

# The African Academy of Sciences

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***Prof. Catherine Ngila***  
**Executive Director, AAS**

# PRESENTER CONTACT



## VISITING PROFESSOR

1. University of Johannesburg, Department of Chemical Sciences, P.O Box 17011, Doornfontein, 2028 South Africa (2017)
2. University of Nairobi, Chemistry Department, Kenya (2021)
3. Masinde Muliro University of Science and Technology, Department of Pure & Applied Chemistry, Kenya. (2015)

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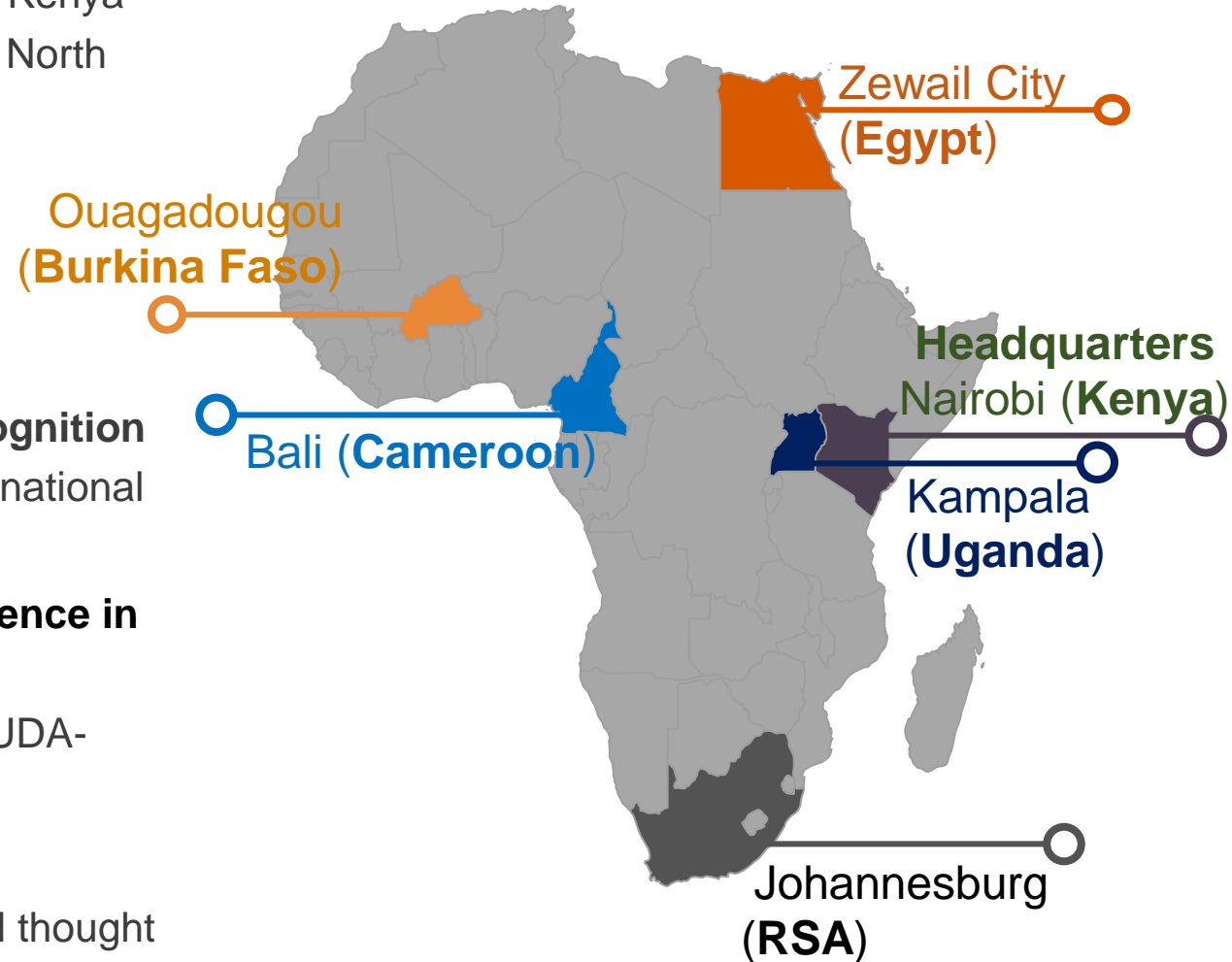
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## Prof Ngila Professional Links

- [https://www.researchgate.net/profile/Jane\\_Ngila/](https://www.researchgate.net/profile/Jane_Ngila/)
- <https://scholar.google.co.za/citations?user=NNc4NEYAAAAJ&hl=en>
- <https://www.linkedin.com/in/catherine-ngila-68a620114>
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- [https://en.wikipedia.org/wiki/Jane\\_Catherine\\_Ngila](https://en.wikipedia.org/wiki/Jane_Catherine_Ngila)

# The African Academy of Sciences (AAS)-1985/36yrs Ago

- **A non-aligned, non-political, not-for-profit pan-African** organisation
- **Headquarters** in Nairobi through a hosting agreement with the Kenya government & with **5 offices** in South, East, Central, West and North Africa
- **Tripartite mandate:**
  - Recognise excellence,
  - Advisory and think tank functions
  - Implementing key STI programmes
- **Continental Academy** in Africa enjoying the **support** and **recognition** of the **African Union** and several governments and major international partners
- **AESA platform (Alliance for Accelerating Excellence in Science in Africa)** launched in 2015 as a declaration of African Union for **Continental Agenda setting & Business Planning-** jointly with AUDA-NEPAD.
- **Vision:** Transformed lives through science
- **Mission:** Leverage resources through research excellence and thought leadership for sustainable development



Support the best people, places  
and programmes to undertake  
relevant and cutting-edge research  
To nurture strategic relationships

Transformed lives  
through science



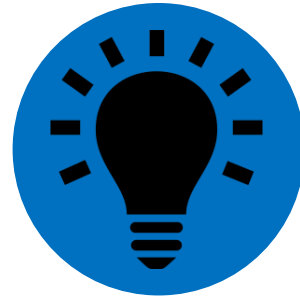
Leverage resources for research  
excellence and thought leadership  
for sustainable development

# The AAS triple mandate

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**Recognising  
excellence**



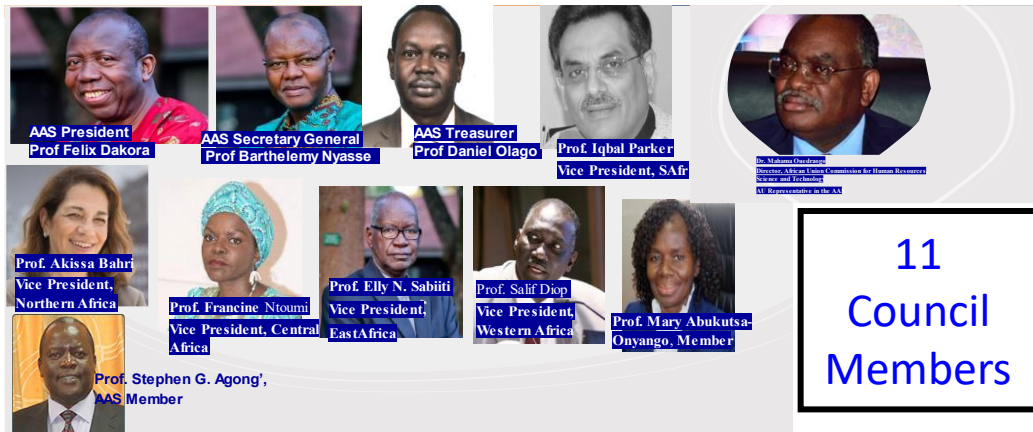
**Think tank  
functions**



**Implementing  
science  
programmes**

# The AAS Governance

1. The **General Assembly (GA)** consists of all Fellows of The AAS and is the highest and ultimate decision-making governance organ of The Academy to which the Governing Council is responsible. It appoints the Governing Council, oversees election of Fellows and approves long-term plans of The Academy.



2. The **Governing Council (GC)** is The AAS Board of Directors and consists of 11 members elected by the GA. The president of the GA is the Chairman of the GC. The Council exercises oversight on The AAS Secretariat directly as well as through its sub-committees.

- Finance, Risk, Audit, and Compliance (FRAC) Committee
- Programmes sub-committee
- Governance & Nominations sub-committee
- Gender & Education Committee

3. The **Secretariat** based at The AAS headquarters in Nairobi, implement The Academy's activities under the leadership of the Executive Director.

The AAS Managers and Senior Advisors are responsible for key areas of work at the AAS including the Alliance for Accelerating Excellence in Science in Africa (AESA) programmes the sustainability platform Coalition for African Research and Innovation (CARI), The AAS strategy and communications functions.



## Programmes at the AAS

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***Obed Ogega, PhD***  
**Senior Programmes Officer**

# Mandate III: Major Programme Areas





# The African context



## Climate Change

Africa = ~ 6 Million tons of carbon emissions vs. China >9Billion tons!) yet it will suffer the worst devastations i.e. extreme weather patterns, drought, desertification, floods, rising sea levels, disease outbreaks etc.



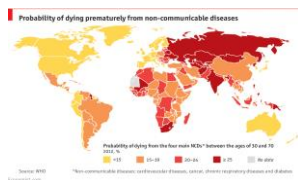
## Food Insecurity

124 Million people in 51 African countries experienced high levels of food insecurity (FAO)



## Poverty

The largest number of people, (390 million) living in extreme poverty



## High disease burdens and epidemiological transition

25% of global disease burden, mostly infectious, but increasing NCD burden

# The African SCIENTIST's context



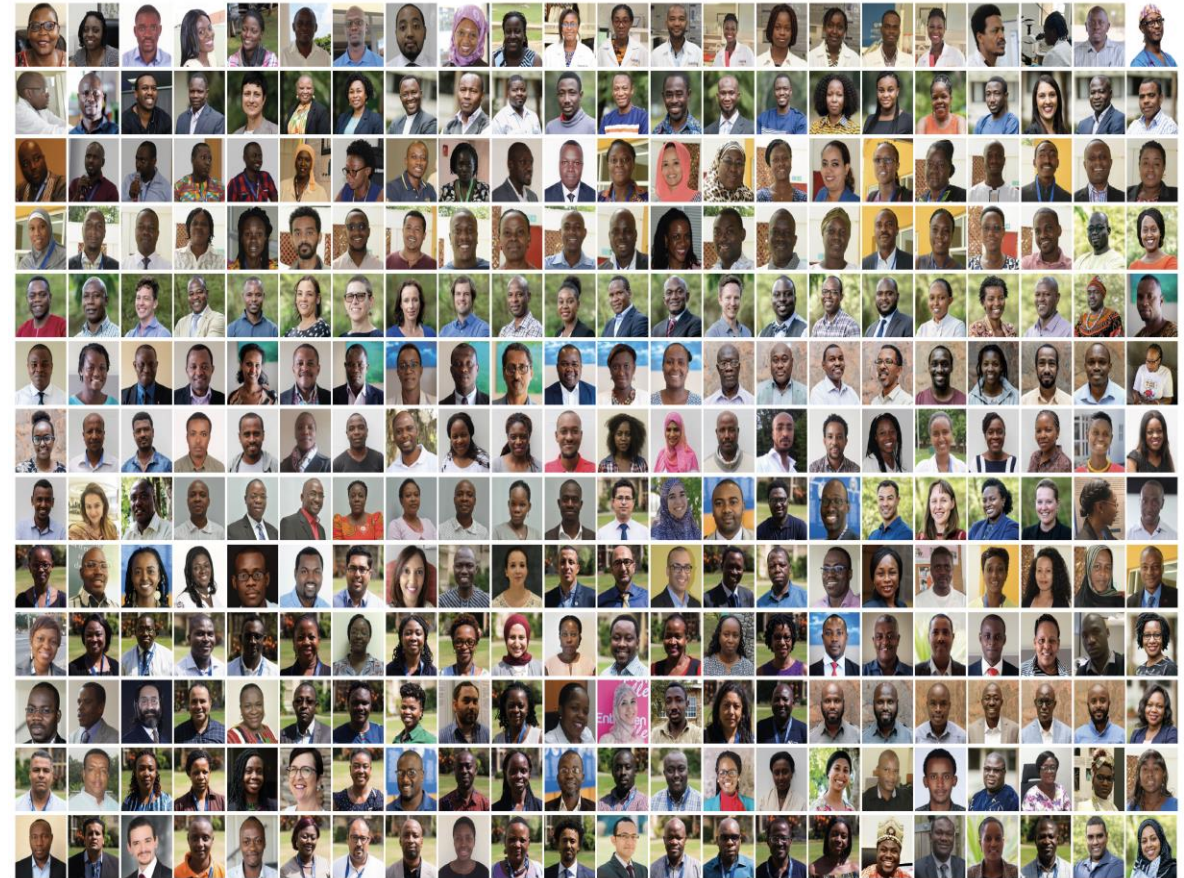
*It is challenging being a researcher in Africa*

- Find funding
- Prepare proposals
- Align your research with funder and/or national priorities
- Address reporting requirements
- Measure and demonstrate uptake
- Manage data & people
- Procure equipment & negotiate with customs for duty exemptions
- Organise budgets, manage finance
- Ensure compliance with regulation
- Oversee ethical control
- Obtain visas for meetings and your collaborators

# The Alliance for Accelerating Excellence in Science in Africa (AESA)

*Shifting the centre of gravity for African science to Africa*

- **AESA Platform** was set up in 2015 by an AU resolution, sponsored by AUDA-NEPAD, hosted by AAS and with support of global partners
- **Agenda setting & scientific prioritization,**
- mobilizing **R&D funding** locally and globally
- Managing continent-wide **Science, Technology & Innovation (STI)** programmes.



# AESA Business Plan 2016-2021 anchored on 4 Goals

*Shifting the centre of gravity of African science to Africa*



# How AESA implements key Science, Technology & Innovation Programmes in Africa

**Build R&D Infrastructure**

**Innovations & Entrepreneurship**

**Rising & Emerging Research Leaders**

**Critical gaps in the R&D ecosystem**



**PROGRAMS**



*DELTA Africa*



*Grand Challenges Africa*



*FLAIR*



*AESA-RISE*



*ReMPro Africa*

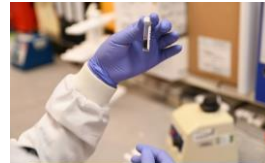


*Community & Public Engagement*

**PLACES**



*H3 Africa*



*Translational sciences with big Biotech & Pharma*



*APTI*



*CR4D*



*Science Communication*



*Science & Language*

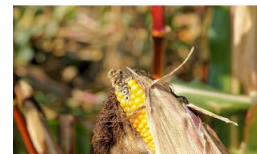
**PEOPLE**



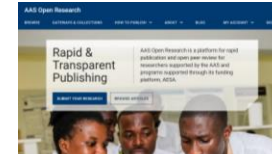
*Africa Scientific Priorities*



*Affiliates*



*CIRLE*



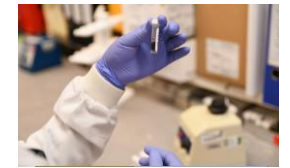
*AAS Open Publishing*



*South-South Africa-India*



*Global Grant community*



*Clinical Trials Community*

**PRODUCTS**

**PRACTICES**

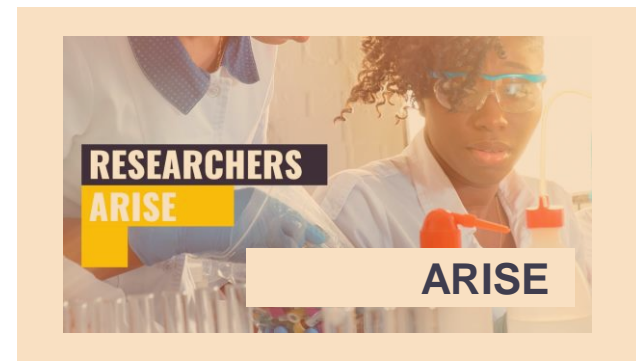
**POLICIES**

**PARTNERSHIP**

# AESA 2.0 DEVELOPING RISING RESEARCH LEADERS

## Programmatic Delivery: Post-Doctoral Programmes and Schemes

- Building rising/emerging research leaders
- Natural, Life, Physical, Chemical, Environmental sciences for early/mid-career fellowships
- Expanding Partnerships: Royal Society, UNECA, FCDO, BMGF, NIH, Carnegie Corporation, European Commission



# AESA 2.0 FILLING CRITICAL GAPS IN SCIENCE

*Programmatic Delivery: Critical Gaps in R&D Ecosystem*



Agenda Setting and  
Scientific Prioritisation



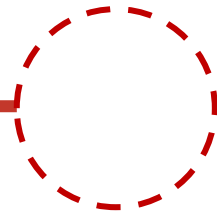
ReMPro Africa  
Research management



GFGP/GGC  
Financial governance



Science  
Communication



Community &  
Public Engagement



Monitoring,  
Evaluation  
& Learning



Policy  
Translation



Expanding  
Partners

# Good Financial Grant Practice

3 components make up the GFGP global grants community platform

Good Financial  
Grant Practice  
(GFGP) Standard  
(ARS 1651)

Portal based  
pre-certification  
to the  
requirements of  
GFGP

Licensed GFGP  
Certification Bodies  
to audit and certify  
compliance

**300+** ORGANIZATIONS  
REGISTERED

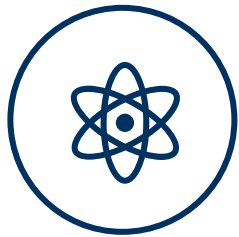
**45** COUNTRIES WHERE  
ORGANIZATIONS ARE  
USING GFGP

**750+** GGC PORTAL USERS



# 10 major achievements

in shifting the centre of gravity of African science to Africa



Increasing **Africa's scientific quality** and **productivity**



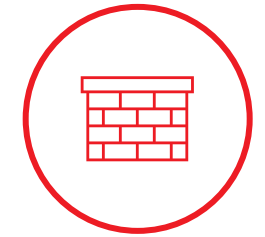
Growing **young African scientists** and supporting women in science



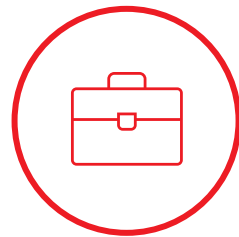
Promoting **equitable partnerships in Africa**



More productive, impactful **intra-African collaborations**



**Funding** new/emerging centers of scientific advancement/excellence in Africa



African science R&D producing **high-value jobs** for Africa



More funding mobilized by AESA and for **various sciences**



**Celebrating** increased science, funding and partnerships



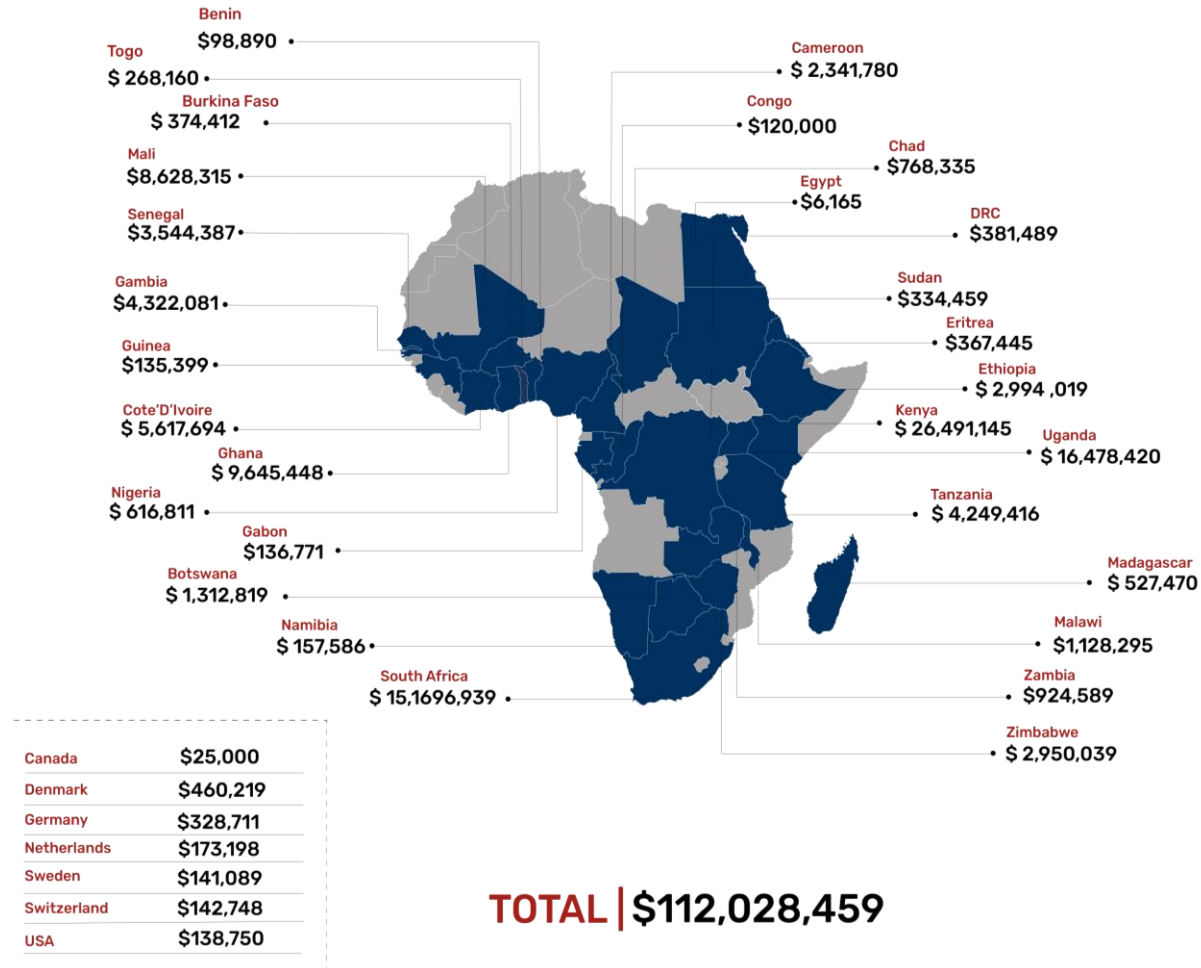
Setting **scientific agenda** and the next big priorities for Africa



Transforming lives by **reaching targets for science R&D** for Africa

# Snapshot of funding mobilized so far

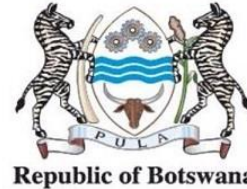
- Through AESA so far agreements of ~US300M, set to reach USD 500M over the next few years. **>70%** of this amount is going **into infectious diseases** (malaria, HIV, TB, NTDs, childhood diseases); less for NCDs, **more needed for pandemics, climate, social, natural sciences**
- But Africa needs to invest hundreds of millions/billions of dollars to build capacity, infrastructure, raise the number of scientists from less than 200 to >1,000 per million inhabitants
- Resources must come from governments, African business, philanthropy through CARI and AUDA-NEPAD (new fund pot that can be tapped/matched with external funds).



# ARISE-PP grants: Highlights

- At least 40 emerging African research talents across 40 African countries.
- A call for proposals open to African researchers, in areas of scientific endeavor that reflect the current African Union (AU) – European Union (EU) research priorities, who demonstrate the capacity to deliver cutting-edge research, selected through a rigorous grant award process.
- The call for applications targets African researchers with 2 to 7 years of experience post-PhD but with considerable and demonstrable research leadership experience.
- Grant awards of up to EUR 500 000 over a period of up to 5 years to start their own independent research team and project.
- A Scientific Advisory Committee, composed of eminent African and European scientists, guarantees the scientific independence and aptness of the initiative.

# Partners Supporting The AAS Programmes





Contact The AAS for more information or to join mailing list

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