



**16th SCIENTIFIC CONFERENCE OF THE
AFRICAN ACADEMY OF SCIENCES**

**Theme: Science, Technology, and Innovation
for Sustainable Development and Economic
Prosperity in Africa**

12–15 December 2026

Dar Es Salaam, Tanzania

CONCEPT NOTE

16th SCIENTIFIC CONFERENCE OF THE AFRICAN ACADEMY OF SCIENCES

Theme: Science, Technology, and Innovation for Sustainable Development and Economic Prosperity in Africa

Date: 12 – 15 December 2026

Venue: Dar Es Salaam, Tanzania

Chair, Local Organizing Committee

Prof. Sospeter M. Muhongo
Vice President AAS, Eastern Africa Region

Secretary, Local Organizing Committee

Prof. Athanas S. Macheyeke
The University of Dodoma (UDOM)

Members, Local Organizing Committee

Representatives from participating Tanzanian Institutions

Collaborating Institutions in Tanzania

1. Tanzania Commission for Science and Technology (COSTECH)
2. University of Dar es Salaam (UDSM)
3. The University of Dodoma (UDOM)
4. The State University of Zanzibar (SUZA)
5. Sokoine University of Agriculture (SUA)
6. The Nelson Mandela African Institution of Science and Technology (NM-AIST)
7. Tanzania Academy of Sciences (TAAS)

1. Executive Summary

The African Academy of Sciences (AAS) is a Pan-African scientific organization established in 1985 to promote excellence in science, technology and innovation (STI) across Africa. Through its mandates of recognizing scientific excellence, providing evidence-based policy advice, and supporting research and capacity development, AAS has become one of Africa's leading scientific institutions. As Africa continues to face complex challenges associated with climate change, food insecurity, emerging diseases, unemployment, rapid urbanization, digital transformation, energy transition and sustainable industrialization, there is a growing need to strengthen science, technology and innovation as drivers of sustainable development.

The 16th AAS Biennial International Conference will provide a high-level platform for scientists, policymakers, industry leaders, development partners, innovators and young

researchers to deliberate on emerging scientific advancements and formulate practical solutions for Africa's development and prosperity. The conference is expected to attract more than 500 participants from Africa and beyond, representing academia, governments, industry, civil society, development organizations and international institutions.

2. Introduction and Justification

About 60% of the Africa's population of approximately 1.6 billion is made up of young people under the age of 25. It is estimated that Africa will have a population of approximately 2.5 billion by 2050. Consequently, STI have to be deployed to provide solutions to the Africa's complex challenges in issues pertaining to education, food and nutrition, health, water, energy, industry, climate change, etc. Science, technology and innovation are central to unlocking productivity, jobs creation, poverty eradication, and building resilience. Investment in African-led research and innovation however, remains inadequate, and linkages between scientists, policymakers, and funders are often not strong.

For the AAS, the theme of this conference – **Science, Technology, and Innovation for Sustainable Development and Economic Prosperity in Africa** - is particularly significant. The newly elected Governing Council has identified resource mobilization and financial sustainability as critical priorities for strengthening the Academy's ability to fulfill its continental mandate. While the AAS has established itself as Africa's premier scientific organization and a trusted voice for science, the scale of Africa's challenges demands a significant expansion of the Academy's capacity, programs, partnerships, and influence. This expansion will require innovative and diversified financing mechanisms.

The 16th Biennial Conference therefore provides a unique platform not only for scientific discourse but also for strategic investment dialogue. The conference will serve as a convening mechanism that brings together scientists, policymakers, development partners, philanthropists, industry leaders, financial institutions, foundations, and government representatives to explore sustainable models for financing African science. It will showcase the transformative impact of scientific investments, demonstrate the return on investment from research and innovation, and create opportunities for new partnerships and funding commitments.

Importantly, the conference will function as a linchpin for the AAS's broader fundraising and institutional strengthening agenda. Through high-level dialogues, investment forums, donor roundtables, industry engagement sessions, and partnership-building events, the conference will seek to catalyze new financial commitments toward African science and position the AAS as the leading platform for mobilizing resources for scientific advancement across the continent.

In particular, the 16th Scientific Conference of the AAS will offer a platform for African researchers, policymakers, development partners, and the private sector to share evidence, showcase emerging research, and align STI priorities with Africa's development and prosperity goals. Hosting the conference in Tanzania reinforces regional ownership and highlights East Africa's growing role in STI.

2.1 Conference Goal

To advance the role of Science, Technology, and Innovation (STI) as drivers of sustainable development and economic prosperity in Africa through knowledge exchange, policy dialogue, and partnership building.

2.2 Strategic Objectives

- **Showcase African Research:** Present high-quality scientific work by researchers across the continent, with emphasis on early-career scientists.
- **Strengthen Policy-Science Linkages:** Facilitate dialogue between scientists and high-level decision makers on using STI for national and continental development.
- **Mobilize Investment:** Identify and promote investment opportunities in African STI from government, philanthropy, and development partners.

3. Conference Activities

The conference will be organized for 4 days – 3 days of scientific and policy presentations, while the last day will be devoted to organizing the Annual General Meeting (AGM) of AAS. Arrival will be on December 11, presentations will be on 12-14 December 2026, while AGM of AAS will be on December 15. Departure will be on 16th December 2026.

3.1 Expected number of participants:

The conference is expected to attract approximately 500 delegates from more than 40 countries across Africa and beyond. Participants will include:

- AAS Fellows and Affiliates
- Scientists, Technologists and Innovators
- Early Career Researchers and Students
- Government Officials including Policymakers
- African Union Representatives
- Development Partners and Philanthropists
- United Nations Agencies
- Industry Leaders and Entrepreneurs
- Innovation Hubs and Incubators
- Non-Governmental Organizations
- Media Organizations

3.2 Indicative Participation

Category	Expected Number
Researchers and Academics	220
Government Officials	50
Industry Representatives	60
Development Partners	40
Students and Young Scientists	100
Media and Others	30
Total	500

3.3 Conference Format

Keynote addresses, plenary sessions, parallel technical sessions, poster presentations, policy dialogues, industry forums, innovation exhibitions, young scientists' forum, women in science forum, networking events, and virtual participation platform.

3.4 Conference Agenda

Day 1: 12 December 2026

Opening Ceremony and Scientific Sessions

Opening Ceremony

Chair of the Local Organizing Committee
President of the African Academy of Sciences

Official Opening: H.E. President of the United Republic of Tanzania

Group photographs

Tea break and tour of exhibitions

Scientific Sessions A:

Parallel Scientific Presentations – 4 parallel sessions

Session 1: Current research in Agriculture & Animal husbandry

Session 2: Current research in Health & Wellbeing

Session 3: Current research in Energy & Water

Session 4: Current research in Digital Technologies

Lunch break

Scientific Session B: Parallel sessions

Session 1: Current research in pure and applied chemistry, physics and space sciences

Session 2: Current research in life sciences

Session 3: Current research in earth sciences, minerals, oil & gas

Session 4: Current research in engineering, architecture and innovation

Day 2: 13 December 2026 – Policy, Investment, and Thematic Dialogue

9:00 am Keynote address and interactive forum: Science and Leadership for Africa's Transformation

To be delivered by Former President Olusegun Obasanjo GCFR, FAAS of Nigeria

Tea break

Section 3: Presidential session 1 showing AAS' African-wide science programming

Chair: Professor Friday Okonofua

Co-Chair: Professor Lise Korsten

Presentation 1: ARISE as a model for research capacity strengthening in Africa: Methods, lessons learned, and impact – Dr Boniface Ushie

Presentation 2: Illuminating Africa's future: Synchrotron science as a pre-eminent tool for research, innovation, and development: Professor Collins Simon, FAAS

Presentation 3: Confronting the climate-health nexus: Ebola as a wake-up call for Africa's scientific and public health preparedness: Professor Helen Rees, FAAS

Presentation 4: Strengthening Africa – China partnerships for sustainable agricultural transformation, Dr Nkem Mkhumba and Professor Felix Dakora

Lunch Break

Scientific session C: 4 parallel sessions:

Session 1: Digital Innovation, AI and the 4th Industrial Revolution in Africa

Session 2: Climate-Smart Agriculture and Food Security through STI

Session 3: African health systems, traditional medicine, and drug discovery

Session 4: Reimagining policy and governance in African science for the 21st Century

Day 3: 14 December 2026 – Science, Governance, and Philanthropy

9am: Keynote presentation: The Nexus between Scientific Evidence and Political Decision-Making in Africa – by Her Excellency, Professor Ameenah Firdaus Gurib-Fakim, FAAS, Former President of the Republic of Mauritius

Tea Break

Plenary session on Philanthropy and Science in Africa – Panel with up to 4 donor organizations on funding priorities, grant mechanisms, and partnerships for African research - AfDB, World Bank, Ford Foundation, EU, and Gates Foundation

Panel session on Fellows showcasing their work on promoting science in Africa

Presentation 1: The Ghana Research Fund: Origin, mandate and funding mechanisms for national research excellence: Professor Eric Danquah, FAAS

Presentation 2: Advances in cancer treatment and prevention: The emerging role of immunotherapy – Professor Kunle Odunsi, FAAS

Presentation 3: The emerging role of genomics in disease surveillance in Africa. Professor Christian Happi

Lunch Break

Session 1: High-Level Dialogue on STI Investment

Panel discussion with representatives from the African Union, NEPAD, and other government agencies on financing and investment opportunities for science in Africa.

Proposed presenters:

- Dr. Monique Nsanzabaganwa – Deputy Chairperson, African Union Commission
- Prof. Roseanne Diab – CEO, Academy of Science of South Africa; Co-Chair, IAP for Science
- Ms. Rebecca Enonchong – Founder, AppsTech; Board Member, World Bank Private Sector Advisory Group
- Prof. Salim Abdool Karim – Director, CAPRISA

Session 2: Engaging the diaspora: Expanding the reach, influence, and impact of the African Academy of Sciences - Professor James J. Cochran, University of Alabama

Day 4: 15 December 2026 – General Assembly and Closing Ceremony

General Assembly

Closing ceremony with dinner and entertainment

To feature:

- Dinner and entertainment
- Presentation of conference resolutions / Communique
- Awards for best scientific presentations
- Obasanjo prize award
- Other awards
- Conferment and award to new Fellows
- Closing remarks

4. Expected Outputs

The conference is expected to produce:

- The Dar Es Salaam Declaration on Science, Technology and Innovation for Africa's Development and Prosperity,
- Conference Proceedings,
- Policy Briefs for African Governments,
- Recommendations for STI investments,
- New research and institutional partnerships,
- A Young Scientists Networking Platform,
- Scientific publications and special journal issues, and
- Innovation and technology showcase reports.

5. Expected Outcomes

- Scientific Impact
- Increased research collaboration.

- Improved knowledge sharing.
- Policy Impact
- Stronger science-policy interfaces.
- Evidence-based policymaking.
- Economic Impact
- Enhanced innovation investments.
- Increased technology commercialization.
- Social Impact
- Increased youth participation in science.
- Improved public appreciation of science.

6. Sponsorship Opportunities

Platinum Sponsor – USD 50,000 and above

- Premium branding
- Exhibition space
- Speaking opportunity
- Recognition during opening ceremony

Gold Sponsor – USD 25,000

- Branding opportunities
- Exhibition booth
- Conference materials visibility

Silver Sponsor – USD 10,000

- Exhibition booth
- Promotional materials inclusion

Bronze Sponsor – USD 5,000

- Logo placement
- Acknowledgement in conference materials

7. Call for Partnership and Support

The AAS invites governments, development partners, private sector organizations, philanthropic foundations, research institutions and individuals to support this important continental initiative. The conference provides a unique platform to advance science, innovation and sustainable development while contributing to Africa's long-term prosperity.

8. Pre - & Post – Conference Tours

Information for those wishing to visit our beaches and national parks will be available in the forthcoming detailed conference's circular.

9. Conference Secretariat:

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