



Communication and Marketing Department
Isebe loThungelwano neNtengiso
Kommunikasie en Bemerkingsdepartement

Private Bag X3, Rondebosch 7701, South Africa
Welgelegen House, Chapel Road Extension, Rosebank, Cape Town
Tel: +27 (0) 21 650 5427/5428/5674 Fax: +27 (0) 21 650 5628

www.uct.ac.za

23 March 2026

UCT collaborates on Africa-wide biodiversity genomics initiative

Partnership advances global conservation goals

The University of Cape Town (UCT) is playing a vital collaborative role in the African BioGenome Project (AfricaBP), a Pan-African initiative aligned with the Kunming-Montreal Global Biodiversity Framework (KMGBF). Through this partnership, UCT researchers are supporting large-scale genomic and bioinformatics efforts across the continent, helping to mitigate biodiversity loss while promoting equitable sharing of benefits derived from genetic resources.

AfricaBP combines cutting-edge science with ethical, legal and social considerations (ELSI), underpinned by coordinated policy frameworks and robust Digital Sequence Information (DSI) infrastructures. These components are essential to ensuring that genomic research contributes to meaningful conservation outcomes while providing fair benefits to African communities.

A recent [publication](#) in *Nature Reviews Biodiversity*, titled *Expanding African biodiversity genomics to meet global biodiversity goals*, examines the challenges and opportunities of implementing the KMGBF across Africa. The paper also proposes integrating AfricaBP's theory of change to guide the effective application of genomics and policy frameworks across the continent.

UCT Postdoctoral Fellow Dr Hawwa Gabier, who is the co-author of the paper, emphasised the importance of combining scientific innovation with ethical governance: "By integrating robust biodiversity data infrastructure with participatory engagement, ELSI-informed governance and collaborative partnerships, AfricaBP is advancing a model in which knowledge generation, equitable benefit sharing, and conservation outcomes reinforce one another across the African continent. Africa's biodiversity future will be shaped by how this knowledge is generated, shared and responsibly stewarded. Through strengthened data infrastructure, inclusive dialogue and attention to the ethical, legal and social dimensions of biodiversity science, AfricaBP is creating the conditions for equitable benefit sharing and sustainable biodiversity stewardship across the continent."

Theory of change: five key opportunity areas

The publication outlines a theory of change focusing on five key opportunity areas, providing clear recommendations, potential outcomes and associated challenges:

- Legal and ethical frameworks where there are shortages of clear and comprehensive frameworks across Africa
- Genomics and Digital Sequence Information (DSI) infrastructures, including the imbalance in using, studying, generating and storing DSI data (e.g. genomics data) within Africa
- Inclusion and gender imbalance of DSI researchers in the DSI field, especially under-representation
- Conflicting priorities between biodiversity conservation, poverty alleviation and sustainable development
- The importance of planning, transparency, accountability, monitoring, review and reporting for the successful implementation of the KMGBF

Chairperson of AfricaBP and professor at Mohammed V University in Rabat, Professor Bouabid Badaoui, highlighted the project's vision for Africa-led genomics. "AfricaBP is building an Africa-led genomics future where data sovereignty, robust DSI infrastructure and ethical governance are non-negotiable, so KMGBF goals become measurable conservation outcomes, and the benefits flow back, fairly and transparently, to African countries and communities. This ensures that Africa's biodiversity and genomic integration translates to real value for its people rather than becoming an extractive science."

Practical solutions and existing models

While challenges remain, AfricaBP highlights solutions already in place across the continent and globally. These include South Africa's Biodiversity Passport, which strengthens transparency and monitoring for access to genetic resources and DSI; the Global Alliance for Genomics and Health (GA4GH) Passports and Cryptography for Genomic Health file container formats; and the African Union's Strategy for Gender, Equality and Women's Empowerment, which addresses under-representation in scientific research.

Some African countries are also promoting in-country capacity to generate, analyse and use genetic resources and DSI, simplifying non-commercial access, reducing export permit requirements and removing application fees. These initiatives demonstrate practical pathways to strengthen African-led genomic research while ensuring fair benefit sharing.

Founder and Co-Chair of AfricaBP Dr ThankGod Echezona Ebenezer stressed the importance of pairing data sharing with benefit sharing. "Sustainable biodiversity conservation through innovative scientific approaches is rooted in the availability of relevant data for such innovations and sharing of resulting benefits. Our goal is not only to enable biodiversity genomic innovations across Africa by making such data available, but to ensure that its benefits are distributed fairly, equitably and sustainably."

Driving impact through collaboration and engagement

AfricaBP applies its theory of change to guide implementation through initiatives that enhance biodiversity data infrastructure, increase awareness of benefit sharing and foster stakeholder engagement. Roundtable discussions, surveys and community consultation across the continent support evidence-based policy and practice.

Executive Secretary of the Convention on Biological Diversity (CBD), United Nations Environment Programme (UNEP) Astrid Schomaker, noted: "Africa continues to demonstrate leadership in advancing Access and Benefit-Sharing (ABS) and driving innovation on digital sequence information (DSI). As Parties work toward implementing the Multilateral Mechanism

and the Cali Fund under Decision 16/2, strengthening scientific infrastructure and capacity across Africa will be essential to achieving fair and equitable benefit sharing and delivering on the Kunming–Montreal Global Biodiversity Framework.”

Next steps: continental engagement and capacity building

AfricaBP is inviting African organisations and international partners to contribute to the delivery of its roadmap. A major milestone will be the launch of the first African Congress on Digital Sequence Information (DSI), Infrastructure and Policy. The congress will convene four times a year across all five African regions, beginning in West Africa in May 2026, to strengthen policy dialogue, build DSI capacity and foster collaboration.

As AfricaBP scales its efforts, the integrated approach promises a transformative impact across biodiversity conservation, food security and equitable use of genetic resources in Africa. UCT’s collaboration highlights the university’s commitment to supporting African-led scientific initiatives that combine innovation with ethical stewardship and societal impact.

Through projects like AfricaBP, Africa is demonstrating that scientific advancement and the responsible management of biodiversity can go hand in hand, ensuring benefits flow to both people and ecosystems across the continent.

Issued by: UCT Communication and Marketing Department

Velisile Bukula

Head: Media Liaison
Communication and Marketing Department
University of Cape Town
Rondebosch
Tel: 021 650 2149
Cell: 071 642 3495
Email: velisile.bukulai@uct.ac.za
Website: www.uct.ac.za