertise with academic insight to address maritime threats. Their contributions



on strategy, defence innovation, and cybersecurity underscored the University's commitment to building Africa's institutional and intellectual capacity for peace, security, and ocean governance. The outcomes of the conference, collated by SIGLA is available as a free ebook.



"The strategic importance of holding regular Sea Power for Africa Symposiums is critical for the eradication of current as well as future challenges or threats within the African Maritime Domain."





#MOONSHOT 5

AFRICAN VALUES ARE EXPLICIT AND PROMOTED

Honouring African Culture and Practices Through *Ubuntu*

In living out *Ubuntu*, Africa ensures that its growth remains grounded in compassion, reciprocity, and the collective good. It provides a powerful lens for understanding the value of African culture and heritage. Honouring these traditions affirms dignity, interconnectedness, and collective identity, which are principles at the heart of *Ubuntu*. When education, governance, and social systems are rooted in cultural heritage, Africa's progress becomes authentic and enduring.





AU Goal 16:
African Cultural
Renaissance

No equal SDG

Honouring African Culture and Practices Through *Ubuntu*

Although AU Goal 16 does not directly align with any of the UN SDGs, it is central to SU's role as a university *in, and for Africa*. SU actively contributes to the cultural renaissance of South Africa and our Continent through scholarship, performance, curriculum transformation, and community engagement.

Our Faculty of Arts and Social Sciences houses our Departments of Music, Visual Arts, and Drama, which are reimagining Eurocentric art forms and elevating indigenous knowledge systems to showcasing African creativity on global stages. These contributions are expressed in multiple forms, such as internationally recognised scholarship on the Africanisation of music and opera, as well as platforms like Woordfees, WOW, SoSAC, and African Drumming Tuesdays that connect communities with music. Additionally, we run social impact programmes that integrate the arts into schools and communities.

Lunathi Ncamani: Giving Voice to the African Cultural Renaissance

Lunathi Ncamani is an SU choral conductor and music educator whose work focuses on culturally responsive pedagogy and using music for community empowerment.

Growing up in the Mdantsane township near East London, Lunathi Ncamani was surrounded by music. From neighbours blasting different genres to the township's own celebrated musicians, music was always a part of daily life. Though his mother pushed him toward engineering as a career path, his heart was always in the arts. A chance audition through a sister's friend led him to SU's Higher Certificate in Music, the first step in a journey that would see him become a champion of African choral music.

From the certificate, aimed at students who do not have a formal music background, he progressed to diploma and degree studies, supported by mentors and lecturers, like Dr Inge Engelbrecht, Dr Ralph Kohler, and Dr Martin Berger. The path wasn't easy: He had to support himself through his studies by working as a facilities assistant at the Department of Music, and teaching to private choral students. But this struggle only increased his resolve to continue his qualifications. That

decision opened doors to a Master's degree in Music Education with a focus on culturally responsive pedagogy, as well as teaching opportunities that took him to Mozambique, Scotland, and Germany. "I loved performing, but I realised I loved teaching more," he recalls.

Today, Agenda 2063's Goal 16, the African Cultural Renaissance, is lived daily in classrooms, choirs, and concerts for Lunathi. "We are raising a generation of musicians who understand our traditions deeply," he says. As a classically trained singer and lecturer in choral conducting at SU, Lunathi is driving force in reshaping the curriculum. He has embedded African choral traditions into teaching and performance, ensuring his culturally diverse group of students don't just learn the notes but understand the role of the culture, stories, and authenticity behind the music works. His work has transformed the SU Chamber Choir, where African repertoire now holds pride of place and resonates with audiences across the country.

His international collaboration with LMU Munich during his undergraduate studies was equally formative. Arriving in Germany on a public holiday with no keys to his student housing, he found himself stranded until a stranger and later friend, Nini, offered him her flat and cooked him dinner. "You practiced *Ubuntu*," he told her. Proof that the African spirit of humanity can be found anywhere. That act of kindness shaped his whole stay. During this time in Germany, he taught fellow students African songs, humorously recalling at their struggles to "move while singing." More importantly, he learned how global curiosity about African music must be met with respect for authenticity - a theme that informs his teaching and research to this day.

With his eyes set on the future with a permanent appointment at SU, a certified short course, and plans for a PhD on African choral authenticity, he is determined to see African voices heard, valued, and celebrated both at home and on the world stage.

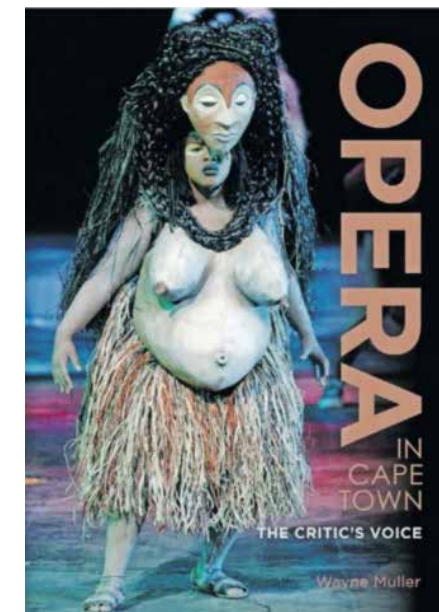
Lunathi Ncamani
teaching at the Music
Department at SU



Wayne Muller: Championing the Africanisation of Opera

Dr Wayne Muller, Manager: Strategy, Global and Corporate Affairs, is leading national and international conversations on the Africanisation of opera. His journey began with a PhD in Musicology at SU in 2013, where he studied the evolution of opera after the end of apartheid. What started as an academic thesis has now been transformed into a book, *Opera in Cape Town: The Critic's Voice*. The publication follows the evolution of Opera in South Africa from the music-making of slaves in the 1600s to the apartheid years (1949 – 1993), and the distinct path of opera in South Africa carved after our first democratic election in 1994.

At the heart of Muller's work is the concept of Africanising opera—an ongoing process by which a traditionally Eurocentric art form is recontextualised using local stories, languages, and settings. He shares: "An interesting story evolved of how opera in South Africa became ingrained in our society, so much so, that we 'Africanised' opera and made it a distinctly South African art form - meaning we transported the settings of standard Western European opera repertoire to local settings, inserted indigenous music into the opera, translated Italian and German operas into local languages and many South African composers wrote new operas that tell local stories that we can relate to." Through his contributions, Muller positions opera not as a relic of European tradition, but as a vibrant,



Dizu Plaatjies & Ibuyambo at the opening of the 2024 International Association of Music Libraries, Archives and Documentation Centres

localised art form that resonates with the rhythms, struggles, and aspirations of a post-apartheid nation.

Preserving Cultural and Artistic Expressions

SU is committed to preserving and promoting cultural and artistic expression, contributing to the preservation and promotion of local heritage. One of these initiatives is the *Woordfees*, an annual cultural festival that has been held since 2000, showcasing the University's commitment to promoting cultural enrichment and artistic exploration. Over the years, the festival had grown significantly, and, in 2024, it went from being offered by SU, to an independent non-profit company to ensure its longevity. In 2023, approximately 200 alumni, students and staff participated in more than 120 presentations at the festival.

An Audience Development Project was launched to encouraged meaningful engagement through exposure to the performing arts giving over 400 students, many of whom had never attended formal performances, access to 57 theatre, music, dance and visual art productions. The *Woordfees*-linked social initiative WOW (Words Open Worlds) celebrated 21 years of collaboration with more than a hundred underserved schools in the Western, Northern and Eastern Cape, contributing to their development through language and the arts, with some of those students served, later becoming SU graduates themselves.

SU Department of Music

Prof Mario Nell, then Chair of SU's Department of Music, reported that 2024 was an exciting period of development and transformation at the Department. While anchored in their internationally recognised Western Classical traditions, the Department is becoming a leading

centre for jazz and commercial music, with a blossoming African music component. Additionally, their numerous social impact programmes are crucial in the development of Western Cape communities and continue expanding, involving current and prospective students in quality training. Highlights in 2024 included the Stellenbosch International Piano Symposium and Hennie Joubert Piano Competition in April, The International Association of Music Libraries, Archives and Documentation Centres (IAML) conference, held for the first time in Africa in June, the 19th annual Stellenbosch international Chamber Music Festival in July, a thriving Endler Concert Series and a host of Masterclasses by international visiting guests.

Standout Events

The Symposium of South African Composers (SoSAC) 2024

The SoSAC 2024, held from 9 to 13 September 2024 at SU, was a landmark cultural event showcasing the evolution and preservation of our South African musical heritage. The event highlighted SU's commitment to supporting growth and diversity in African musical expression. The symposium offered nine concerts presenting new works by South African composers, as well as a series of premieres by the SoSAC Festival Orchestra, conducted by Liam Burden. These performances reflected the dynamic development of South African orchestral music. A standout performance included the premiere of *Samsara* by Lusibalwethu Sesanti, performed by the University of Stellenbosch Symphonic Wind Ensemble, the symposium's eleven interactive lectures and workshops included sessions by Ncebakazi Mnuwana on indigenous music notation and Naomi Sullivan on saxophone composition techniques, offering practical and culturally grounded approaches to music-making.

Africa United Youth Orchestra at Carnegie Hall

Six SU students were selected to join the prestigious Africa United Youth Orchestra (AUYO), for a historic performance in New York. The AUYO made its North American debut at Carnegie Hall as part of Carnegie Hall's World Orchestra Week, featuring youth orchestras from around the globe. Notably, two SU students were appointed concertmaster and associate concertmaster, leading the pan-African ensemble of students from Nigeria, Kenya, Mozambique and the Democratic Republic of Congo.

The Konserve: Community-Based Cultural Revival

The Music Konserve has become a regional hub for cultural development and musical excellence, hosting programmes such as the pre-degree **Certificate in Music Literacy**. Since its inception in 2006, it has attracted band members from the nine National Defence Force bands and student from Zambia, Swaziland, Namibia, Botswana, Kenya, Rwanda and Congo-Brazzaville.

Bridging Social Gaps Through Music

Bridging Social Gaps through Music (BSGM) is a social impact initiative within SU's Music Education programme, led by lecturer Danell Muller. The project engages local

school students in teaching, composing, conducting, and music production with several community partners in Cloeteville (Stellenbosch), Grabouw, Faure, and Rawsonville. Through these partnerships, BSGM helps to create inclusive music education opportunities for young people.

Stellenbosch Youth Orchestra

The Stellenbosch Youth Orchestra (SYO) was re-established in 2023 in response to community and school requests from the greater Stellenbosch area. Led by Prof. Mario Nell and a team from the department, the orchestra relaunched with a performance at the HearUs fundraising concert on 9 September 2023, aimed at raising money for the cochlear implants for hearing-impaired children. Conducted by Reghardt Kühn, who also serves as artistic administrator, the SYO now rehearses weekly at the Konserve and performs regularly.

Jewellery as a Medium of Political and Cultural Expression

Dr Bongani Mashange became SU's first black Visual Arts PhD graduate. His unique perspective, shaped by his Zimbabwean heritage and global influence, along with his profound understanding of cultural dynamics, informs his striking abstract jewellery designs and groundbreaking research.

Mashange's work challenges conventions and invites discourse on identity and representation. He explores identity within postcolonial Africa, combining conceptual rigor with craftsmanship to create art jewellery that reflects personal and collective narratives. His work draws on his Zimbabwean heritage, blending traditional symbolism with contemporary techniques to create visual narratives of resistance, identity, and memory—often using jewellery as a medium of political and cultural expression.

Community arts events

African Drumming Tuesdays

Hosted weekly at the SU Museum, Tuesday drumming sessions with Vuyo Mgijima offer an opportunity for all members of the public to take part in intergenerational, intercultural space for community expression. The initiative revives indigenous musical traditions and connects students and locals alike, where they can develop their skills and learn to play an African drum, such as the djembe. Vuyo notes that playing the African drum is a highly relaxing and therapeutic activity and can help creativity, team spirit and social cohesion.

Wednesday Art Walkabouts

The Wednesday Art Walkabouts is an initiative of the SU Museum to educate and to share its art collections with the public, while showcasing its collections. Attendance is free to members of the public for these Wednesday sessions and feature guided tours and discussions focusing on specific themes and current exhibitions.



A drumming circle at the SU Museum

#MOONSHOT 6

AFRICAN CITIZENS ARE MORE EMPOWERED AND MORE PRODUCTIVE

The philosophy of *Ubuntu* reminds us that societies thrive only when every person can flourish. Moonshot 6 envisions an Africa where every citizen has the freedom, skills, and opportunity to contribute meaningfully to shared prosperity. Advancing gender equality and ensuring quality education speak to values of shared responsibility and mutual upliftment. Countless examples across the globe show that when women are empowered and access to learning expands, communities grow stronger, collective well-being improves, and potential is unlocked for all. This vision aligns with access to quality education (AU Goal 18 and SDG 4) and gender equality (AU Goal 17 and SDG 5), ensuring that *no one is left behind*.





AU Goal 17:
Full gender
equality in all
spheres of life



SDG 5:
Gender Equality

Advancing Gender Equality and Women's Leadership

SU recognises that gender equality is a crucial ingredient in the foundation of sustainable development. In 2024, SU continued to promote equality across employment, research, student access, leadership, health, entrepreneurship, and sport.

Currently, women comprise 56.7% of enrolled students, with the percentage of doctoral graduates nearing parity at 48%. SU is also expanding opportunities for first-generation female students. The University celebrates and supports senior female academics and leaders and invests in initiatives that address systemic barriers in Science, Technology, Engineering, and Mathematics (STEM) fields and beyond.

Key contributions include the establishment of a care centre in nearby Ida's Valley, supporting survivors of gender-based violence, the Thuthuzela Care Centre, the Gender and Corruption Symposium linking justice and equity, the #WomenOfSU campaign amplifying women's achievements across disciplines; and new platforms for women in sport and entrepreneurship.

Driving Gender Equality in STEM

Prof Sibusiso Moyo is the DVC Research, Innovation and Postgraduate Studies at SU and holds a PhD in Mathematics.

SU believes that full gender equality is critical to building a sustainable, innovative, and inclusive future, in line with both the SDGs and Agenda 2063. In her message for the International Day of Women and Girls in Science on 11 February 2024, **Professor Sibusiso Moyo**, SU's Deputy Vice-Chancellor Research, Innovation and Postgraduate Studies, reflected on the progress made and the challenges that remain in the journey toward gender equality in STEM.

At SU, women are steadily breaking new ground in science and innovation, with women doctoral graduates surpassing the national average. However, Prof Moyo reminds us that structural barriers still limit access, progression, and representation, especially in emerging areas like artificial intelligence (AI), where women's voices are underrepresented.

Prof Moyo reaffirms SU's commitment to changing this trajectory by creating enabling spaces for girls and women to thrive in science, from early education to advanced research. SU regularly celebrates the achievements of role models like Prof Michele Miller, a leader in the management and control of TB in animals and those aspects that impact the human-animal interface, Prof Sara Grobbelaar, of the Department of Industrial Engineering, who specialises in innovation for inclusive development. They are conducting impactful research while mentoring the next generation. Note also the inclusion of students like Melissa Muller, SA's top matriculant of 2023, who is now studying mechatronics at SU.

Prof Sibusiso Moyo, DVC Research, Innovation and Postgraduate Studies



Corina du Toit, Programme Manager at the SDG/2063 Impact Hub featured during Women's Month's "Day in the life" series.

KEY STORIES AND HIGHLIGHTS:

Women's Month and the #WomenOfSU Campaign

SU celebrated the trailblazing #WomenOfSU in their Women's Month (August) 2024 campaign, honouring the work of academics, researchers, and students building a more inclusive future. Included was Prof Pumla Gobodo-Madikizela, 2024 Templeton Prize Laureate known for her globally recognised work on trauma and reconciliation; Prof Soraya Seedat advances gender equity in mental health; Dr Gestél Kuyler, who heads up a polymer start-up Nanosene, and Prof Juliana Claassens, who brings feminist perspectives to theology. Students and emerging leaders are also breaking ground, like Dr Maureen Etuket, awarded for her social impact work. Across sport, arts, and entrepreneurship, women such as Dr Jocelyn Solomons (sport equity), Lize Briel (composition), and Solomzi Mphambo (black feminism) are changing narratives in their fields. This followed on the May Worker's Day series "A day in the life" that featured support staff at SU in their areas of influence. The SDG/2063 Impact Hub Programme Manager (SU International), Corina du Toit, was featured for her work in advocating for the visible uptake of Sustainable Development at SU.

New Thuthuzela Care Centre Brings Hope to GBV Survivors

The Stellenbosch Thuthuzela Care Centre (TCC) is the first Gender-Based Violence (GBV) support facility in the area, located outside a hospital and offering onsite overnight accommodation to provide survivors with immediate safety, care, and dignity. Since opening in February 2024, it has eased the



burden on district hospitals while setting a new benchmark for victim-centred, court-directed justice. SU collaborates with partners in Government, civil society, and business partners through the Initiative for Non-violence, Support, Prevention, Intervention, Research and Education INSPIRE) facility which will help to establish global networks to study nonviolence and create an environment for academics and students to research GBV. "We want to bolster our commitment to fighting GBV and this facility will help with research, training and teaching," said Jaco Greeff Brink, head of the Equality Unit.

Gender and Corruption Symposium: Bold, Beautiful and Brave

Prof Pregala Pillay, Director of SU's Anti-Corruption Centre for Education and Research (ACCERUS,) at our

School of Public Leadership, is a nationally recognised leader at the intersection of gender, justice, and governance. Through public engagement and education, she is driving the institutional and societal change that Gender Equality in all spheres demands. The Centre hosted the International Gender and Corruption Symposium in June 2024, which brought together ministers, activists, and global experts to explore the link between corruption and gender inequality. Gender equality and Justice and Good Governance (SDG 16), aligned on many levels during dialogues on ethics, justice, and empowerment.



AU Goal 18:
Engaged and
empowered
youth and
children



SDG 4:
Quality
Education

Empowering Youth Through Quality Education, Global Engagement and Innovation

Stellenbosch University believes that empowering youth through education is central to achieving sustainable development and building a more equitable future. Guided by AU Goal 18 and SDG 4, the University invests in quality learning, global engagement, and innovation that prepare students to become active, responsible citizens of the world. Through initiatives like SU International, student-led platforms, and collaborative programmes, SU creates opportunities for young people to access education, connect across cultures, and translate knowledge into real societal impact.

SU International: A Meaningful Service to Society

Robert Kotzé is the current Senior Director and founder of SU International (SUI) where he has been connecting people and institutions to advance SU since 1993.

As a University, SU is committed to South Africa and Africa. At the same time, we are intensely aware of our role in and relation to the international arena. To inspire and be inspired, SU engages and collaborates with stakeholders, the communities we serve, industry, government and our University partners at a local, regional, continental and global level. Our approach to collaboration and engagement aligns with our core values of respect, compassion, and equity. Shares Robert Kotzé: "At SU, internationalisation is seen as an institutional commitment to integrate an international, intercultural and global dimension into university life. We do this with intention. We have a plan and a committed International@SU collective, the primary practitioners of internationalisation at our Institution."

He further explains that the intention of the work by SU International is also to accomplish internationalisation comprehensively by augmenting the purpose, functions and programmes of the University for all SU students and staff, to advance the quality and impact of learning and teaching, research and innovation, in meaningful service of society. "The latter requires a commitment to infuse internationalisation into the knowledge exchange responsibility of the University beyond the classroom and the research laboratory: through technology transfer, science communication and diplomacy, and engagement with public (policy) and civil society (community service). This journey requires a high degree of nimbleness and responsiveness to the needs of our students and staff, the opportunities within the institution, and possibilities that international networks bring."

For SU, being a global partner, provides a safe space for engagement with our peers and partners. The departure point for this journey at SU is informed by reflections and best practices within International Higher Education (IHE) regarding responsible internationalisation within our shared current geo-political challenges, the opportunities in the digital world, and the sector's commitment to the global and continental sustainable development agenda.

In 2024, SU hosted numerous delegations and facilitated academic exchanges with various partner universities globally. This year alone, we welcomed more than 100 delegates from 70 university partners and associate institutions from 27 countries through the Stellenbosch International Academic Network (SIAN) meetings. These activities, alongside immigration, registration, and partnership support, enable SU to prepare engaged, globally competent graduates who are equipped to lead and collaborate across borders, advancing the AU's vision of inclusive, lifelong, quality education coupled with graduating students who are **engaged and empowered** to make a change in their spheres of influence.

Robert Kotzé, Senior Director and founder of SU International



Juliet Saleh and Rahma Djuma, founders of the SU Refugee and Asylum Seeker Student Support Network

KEY STORIES AND HIGHLIGHTS:

Refugee and Asylum Seeker Student Platform

SU, is an active member of the African Higher Education in Emergencies Network (AHEEN), a network of African Universities dedicated to offering qualifications with strong employability potential to refugees and internally displaced persons on the Continent. In 2024, we made strides with our own Refugee and Asylum Seeker Student Platform (SU-RASN). This student-led society was established to provide peer-led support for asylum seekers and refugees on campus. The platform connects to international policy dialogues and is supported by the Centre for Global Engagement at SU International.

Milani Education: Student Startup Tackling the Digital Divide

First-year data science student, Alexandra Lutz, created Milani Education, a free online learning platform, while she was still in high school. Milani, meaning 'to grow' in isiZulu, is a supplementary high school level learning tool which shares learning content from the best schools and teachers in South Africa to any student at no cost. Recent expansions with the support of SU's incubator, the LaunchLab, is one example of how SU students are driving real educational change in underserved communities.

TRAC Supports Potential Students

TRAC South Africa is a national, non-profit Mathematics and Physical

Science intervention program at SU. Its supports and uplifts Mathematics and Physical Science education in underserved South African secondary schools, enabling learners to take ownership of a successful future. Additionally, it extends guidance to learners navigating the complexities of tertiary education application processes, including essential support with funding applications. TRAC identified 292 grade 12 learners who qualified to apply to the University for first-year studies in 2025. 245 applications were completed, and 161 applicants received a conditional offer. The top three 2024 TRAC grade 12 learners chose to apply to Stellenbosch University.

Student Success

The DELL Young Leaders Programme, launched in 2020 as a partnership between Stellenbosch University and the Michael and Susan Dell Foundation, equips students with personal and professional skills to succeed in their careers. Since its inception, the programme has supported 665 SU students, achieving a 96% retention rate of students completing or staying on track with their degrees. In 2024, it reached a milestone with a 100% placement rate, as all 2023 graduates entered meaningful employment or further study within three months of graduating.

Augmenting Our International Partnerships

Stellenbosch University became one of only nine universities outside Europe to establish a multifocal partnership with the University of



Alexandra Lutz (Milani Education) with colleagues at Western Cape school.

Groningen, a top 100 institution in the Times Higher Education World University Rankings. This partnership unlocks new opportunities for interdisciplinary research and industry collaboration in the fields of energy transitions, digital transformation, and biomedical solutions. In practice, it translates to joint PhD programmes, joint postdoctoral fellowships, advantages for undergraduate student mobility, enhancing opportunities for external funding, and sharing best practices in terms of educational innovation. The partnership will strengthen our research collaboration on energy transitions, digital transformation, and biomedical solutions. Key objectives are to develop joint PhD programmes, support postdoctoral fellows, and enhance external funding, academic matchmaking, and educational innovation.

Afterword: A Practice of Everyday Justice

We asked Dr Katlego Letlonkane what *Ubuntu* means to her, and how she incorporates it into her personal and professional practice. She is a Senior Programme Manager, Diversity Capacity Development in our Human Resources Division.

As I reflect on the work captured in this Sustainability and Development Annual Report, I am reminded once again of the steady force that guides my own practice: *Ubuntu*. For me, *Ubuntu* is not an abstract ideal or a slogan. It is the everyday practice of justice: The way we recognise one another's humanity, restore balance where it has been disturbed, and create the conditions for people and the natural world to flourish together.

My thinking about justice began long before my formal research did. Growing up in conditions shaped by inequality and exclusion made me wonder deeply about a world that did not wound people, a world where everyone could live with dignity. Long before constitutions and written laws, people carried within them a sense of what was right, what was fair, and what upheld the delicate equilibrium between people and nature. To practise *botho* (Tswana for *Ubuntu*) is, in essence, to practise justice. I lead my work from this premise: that it is essential to engage with all people from a foundation of absolute equality. Everything else proceeds from this single principle.

Shaping my work at SU

Ubuntu teaches me that I am a human being through my relations with others. My being is incomplete

and cannot evolve outside of this relational capacity. This wisdom is what I strive to bring into our understanding of diversity and inclusion here at SU.

In my work in capacity development, I focus on creating programmes that strengthen this crucial relational capacity. This is precisely where the struggle for true inclusion lies: In developing the "muscle" that makes it possible and easier to relate to others who are different and hold different beliefs. Our flagship staff development programme, *Siyakhula* (we are growing), which aims to build staff capacities for diversity, draws significantly from the philosophy and values of *Ubuntu* to embed this shared humanity.

Ubuntu and the Path to Sustainability

Ubuntu deeply grounds us in the truth of abundance. It holds the belief that the world and all its resources are here for everyone to sustain themselves. Mother Nature provides – we are cared for and provided for. We need to hold onto this spirit of abundance, even as world systems attempt to make us believe otherwise. We know the earth makes enough for all, yet these systems engineer inequality for profit and power. Instead, we must collaborate to grow the resources of the world for future generations. Our mandate is simple: to use just enough and grow the rest for those who are still to come.

Looking ahead, I would like to see every one of us who works at SU take seriously the resource that this institution is for our country. We must intentionally align *Ubuntu* with our sustainability ambitions. Our shared obligation is to ensure that the SU we hand over to the future generation is much better than the SU that was handed over to us, shaping a better world for the next generation.

Contributors and A Vote of Thanks

The SDG/2063 Impact Hub at SU International proudly presents this report documenting SU's contributions to sustainability. The report draws on information from various institutional sources and personal consultations. The editorial team would like to thank the staff members in each faculty, school, and division who contributed information, as well as the individual researchers and other staff members who gave their time to collaborate on this publication by providing information and photographs.

We are thankful for permission to reuse information from the SU Annual Integrated Report 2024, as well as the Environmental Sustainability Plan and Report 2024 released by Facilities Management's Environmental Sustainability department. We also acknowledge the DRD's Research for Impact publication and for their work in aligning the Strategic Research Areas at SU with the SDGs and AU Goals. We gratefully thank the Corporate Communications and Marketing Division for the permission to reproduce information from the Annual Integrated Report and the various SU News and Events portals.

Please note that the initiatives highlighted in this report represent only a portion of the diverse and impactful projects within SU. We would like to encourage SU colleagues to contact us to have their initiatives included at susdev@sun.ac.za. Your participation is vital to ensuring that the full spectrum of sustainability initiatives is noted and recognised.

Photography:

Stephan Els and Ignus Dreyer, SU Centre for Photographic Services.

Dr Sara Andreotti, Prof Thinus Booysen, Daniel Botelho, Botswele, Asier Camacho, Mark Cloete, Francisca Darkoh, Corina du Toit, Nico Elema, Wiida Fourie-Basson, Christine Groenewald, Manuel Jackson, Chris Jackson, Marcel Kok, Laikin Photography, Dr Jannes Landschoff, Dr Katlego Letlonkane, Amir Mortezaie/Unsplash, Petro Mostert, Dr Mary Nel, Prof Clive Gray, Henk Oets, Dr Robyn Pharoah, Curt Ruyters, Henk Stander, Prof Sophie van der Heyden, Dr Doris Viljoen, Bureau for Economic Research, Botanical Gardens, Centre for Learning Technologies, Centre for the Advancement of Social Impact and Transformation (CASIT), CubeSpace, Department of Music, Division for Research Development, Facilities Management, Innovation and Commercialisation, Milani Education, Policy Innovation Lab at the School for Data Science and Computational Thinking, Sea Power for Africa Symposium, School for Climate Studies, School for Public Leadership, Stellenbosch Network, Sound and Vibration Research Group at the Department of Mechanical and Mechatronic Engineering.

We extend our further thanks to Jenny Frost of Jenny Frost Design & Illustration for her invaluable design work, including the layout of this report and the alignment of the two sustainability agendas (jenfrost@icloud.com).

We also sincerely acknowledge the contributions of our copy editor, Petro Mostert, for ensuring the clarity and quality of the text throughout the report (petromostert@sun.ac.za).

We express our sincere appreciation to Dr Ofentse Theledi for generously sharing insights from his 2024 doctoral thesis. The integration of *Ubuntu* into leadership practices of leaders in multinational companies: A South African perspective, completed at the University of Pretoria. His work has deepened our understanding of *Ubuntu* as a living practice grounded in accountability, dignity, reciprocity, and collective humanity, and how these values intersect with sustainability.

Should you have any feedback regarding this Annual Report, please direct it to the Programme Manager at the SDG/2063 Impact Hub, Corina du Toit (corina@sun.ac.za).

Previous reports can be found at <https://susdev.sun.ac.za>

This report was drafted using human expertise supported by AI-assisted writing tools.





<https://susdev.sun.ac.za>
www.su.ac.za/en



Stellenbosch
UNIVERSITY
IYUNIVESITHI
UNIVERSITEIT

forward together
sonke siya phambili
saam vorentoe