African Union
Scientific Technical Research Commission

African Scientific
Research and
Innovation Council

Report on the Programmes, Projects and Activities of the African Union Scientific Technical and Research Commission (AU-STRC) and the African Scientific Research and Innovation (ASRIC)

2021 - 2025

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(AU-STRC) and the African Scientific Research and Innovation (ASRIC)

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This report provides an overview of the programmes, projects, and activities undertaken by the African Union Scientific Technical and Research Commission (AU-STRC) and the African Scientific Research and Innovation Council (ASRIC) in fulfilling their mandate in alignment with the AU's Agenda 2063 and the Science, Technology and Innovation Strategy for Africa (STISA-2024 towards the advancement of science, technology, and innovation (STI) in Africa including research coordination, capacity building, and policy support..

This report is structured in three main parts:

Part A is a comprehensive report on the programmes, projects, and activities undertaken by the African Union Scientific Technical and Research Commission (AU-STRC)

Part B is a comprehensive report on the programmes, projects, and activities undertaken by the African Scientific Research and Innovation Council (ASRIC)

Part C higlights the challenges face in implementation of the AU-STRC and ASRIC and concludes the report.

African Union
Scientific Technical Research Commission

A

AU-STRC REPORT ON THE PROGRAMMES, PROJECTS AND ACTIVITIES 2021 - 2025

Introduction

The African Union Scientific, Technical and Research commission (AU-STRC) is a specialized institution of the African Union with a long history founded in 1954, the AUSTRC has been at the vanguard of promotion of science and technology in the past 7 decades at continental level. The AU-STRC was integrated into then Department of Human Resources Science and Technology (HRST), today the Department of Education Science Technology and Innovation (ESTI).

In ther AUC's strategic plan, the AU-STRC is designed to spearhead the role of science, technology and research in the integration, cooperation and development priority pillars. Areas of priority action include the promotion of research in all fields of science, training to build African capacity to address emerging R&D and I. The AU-STRC is also mandated to formulate science and technology policy and to build the capacity of the decision makers in science and technology. The AU-STRC's programmes and projects are largely guided by the Science, Technology and Innovation Strategy for Africa (STISA-2024).

In furtherance, the African Union Executive Council Decision 2014 (EX.CL/DEC. 747(XXII)) on the establishment of the African Scientific, Research and Innovation Council (ASRIC) allocated the ASRIC Secretariat to be hosted by the AU-STRC (Article 8 para 1 of the ASRIC Statute "AU-STRC shall be the secretariat of the ASRIC").

During the reporting period the following programmes and projects were conducted:

1) African Union Network of Sciences (AUNS)

In accordance with the Article 7 (II) (d) of ASRIC Statute - "support and promote the establishment of pan African platforms connecting institutions networks, and other actors to strengthen synergies and scientific knowledge exchange", the African Union Network of Sciences (AUNS) is mandatory to be established and to be recognized as an ASRIC flagship project.

AUNS is a virtual network and platform where African scientists within Africa and Diaspora can interact, cooperate, exchange information/knowledge and complement one another in research and academic work. This involves a wide range of individuals working together to address African science and technology development challenges and help the ASRIC to achieve its mandate. AUNS is an innovative way to enhance brain circulation and bridge the gap between African based Scientists and those in the Diaspora.

The establishment of AUNS has four phases including portal development. First phase, was the development of the database of scientists is a continuous process that has grown to over 12,000 scientists, from across the continent and the Diaspora. The second phase is the development of the Network portal, modules, data base and digital library. The third phase is the functionalization and publicity of the Network. The fourth phase is a continuous improvement and sustainability of the network. The development and functional of AUNS was hindered by the lack of resources that allocated by the African Union to ASRIC.

2) Merck Africa Research Summit (MARS)

Since 2015, the AU-STRC co-organizes with Merck international and Merck Foundation, the "Merck Africa Research Summit", the summit aims at the building the STEM capacity of African females. It is an annual event that attracts over 200 scientists from the AU Member States providing an opportunity for young career Scientists to present their research and research

findings to internationally recognized scientists and researchers who are drawn from world leading universities and Nobel Laureates Scientists.

On the other hand, the summit attracts policy makers at different levels including Head of States, Ministers, Parliamentarians with whom the young Scientists were in position to discuss and address their challenges and aspirations.

3) Africa Engineering Science Capacity Building

The AU-STRC, in collaboration with the Egyptian Engineering Syndicate and Schneider Electric Egypt, developed a Capacity Building Programme for Young African Electrical Engineers. The programme combines theoretical lectures, laboratory practicals, industrial visits, and mentorship opportunities. The inaugural training batch was launched in 2017. However, the initiative is currently facing financial constraints that hinder its expansion to other AU Member States. In response, the AU-STRC and the Egyptian Engineering Syndicate are actively working together to mobilize resources to ensure the programme reaches and benefits more young African engineers across the continent.

4) AU Green Innovation Framework

The AU Green Innovation Framework (AU-GIF) was developed by the AU-STRC, the Framework aimed at galvanizing the efforts of African Union member states to enhance societal and economic resilience to environmental pressures, promote efficient use of natural resources thereby to realize Agenda 2063 aspirations. In addition, the AU-GIF serves as a guide for African Union Member States towards a path of economic prosperity through sustainable technological, industrial and to build a system of green innovation.

This framework was developed to address the policy gaps in most of the AU member states which were highlighted from the findings of an internal study where the results showed that few of the the Member States have green innovation policies while others have it embedded in their Science and Technology policies.

5) India Africa Health Research Collaboration

Guided by the Assembly Decisions on the South-South cooperation and guided by the India Africa Partnership, a Memorandum of Understanding (MoU) was signed between the AU-STRC and the Indian Council of Medical Research (ICMR) on 27th March, 2019 in India.

Three priority areas were identified under this MoU:

1. Priority area one: Training and Capacity Building of Health and Medical practitioners
2. Priority area two: Health Sciences Research grant scheme
3. Priority area three: Pharmaceutical Trade and Manufacturing

In priority area one since 2019 about 150 scientists have been trained annually in the areas of molecular biology, biostatistics and health research, principles and practices of epidemiology among others. In priority area two a conceputalization for a grant with 6 million USD envelope was set in place. While for priority three, a joint working group was set to identify the capacity

building and training requirements of African drug regulators on regulatory standards, procedures; control; testing; documentary needs; management; licensing of drugs; biologicals and manufacturing; Intellectual Property Rights concepts, rules and procedures with the ultimate goal to harmonize clincial trail approvals and conduct joint clinical trials and exhibitions (SOUK) and India-Africa pharma-week.

By the end of the year 2022 the STRC reported to the Departments of ESTI and HRMD concerning the dire shortage of staff, accordingly the programme was halted.

6) Africa Environmental Society (AES)

The AU-STRC, in collaboration with the Nigerian Environmental Society has proposed the creation of the African Environmental Society (AES) in order to support the implementation of environmental policies in aligned with Africa's climate and sustainability goals and to address the continent's vulnerability to the climate change. The AES when established will serve as a continental scientific body and environmental ombudsman, and will build a network of experts and agencies to provide independent, evidence-based guidance. AES will support the development and coordination of environmental policies and establish an environmental information observatory network in partnership with AU Member States thereby working closely with national environment agencies, ministries and focal points.

A draft statute was developed and sent to the AU-STRC database for information and contribution. By October 2025 a launching meeting is foreseen to take place in Abuja, Nigeria, on the condition that seven (7) associations to sign the AES statute. The AU-STRC database is composed of 200 African societies and associations.

African Scientific Research and Innovation Council

B

ASRIC REPORT ON THE PROGRAMMES, PROJECTS AND ACTIVITIES 2021 - 2025

Introduction

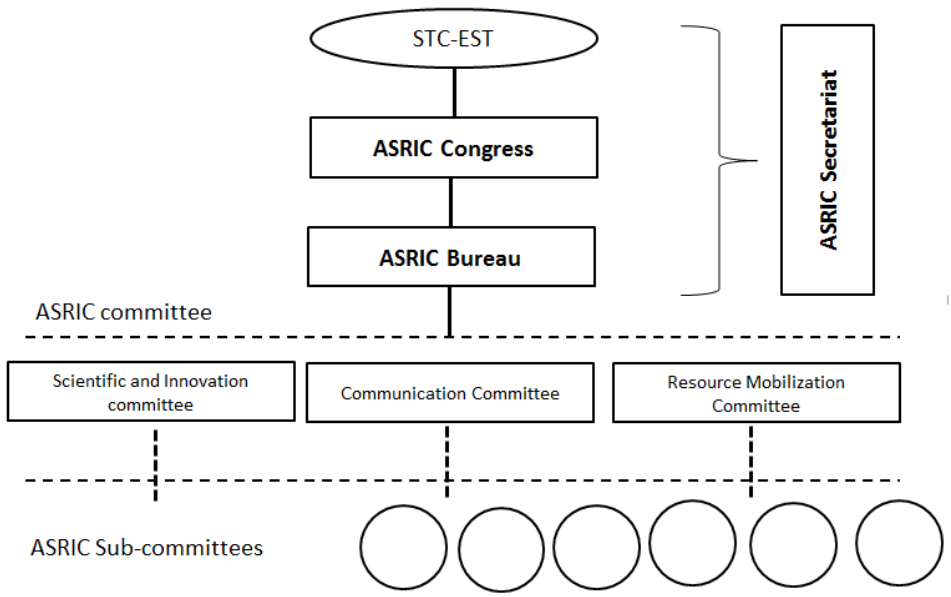
The African Scientific, Research and Innovation Council (ASRIC) was established by the African Union Executive Council Decision 2014 (EX.CL/DEC. 747(XXII)) and launched in 2018 as a Specialized Technical Advisory Body to the Union and its Commission. The objective of the ASRIC is to promote scientific research and innovation to address the challenges of Africa's socio-economic development. Its mandate as a continental platform is to mobilize African research excellence for dialogue, serve as the voice of the scientific community, and build and sustain the continental research and policy nexus.

The endorsement of the ASRIC Statute by the Executive Council paved the way for the establishment and operationalization of ASRIC and its governance bodies. The operationalization process began with the formation of its governance structure, followed by the development and endorsement of ASRIC's Rules of Procedure.

In accordance with Article 5 of the ASRIC Statute the governance mechanisms of the ASRIC shall comprise of:

a) The Congress;
b) The Bureau of the Congress; and
c) The Secretariat.

The ASRIC organogram is presented in the figure below.



I) ASRIC Governance Related Activities

Under governance, the following activities are to be reported.

1) ASRIC Congress

ASRIC Congress is the apex decision-making body of the ASRIC with 55 voting members which discusses matters related to the ASRIC Flagship Projects and programmes. Since inception, the ASRIC has successfully conducted six Congresses as follows: in 2018 and 2019, the Congress

was held in Abuja, Nigeria; in 2020 was held virtually due the COVID pandemic; and in 2021 and 2022, the Congress was held in Nairobi, Kenya and Mombasa, Kenya respectively. The 2023 ASRIC congress was conducted in Rabat, Morocco and that of 2024 was conducted in Zanzibar, Tanzania.

During the Congress sessions keynote speeches that focus on the Congress theme are presented, reports from working Committees, reports from principal investigators of the ASRIC flagship projects and Diaspora Committees were presented and discussed by the Congress among other procedures and legislative issues. The Congresses resulted in several communiques that reflect the output and recommendations of each congress.

2) ASRIC Bureau

Since the establishment of ASRIC, the Bureau conducted nine ordinary sessions and five extra ordinary sessions among of which four extra ordinary sessions were held during the COVID pandemic which led to STI interventions to protect the African populace from the pandemic and support the work done by Africa CDC in this endeavor. The Bureau meetings generally, aimed at the development of ASRIC Strategic documents such as the ASRIC Strategic Plan 2023-2028, ASRIC Resource Mobilization Strategy, ASRIC Flagship Projects and Programmes guidelines, modalities and processes to identify and recognize ASRIC centers of excellence within Africa. The Bureau also addressed the issues related international cooperation and intra Africa research networks and joint projects/modalities.

3) ASRIC Committees

Three main committees were established to help the vice chairs in their thematic areas. These committees are: Science and Innovation Committee; Communication Committee; and a committee on Resource Mobilization. These committees since the establishment of ASRIC are active and considered to be the thinktank of ASRIC in their respective fields. The committee's membership is extended beyond the voting members of the congress where African scientists with strong background in each of the thematic areas were welcomed to join the committees.

4) ASRIC Ad-hoc Committees

Since the establishment of ASRIC about 20 ad-hoc committees were constituted to serve a purpose that is allocated to them by the Congress and/or the Bureau. The largest number of such ad-hoc committees were put in place during the covid pandemic to serve as thinktank and resources for supporting the AU interventions to COVID-19.

Consequently, ASRIC mobilized its Scientists to address challenges experienced by Member States during the COVID-19 outbreak in 2020. This effort attracted over 200 African Scientists who volunteered their services to ASRIC and supported ASRIC innovative approaches tackle Africa's challenges. In response to the global pandemic, ASRIC's intervention in tackling COVID-19 was established through the formation of the following ad-hoc committees and working groups:

- The ASRIC Advisory Board Members on STI Intervention for COVID-19
- The ASRIC IP Taskforce on the Development of IP protection in Joint Research and Collaboration during Outbreaks

- The ASRIC Taskforce on Mapping Out R&D Interventions to COVID-19
- The ASRIC Working Group on Africa's Indigenous Knowledge to Preventing and Controlling Emerging Infectious Diseases on the Continent like COVID-19: Utilizing an Afro-centric Response
- The ASRIC Working Group on Socioeconomic Impact of COVID-19 on Africa
- The ASRIC Working Group Members to Study the Impact of COVID-19 on Africa's Food and Nutritional Security
    i. TASKFORCE 1: Food and nutrition security in light of COVID-19 pandemic and Beyond "Situational analysis on the food and nutritional security in Africa".
    ii. TASKFORCE 2: Identification and review of guidelines for in-country and trans-boundary movements of food and Agro-products
    iii. TASKFORCE 3: Mitigating the Impact of COVID-19 Pandemic on Components of Africa's food Systems "Examining the consequences of Covid-19 Africa's Food systems".
    iv. TASK FORCE 4: Promotion and Domestication of Agribusiness and Product Development Opportunities in the realm of STI.
    v. TASKFORCE 5: Capacity Audit on Continental Research and Training Responsiveness to Uncertainties in Food, Nutrition Security and Sustainable Agriculture
    vi. TASKFORCE 6: Enabling environment "Develop policy brief and policy guidelines to address the current and future (similar) challenges to food and nutrition security (FNS) in Africa through advocacy and sensitization campaigns".

5) ASRIC Diaspora Chapter

In accordance with Article 6 (3) of the ASRIC Statute, the Congress established three Diaspora Chapters namely: the ASRIC UK Diaspora Chapter, the ASRIC Australia Diaspora Chapter and the ASRIC North American Diaspora Chapter.

The ASRIC Secretariat organized a series of workshops for the ASRIC UK and Australia Chapters, in which scientists from different fields as well as stakeholders whose countries of origin are in Africa including university professors, scientists, a former adviser to the prime minister of UK, entrepreneurs and businessmen and women participated. After the meetings a Diaspora framework for engagement was developed which contained the following:

- Setting Up and Developing a Database for Diaspora
- Envisage the possibility to setup Africans in Diaspora Engagement Fund and explore scholarship opportunities for Africans.
- Developing strategic partnership with international STI Research Councils such as the Black British Science Research Council, Education and Scientific Research Council, Natural Environment Research Council, Medical Research Council and similar international agencies
- Capacity Building Programme including mentoring
- Developing strategic partnership with international STI research institutions in Australia and UK
- Staff and student mobility scheme
- Home visiting programmes for senior chairs and academics

- Research partnership with institutions abroad
- Building strategic alliance with international agencies in Australia

In 2023, The ASRIC UK Chapter organized the Forum of Africa Research in Diaspora (FARID) which was participated by 150 African scientists based in UK to advocate for the Chapter and its good cause. On the other hand, the ASRIC Australia Diaspora Chapter is exploring the possibilities to establish a pioneer center for Africa's studies. Currently ASRIC is in engagement with the three Chapters to organize Diaspora Africa Science Dialogue Conference that to be held on 2026.

II) ASRIC Enabling Environment

The enabling environment covers institutional arrangements, by-laws for ASRIC that's to ensure ASRIC attends to its mandate to the level that is expected by the stakeholders and partners:

The ASRIC Statute was adopted by the Twenty Sixth Ordinary Session of the Assembly of the African Union held in Addis Ababa, Ethiopia on 31st January 2016. The Statute paved the way for the establishment and operationalization of the ASRIC and its governance bodies. Accordingly, the ASRIC Rules of Procedure were developed as the guiding principles on the conduct of the governance and operations of the ASRIC Congress, Bureau, Committees and the ad-hoc Sub-Committees among others. In addition, the ASRIC Rules of Procedure document spell out the election procedure, the responsibilities of the Bureau and Committees' membership, etc. The ASRIC's Rules of Procedure was developed by the ASRIC Bureau and endorsed by the second ASRIC Congress in 2019.

During the reporting period the following by-laws, strategic documents and guidelines were developed:

1) ASRIC Strategic Plan 2022-2028

The ASRIC has developed a strategic plan for 2022-2028 to guide its efforts in becoming a leader in STI development in Africa and beyond. The six-year plan aims to strengthen the ASRIC's position in the STI landscape and ensure that STI has a significant impact on the development of products and services that can contribute to economic transformation and prosperity in Africa. The plan will serve as a roadmap for the organization's future and its implementation will be crucial in driving economic growth and innovation in the region. The thrust of this strategic plan is based on the AU Sectoral frameworks and policies and is aligned with the implementation of the continental overarching framework, AU Agenda 2063, and its aspirations.

The strategic plan has the following impact focus areas which are: (1) Enhance Intra-Africa Research Cooperation; (2) Promotion of Human Capacity Development; (3) Create awareness and sensitize stakeholders; policy and decision-makers; and partners on the STI products and services' potential contribution to Africa's economy and to the improvement of the African populace livelihood; and (4) more participation of ASRIC members in ASRIC decision making process.

The ASRIC Strategic Plan 2022 – 2028 introduces technical solutions, management tools, dissemination approaches, and partnership with national and regional key stakeholders and

provides an opportunity for the ASRIC Committees, Sub-Committees, Taskforces, and all stakeholders to participate and contribute towards achieving the desired goals.

2) Resource Mobilization plan for ASRIC 2022-2028

The Resource Mobilization Plan for ASRIC was developed and is guided by the ASRIC mandate that is outlined in Article 4 (C) of the ASRIC Statute, where ASRIC is mandated to mobilize resources to support scientific research and innovation programmes and activities in accordance with the AU financial policies. This plan is to mobilize the needed resources to implement the ASRIC Strategic Plan 2022 – 2028 and beyond. The strategy aims to ensure adequate, predictable, flexible funding to execute the Vision, Mission and desired outcomes in the ASRIC's strategic plan. Also, the Resource Mobilization Strategy addresses the need for additional resources to fulfill the goals set out in the strategic plan

Recognizing the dynamic nature of resource mobilization, this strategy is a living document, that will evolve over time depending on the realities and facts on ground, in order to take stock of its performance and to tailor the strategy to tackle new challenges and risks.

3) African Union Science, Technology and Innovation Framework on Africa Free of Viral Hepatitis

The African Union's Science, Technology, and Innovation (STI) Framework for an Africa Free of Viral Hepatitis is a transformative policy initiative aimed at eradicating the burden of Viral Hepatitis across the continent. Recognized as a significant public health challenge, Viral Hepatitis impairs economic growth and impacts the health and well-being of millions of Africans. This framework leverages the power of science, technology, and innovation to address these challenges comprehensively and equitably, fostering a healthier and more resilient Africa.

4) Guideline on Intellectual Property Strategy in Joint Research and Collaboration During Outbreaks

In response to the need to protect Africa's intellectual property and foster resilience in the face of global pandemics, such as H1N1, Ebola, and COVID-19, the ASRIC has developed the "Guideline on Intellectual Property Strategy in Joint Research and Collaboration During Outbreaks".

The "Guideline on Intellectual Property Strategy in Joint Research and Collaboration During Outbreaks" is a pivotal framework for promoting cooperation and creating a fair and inclusive IP landscape across African nations. This guideline serves as a key resource for AU Member States, research institutions, policymakers, and industry stakeholders. Its purpose is to enhance IP literacy, facilitate effective research collaboration, and navigate the legal and operational challenges surrounding IP rights during public health crises. The guideline outlines best practices for managing IP rights at all stages of research collaboration from concept development through to commercialization and equitable benefit-sharing while honoring Indigenous knowledge systems and ensuring that local communities are active participants in the innovation process.

5) Guidelines for Accreditation of ASRIC Centers of Excellence

ASRIC does not own its own infrastructure, it relies on the resources of its member institutions to execute its flagship projects. The success of ASRIC's programmes and activities is mostly through collaboration with its members and institutions with demonstrated capacity and relevance. This way, ASRIC ensures that its interventions are both impactful and cost-effective. Centers of

Excellence accredited by the ASRIC is one of the approaches that ASRIC is served in its efforts to realize the strategic objectives aligned with its mandate and the broader vision of the African Union.

Against this backdrop a framework to guide the establishment / recognition and accreditation of ASRIC Centers of Excellences (ASRIC-CoEs) was developed and endorsed by the 7th ASRIC Congress. This model allows the optimal utilization of existing infrastructure within host institutions, thereby maximizing the value of limited financial and experimental resources.

These Centers of Excellence will serve as nodes in continent-wide research and innovation, promote regional collaboration, integration, and knowledge exchange.

III) ASRIC Activities and Flagship Projects

1) ASRIC Scientific Conferences

a. ASRIC Annual Scientific Conference

Seven annual ASRIC scientific conferences were organized since the establishment of ASRIC where they attracted more than 700 scientists and 600 scientific papers in the thematic areas of Agricultural Sciences, Engineering Sciences, Health Sciences, Natural Sciences and Social Sciences.

b. ASRIC Biannual Engineering Conference

ASRIC has evolved its scientific conferences to be thematic focused and to address a specific African challenge, particularly in the field of Engineering. The first ASRIC Conference on Engineering Sciences was held on September 2021 under the theme “Engineering and Informatics for Africa’s Urbanization” and the second conference was held in January 2024 under the theme “Utilization of Engineering and Informatics for Africa’s Trade and Development”. These conferences have attracted over 150 participants, scientists, researchers, and scholars from Africa and beyond. The third conference will be held in 8-10 December 2025.

c. Africa Free of Hepatitis Conference

The Africa Free of Hepatitis Conference was held in August, 2023 in partnership with the African Liver Patient Association (ALPA). The conference discussed the ASRIC Framework on Hepatitis and the ASRIC Flagship Project on Africa Free of Hepatitis. The Conference was attended by over 70 participants including Chairs of Parliamentarian Committees on Health from the AU Member States and Health Professionals and Experts within Africa with the aim of advocating the framework and appeal for allocating the funding required for the implementation of the framework.

2) ASRIC Scholarship Scheme

The ASRIC scholarship scheme that is the epic of ASRIC flagship projects and programmes was launched by the ASRIC Bureau to build the capacity of Africa’s young scientists and talent, enhance research and innovation for Africa’s development, and to provide doctoral scholarships for the benefit of African students.

ASRIC scholarship scheme was pioneered by the Euro-Mediterranean University of Fez, Kingdom of Morocco by offering 10 scholarship slots annually for African PhD students to carry out their doctoral research work at the world class Euro-Med University of Fes, Morocco.

By taking up the ASRIC initiative, the Euro-Med University of Fes has become a champion institution, dedicated to support the cause of the scholarship and its mission to bring the frontiers of science to Africa. The ASRIC scholarship scheme, is driven by demands for research and science, and acknowledges the pressing needs and challenges faced by the continent.

The scholarship includes; full tuition fees, accommodation, an annual single return ticket to the student's home country with a maximum contribution of $1,000 during summer vacation, and a stipend allowance of $1,000 monthly for 11 months every year. Over the course of the scholarship scheme, Euro-Mediterranean University of Fes, Morocco has paid more than 15 million US dollars. It is worth noting that ASRIC Scholarship Scheme is merit based and no other criteria are considered under the scheme.

To date over 50 African students have been selected to conduct their Ph.D. studies in fields such as digital engineering, robotics, artificial intelligence, additive manufacturing, etc. since, the launching of the scholarship in 2020.

A yearly call is published for applicants to submit their interest and the demand for the scheme is portrayed by the inflation in number of applications that are received by the secretariat where in 2020 (383 applications were received), while in 2021 (337), 2022 (298) 2023 (444) and 2024 (406) applications. The scheme attracted applications from 39, 33, 30, 32, 28 African Union Member States respectively on its timeline. The ASRIC and UEMF evaluate the applications received for the doctoral scholarship and in May 2025 a new batch of seven successful PhD scholarship candidates have been enrolled for their studies.

3) ASRIC Scientific Journals

The ASRIC Scientific Journals were established by the ASRIC Bureau and Congress as means to promote knowledge exchange, intra-Africa research, and strengthen capacity of STI professionals and institutions. The ASRIC Scientific Journals aims to attract Africa's highest quality articles and research and showcase African scientific excellence within the continent and outside. The ASRIC Scientific Journals adopted five thematic areas (Agricultural Sciences, Engineering Sciences, Health Sciences, Natural Sciences, Social Sciences and Humanities) based on the Frascati-Manual of UNESCO and are open source and free.

Since the production of the ASRIC Scientific Journals in 2020, the journals have attracted more than 600 scientific papers among of which over 300 articles were accepted and published in the ASRIC Scientific Journals. The journals already have their ISSNs (online and print) and are in the process to be registered in the AJOL, SCOPUS, Google Scholar, ORCID.

4) ASRIC Flagship Project on Village Free of Hepatitis "hands-on capacity building"

Since the ASRIC flagship projects are community based, the issue of Viral Hepatitis and its impact on the wellbeing of Africa's populace and our nations' economies, ASRIC considered to join hands with other African sister organizations within the Union structure and beyond to eliminate the Viral Hepatitis from Africa. Since then, three workshops were conducted to build the capacity of African

scientists and equally to advocate for Africa's policy makers on the Viral Hepatitis and the ASRIC Flagship Project on Village Free of Hepatitis.

On December 2023, a hands-on capacity building and a pilot phase of Africa Village Free of Hepatitis was conducted in Shabu Village, Nasarawa State Nigeria where the 3000 inhabitants were subjected to the process of: Educate, Test & Diagnose, Treat, Prevent, Surveillance & Monitor nexus. 33 medical and 15 non-medical practitioners were trained during the period of the capacity building and a pilot phase of the project was executed.

In this pilot phase, the results showed that 900 were infected by Hepatitis B, 300 were infected by Hepatitis C. As of the "Treat" nexus the ASRIC availed drugs for the cure of those infected by the Hepatitis virus C while, for Hepatitis B, a two months treatment was given to the infected persons with the hope that the local health authorities will continue supplying them with the medication. Under the nexus of "Prevent", 2000 people are to be vaccinated and ASRIC availed the vaccination for the patients.

It is worthy to mention that this capacity building and pilot phase of Africa Village Free of Hepatitis was conducted with the support from the African Liver Patient Association (ALPA). Ten experts were mobilized to build the capacity of Nigerian participants and to commence the pilot phase.

5) ASRIC flagship project on AI in Agriculture

ASRIC flagship project on AI in Agriculture (Design and Development of AI-Enabled Irrigation with a Fertigation System) aimed at the optimization of the irrigation water, soil nutrition, and soil fertility to improve the plants and crops yield to produce more food to meet the needs of a growing population.

The project is implemented in three stages:

Stage I: Focused on gathering climate data, selecting algorithms and developing an AI model for estimating optimal Crop Water Requirements. **Stage II:** AI algorithm development for estimating Crop Nutrient Requirements. **Stage III:** Integration of stages I and II, as well as the development of prototypes.

Stage I was completed and achieved remarkable results and the scientific team is currently working on stage II. Initial funding for the research and equipment was provided by the Euro-Mediterranean University of Fes, with to PhD research student while the project attracted additional funding from Horizon Europe.

6) ASRIC Flagship Project on Corona Virus' Diagnostic and Treatment for All "Made in and for Africa"

This project focused on the development of an alternative approach for rapid and early detection, identification and tracking, of specific variants of concern through clustered interspaced short palindromic repeats (CRISPR) diagnostics and to design and discovery of new inhibitors of SARS-CoV2 main Protease (Mpro) to treat COVID-19.

A prototype detection equip has been developed and the new inhibitors are very potent in vitro (in cells) to treat COVID-19 and now in the process of testing on mice and eventually on humans, where more relevant scientific institutions within Africa were called upon for participation in this

phase. The project is technically and financially supported by the Hassan II Academy of Science and Technology and the Euro Med University of Fes.

7) African Disaster Mitigation Research Center (ADMIR): Project under the AU-ASRIC Initiative on Community Based and Inclusive Innovation

ADMIR, is an ASRIC Center of Excellence which, serves as a think tank to generate scientific knowledge for mitigating the impact of natural hazards on communities and the environment, that was established with the participation of Egypt, Sudan, Morocco, Algeria, Democratic Republic of Congo and African Seismological Commission. It facilitates networking among African scientists and institutions to strengthen scientific capacity for advising Member States and Policy Makers on natural hazard-related issues. ADMIR's scope of work incorporates science to aid communities, transferring advanced technologies and modern geophysical knowledge to African scientists, and providing tools to achieve the Sustainable Development Goals 2030, AU Agenda 2063 aspirations. ADMIR contributes equipment and technical support worth $10 million USD to AU Member States including its headquarters which is located at the National Research Institute of Astronomy and Geophysics (NRIAG), Cairo, Egypt.

In 2023, ADMIR conducted its first capacity building programme for Natural Disaster Monitoring and Risk Reduction in Africa that was hosted by NRIAG and extended for 20 days with the participation from 16 African Members States.

8) ASRIC Flagship Project on Fighting Stunting in Africa: Waging War on Malnutrition and Pollution

The ASRIC Flagship Project on Fighting Stunting in Africa: Waging War on Malnutrition and Pollution is designed to alleviate the stunting levels in Sub-Saharan which spans from the prenatal months in the womb to the early years of the child's life before school.

The first phase of the flagship project is focused on:

a. Getting Rid of Undernutrition by ensuring good nutrition early in life means better 'grey matter infrastructure' – the brain development essential to ensure economies that can innovate and flourish; tackling nutrition challenges will reduce the burden on the health system; improving nutrition will help end poverty; and addressing food insecurity and famine can make an essential contribution to conflict and post-conflict.

b. Getting Rid of Pollution through monitoring programs to assess the levels of detrimental pollutants both in biological specimens and environmental matrixes such as air, water, and soil.

The ASRIC Sub-Committee on Fighting Stunting in Africa: Waging War on Malnutrition and Pollution was created under the ASRIC Committee on Science and Innovation to develop the "African Union Framework on Preventing and Controlling Stunting in Africa" that will serve as a guideline to policy makers at all levels of the African Union and its Member States.

9) International Platform for Adaptation Metrics (IPAM)

ASRIC is one of the founding members of the International Platform for Adaptation Metrics (IPAM) which is platform for developing, testing, and standardizing metrics to measure the effectiveness of climate adaptation projects and policies. IPAM strives to bridge the gap between adaptation

actions and their measurable outcomes, fostering data-driven decision-making at local, national, and international levels. As member of the IPAM alliance, ASRIC continues to contribute its fair share in ensuring the vision of the IPAM and its role in safeguarding Africa's environment priorities.

10) ASRIC Scientific Movement in Response to COVID-19 Outbreak

The ASRIC Scientific Movement emerged after the ASRIC response to the COVID-19 outbreak, representing a people's initiative for collective scientific efforts to address the pandemic. Since the declaration of the COVID-19 pandemic, ASRIC proactively engaged African scientists and professionals to advise on containment measures and interventions including response. Over 250 scientists; more than 40 Universities and Research Institutions; and large number of African specialized institutions such as RUFORUM, FARA, ATPS, AU-IAPSC, AU-IBAR, etc., collaborated for the implementation of STI actions and interventions for COVID-19 which, resulted in the production of various publications, including guidelines on IP protection, research translation, Afrocentric non-pharmaceutical interventions for COVID-19, healthcare investment, pandemic R&D mapping, COVID-19 pandemic modelling, utilizing Africa's indigenous knowledge for disease prevention and control, among others. These achievements showcase the dedication of African scientists working on a pro-bono basis for the continent's benefit.

The following are some publications achieved under this ASRIC Movement:

a) Guideline on IP protection in Joint Research and Collaboration during Outbreak
b) Afrocentric non-pharmaceutical interventions for COVID-19
c) Guidelines on Investment in Health Care and Health Research Systems
d) Mapping out and Inventory of the Pandemic R&D
e) COVID-19 Pandemic Modelling
f) Africa's Indigenous Knowledge for Prevention and Control of Emerging Infectious Diseases on the Continent like COVID-19 Utilizing an Afrocentric Response - Actions and Interventions

11) ASRIC Website

In 2025, the ASRIC website (https://www.asric.africa) was successfully redesigned into a modern and dynamic platform, marking a milestone in strengthening ASRIC's digital presence. This redevelopment has enhanced ASRIC's ability to showcase its work, programmes, and flagship projects. The new website also serves as an online medium for disseminating and promoting ASRIC events. ASRIC benefits from more effective engagement with both the African and global scientific communities, thereby boosting the ASRIC impact worldwide.

12) Strategic Documents and Projects under Development

The ASRIC has developed key strategic documents and projects that align with the continent's priorities for sustainable growth and advancing Africa's STI landscape with objective to address the Agenda 2063 aspirations. The initiatives include:

a) Participation of Leading Universities in ASRIC Scholarship Scheme

Following the success story of the ASRIC-UEMF PhD scholarship, the ASRIC Congress made an open call to lead African Universities to empower Africa's future by offering scholarships to talented African students from the AU member states. The initiative, is a call to action to foster

continental development by promoting capacity building and advancing the frontiers of science to Africa. In that regard, a concept note was developed and sent out to the members of the Congress for their input.

b) African Technology Transfer Center

At the second ASRIC – OI Engineering Conference, held 2024, it was decided to "Request the AU-ASRIC), the Federation of African Engineering Organizations and Obour Institutes to conduct a study for establishing a specialized center in Africa concerning technology transfer and marketing to support intra-industry and intra-trade". The request was endorsed by the 7th ASRIC Congress while the offer by the Obour Institutes to establish such a center was welcomed. Since then, a working group is conducting the modalities for the establishment of the Africa Technology Transfer Center (ATTC) and its institutionalization in ASRIC Centers of Excellence network.

c) ASRIC 4th Industrial Revolution

The critical role in enabling Africa to fully harness the potential of the Fourth Industrial Revolution (4IR) was recognized by ASRIC. A working group was established to analyze the impact of the 4IR on AU member states, focusing on opportunities and challenges by examining policies, strategies, and readiness across different regions. As of the initial report received by the 7th ASRIC Congress the working group was directed to develop the "ASRIC STI Strategy for Fourth Industrial Revolution".

d) ASRIC Diaspora Summit on STI for Africa's Prosperity

Since its establishment, ASRIC has focused on fostering meaningful collaboration between Africa-based scientists and their counterparts in the Diaspora to position the ASRIC as a central platform for leveraging the expertise, resources, and networks of the Diaspora to build capacity across the continent and strengthen the role of STI as a driver of Africa's prosperity. The ASRIC Diaspora Summit on STI for Africa will be a vital step towards unlocking the potential of the African Diaspora for sustainable development and innovation.

Accordingly, the ASRIC, under the guidance of its Bureau and in alignment with its Strategic Plan 2022–2028, has committed to organizing the Diaspora Africa Science Dialogue Conference in partnership with the Senegalese Academy of Sciences in November 2026.

e) Women Elevate Program

The ASRIC in partnership with the International Center for Artificial Intelligence Research and Ethics (iCAIRE) launched the 2nd edition of the Women Elevate Program in collaboration with Microsoft. This programme is under the AU-STRC and ASRIC initiative "Towards Women Participation in Scientific Research in Africa". The programme is targeting to build capacity of 5,000 African women in AI.

C

GENERAL CONCLUSION

Challenges

AU-STRC and ASRIC continues to encounter a range of challenges that impact the effective delivery of its mandate and programmes.

One of the core issues is the limitation in both human and financial resources, which constrains the institutions' ability to expand its reach, sustain ongoing initiatives, and respond proactively to emerging continental priorities. There is also a need to enhance awareness among members of the AU Specialized Technical Committee on Education, Science Technology and Innovation (ESTI-STC) regarding institutions' contributions to the African STI landscape. Strengthening this awareness is essential to building greater institutional alignment and support.

In addition, while the AU-STRC and ASRIC operate under the broader framework of AUC, their programmes and projects have not received the level of support expected from the ESTI Department. For instance, none of the institutions has prominently featured in recent multilateral cooperation agreements which has limited opportunities for broader collaboration and resource mobilization.

Furthermore, participation from some ASRIC Congress Members in ASRIC-led projects has been relatively low. While the reasons vary and are not always explicitly stated, they may be attributed to financial limitations, organizational factors, or evolving levels of personal and institutional commitment. Enhancing their involvement would contribute significantly to the institutional ownership and the success of ASRIC's programmes and projects.

There is a need to revitalize structured dialogue among national academies and scientific bodies to encourage coordinated research efforts and knowledge sharing across borders in order to overcome the challenge of weak intra-African research collaboration.

Conclusion

The 2021–2025 reporting period has been a pivotal phase for both the AU-STRC and ASRIC in advancing Africa's science, technology, and innovation (STI) agenda. Despite facing human and financial resource-related challenges, the institutions have made significant strides in promoting research excellence, capacity building, and policy engagement aligned with the African Union's Agenda 2063 and the Science, Technology and Innovation Strategy for Africa (STISA-2024).

The AU-STRC has continued to build on its historic legacy by implementing transformative initiatives such as the African Union Network of Sciences (AUNS), the Green Innovation Framework, and the Africa Environmental Society (AES), among others. ASRIC, has expanded its influence with notable achievements such as the ASRIC scholarship scheme, ASRIC Scientific Journals and the Village Free of Hepatitis programme, etc.

Looking ahead, the continued success of AU-STRC and ASRIC depends on resource mobilization, stronger institutional support within the AUC, and broader engagement from stakeholders and Member States. With sustained commitment and collective effort, AU-STRC and ASRIC are well positioned to remain key drivers in shaping Africa's scientific future and delivering homegrown solutions to the continent's most pressing challenges.