



Identifying Priorities for Enhancing Gender in Science in Africa

Outcome Document for the Virtual Experts' Consultative
Roundtable Held on 23 July 2020

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Abbreviations and Acronyms

AAS	African Academy of Sciences
AESA	Alliance for Accelerating Excellence in Science
AU	African Union
AUDA	African Union Development Agency
CESA 16-25	Continental Education Strategy 2016-2025
CSOs	Civil Society Organizations
ICT	Information Communication Technology
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organizations
STEM	Science Technology Engineering and Mathematics
STI	Science Technology and Innovation
SDGs	Sustainable Development Goals
STISA	Science, Technology, Innovation Strategy for Africa
TVET	Technical and Vocational Education
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UN WOMEN	United Nations Women
WEF	World Economic Forum

Glossary of Terms

SEX Refers to a set of biological attributes in humans. It is primarily associated with physical and physiological features including chromosomes, gene expression, hormone levels and function, and reproductive/sexual anatomy usually categorized as female or male.

GENDER Refers to the socially constructed roles, behaviors, expressions and identities of girls, women, boys, men, and gender diverse people. It influences how people perceive themselves and each other, how they act and interact, and the distribution of power and resources in society.

GENDER EQUALITY Refers to equal enjoyment by women and men of socially valued goods, opportunities, resources and rewards. It implies that the interests, needs and priorities of both women and men are taken into consideration, recognizing the diversity of different groups of women and men. Where gender inequality exists, it is generally women who are excluded or disadvantaged in relation to decision-making and access to economic and social resources.

GENDER EQUITY Gender equity is the process of being fair to women and men. To ensure fairness, strategies and measures must often be available to compensate for women's historical and social disadvantages that prevent women and men from otherwise operating on a level playing field. Equity leads to equality.

GENDER PERSPECTIVE Looks at the impact of gender on people's opportunities, social roles and interactions.

WOMEN'S EMPOWERMENT Refers to increasing the personal, political, social or economic strength of individuals and communities. Empowerment of women and girls concerns women and girls gaining power and control over their own lives. It involves awareness-raising, building self-confidence, expansion of choices, increased access to and control over resources and actions to transform the structures and institutions which reinforce and perpetuate gender discrimination and inequality. Focuses on identifying and redressing power imbalances.

GENDER MAINSTREAMING Gender mainstreaming is the process of assessing the implications for girls and boys and men and women of any planned action, including legislation, policies and programmes. It is a strategy for making girls' and women's, as well as boy's and men's, concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes so that girls and boys and women and men benefit equality, and inequality is not perpetuated

INTERSECTIONALITY Intersectionality refers to overlapping social identities and the related systems of oppression, domination and/or discrimination. The idea is that multiple identities intersect to create a whole that is different from the component identities.

Executive Summary

Despite women being over fifty percent of the total global population, they remain grossly underrepresented in science education and subsequently in science careers. In Africa particularly, the situation is quite dire, as women in some countries represent less than fifteen percent (UNESCO, 2017). Gender equity as a principle of development has been identified as an important framework for sustainable development. It has been prioritized in the SDGs (Goal 5) and in AU Agenda 2063 (Goal 17). Aspiration 6 of the AU Agenda 2063 envisions an Africa where development is people driven, relying upon the potential offered by its people, especially its women and youth and caring for children. It also aspires to achieve key continental and global commitments while entrenching the principles enshrined in Article 4 (I) of the AU's Constitutive Act which is the "promotion of gender equality" (AU, 2018). The AU Science, Technology and Innovation Strategy for Africa 2024 (STISA-2024) places science, technology and innovation at the epicenter of Africa's socio-economic development and growth. Despite the recognition of the need to have gender equity in every area of development, the STI pillar of Agenda 2063 and the STISA 2024 are not very clear on the framework for achieving gender equity in the efforts to harness STI for sustainable development in Africa.

Through the Africa Scientific Priority Setting Project, the Alliance for Accelerating Excellence in Science in Africa (AESA) is working with key stakeholders to identify and validate key scientific priorities for the continent. Once identified, AESA will disseminate such priorities with an aim to inform investment decisions by African governments and global funders, support rapid and effective alignment of the African scientific leadership and major funding partners, and ultimately direct resources toward those projects deemed most critical to scientific and development progress in Africa. AESA's engagement in the process of collaboratively

defining the scientific agenda for Africa is aligned to the AAS theme of nurturing excellence as defined in our five-year strategy 2018-2022.

Recognizing the challenges with enhancing gender equity in science, AESA put together a prioritization exercise aimed at gathering diverse experts to define and validate priorities for gender and science in Africa. Participants had an opportunity to identify and rank the gender and STI research priorities for Africa, and recommended programme actions that could be taken up to improve the situation. Participants identified several areas that are considered important research priorities for addressing the lack of gender equity in STI. Some of the priorities that were suggested by the majority of the participants include: Gender conscious funding for STI research and programmes; supporting women's leadership in STI; Gender aware policies in the STI sub-sector; inter-generational transmission of gender bias in STI amongst others.

These priorities will be further interrogated through an in-depth literature synthesis and further consultation with experts in order to develop a concise understanding of the research gaps in gender and STI in Africa and then advocate for action from key stakeholders.

This outcome document captures the proceedings of the expert consultation roundtable held on the 23rd July and a literature synthesis exercise on the status of enhancing gender in science in Africa, and identification of challenges and opportunities for investment within this strategic priority area. AESA is an initiative of the African Academy of Sciences and the African Union Development Agency (AUDA-NEPAD). This document precedes the policy paper that will reflect the consensus of different stakeholders on key priorities to achieve the greatest return on investment in enhancing gender equity in science.



Photo credit: @WACCBIP 2018

Lilly Paemka, a WACCBP/ DELTAS Africa grantee

1.0 Introduction

The Alliance for Accelerating Excellence in Science in Africa (AESAs) is a funding, agenda-setting and programme management initiative created in 2015 through a partnership of the African Academy of Sciences (AAS), the African Union Development Agency (AUDA-NEPAD), founding and funding global partners*, and through a resolution of the summit of African Union Heads of Governments.

The mission of AESA is to shift the centre of gravity for African science to Africa through agenda setting; mobilizing research and development (R&D) funding; and managing continent-wide Science, Technology & Innovation (STI) programmes that promote the brightest minds, strengthen the best possible science environments in Africa, foster scientific excellence, inspire and mentor emerging research leaders, and accelerate and translate research & innovations into products, policies and practices that improve and transform lives in Africa.

The African Academy of Sciences

The African Academy of Sciences (AAS) is a non-aligned, non-political, not-for-profit pan African organisation whose vision is to see transformed lives on the African continent through science. Our tripartite mandate is recognising excellence, providing advisory and think tank functions and implementing key STI programmes addressing Africa's developmental challenges.

African Union Development Agency (AUDA-NEPAD)

The African Union Development Agency (AUDA-NEPAD) is the development agency of the African Union, coordinating and executing priority regional and continental development projects to promote regional integration towards the accelerated realisation of Agenda 2063 – Africa's vision and action plan.

Through the Africa STI (Science Technology and Innovation) Priority Setting Project, AESA seeks to identify and validate key scientific priorities that will guide advocacy for investments towards discovering, developing and delivering game-changing interventions that will transform lives sooner on the African continent.

In 2020, the commitment to validate key scientific priorities for Africa has been a key feature of all the discussions on the AESA strategy. Towards this end, AESA, in collaboration with diverse stakeholders and partners, held the first Virtual Experts Consultative Roundtable on Gender and Science, Technology and Innovation on the 23rd July 2020. This was hosted as part of the science prioritization exercises being conducted under the Africa's Scientific Priorities programme (2019-2023). The programme is a collaborative initiative of the AESA and AUDA/NEPAD aimed at engaging key stakeholders in the process of identifying and validating

scientific priorities for the African continent. This programme is funded by the Bill and Melinda Gates Foundation.

The convening aimed at identifying and weighting the key priority areas on gender and STI. These will be further developed and synthesized for engagement with key stakeholders and aligning with interventions of the African Union towards enhancing gender equity in STI on the continent. They will also guide scientific institutions and partners on critical and priority areas for support. The meeting brought together 58 participants, drawn from eight African countries, as well as other countries like the United Kingdom, United States of America and Canada. Eighty-Six percent were female. The session combined expert presentations and engagement sessions where participants responded to questions via the Menti-platform.

The meeting was hosted by Isayvani Naicker, the Director of Strategy and Partnership at the AAS and moderated by Roseanne Diab, Emeritus Professor at the University of KwaZulu-Natal and the Director of GenderInsite in Africa. Kedest Tesfagiorgis, the Global Partnerships and Grand Challenges team lead at the Bill and Melinda Gates Foundation, delivered the opening remarks. As the convener of the Priority Area in Gender and Science, Roseanne Diab also gave a presentation on the contextual issues around gender, women and science in Africa. The keynote address on “Advancing Gender Equity in STI in Africa: Policy and Practice Perspectives” was delivered by Monica Idinoba,

the Principal Scientific Officer at the African Union Commission. The presentations were interspersed with engagement sessions where participants answered questions relating to the subject matter aimed at identifying priorities and ranking them as well as a question and answer session at the end.

Through the discussion and engagement process, this consultative roundtable was able to identify the main issues affecting gender inclusion in STI, the priorities for action and opportunities for engagement for AAS and other relevant actors. The same will be discussed later in the report. The meeting concluded with closing remarks by Roseanne Diab, Catherine Ngila, the Deputy Vice Chancellor (Academic Affairs) at Riara University, and Chair of the AESA Fellows Working Group on Education and Gender and finally, Tom Kariuki, the Director of Programmes and AESA Platform at the AAS.

The next section provides a brief background of gender and STI in Africa, and a common understanding of the issues of gender, STI and development in Africa. Section 4 presents the priorities for gender and STI based on the presentations and results of the engagement sessions. Section 5 highlights the opportunities for AAS-AESA, African governments, funders, and other key stakeholders in this area, as was identified by the participants. Section 6 provides the conclusion and way forward. Annex 1 provides a brief on the main points brought out during the roundtable presentations.

SUSTAINABLE DEVELOPMENT GOALS



Figure 1: Sustainable development goals: credit.un.org

2.0 STI and Development

The Sustainable Development Goals (SDGs) recognize that STI is a key driver enabling and accelerating the global transformation towards prosperous, inclusive and environmentally sustainable economies in developing and developed countries alike. Goal 9 on infrastructure, industrialization and innovation explicitly mentions the role of fostering innovation and technological progress to promote inclusive and sustainable industrial development. STI is also recognized as a means towards achieving most of the SDGs (UN IATT, 2016).

According to the outcome report of the United Nations Conference on Trade and Development held in Geneva on 2nd and 3rd July 2018, innovation has always played a fundamental part in economic development. In the long-term, growth in incomes is determined by changes in productivity that are closely linked to technological progress and innovation. Even in the medium and short term, considerable benefits are achievable by adopting modern technologies and innovative practices. Access to information and communications technologies (ICTs), for example, is improving the quality of life in the most remote areas of the world by enabling people to communicate, learn and run their businesses more effectively. Biotechnology and precision farming – enabled by technologies such as geolocation, drones, smart sensors and cloud computing – can improve yields and farmers' livelihoods in regions challenged by adverse climatic conditions. Renewable energy technologies are diffusing at an impressive pace and provide broader access to electricity, which is a prerequisite for productive upgrading and a means to deliver on many other development targets in areas such as health, gender or education. Environmental technologies help tackle harmful emissions and improve energy efficiency in manufacturing sectors (UNCTAD, 2018). Science, Technology and Innovation are by all means key drivers to development the world over.

Closer home, the African Union too has acknowledged the central place of STI in development. The AU Science, Technology and Innovation Strategy for Africa 2024 (STISA-2024) places science, technology and innovation at the epicenter of Africa's socio-economic development and growth. The STISA-2024 is the first of the ten-year incremental phasing strategies to respond to the demand for science, technology and innovation to impact across critical sectors such as agriculture, energy, environment, health, infrastructure development, mining, security and water among others. The mission of STISA-2024 is to "Accelerate Africa's transition to an innovation-led, Knowledge-based Economy". This will be achieved by: 1) Improving STI readiness in Africa in terms of infrastructure, professional and technical competence, and entrepreneurial capacity; and 2) Implementing specific policies and programmes in science, technology and innovation that address societal needs in a holistic and sustainable way.

The strategy is anchored on six distinct priority areas that contribute to the achievement of the AU Vision. These priority areas are: Eradication of Hunger and Achieving Food Security; Prevention and Control of Diseases; Communication (Physical and Intellectual Mobility); Protection of our Space; Live Together - Build the Society; and Wealth Creation. The strategy further defines four mutually reinforcing pillars which are prerequisite conditions for its success. These pillars are building and/or upgrading research infrastructures; enhancing professional and technical competencies; promoting entrepreneurship and innovation; and providing an enabling environment for STI development in the African continent. Continental, regional and national programmes will be designed, implemented and synchronized to ensure that their strategic orientations and pillars are mutually reinforcing, and achieve the envisaged developmental impact as effectively as possible (AUC, 2014).

The AU Science, Technology and Innovation Strategy for Africa 2024 (STISA-2024) priority areas:



3.0 Gender and STI in Africa

Despite the central role that STI plays in development, the persistent state of gender inequality and inequity in STI is quite alarming. Persistent gender inequality and inequity severely limits women from achieving their potential and effectively contributing to development. The 2015 United Nations Educational, Scientific and Cultural Organization (UNESCO) report reveals that though women comprise over 50% of the total global population, they account for only about 29% of scientific researchers globally and are outnumbered by men as students, educators, researchers and workers in STEM fields (UNESCO, 2015). The report also finds that women are better represented in some disciplines like health, agriculture and environmental management, but are a minority in other disciplines like energy, engineering, transportation, information technology and computing (ibid).

In Sub-Saharan Africa, women account for 30 percent of researchers, though some countries have a better record than others. As at 2013, South Africa and Egypt were the two countries achieving close to gender parity, with women accounting for 43.7 percent and 42.8 percent respectively (UNESCO, 2015). The question about gender and STI however, goes beyond just looking at participation of women and men in STI professions, it is also about looking at the extent to which STI is bringing solutions for women and men in their day-to-day lives as agents of development. For example, women account for over 70 percent of the labour force in agriculture in Africa, solutions and innovations that would improve their productivity are not only vital for food security for the continent but would also contribute to improving the incomes of women. Technologies that improve access to safe drinking water closer to the home, reduce the time burden women face looking for water in most of rural Africa. These are examples of how an integrated

framework of STI and development through a gendered lens would result in better outcomes for all (UNESCO, 2018).

For STI to be gender responsive, there is a need for more women in leadership not only at policy level, but also in STI research. Women's voices need to be represented throughout the STI value chain from education, policy, production of scientific solutions and use of these solutions. Addressing the gender gaps in STI is therefore a development imperative for Africa, as it works towards promoting sustainable development that ensures large numbers of the population can escape poverty into productive engagement.

Participants at the experts' roundtable identified various research gaps in gender and STI. From the discussion, it was evident that the challenges of promoting gender equity in STI in Africa will have to be a multi-faceted approach involving all the stakeholders. In addition, it will require an understanding of the social, cultural, political and economic factors that affect gender equity in STI, with a critical understanding of the policy and institutional arrangements and how these interface with the life cycle of girls and boys, men and women. Understanding the challenges from this multi-dimensional lens, necessitates a deliberate, intensive and innovative research agenda that is able to peel off the real issues and bring to the fore the nuances that characterize thinking on this subject. Some of the research gaps identified included:

- a. Unconscious Bias - Unconscious biases, also known as implicit biases, are the underlying attitudes and stereotypes that people unconsciously attribute to another person or group of people that affect how they understand and engage with that person or group (Reiners, 2020). Women in STI have been victims of

Research gaps in Gender and STI in Africa-Chart

- Unconscious Bias
- Gender roles and attitudes and the transmission of these from the private sphere to the public sphere
- Gender sensitive workplace policies
- Affirmative action for women and girls
- Promoting the participation of girls and women in STI Education
- Gender digital divide
- Intergenerational transmission of gender inequity in STI



unconscious bias, in validating their capabilities and competencies; in accessing opportunities and promotions and even in justifying their place in the fields they are involved. The common adage that women have to work twice as hard to get half the recognition, has played out very prominently in STI not only in Africa but also across the world. There is need for further research in this and other areas to enable understanding on the scale, scope, types and drivers of unconscious biases.

- b. Gender roles and attitudes and the transmission of these from the private sphere to the public sphere. Closely associated to the point above, women face the double jeopardy of the need to prove their capability as competent scientists in the workplace and competency in undertaking their gender care roles in the home. The pressure to perform outstandingly in both the private and public sphere places a strain on women in STI. In instances where one of the two spheres faces a setback due to demands in the other, women are faced with the option of abandoning one over the other. Research based on “life-span” theory has shown that during their reproductive years, women tend to take a back seat in their careers and as such, whilst the men climb the career ladder steadily, women’s career path is nothing close to a linear progression, it involves starts and stops, and in some instances even retrogression (Stevens et al, 2006).
- c. Gender sensitive workplace policies (work-life balance, equal-pay for equal-work, zero tolerance to workplace gender-based violence etc). How women and men engage in the workplace is important in how they express their skills and knowledge. Workplace policies should be able to protect men and women equally from any form of discrimination and accord them the opportunities to fully express their skills and talents while allowing them to grow and progress. For the workplace to be an equal playing field, there is need for policies that balance the realities of gender roles and the differentiated gender power balance. To develop appropriate policies, there is need for a clear understanding on issues and the most effective tools for addressing the same.
- d. Affirmative action for women and girls – As has been mentioned in the previous section, studies have shown that women and girls are grossly underrepresented in STI. Drilling down to the factors that result in this situation, it is evident that there are very many social, cultural and economic factors that are contributory. Some of these factors don’t have a single bullet solution and may take time to resolve. In the meantime, therefore, there is a case for instituting affirmative action measures to elevate women and girls. Affirmative action includes lifting up socially disadvantaged groups by employing preferential and supporting measures to enable them participate on an equal playing field with the others. Their goal is to counter deeply entrenched social practices that reproduce group-structured inequality even in the absence of intentional discrimination (Sabbagh, 2004). Affirmative action is a science, that requires well thought out solutions informed by research.
- e. Promoting the participation of girls and women in STI Education (enrolment, retention, transition and funding) – there is need for up to date data and information on the participation of women and girls in STI and the factors that limit their effective participation. The low participation rate of women in STI careers, is a transmission result of low participation of girls in STI courses. As such understanding the data, and the drivers is paramount in developing the most effective responses to the same.
- f. Gender digital divide – Digital transformation is a phenomenon that has been felt the world over. It includes the effects that economies and societies experience as a result of digitization and the use of interconnected digital technologies and data. Digital transformation is offering new opportunities across the world, and holds promises for enhanced productivity growth and improved well-being of all citizens. As with other development indicators, there is evidence of a significant gender gap in the access, use and ownership of digital technologies that is evident all over the world, but more prevalent in Africa. This if allowed to continue will greatly limit the equitable realization of the benefits of digital transformation, with detrimental results (OECD, 2018).
- g. Intergenerational transmission of gender inequity in STI – As women face discrimination in STI, there’s a backward transmission of this to young girls. Girls need to see and experience more women in STI, women who are champions and are celebrated for their scientific breakthroughs in research and innovation. They need to see more women professionals in science fields. This creates a new reality for them in their sub-conscious that science is also for women and women can make it in STI fields. To break the cycle of low participation, women in STI need to encourage and mentor the next generation of women in STI.

4.0 Priorities for Enhancing Gender in STI in Africa

Various studies recommend mainstreaming gender into STI policies and strategies by promoting access for women and girls to STI education, establishing collaborative and mentoring programmes, improving conditions for recruiting and retaining women in STI careers among other interventions. Enhancing gender in STI is a step forward in supporting African policy makers, governments, funding partners and scientific community in prioritizing STI interventions that will increase opportunities for enhancing gender equity while also achieving the sustainable development goals. Recognizing the gaps mentioned in the section above, the experts attending the roundtable identified some priority areas for aligning research with policies and strategies of the African Union. These preliminary priority areas have been summarized and categorized as follows:

- a. Supporting intersectionality research – To effectively respond to the issues of gender inequality and inequity in STI, there is need to understand the gender issues in society. Intersectionality research will enable the understanding of the socially constructed dimensions of difference and how they impact the participation of women and men; as well as boys and girls in STI. There's need to appreciate that gender is not encapsulated in a static definition, the contours of the same are constantly being shaped by the evolution of societies. These researches will be very critical in ensuring that policies and programmes are relevant and responsive to the real situation. This will also be useful in developing strategies for tackling unconscious bias.
- b. Funding – As a priority area, funding is a foundational requirement for any intervention. Funding will be critical for fulfilling policy commitments through the implementation of programmes. However, there is another aspect of funding, which is aimed at directing attention to an area. When there is funding for particular areas of research, or funding for particular categories of researchers, it draws attention to those research areas or those groups of researchers. Therefore, funding can give prominence to women researchers and or (no/) to research areas that would promote gender conscious development.
- c. Promoting gender equity along the STI pipeline – girls in STI will result in women in STI. There are many factors that hinder girls from effectively participating in STI. These factors need to be addressed as well as addressing the factors that limit and discriminate against women later on in their careers. An integrated life cycle approach should be employed in understanding and eventually addressing these issues. Interventions cannot just be targeted at one level without the others as this will not sustainably resolve the situation.
- d. Promoting women's leadership in STI – As was suggested by one of the panelists, one of the main reasons why the issues of gender equality and equity are not being adequately addressed is because women are not at the decision-making table. There are very few women in leadership in STI, resulting in skewed and biased decisions. Getting women onto the decision-making table as leaders is an agenda that needs to be pursued deliberately. Programmes that promote women scientists, build their capacity in leadership will be important for achieving this. As more women make it to prominence in STI, they will also serve as role models for the younger generation, serving to motivate girls into STI pathways.
- e. Promoting continental, national and institutional policies that promote gender equity in STI – Policies and institutional frameworks that promote gender equality and equity in STI need to be instituted at both the micro level and the macro level. STI institutions, national governments and the continental organization all require a policy shift and institutional adjustment to address the challenges that have been identified in the previous sections.
- f. Interventions to address the gender digital divide
- g. Mentorship and Role modelling to address the intergenerational transmission of gender inequity in STI.



Priorities for enhancing Gender and Science in Africa

- Supporting intersectional research
- Funding
- Promoting gender equity along the STI pipeline
- Promoting women's leadership in STI
- Promoting continental, national and institutional policies that promote gender equity in STI
- Interventions to address the gender digital divide
- Mentorship and Role modelling

5.0 Opportunities for engagement in Gender and STI in Africa

The situation on gender and STI in Africa will require concerted action by all stakeholders to address. It not only limits the potential of women in STI, but also compromises the great value that can be achieved for society when men and women, boys and girls are not engaged optimally in STI. There is therefore an imperative for action to address the situation, as it has broad based implication for the development of the continent.

To understand the opportunities for engagement there is need for collaboration, research and involvement of all stakeholders, as well as an understanding of the development process on the continent. Understanding development and the drivers of development will have to be within the understanding of unique country contexts and local realities. Participants emphasized that there was need to have those affected playing a central role in defining the problem and identifying solutions based on their experiences. It would be sub-optimal to design programmes aimed at increasing girl's enrolment in STI subjects without first engaging them to understand what the challenges and barriers are, that hinder them from enrolling in the same. Participants also identified that interventions also need to be anchored within the existing policy and institutional context. This will provide the necessary impetus for galvanizing buy-in from the leadership. In addition, finding resources to support implementation of interventions is much easier where interventions are anchored in existing frameworks,

therefore increasing the chances of successful implementation.

Consideration should be made on which stakeholders to engage and how to engage them. An analysis of the influence versus interest profile of the stakeholders is useful in understanding the scope, type and importance of engagement. Some of the stakeholders are so critical that if they are not brought on board, the chances of success of an intervention are greatly compromised. The participants identified some of the critical stakeholders for this agenda as: AUDA/NEPAD and the AUC relevant divisions; African universities; Regional Economic Commissions; African women scientists; global and regional science research funders; UN-ESCO and other relevant UN agencies; development partners; AU member states STI agencies; AU and member's states policy makers amongst others.

The opportunities for engagement that were identified by participants can be summarized into three broad categories which include: the need for collaboration; strengthening the relationship between research and policy; and funding for programmes that amplify the role of women in STI. Specifically, participants recommended the following:

- i. Building a collaborative network for female African researchers that supports conversations between the scientific community and decision-makers.

Opportunities for engagement in Gender and STI in Africa



Building a collaborative network for female African researchers that supports conversations between the scientific community and decision-makers.



Support for research, advocacy and awareness creation campaigns that address gender biases and inequalities in access to opportunities in STI with a focus on gender norms at places of work, institutions and research fields.



Implementing programmes that promote girls' and women's enrollment in STI courses at every level including technical, graduate, post-graduate and research levels with no age restrictions.



Providing funding for women to undertake STI education, research and implementation of STI projects.




Support entrepreneurship programmes led by women scientists and researchers advancing creation of green jobs.



Programmes addressing the gender digital divide



Programmes supporting review of policies and institutional frameworks that support gender equity in STI at the AUC, Members States and institutional levels.

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- ii. Support for research, advocacy and awareness creation campaigns that address gender biases and inequalities in access to opportunities in STI with a focus on gender norms at places of work, institutions and research fields.
 - iii. Implementing programmes that promote girls' and women's enrollment in STI courses at every level including technical, graduate, post-graduate and research levels with no age restriction.
 - iv. Providing funding for women to undertake STI education, research and implementation of STI projects.
 - v. Support entrepreneurship programmes led by women scientists and researchers advancing creation of green jobs.
 - vi. Programmes addressing the gender digital divide
 - vii. Programmes supporting review of policies and institutional frameworks that support gender equity in STI at the AUC, Members States and institutional levels.

6.0 Conclusion and Way Forward

The question of gender equity in STI, is a fundamental question in the development narrative of Africa. As the continent charts a sustainable path towards economic prosperity and human development, the place of science, technology and innovation cannot be denied. It has been evidenced that a development trajectory that leaves a section of the population behind, is not sustainable and results in various other challenges and limitations along its path. Gender equality and equity is fundamental for development and as such, as the continent makes advances in STI, gender inclusion and mainstreaming needs to take center stage.

The experts' roundtable provided an initial conversation on the issues surrounding gender equality and equity in STI in Africa. It was emphasized that the problem of gender equity is not about women only, but it is about women and men and the power balance and social norms that discriminate against one gender over the other. In the case of STI, women have been disenfranchised, and left out as the wheel of STI has continued to evolve. As such, both men and women will have to be engaged in resolving this situation.

The roundtable identified the research gaps and some of the priority areas that need to be pursued to address this prevailing gender discrimination. From the discussion, it was evident that any interventions would need to employ a life cycle approach in understanding, the challenges, opportu-

nities and solutions. All relevant stakeholders need to be engaged, and particularly those who are most affected to understand their context. Funding emerged as the highest priority. It would make sense to have funding as a high priority, because every intervention will require funding. Allocation of funding determines the level of success of any intervention. This was followed by promoting women's leadership in STI; development of appropriate policies at macro and micro levels; addressing the gender digital divide in the continent; and addressing the inter-generational transmission of gender inequity in STI. This is by no means an exhaustive list but provides a useful starting point for further interrogating the issues at hand.

Following the successful conclusion of the experts' roundtable, a subsequent process of priority setting, and weighting will be pursued. An in-depth synthesis will be undertaken to further refine the selection of the priority areas and elaborate on the opportunities for investments. A draft policy paper that captures these components will be developed and will be discussed at a second experts' roundtable. A steering committee will be established to guide and inform the development of the policy paper and review the progress made in different stages of the same. A policy brief will then be shared with various stakeholders as a call to action and to inform resource mobilization to address these research priorities.



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5. Catherine Ngila, Riara University
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8. Deborah Fay Ndlovu, African Academy of Sciences
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11. Elizabeth Marincola, The African Academy of Sciences
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14. Grace Ndeke, Egerton university
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38. Sonali Das, University of Pretoria
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41. Susan Chomba, ICRAF
42. Tana Joseph, AstroComms
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Suggested citation:

AESA (2020) *Identifying Priorities for Enhancing Gender in Science in Africa; Outcome Document for the Virtual Experts' Consultative Roundtable Held on 23 July 2020*. Nairobi: Alliance for Accelerating Excellence in Science in Africa.

About the Africa Scientific Priority Setting Programme

This outcome document is part of the outputs of the science prioritisation exercises being conducted by the African Academy of Sciences under the Empowering Africa Empowering African Ownership Research and Innovation programme (2019-2023). The programme is a collaborative initiative of the AAS in collaboration with AUDA-NEPAD through its programme AESA aimed at engaging key stakeholders in the process of identifying and validating scientific priorities for the African continent. Guided by the SDGs, Africa's Agenda 2063 and STISA 2024, scientific priorities for the continent will be identified and disseminated with the aim to inform investment decisions of major actors including African governments, funders, science leaders and other stakeholders to ensure that resources are directed at the critical gaps identified for the continent. This programme is funded by the Bill and Melinda Gates Foundation.

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