African Union
Scientific Technical Research Commission

African Scientific Research and Innovation Council

END OF TERM REPORT ON SCIENCE, TECHNOLOGY AND INNOVATION STRATEGY FOR AFRICA

(STISA 2024)

October 2025

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PREAMBLE

The Science, Technology and Innovation Strategy for Africa (STISA) 2024 was first adopted by the African Union (AU) Assembly of Heads of State and Government in decision, (Assembly/AU/Dec.520 (XXIII)). Also referred to as the STISA-2024, it is designed as a ten-year continental framework to harness science, technology, and innovation (STI) in advancing Africa's socio-economic development. It supports the African Union's broader vision articulated in Agenda 2063: The Africa We Want, which aims for an integrated, prosperous, and peaceful continent driven by its citizens.

During the first half of the implementation term of the Science, Technology and Innovation In 2019, the African Union, Scientific, Technical and Research Commission (AU-STRC) developed the STISA mid-term report covering the Programmatic, Projects and Activities of the AU-STRC Strategy.

As STISA-2024 nears its conclusion, it is imperative to review the achievements undertaken by the AU-STRC and ASRIC in the implementation of the last ten-years under this strategic framework. Also, it is important to look forward as we operationalize STISA-2034, the next strategic ten-year framework as we build on the achievements, lessons, and gaps of its predecessor while aligning with Africa's evolving development trends and emerging challenges

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 (STISA2024 towards the advancement of science, technology, and innovation (STI) in Africa including research coordination, capacity building, and policy support.

This report is structured in four main parts: Part A is an introductory overview of the AU-STRC, ASRIC and the STISA 2024. Part B is a comprehensive report on the programmes, projects, and activities undertaken by the African Union Scientific Technical and Research Commission (AU-STRC); Part C is a comprehensive report on the programmes, projects, and activities undertaken by the African Scientific Research and Innovation Council (ASRIC); Part D highlights the challenges face in implementation of the AU-STRC and ASRIC, concludes the report and Suggestions to what can be done in STISA-2034.

The activities, programmes, projects of the AU-STRC and ASRIC that have been conducted over this period of the STISA 2024 are available at the websites of AU-STRC at www.austrc.org and ASRIC at www.asric.africa

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Overview of the AU-STRC, ASRIC and the STISA 2024

1.0 INTRODUCTION

African Union's overarching blueprint for transforming the continent into a prosperous, integrated, and peaceful Africa, driven by its own citizens and representing a dynamic force in the global arena is served in the Agenda 2063 the Africa we want. The African Union Agenda 2063 provides the strategic direction for Africa's socio-economic development and is operationalized through a series of continental frameworks and strategies which are designed to achieve specific sectoral goals. Among these, the Science, Technology and Innovation Strategy for Africa (STISA-2024) and its successor, STISA-2034. The STISA strategy is key for implementing the Agenda 2063 aspirations pertaining to knowledge-based economies, industrialization, and human capital development.

The Science, Technology and Innovation Strategy for Africa (STISA-2024) was adopted by the African Union (AU) Assembly of Heads of State and Government in 2014, (Assembly/AU/Dec.520 (XXIII)). STISA-2024 represented a defining continental commitment to reposition Science, Technology, and Innovation (STI) as the primary engines for Africa's socio-economic transformation. The strategy emerged from a critical recognition that Africa's long-term development and competitiveness depend on its capacity to generate, apply, and manage knowledge for sustainable growth. The STISA-2024 framework aligned with Agenda 2063: The Africa We Want, and it sought to reverse the marginalization of science and technology in national and regional development policies by establishing a coordinated, systematic approach to research, innovation, and capacity development.

In addition, the adoption of STISA-2024 marked a paradigm shift from externally driven development models toward an Africa-centered knowledge economy. It redefined the continent's development narrative from one of dependency to one of innovation-led self-reliance, emphasizing the creation of indigenous solutions tailored to Africa's unique socio-economic and environmental contexts. This strategic reorientation was anchored on six priority areas: eradicating hunger and achieving food security; preventing and controlling diseases; improving communication infrastructure; protecting the environment and natural resources; promoting peace and security; and creating wealth through sustainable industrialization and innovation. These priorities were based on four enabling pillars: infrastructure development, technical competences, innovation and entrepreneurship, and an enabling policy environment, forming an integrated framework for action at national, regional, and continental levels.

There were several institutions, agencies, implementing the STISA-2024 such as AUC, AUDA-NEPAD agency, the Department of Education, Science Technology and Innovation, UNECA, UNESCO among other. Central to the implementation of this strategy and being one of the key stakeholders were the African Union Scientific, Technical and Research Commission (AU-STRC) which is the secretariat of the African Scientific Research and Innovation Council (ASRIC)

developed several projects and programmes that are being implemented in accordance with the STISA-2024 pillars and priorities.

The AU-STRC, established in 1950s serves as one of the oldest specialized technical institutions of the Union. Its mandate revolves around coordinating continental research, promoting knowledge transfer, and facilitating science-driven policy and innovation ecosystems. ASRIC, launched in 2018 as the scientific advisory body for the African Union, with the goal of mobilizing African research excellence, connecting scientists and innovators, and institutionalizing science advice for policy across member states.

Over the past decade, the secretariat of the AU-STRC and ASRIC has played pivotal roles in shaping Africa's STI landscape through targeted programmes and policy instruments. Their interventions have ranged from strengthening research networks, enhancing intellectual property governance, and promoting gender inclusivity in STEM, to leading continental responses to emerging health and environmental challenges. Initiatives such as the AU Green Innovation Framework, Pan-African Intellectual Property Organisation (PAIPO), ASRIC Scholarship Scheme, and Afro-Centered Non-Pharmaceutical Interventions for COVID-19 reflect the strategic breadth and multidisciplinary nature of their work. These and other programmes have supported the achievement of STISA-2024 goals.

The period of STISA-2024 implementation coincided with transformative global and regional developments that reshaped Africa's innovation landscape. The Fourth Industrial Revolution (4IR), the COVID-19 pandemic, the intensifying climate crisis, and rapid digitalization collectively underscored the centrality of STI in responding to systemic shocks and in building resilient economies. The pandemic, in particular, exposed the fragility of Africa's research systems and its dependence on external technologies, while simultaneously catalyzing unprecedented continental collaboration and indigenous innovation. In this context, the roles of AU-STRC and ASRIC became even critical not merely as implementers of STI policy but as continental conveners that channel scientific knowledge into policy and societal impact.

At the same time, the implementation of STISA-2024 illuminated enduring institutional challenges. The AU-STRC and ASRIC continued to face constraints in human and financial resources, limited autonomy in programmatic decision-making, and fragmented coordination among AU organs and regional institutions. While these challenges constrained the pace of implementation, they also revealed important lessons for future strategic planning. The need for sustained investment in research infrastructure, strengthened governance and accountability frameworks, and deeper partnerships with the private sector and the African diaspora emerged as key imperatives for sustaining STI-led transformation.

As STISA-2024 concludes, its achievements and lessons provide a foundation for the formulation of STISA-2034, the next ten-year continental framework. The successor strategy aims to deepen Africa's integration into the global knowledge economy by focusing on six interlinked priority areas viz: 1) Accelerating Sustainable and Inclusive Industrialization (2) Building Human Capital, Infrastructure, and Skills (3) Building African Capabilities in Frontier and Emerging Technologies (4) Strengthening Science Diplomacy and Partnerships (5) Private Sector Engagement (6) Addressing Youth and Gender Inequalities. The priorities areas will give ground to further advance frontier technologies, green industrialization, digital transformation, and human capital development. STISA-2034 also emphasizes inclusivity ensuring that Africa's youth and women are central actors in innovation systems and science diplomacy, enabling African institutions to play stronger roles in global scientific cooperation and governance.

In this context, the AU-STRC and ASRIC stand at a pivotal moment in Africa's development trajectory. Their experience in coordinating research networks, building institutional capacities, and translating scientific evidence into policy places them at the core of Africa's STI ecosystem. Moving forward, their roles will be instrumental in ensuring that the objectives of STISA-2034 are not only realized but internalized within national development strategies across the continent. The legacy of STISA-2024 demonstrates that Africa's transformation is inseparable from its scientific capability; the next decade presents an opportunity to consolidate this foundation and chart a new path toward a resilient, innovative, and self-sustaining African future.

2.0 AFRICAN UNION SCIENTIFIC, TECHNICAL AND RESEARCH COMMISSION (AU-STRC)

The African Union Scientific, Technical and Research Commission (AU-STRC) is one of the oldest specialized technical institutions of the African Union (AU

AU-STRC was born out of the ashes of the Commission for Technical Cooperation in Africa (CCTA) which was established in 1950s together with the Scientific Council of Africa (CSA) by Belgium, France, Portugal, United Kingdom, Southern Rhodesia and South Africa. At an extraordinary session of The CCTA held in Accra in 1958, the Foundation for Mutual Assistance in Africa (FAMA) was created as an instrument for bilateral technical assistance. Ghana joined the CCTA in 1958 followed by Liberia and Guinea in 1959 and Cameroon in 1960. Seventeen other African Countries joined the CCTA in 1961. The headquarters of CCTA with the core of its secretariat was moved from London to Lagos in 1959.

In 1964, a year after the Organization of African Unity (OAU) Charter was signed on 25th May 1963, the founding fathers of the OAU unanimously resolved in Cairo, Egypt to assimilate The CCTA formally and gave it a new name: The Scientific, Technical and Research Commission (STRC). The OAU-STRC was born out of recognition by the Heads of States that real and

sustainable social and economic development of the continent depended on innovative scientific and technological policies.

During its early years, it functioned as the umbrella institution for various specialized scientific units, including the Inter-African Bureau for Animal Resources (IBAR) based in Kenya and the Inter-African Phytosanitary Council (IAPSC) based in Cameroon, etc. These agencies were later upgraded to fully fledged institutions of the OAU/AU and operate to address areas of agriculture, animal health, and plant protection, among others. After the founding of the African Union, the the OAU was disbanded on 9 July 2002 and from hence forth the OAU-STRC was renamed as the AU-STRC.

AU-STRC plays a role in coordinating continental research, promoting innovation, and facilitating knowledge-sharing. AU-STRC acts as a catalyst for building Africa's scientific capacity, strengthening institutional collaboration, and ensuring that research outputs address pressing developmental challenges, including food security, health, climate resilience, and industrial growth.

The African Union Scientific, Technical and Research Commission (AU-STRC) remains a cornerstone of the AU's efforts to transform Africa into a knowledge-driven, innovative, and industrialized continent. By coordinating research, fostering partnerships, and promoting capacity development, AU-STRC continues to ensure that science, technology, and innovation serve as key drivers in realizing the vision of Agenda 2063: The Africa We Want.

The Founding Framework of the African Union Scientific, Technical and Research Commission (AU-STRC) dates back to 1965, when it was created under a resolution of the Organization of African Unity (OAU). Its establishment was a direct response to the continent's recognition of the critical role that science, technology, and research play in achieving Africa's long-term socio-economic transformation and self-reliance.

In terms of AU Integration, the AU-STRC now operates under the Constitutive Act of the African Union, functioning as a specialized technical office. This status enables the Commission to provide dedicated expertise in science, technology, and innovation (STI), while ensuring its work is fully embedded within the AU's institutional framework.

The Commission's Strategic Alignment ensures that all of its activities directly contribute to the broader vision and policy objectives of the African Union. In particular, AU-STRC's mandate supports Agenda 2063, specifically Aspiration 1, which envisions a prosperous Africa based on inclusive growth and sustainable development, and Aspiration 6, which emphasizes people-driven development that harnesses the potential of Africa's women and youth. Furthermore, AU-STRC plays a central role in advancing the Science, Technology and Innovation Strategy for Africa (STISA-2024), which prioritizes six critical areas: eradicating hunger, preventing disease, building

communication infrastructure, protecting the environment, promoting peace and integration, and creating wealth through industrialization and innovation.

With regard to Governance, AU-STRC is guided by the policy organs of the African Union, which provide strategic direction and oversight. Implementation of its programs and initiatives is carried out in close collaboration with AU Member States, national governments, research institutions, and a wide network of development partners. This governance framework ensures both continental ownership and inclusivity, while fostering partnerships that enhance the impact and sustainability of the Commission's work.

2.1 Vision, Mission, Mandate and Core Functions of AU-STRC

2.1.1 Vision

To be a leading African Institution in positioning Africa as a global force to be reckoned with, an Africa that is knowledge driven with robust and sustainable system of innovation.

2.1.2 Mission

To enhance the capacity of our Institution, and our Member States to utilize scientific research and innovation outcome to build a knowledge economy.

2.1.3 Mandate

To implement the Africa's Science and Technology Policy in coordination with relevant stakeholders; promote the Intra-Africa research activates; identify new and comparative priority areas for research; and to popularize the scientific and technological research culture in Africa.

2.1.4 Core Functions

AU-STRC has the following core functions:

- Ensure the implementation and promotion of STISA-2024
- Identify the potential areas with comparative advantage in research and development;
- Coordinate and promote the Inter-Africa research activates and programmes
- Establishment of research partnership and networks
- Advance the programmes on the exchange of researchers and specialists among the AU Member states that including brain circulation
- Promote best practices emanating from scientific and technological development applications
- Organize training programmes in scientific and technological development that includes technology transfer and capacity building
- Promote R&D commercialization including science park and incubators; and
- Mobilize resources and identify funding for research projects.

3.0 AFRICAN SCIENTIFIC RESEARCH AND INNOVATION COUNCIL (ASRIC)

The African Scientific Research and Innovation Council (ASRIC) is a specialized advisory body of the African Union (AU). ASRIC serves as the continental platform for mobilizing African research excellence, fostering innovation, and promoting the use of science, technology, and innovation in addressing Africa's socio-economic and developmental challenges. The ASRIC brings together African researchers, innovators, policymakers, and the diaspora to provide scientific advice to the African Union and its Member States, while also serving as a continental voice for the scientific community.

The idea for the African Scientific, Research and Innovation Council (ASRIC) was first raised at the First African Congress for Scientific Research, Technology and Drug Industry in Cairo in December 2004. This led to a 2005 Executive Council decision EX/CL/Dec.216 (VII) requesting the AUC to formally study the matter. The final legal framework for ASRIC's establishment and operationalization was put in place over a decade later, when the African Ministerial Conference on Science and Technology (AMCOST V) in Congo, Brazzaville in April, 2014 reviewed the Statutes of ASRIC, which was then subsequently adopted by the Executive Council adopted the through decision (EX.CL/Dec.747 (XXII)), in April 2014. This paved for the establishment and operationalization of the ASRIC with its launching in November 2018 in Abuja, Nigeria.

The governance of the ASRIC consists of a Congress, a Bureau and a Secretariat. Article 8(1) of the its statute states that "The AU-STRC shall be the Secretariat of the ASRIC." With the establishment of ASRIC, the continent has a pan-African platform that serves as a voice for the African research community and allows African scientists to be directly involved in research policy and programming process and widen the spread of research in all sectors of development and knowledge generation.

3.1 Objective and Core Functions of ASRIC

3.1.1 Objective of ASRIC

The objective of ASRIC is to promote scientific research and innovation in order to address the challenges of Africa's socio-economic development.

3.1.2 Core Functions

- Mobilize African research excellence to advance the African development agenda;
- Build and sustain a continental scientific, research and innovation-policy nexus;
- Mobilize resources to support scientific, research and innovation activities and programmes in accordance with the AU policy in this area;
- Promote dialogue and provide voice of the scientific community that expresses continental excellence;

- Advocate for knowledge exchange and technology acquisition and link the scientific community
- Support and strengthen the capacity of STI national and regional councils and facilitate collaboration among them;
- Identify strategies and means to bridge the gap between science, research and innovation and policy; and
- Promote intra-Africa and international collaboration in STI

4.0 STRATEGIC RELEVANCE OF AU-STRC/ASRIC IN IMPLEMENTATION OF STISA

The African Union Scientific, Technical and Research Commission (AU-STRC) which is the secretariat of the ASRIC holds a strategic position within the continental development agenda. Its contributions are directly aligned with Agenda 2063, which envisions Africa's transformation into a knowledge-based, innovative, and industrialized continent. By promoting science, technology, and research, AU-STRC plays a vital role in driving inclusive growth, competitiveness, and sustainable development. In addition, the Commission contributes significantly to the Science, Technology and Innovation Strategy for Africa (STISA-2024). Through these interventions, AU-STRC/ ASRIC ensures that science and innovation remain at the heart of Africa's development trajectory.

The AU-STRC/ASRIC also supports the Continental Education Strategy for Africa (CESA 16-25) by fostering research, innovation, and higher education initiatives. By linking research outcomes with the educational sector, the Commission contributes to building the next generation of African scientists, innovators, and policymakers who are equipped to address continental challenges.

AU-STRC/ASRIC aligns its efforts with the United Nations Sustainable Development Goals (SDGs). It places particular emphasis on Goal 9, which focuses on industry, innovation, and infrastructure, and Goal 4, which prioritizes quality education. In doing so, the Commission ensures that Africa's research and innovation agenda contributes to both continental aspirations and global development targets.

5.0 OVERVIEW OF SCIENCE, TECHNOLOGY AND INNOVATION STRATEGY FOR AFRICA (STISA-2024)

In June 2014, at its Twenty-Third Ordinary Session in Malabo, Equatorial Guinea, the Assembly of the AU Heads of State and Government endorsed, the African Union Science, Technology and Innovation Strategy for Africa (Assembly/AU/Dec.520 (XXIII)). STISA-2024 was conceived as a continental framework to accelerate Africa's transition to an innovation-driven and knowledge-based economy. The strategy was developed in recognition of the cross-cutting role of science, technology, and innovation (STI) in all AU development policies and frameworks, including

Agenda 2063. This adoption of STISA reaffirmed the AU's commitment to placing science, technology, and innovation at the center of Africa's socio-economic transformation.

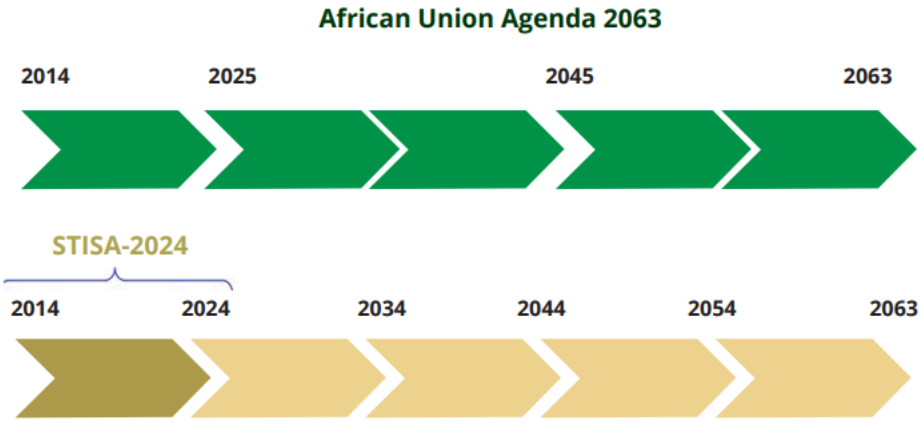

Figure 1: STISA 2024 within the Agenda 2063 timeline (Source: STISA-2024)

The AU-STRC and the ASRIC has over the past decade supported the effective implementation of STISA-2024. This involved the carrying out several programmes, projects and activities, identifying, developing and putting in place the necessary policy documents, guides, and institutional collaborations mechanisms required for smooth domestication and execution of the STISA-2024 in its Member States and Regional Economic Communities (RECs) about the institutional frameworks needed for effective implementation.

This report reveals a range of the previous, current ongoing and immediate upcoming programmes and projects that are implemented by the AU-STRC and ASRIC of which 23 are under the AU-STRC and 26 under ASRIC. However, some of these were interconnected, requiring complementarity and synergy.

Figure 2: STISA-2024 implementation phases (Source: African economy driven by innovation: STISA Policy Analysis)

The STISA-2024 represents the first ten-year incremental strategy designed to respond directly to Africa's critical challenges while contributing significantly to the AU vision of "An integrated, prosperous and peaceful Africa, driven and managed by its own citizens and representing a dynamic force in the global arena."

In developing STISA-2024, four pillars were identified as prerequisites for achieving its mission of "Accelerating Africa's transition to an innovation-led, knowledge-based economy." The AU-STRC and ASRIC examined the pillars and priority areas as a required basis for achieving STISA's goals. STISA-2024 provides Africa with a coherent roadmap to strengthen its science, technology, and innovation landscape, enabling the continent to harness knowledge and creativity as levers for sustainable development and transformation.

5.1 AU-STRC/ ASRIC Programmes and Projects as aligned to the STISA – 2024 Priority Areas and Pillars Matrix

The matrix of AU-STRC/ASRIC programmes and projects serves the interventions implemented within the six priority areas of the Science, Technology and Innovation Strategy for Africa (STISA-2024). The alignment of the programmes to the STISA-2024 framework ensures that AU-STRC/ASRIC initiatives directly support Africa's broader development aspirations as captured in Agenda 2063.

	Priorities	Research and/or innovation areas
1	Eradicate Hunger and ensure Food and Nutrition Security	- Agriculture/Agronomy in terms of cultivation technique, seeds, soil and climate - Industrial chain in terms of conservation and/or transformation and distribution infrastructure and techniques
2	Prevent and Control Diseases and ensure Well-being	- Better understanding of endemic diseases - HIV/AIDS, Malaria Hemoglobinopathie - Maternal and Child Health - Traditional Medicine
3	Communication (Physical & Intellectual Mobility)	- Physical communication in terms of land, air, river and maritime routes equipment and infrastructure and energy - Promoting local materials - Intellectual communications in terms of ICT
4	Protect our Space	- Environmental Protection including climate change studies - Biodiversity and Atmospheric Physics - Space technologies, maritime and sub-maritime exploration - Knowledge of the water cycle and river systems as well as river basin management
5	Live Together – Build the Society	- Citizenship, History and Shared values - Pan Africanism and Regional integration - Governance and Democracy, City Management, Mobility - Urban Hydrology and Hydraulics - Urban waste management
6	Create Wealth	- Education and Human Resource Development - Exploitation and management of mineral resources, forests, aquatics, marines etc - Management of water resources

Figure 3: STISA Priority Areas (Source: STISA-2024)

As shown in figure 3, the priority areas are:

Priority 1: Eradication of hunger and achieving food security
Priority 2: Prevention and control of diseases
Priority 3: Communication (Physical & Intellectual Mobility)
Priority 4: Protection of our space
Priority 5: Live together – build the society
Priority 6: Wealth creation

In addition, these programmes and projects are underpinned by the four STISA pillars, which serve as enablers for sustainable impact. STISA Pillars include:

Pillar 1: Infrastructure Development
Pillar 2: Technical Competences
Pillar 3: Innovation & Entrepreneurship
Pillar 4: Enabling Environment

The tables A and B show the AU-STRC and ASRIC projects and programmes and the specific alignments to the STISA-2024 priority areas and pillars

Table A: AU-STRC PROGRAMMES AND PROJECTS

No.	**Activity**	**STISA Priority Area**	**STISA Pillar**
1	African economy driven by innovation: STISA Policy Analysis	1, 2, 3, 4, 5 & 6	1, 2, 3 & 4
2	Pan-African Intellectual Property Organization (PAIPO)	3, 5 & 6	2 & 4
3	African Union Infectious Diseases Framework	2, 5 & 6	2
4	AU-STRC, UNESCO, MERCK MARS Summit	2	2
5	Africa Engineering Science Capacity Building	6	2 & 3
6	African Union Network of Sciences (AUNS)	3 & 6	2, 3, 4
7	Federation of African Engineering Organization (FAEO)	6	1, 2 & 3
8	Strengthening and Building African Capacity on Geographical Indicators (GIs)	4	2
9	Capacity Building Workshop on Mitigating the Impact of Natural Hazards in Africa	4	2
10	AU Green Innovation Framework	1 & 4	4
11	Capacity building initiative on inclusive /community-based innovation for AU Member States	5 & 6	2 & 3
12	Towards Women Participation in Scientific Research in Africa	5 & 6	2
13	Climate Change Impact in Africa challenges and opportunities within the Realms of Science, Technology and Innovation	4, 5 & 6	1
14	Capacity Building Training Workshop on Viral Hepatitis for AU Member States & African Liver Patients Association (ALPA)	2 & 5	2

15	Capacity Building Workshop for AU Member States on Accessing Green Climate Fund (GCF)	4	2 & 4
16	Framework for Capacity Building of Journalists in Reporting Science and Technology	3	2
17	India Africa Health Research Collaboration and Capacity Building	2	2
19	Science, Technology and Innovation for Post-Conflict Recovery in Africa: Integrating Young Arms to their Societies	1, 5 & 6	2 & 3
20	Research Translation from Bench to Bedside	2 & 5	3
21	African Pharmacopeia	2 & 5	2 & 3
22	African Union Science, Technology and Innovation Framework on Africa Free of Viral Hepatitis	2	3

Table B: ASRIC PROGRAMMES AND PROJECTS

No.	Activity	STISA Priority Area	STISA Pillar
1	ASRIC Strategic Plan 2022-2028	1, 2, 3, 4, 5 & 6	1, 2, 3 & 4
2	Resource Mobilization Strategy 2022 – 2028	1, 2, 3, 4, 5 & 6	1, 2, 3 & 4
3	ASRIC Statutory Meeting - ASRIC Congress	1, 2, 3, 4, 5 & 6	1, 2, 3 & 4
4	ASRIC Engineering Conference	5 & 6	1, 2 & 3
5	ASRIC Scientific Journals	3, 5 & 6	2 & 4
6	ASRIC Scholarship Scheme	3 & 6	2
7	ASRIC Scientific Conference	1, 2, 3, 4, 5 & 6	1, 2, 3 & 4
8	Afro-Centered Non-Pharmaceutical Interventions for Covid-19	2 & 5	2 & 3, 4
9	Inventory on R&D Interventions to COVID-19 in Africa	2 & 5	2 & 3, 4
10	Relevance of investment in the health sector for improvement of health research systems	2 & 5	2 & 3, 4
11	Africa's Indigenous Knowledge for Prevention and Control of Emerging Infectious Diseases on the Continent like COVID-19: Utilizing an Afro-Centric Response "Actions and Interventions	2 & 5	2 & 3, 4
12	Impact of COVID-19 on Africa's Food and Nutritional Security "Actions and Itervention"		
13	ASRIC Advisory Board on STI Strategic Intervention for COVID-19 "Actions and Intervention"	2 & 5	2 & 3, 4
14	ASRIC Flagship Project on Corona Virus' Diagnostic and Treatment for All "Made in and for Africa"	2, 5 & 6	3
15	Participation of Leading Universities in ASRIC Scholarship Scheme	3	2
16	ASRIC Diaspora Summit on STI for Africa's Prosperity	3 & 5	2, 3 & 4
17	ASRIC Flagship Project on Water for All	1, 2 & 5	1 & 3
18	Capacity Building Workshop on Low Cost Moringa Sand Filter Hybrid Technology for Household and Community Water in Africa	1, 2 & 5	2
19	ASRIC Journal Stakeholders Capacity Building Workshop	3	2

20	Africa Environmental Society (AES)	4	1 & 2
21	Guideline on Intellectual Property Strategy in Joint Research and Collaboration During Outbreaks	2	3 & 4
22	Technology Hunting in Africa (Regional Integration Project for Technology Hunting in Africa)	5 & 6	1 & 3
23	Africa Free of Hepatitis Hands on Capacity Building – Shabu Village Project	2, 5 & 6	2
24	Flagship Project on Fighting Stunting in Africa: Waging War on Malnutrition and Pollution	1, 2 & 4	2 & 4
25	Guidelines for Accreditation of ASRIC Centers of Excellence (ASRIC-CoE)	3	1 & 2
26	International Platform for Adaptation Metrics (IPAM)	4 & 5	1
27	African Technology Transfer Center (ATTC)	6	1 & 2
28	ASRIC 4th Industrial Revolution	6	1
29	ASRIC project on AI in agriculture: design and development of AI-enabled irrigation with a fertigation system	1, 2 & 3	3
30	African Disaster Mitigation Research Center (ADMIR) – Center of Excellence	3 & 5	1
31	African Union Science, Technology and Innovation Framework on Africa Free of Viral Hepatitis	2 & 5	1 & 2

B

AU-STRC report on the Programmes and Projects for the STISA-2024 Implementation

1.0 AU-STRC REPORT ON THE PROGRAMMES AND PROJECTS FOR THE STISA-2024 IMPLEMENTATION

This section offers a comprehensive review of the programmes and projects undertaken by the AU-STRC to meet the STISA-2024 objectives. It details the progress, challenges, and lessons learned among others from the projects

1. AFRICAN ECONOMY DRIVEN BY INNOVATION: STISA POLICY ANALYSIS

Background

Africa's economies face persistent challenges of low technological capacity, dependence on aid, and weak institutional coordination. Despite existing policies and initiatives, the continent lags behind in global market competitiveness due to limited innovation ecosystems and insufficient technology transfer mechanisms.

In order to guide the implementation of the STISA-2024 and to identify the needed interventions, to achieve the goals and objectives of STISA-2024, the AU-STRC conducted a policy analysis titled 'African Economy Driven by Innovation: Science, Technology and Innovation Strategy for African 2024'. This policy analysis resulted in identifying the gaps, needs and the requisite policies and institutional arrangements that to accomplish full implementation of STISA-2024. As of the reporting period several projects were implemented by the AU-STRC under the pillars of the STISA 2024. Institutional strengthening and development were also part of the focus during the implementation of the STISA-2024.

The African economy driven by innovation: STISA-2024 policy analysis sought to position innovation as the driver of socio-economic transformation, guiding the transition toward an innovation-led, knowledge-based economy. This was achieved through the identification of mechanisms, policies, and institutions required to achieve this shift.

Aim

To promote technology transfer, innovation, and entrepreneurship as engines of economic growth and industrial competitiveness in Africa.

Objectives

1. Facilitate technology transfer and acquisition between AU Member States.
2. Integrate technology into national priority sectors and development plans.
3. Accelerate economic growth from commodity-based to value-added economies.
4. Lead Africa's transition to an innovation-driven economy.
5. Promote "Made in Africa" products and harmonized quality standards.
6. Develop market gap analyses and technology commercialization frameworks.

Stakeholders

- Continental and Regional Institutions: AUC-HRST, AU-STRC, NEPAD, AOSTI, RECs, OAPI, ARIPO.
- National Actors: Ministries of Science, Technology, Trade, Industry, and Education; Higher Education and Research Institutions; National Innovation Agencies.

- Private Sector and Industry: SMEs, business associations, investors, technology firms.
- Development Partners: UNIDO, UNESCO, UNECA, AfDB, World Bank, OECD.
- Civil Society: Community innovators, entrepreneurs, producer cooperatives.

Activities

- Conduct baseline studies and needs analyses on technology transfer and innovation capacity.
- Establish or strengthen Offices of Technology Transfer and Acquisition (OTTA) at national and continental levels.
- Develop and pilot Technology Transfer and Acquisition policies.
- Build capacity of Member State officials on innovation systems and technology management.
- Promote regional advocacy, awareness, and networking for inclusive innovation.
- Create mechanisms for commercialization of research outputs and support for SMEs.
- Facilitate policy endorsement and coordination among stakeholders.

Outcomes

- Functional AU and national Offices for Technology Transfer and Acquisition.
- Adopted and implemented continental and national innovation policies.
- Enhanced human and institutional capacity for technology management.
- Strengthened intra-African collaboration on innovation and industrial development.
- Expanded markets for African products through innovation and value addition.
- Increased recognition of innovation as a pillar of economic growth and competitiveness.

2. PAN-AFRICAN INTELLECTUAL PROPERTY ORGANISATION (PAIPO)

Background

The Pan-African Intellectual Property Organisation (PAIPO) was established as a Specialized Agency of the African Union following AU Assembly Decisions Assembly/AU/Dec.138 (VIII) of 2007 and Assembly/AU/Dec.453 (XX) of 2013. It shall respond to the growing need for a development-oriented intellectual property (IP) system that promotes creativity, innovation, and knowledge-based economies across Africa.

The PAIPO shall be responsible for intellectual property and other emerging issues related to intellectual property in Africa and shall promote effective use of the intellectual property system as a tool for economic, cultural, social and technological development of the continent as well as set intellectual property standards that reflect the needs of the African Union, its Member States and Regional Economic Communities (RECs), ARIPO and OAPI.

PAIPO recognizes intellectual property as a tool for economic growth, cultural development, and technological advancement, while also addressing challenges of globalization, brain drain, and inadequate protection of indigenous knowledge. It aims to harmonize IP standards across Africa, modernize legislation, and enhance the ability of Member States to leverage IP for sustainable development.

Aim

To establish a continental framework for intellectual property governance that harmonizes standards, promotes creativity and innovation, protects Africa's indigenous knowledge and cultural assets, and positions Africa as an influential actor in global IP negotiations.

Objectives

1. Harmonize intellectual property laws and standards across AU Member States and Regional Economic Communities (RECs).
2. Facilitate the use of IP to foster innovation, creativity, and entrepreneurship.
3. Support Member States in formulating policies and addressing emerging IP issues.
4. Strengthen national and regional IP institutions, including ARIPO and OAPI.
5. Promote awareness and education on intellectual property as a driver of socio-economic development.
6. Ensure the protection, exploitation, and commercialization of African IP assets, including indigenous knowledge, genetic resources, and cultural expressions.
7. Represent Africa's common position in international IP negotiations.

Stakeholders

- African Union (AU) Member States
- PAIPO Secretariat, Council of Ministers, and Conference of State Parties
- African Regional Intellectual Property Organisation (ARIPO)
- Organisation Africaine de la Propriété Intellectuelle (OAPI)
- Regional Economic Communities (RECs)
- National Intellectual Property Offices
- WIPO and other international partners
- African innovators, researchers, entrepreneurs, and cultural practitioners
- Local communities and custodians of indigenous knowledge

Activities

- Drafting and harmonization of continental IP legislation and guidelines.
- Establishment of continental databases on genetic resources, traditional knowledge, and cultural expressions.
- Training and capacity-building programmes for national IP offices and professionals.
- Development of policy guidelines and best practices for IP management and commercialization.
- Public awareness campaigns to promote creativity, innovation, and IP literacy.
- Facilitation of cooperation with global and regional IP institutions.
- Organization of forums for dialogue, research, and policy exchange on emerging IP issues.

Outcomes

- Harmonized IP legislation and policies across Africa.
- Strengthened capacity of national and regional IP offices.
- Increased use of IP systems to foster innovation, creativity, and entrepreneurship.
- Enhanced protection and commercialization of African indigenous knowledge and cultural resources.
- Improved African representation and influence in global IP negotiations.
- Greater public awareness of IP as a tool for development.

3. AFRICAN UNION INFECTIOUS DISEASES FRAMEWORK

Background

Africa continues to face significant challenges from infectious diseases, which undermine health, development, and economic growth. The continent is disproportionately affected by diseases such as HIV/AIDS, tuberculosis, malaria, and neglected tropical diseases, alongside recurring outbreaks of Ebola, influenza, and other emerging pathogens. Weak health systems, inadequate research capacity, poor infrastructure, and limited funding exacerbate the impact of these diseases.

The African Union Infectious Diseases Framework builds on Africa's Common Position at the 2006 UN General Assembly Special Session on HIV/AIDS, the 2000 and 2001 Abuja Declarations, and the 2005 World Summit on the Review of the MDGs, which highlighted infectious diseases as a major barrier to development in Africa. It responds to persistent and emerging challenges by proposing a new, coordinated approach to infectious disease management on the continent.

A continental assessment concluded that a paradigm shift is needed to address diseases affecting humans, animals, and plants under the One Health approach. Human health continues to face immense challenges, with millions living with HIV/AIDS, while the livestock sector which contributes nearly a quarter of sub-Saharan Africa's GDP remains constrained by some of the world's most contagious animal diseases. Likewise, crop pests and diseases threaten food security, with the cassava mosaic pandemic in Eastern Africa serving as a stark example of their socio-economic impact.

This Framework prioritizes science, technology, and innovation as central tools for Africa's preparedness and response. By strengthening capacities for detection, monitoring, and control, and by fostering collaboration among Member States, Regional Economic Communities, and global partners, the Framework provides a roadmap for protecting health, livelihoods, and economic growth against infectious disease threats. It addresses the need to build an evidence based response to the infectious diseases through network of Centres of Excellences. These centres of excellences include: SCAIDS, WACIDS, CACIDS, NACIDS.

In recognition of these challenges, the African Union Infectious Diseases Framework was developed as a continental response to guide Member States and Regional Economic Communities (RECs) in strengthening prevention, control, and management of infectious diseases. The Framework emphasizes the critical role of science, technology, and innovation in combating disease and improving health security. This framework was one of among other guiding strategic documentations and actions that leaded to the establishment of the African Centre for Diseases Control.

Aim

To provide a comprehensive, coordinated, and sustainable framework for addressing infectious diseases in Africa through prevention, control, research, innovation, and capacity building.

Objectives

1. Strengthen surveillance, early warning, and rapid response systems for infectious diseases.
2. Enhance diagnostic, treatment, and vaccine development capacities across Member States.
3. Promote coordinated research on infectious diseases through networks and centres of excellence.
4. Build capacity of health systems, laboratories, and human resources for health.
5. Foster partnerships and collaboration among Member States, RECs, and international partners.
6. Support policies for equitable access to medicines, vaccines, and health technologies.
7. Mainstream infectious disease control into national development and health strategies.

Stakeholders

- African Union Commission (AUC)
- AU Member States particularly Ministries of Health, Science & Technology, Education
- Africa Centres for Disease Control and Prevention (Africa CDC)
- Regional Economic Communities (RECs)
- National Public Health Institutes and Research Centres
- Universities and Centres of Excellence
- International partners including WHO, UNAIDS, UNICEF, UNDP, Global Fund, GAVI
- Private sector and pharmaceutical industries
- Civil society and community-based organizations

Activities

- Establishment of integrated surveillance and monitoring systems at national and regional levels.
- Development of continental guidelines and protocols for infectious disease management.
- Strengthening of laboratory networks and diagnostic capacities.
- Training programmes for healthcare workers, laboratory personnel, and researchers.
- Promotion of R&D in vaccines, drugs, and diagnostics through funding and partnerships.
- Organization of annual forums and policy dialogues on infectious disease challenges.
- Mobilization of domestic and external resources for infectious disease programmes.
- Advocacy and awareness campaigns to reduce stigma and improve prevention.

Outcomes

- Improved capacity for early detection and rapid response to infectious disease outbreaks.
- Strengthened health systems and laboratory networks across Member States.
- Increased African-led research and innovation in diagnostics, treatments, and vaccines.
- Harmonized policies and protocols for infectious disease control across the continent.
- Enhanced intra-African and global partnerships for health security.
- Reduced morbidity, mortality, and socio-economic burden of infectious diseases.

4. AU-STRC, UNESCO, MERCK MARS SUMMIT

Background

Africa faces multiple development challenges ranging from a high burden of infectious and non-communicable diseases to weak research and innovation ecosystems that require robust scientific solutions. Despite having some of the fastest-growing populations and increasing university enrolments, Africa still lags in global research output, with only about 2% of the world's scientific publications originating from the continent. Limited funding, fragmented research systems, and underrepresentation of women in science compound the challenge.

The Merck Africa Research Summit (MARS), launched in collaboration with MERCK, UNESCO, AU-STRC in 2015, was designed as a continental platform to empower African researchers through exposure, capacity building, and recognition. The MARS has since been conducted annually under varying thematic focus largely on infectious diseases, women's health, vaccine development, reproductive health care and non-communicable diseases. These align with the Science, Technology and Innovation Strategy for Africa (STISA-2024) priority area 2 and African Union's Agenda 2063.

The AU-STRC MERCK partnership has institutionalized MARS as a sustainable mechanism to provide a structured platform to advance research, nurture young scientists, promote gender equity in STEM, and link research outputs with policy priorities and societal needs.

Aim

To advance Africa's scientific research capacity and innovation by providing opportunities for capacity building, collaboration, and recognition of African researchers, particularly young scientists and women.

Objectives

1. Strengthen capacity of African researchers through structured training, mentorship, and knowledge exchange.
2. Promote visibility of African research by providing platforms for showcasing innovations and disseminating findings globally.
3. Support gender equity in STEM by empowering women researchers and recognizing their contributions.
4. Foster collaboration between African and international research institutions, industries, and policymakers.

5. Contribute to development priorities by linking research outputs to AU Agenda 2063, SDGs, and STISA-2024.
6. Create sustainable mechanisms for research funding, recognition, and innovation uptake across Africa.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)
- MERCK
- MARS Scientific Advisory Board
- African universities and research institutions
- Young African researchers and postgraduate students
- African governments and policymakers
- International partners
- Civil society and media

Activities

- Annual AU-STRC MERCK MARS Summit bring together African and international researchers to present findings, network, and engage in policy dialogues.
- Capacity-building workshops on advanced research methodologies, data management, grant writing, and science communication.
- Research awards and fellowships recognizing excellence, with a special category for women scientists to promote gender inclusion.
- Policy engagement forums to translate research findings into actionable recommendations for governments and AU bodies.
- Monitoring and evaluation framework to track impact, document success stories, and sustain the initiative.

Outcomes

- Enhanced research capacity of African scientists, particularly young researchers and women.
- Increased scientific visibility of Africa through international publications, conferences, and policy dialogues.
- Strengthened collaborations within Africa and globally, fostering sustainable research ecosystems.
- Evidence-based policymaking in health, agriculture, and technology, informed by African-led research.

- Greater gender equity in science, with more women leading research initiatives and receiving international recognition.
- Sustainable AU–private sector partnership model that supports Africa's long-term scientific growth.
- Contribution to Agenda 2063 and SDGs, positioning Africa as a hub of scientific innovation and global knowledge production.

5. AFRICA ENGINEERING SCIENCE CAPACITY BUILDING

Background

Engineering and applied sciences play a critical role in driving industrialization, infrastructure development, and technological innovation in Africa. Despite the continent's immense potential, Africa continues to face challenges in engineering capacity, including limited access to advanced training, insufficient research infrastructure, weak industry-academia linkages, and underrepresentation of African engineers in global innovation systems.

The AU-STRC, the Egyptian Engineering Syndicate, and Schneider Electric Egypt developed a Capacity Building programme for Young African Electrical Engineers also referred to as the Africa Engineering Science Capacity Building programme which included laboratory practical, industrial visits and theory lessons. The Egyptian Engineering Syndicate (EES) is one of Africa's largest professional engineering bodies. Through joint efforts young engineering expertise were mobilized to train and support African engineers to address Africa's infrastructural and industrial challenges, strengthen human capital, and advance regional integration.

The programme had its first batch of training in 2017 and the programme has trained 60 Engineers from Tanzania, Rwanda, and Uganda, each training session is four weeks long. AU-STRC prioritizes the empowerment of professional associations and regulatory bodies to ensure high standards of practice and sustainable capacity in multidisciplinary fields.

Aim

To build and strengthen Africa's engineering and scientific capacity through coordinated training, research collaboration, and professional networking

Objectives

1. To enhance the skills and competencies of African engineers through structured training and professional development programs.
2. To foster intra-African collaboration in engineering education, research, and innovation.
3. To promote industry-academia partnerships that address Africa's infrastructural, industrial, and technological needs.
4. To strengthen policy engagement, ensuring that engineering research and practice inform development planning and regional integration.
5. To contribute to Africa's global competitiveness by aligning engineering training and practice with international standards.
6. To build advanced technical and professional competencies of African engineers in line with STISA-2024.

Stakeholders

- Egyptian Engineering Syndicate
- African Union Scientific, Technical and Research Commission (AU-STRC)
- Federation of African Engineering Organisations (FAEO)
- National engineering councils and professional associations across Africa
- African universities and technical institutes
- Ministries of Science, Technology, and Higher Education in AU Member States
- Industry partners in construction, energy, ICT, and manufacturing
- Internation partners including UNESCO, World Federation of Engineering Organizations
- Young African engineers, researchers, and students

Activities

- Development and launch of the Africa Engineering Science Capacity Building Programme for young African electrical engineers.
- Collaboration between AU-STRC, Egyptian Engineering Syndicate, and Schneider Electric Egypt to design and implement training modules.
- Delivery of integrated training sessions combining theoretical lessons, laboratory practicals, and industrial visits.
- Mobilization of experienced Egyptian engineers to mentor and train participants.
- Selection and training of engineers from Tanzania, Rwanda, and Uganda.
- Organization of four-week training cohorts hosted in Egypt.
- Strengthening of partnerships among African engineering institutions and professional bodies.
- Promotion of knowledge exchange and regional integration through professional networking.
- Fellowship schemes for young African engineers to pursue industrial engineering training in Egyptian companies.
- Engineering innovation challenge to promote African-led solutions to infrastructure, energy, and technology needs.

Outcomes

- Enhanced technical and practical competencies of young African electrical engineers.
- Strengthened capacity of participating countries to address infrastructure and industrial challenges.
- Improved collaboration and knowledge exchange among African engineering institutions and professional bodies.
- Establishment of a sustainable model for regional engineering training and mentorship.
- Increased participation of African engineers in innovation, industrial development, and applied research.

- Strengthened linkages between academia, industry, and professional engineering associations.
- Empowerment of professional bodies to uphold standards and promote excellence in engineering practice across Africa.
- Enhanced industry-academia partnerships driving technology transfer and industrial growth.
- Establishment of a sustainable continental framework for engineering professional development under the leadership of the Egyptian Engineering Syndicate.

6. AFRICAN UNION NETWORK OF SCIENCES (AUNS)

Background

Africa's transformation agenda requires a robust scientific base to drive innovation, industrialization, and sustainable development. However, the continent's research landscape is often fragmented, with limited collaboration between institutions, countries, and disciplines. Many African researchers operate in isolation, and knowledge produced on the continent is not always visible or adequately integrated into policy and practice.

The African Union Network of Sciences (AUNS) is a virtual platform designed to connect Africa's diverse scientific community—scholars, engineers, technologists, innovators, and inventors in the continent and the diaspora by fostering collaboration, resource-sharing, and interdisciplinary engagement, so as to address African Science and Technology development challenges and strengthen Africa's scientific landscape. AUNS is envisioned as a continental platform that will overcome fragmentation in Africa's scientific research landscape

In addition, AU-STRC surveys reveal that many African scientists remain disconnected from peers within the continent, often engaging more with researchers abroad than with colleagues at home. Diaspora expertise is also underutilized, despite AU's 2003 decision to integrate the diaspora as the "sixth region" of the Union.

AUNS builds on the mandate of the ASRIC to strengthen knowledge exchange, foster innovation, and enhance Africa's capacity to solve its own development challenges.

The network is implemented in four phases summarized as: 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. Phase three is the functionalization and publicity of the network; and Phase four: The continuous improvement and sustainability of the network.

AU-STRC conducted a publicity campaign in 2018 with Vice Chancellors from different Nigerian Universities and later with African ambassadors accredited to Nigeria as part of the AUNS pre-launching activities (Information days).

Aim

The AUNS aims (a) to enrich the African knowledge society and to post the African Research and Innovation outputs and to uplift the intra Africa cooperation in Science, Technology and Research; and (b) improve the quality and the application of science, technology and innovation through

promoting and sharing experiences/knowledge and virtual learning for development.

Objectives

1. Facilitate access to accurate, up-to-date scientific information.
2. Foster knowledge production, dissemination, and open access publishing.
3. Create forums for interdisciplinary interaction and dialogue.
4. Strengthen intra-Africa research collaboration across all scientific domains.
5. Bridge the gap between African scientists in the diaspora and on the continent, introducing brain circulation to counter brain drain.
6. Provide a platform for North-South and South-South cooperation in science, technology, and innovation (STI).
7. Update the scientific knowledge in Africa;
8. Build a digital repository and virtual learning tools for African researchers.
9. Promote publication sharing and open access

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC) – lead developer and continental coordinator.
- African Scientific, Research and Innovation Council (ASRIC) – statutory body supporting governance and strategic alignment.
- National research councils, academies of science, and universities across AU Member States.
- African diaspora scientists and associations.
- Regional Economic Communities (RECs) facilitating sub-regional implementation.
- International partners including UNESCO, TWAS, Royal Academies, IOM's MIDA programme, etc.
- Private sector and industry partners (ICT, health, agriculture, energy, manufacturing).
- Civil society and media for advocacy and science communication.

Activities

- Development of a digital network portal with thematic clusters in Natural Sciences, Engineering, Health, Agriculture, Social Sciences, and Humanities.
- Capacity-building initiatives such as training, mentorship, and fellowships.
- Publication and dissemination programmes, including open-access ASRIC journals and databases.
- Recognition and awards scheme for outstanding researchers, including women and youth in science.
- Continuous improvement of the portal to ensure sustainability and adaptability of the AUNS

- Annual virtual African Sciences Forum bringing together scientists, diaspora experts, and policymakers who are members of AUNS.

Outcomes

- A fully operational AUNS portal network connecting researchers across disciplines and borders.
- Strengthened intra-African and diaspora collaboration in science thereby, enhancing research productivity and reducing duplication of works.
- Improved visibility and accessibility of African research outputs in global knowledge platforms.
- Enhanced capacity of African researchers through mentorship and training.
- Evidence-based policymaking informed by African-led scientific research.
- A sustainable mechanism promoting brain circulation, countering brain drain.

7. FEDERATION OF AFRICAN ENGINEERING ORGANIZATION (FAEO)

Background

The Federation of African Engineering Organisations (FAEO) is the umbrella body of engineering institutions in Africa, representing the continent at the World Federation of Engineering Organizations (WFEO). FAEO serves as the platform for harmonizing engineering standards, strengthening professional associations, and advocating for the role of engineering in development.

The African Union Scientific, Technical and Research Commission (AU-STRC) signed a Memorandum of Understanding (MoU) with FAEO, laying the foundation for close collaboration. Under this MoU, AU-STRC and FAEO work on guidelines for establishing national engineering associations, and developing financial and management control systems. A key priority is the harmonization of engineering standards across Africa to ensure comparability, mobility, and quality in engineering practice.

With partners UNSECO, WEFO, FAEO, AU-STRC jointly organize The Africa Engineering Week and African Engineering Conference which is an annual premier gathering of engineering professionals, academics, and industry leaders from across Africa and beyond. This conference helps to raise the profile of the engineering profession, highlight its vital role in sustainable development, and inspire students to pursue engineering by integrating practical applications into Science, Technology, Engineering and Mathematics (STEM) education.

Aim

To strengthen the structure, governance, and role of FAEO in unifying Africa's engineering profession, harmonizing standards, and building capacity for engineering-driven development across the continent.

Objectives

1. To develop guidelines and statutes that support AU Member States in establishing national engineering associations and councils.
2. To harmonize engineering standards across Africa to promote professional mobility, quality assurance, and continental integration.
3. To recommend and/or build the financial and management capacity of national engineering associations for long-term sustainability.
4. To promote intra-African collaboration in engineering education, research, and practice.
5. To conduct capacity-building workshops for national bodies on professional regulation, accreditation, and continuous professional development.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)

- Federation of African Engineering Organisations (FAEO)
- African national engineering councils, institutions, and professional associations
- African universities and technical institutions
- Regional Economic Communities (RECs)
- Industry stakeholders
- International partners
- African engineering professionals

Activities

- Development of continental, regional, national guidelines and statutes for establishing and strengthening national engineering associations.
- Drafting of harmonized African engineering standards, in collaboration with AU-STRC and RECs.
- Capacity-building workshops for national bodies on professional regulation, accreditation, and continuous professional development.
- Recommend financial and management control systems of national engineering associations.
- Policy advocacy initiatives to integrate engineering solutions into flagship projects.
- Networking platforms for engineers across Africa, promoting knowledge sharing and collaboration.
- Youth and gender empowerment initiatives for advancing inclusivity in engineering professions.

Proposed Outcomes

- National engineering associations established or strengthened in AU Member States
- Harmonized African engineering standards enabling mobility, quality assurance, and recognition across borders.
- Strengthened collaboration between professional bodies, academia, and industry in Africa.
- Increased visibility of Africa's engineering profession in global platforms.
- Enhanced inclusion of women and youth in engineering leadership.

8. DEVELOPMENT OF A GEOGRAPHICAL INDICATIONS (GIs) SCHEME IN AFRICA

Background

Africa possesses a vast array of unique local products agricultural goods, foodstuffs, and handicrafts that reflect the continent's rich biodiversity, cultural heritage, and traditional knowledge. These products hold immense potential for enhancing Africa's competitiveness in domestic and global markets. However, their value is undermined by inadequate protection, imitation, adulteration, and the unauthorized use of local names abroad. Some products have already become generic or commercialized outside their regions of origin, leading to the erosion of cultural and economic ownership.

In many regions of the world, particularly Europe, Geographical Indications (GIs) have proven to be effective instruments for safeguarding local products, enhancing their market value, and promoting territorial development. Although 47 out of 51 AU Member States have established some form of GI protection either through specific legislation or trademark regimes implementation remains uneven, and very few African product names are officially registered.

The Development of a GI Scheme in Africa aims to address these challenges by creating a continental framework for protecting and promoting African products of unique origin and quality. It builds on ongoing collaboration between the African Union Scientific, Technical and Research Commission (AU-STRC) and the Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), with technical support from regional organizations such as OAPI and ARIPO.

Geographical Indications represent a strategic opportunity for Africa to safeguard its cultural heritage, strengthen intellectual property rights, and promote local economic development. Despite the continent's rich diversity of unique products, limited awareness, weak institutional capacity, and fragmented legal frameworks have constrained the effective use of GIs. Establishing a structured GI scheme will empower producers to protect their traditional knowledge, ensure product authenticity, and capture greater market value.

The initiative provides a practical mechanism for transforming traditional products into levers of innovation and sustainable growth. By enhancing traceability, quality assurance, and brand recognition, GIs can generate employment, promote rural development, and open access to international niche markets. Moreover, GIs encourage environmental stewardship and responsible resource use by linking product value to territorial identity and local ecosystems.

This programme is aligned with Agenda 2063, STISA-2024, and the African Continental Free Trade Area (AfCFTA) objectives, promoting inclusive growth, value addition, and continental integration. By positioning GIs within Africa's innovation and trade agendas, the initiative

strengthens Africa's capacity to compete globally while preserving its heritage for future generations.

Aim

To establish a coherent and sustainable framework for the recognition, protection, and promotion of Geographical Indications (GIs) in Africa, thereby enhancing the value of local products and contributing to inclusive socio-economic development across the continent.

Objectives

1. Analyze and document best practices and existing models of GI registration and management across African Member States.
2. Build institutional and human capacity for GI development through a structured training-of-trainers approach.
3. Develop a continental strategy and practical tools to support national and regional GI implementation.
4. Promote networking, knowledge sharing, and stakeholder collaboration on GI management and value chain development.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)
- CIRAD (France)
- African Intellectual Property Organization (OAPI)
- African Regional Intellectual Property Organization (ARIPO)
- National Intellectual Property Offices
- Relevant Government Ministries (Agriculture, Trade, and Industry)
- Producers' Associations and Cooperatives
- Research Institutions and Universities
- Civil Society Organizations (CSOs)
- International Development Partners and Donors: European Union (EU), French Development Agency (AFD), Technical Centre for Agricultural and Rural Cooperation (CTA)

Activities

- Conducted assessments of Geographical Indication (GI) frameworks across AU Member States.
- Implemented the PAMPIG project (2009–2013) with CIRAD and AFD to pilot GI registration and testing mechanisms.
- Strengthened legal frameworks for GI protection through collaboration with OAPI and ARIPO.

- Organized joint AU–EU regional workshops to identify policy priorities and foster institutional cooperation.
- Reviewed best practices through literature analysis, case studies in five Member States, and validation workshops.
- Designed standardized training curricula and developed an AU/STRC online platform and manual for GI management.
- Trained 125 professionals across the five AU economic regions, establishing a network of national GI trainers.
- Drafted a comprehensive continental GI strategy document informed by national inputs and best practices.
- Disseminated results via publications, newsletters, and regional/continental awareness workshops.

Outcomes

- Improved understanding of GI frameworks and operational models across AU Member States.
- Strengthened institutional and legal capacities for GI protection and management.
- Enhanced human capital through standardized GI training and professional certification.
- Established a sustainable network of GI trainers and knowledge-sharing mechanisms across regions.
- Produced a continental GI strategy document to guide policy harmonization and implementation.
- Increased awareness and stakeholder engagement in the promotion of African-origin products through GIs.
- Fostered stronger AU–EU and intra-African collaboration on intellectual property and value chain development.

9. CAPACITY BUILDING WORKSHOP ON MITIGATING THE IMPACT OF NATURAL HAZARDS IN AFRICA

Background

Africa has in recent decades witnessed a troubling increase in natural hazards. Regions once unaffected are now experiencing earthquakes, floods, droughts, volcanic eruptions, landslides, wildfires, and other hazards, many of them intensified by the effects of climate change. These disasters not only threaten human lives but also undermine social and economic development across the continent.

Recognizing this urgent challenge, the African Union Scientific, Technical and Research Commission (AU-STRC), in partnership with international and regional scientific institutions, initiated a programme on mitigating the impact of natural hazards in Africa. This programme focuses on mapping risks, analyzing threats, developing scenarios, and advising policymakers on preparedness and response strategies.

Two dedicated working groups were established, drawing expertise from Africa, the Diaspora, the European Union, Japanese scientific institutions, and the Japan International Cooperation Agency (JICA). These groups focus on seismic and volcanic hazards as well as climate change mitigation and adaptation. This initiative underscores AU-STRC's long-standing role as a continental leader in mobilizing science and research for Africa's resilience.

The first Capacity Building Workshop on Mitigating the Impact of Natural Risks in Africa was organized in 2017 by AU-STRC in collaboration with UNESCO and the National Research Institute of Astronomy and Geophysics of Egypt. The workshop gathered over 80 participants from 15 AU Member States, making it one of the largest multi-stakeholder engagements on disaster risk reduction at the continental level.

The training modules were comprehensive and practical, covering:

1. Scientific methodologies for disaster risk reduction.
2. Crisis management systems, including an Egyptian case study.
3. Seismicity, seismic hazards, and engineering seismology.
4. Development of a seismo-tectonic map of Africa as a tool for hazard and risk assessment.
5. Climate change and its impacts on Africa, including regional climate modeling.
6. Funding opportunities for natural hazard research and resilience programmes.

Through this workshop, AU-STRC and its partners built the foundation for stronger technical expertise in Africa, while also identifying the need for more sustained investments in capacity building across sectors such as health sciences, engineering, and natural risks management.

The AU-STRC in collaboration with the National Research Institute of Astronomy and Geophysics (NRIAG) and other partners institutions developed a draft constitutive act for a proposed African Seismological Society which would take on the challenges that arise from natural hazards in the continent.

Aim

To strengthen Africa's resilience against natural hazards by building professional capacity, promoting scientific collaboration, and equipping decision-makers with evidence-based tools for disaster risk reduction and climate change adaptation.

Objectives

1. To enhance the technical capacity of African professionals in disaster risk management and hazard mitigation.
2. To promote regional and international collaboration in addressing natural hazards.
3. To provide science-based recommendations that support national and continental disaster preparedness and response strategies.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)
- UNESCO
- National Research Institute of Astronomy and Geophysics (Egypt)
- Japan International Cooperation Agency (JICA)
- European Union scientific institutions
- Scientists and experts from Africa and the Diaspora
- AU Member States (15 countries participated in the first workshop)

Activities

- Expand capacity building programmes on natural hazards to cover more AU Member States.
- Establish regional centers of excellence on seismic risk, volcanic monitoring, and climate adaptation.
- Develop a continental database and observatory for natural hazard mapping and risk scenarios.
- Strengthen collaboration with global partners (UNESCO, JICA, EU) while expanding African institutional involvement.
- Integrate natural hazard preparedness into national disaster management and climate change policies.

- Mobilize resources to sustain regular workshops, training modules, and hands-on field research programmes.

Outcomes

- Increased participation of AU Member States in natural hazard training and capacity-building initiatives, resulting in broader technical competence across regions.
- Functional regional centres of excellence established, providing specialized research and technical support in seismic risk, volcanic monitoring, and climate adaptation.
- Operational continental database and observatory established to support real-time natural hazard mapping, risk assessment, and evidence-based decision-making.
- Stronger partnerships forged with UNESCO, JICA, EU, and African institutions, fostering knowledge exchange and co-funded research initiatives.
- Natural hazard preparedness and risk reduction measures mainstreamed into national disaster management and climate change policies across Member States.
- Secured financial and institutional mechanisms to sustain periodic workshops, training modules, and applied field research, ensuring long-term continuity and impact.

10. AFRICAN UNION GREEN INNOVATION FRAMEWORK

Background

The African Union Green Innovation Framework, developed by the African Union's Scientific, Technical and Research Commission (AU-STRC), serves as a continental strategy to guide Member States toward sustainable, innovation-driven development. This was put in place considering the mounting environmental, economic, and social challenges affecting Africa. These include climate change, biodiversity loss, resource degradation, and limited technological capacity. Despite contributing less than 4% of global greenhouse gas emissions, the continent remains highly vulnerable to climate impacts and relies heavily on natural resource extraction. The African Union Green Innovation Framework (AU-GIF) emphasizes adaptability, long-term vision, and solutions tailored to Africa's unique context. The AU-STRC working with experts developed the AU-GIF.

The green innovation framework enlists four pillars: Technology system and skills; People and social values and norms; Knowledge system; and Regional/National enablers. The AU-GIF was developed by considering societal values, ethics, and cultural norms, gender inclusion and community engagement. It leverages on existing policy frameworks and proposes targeted actions to create a more focused, coordinated approach to green growth across the continent. By promoting regional cooperation, knowledge sharing, and strategic partnerships, AU-GIF provides a roadmap for leveraging green innovation to build resilience, reduce poverty, create green jobs, and transition Africa toward a low-carbon, sustainable future.

Green innovation is vital for addressing Africa's environmental vulnerabilities while unlocking pathways to inclusive and sustainable economic growth. As the world moves decisively toward low-carbon development and sustainability, Africa must position itself to not only adapt but lead in leveraging green technologies and practices.

The AU-GIF provides a timely and strategic tool to guide this transition. It offers a coordinated approach to embedding green innovation within national and continental development agendas, ensuring alignment with frameworks such as Agenda 2063 and the SDGs. Furthermore, with increasing access to climate financing and international support, the AU-GIF enables African nations to harness new economic opportunities, strengthen resilience, and participate competitively in the emerging global green economy.

Aim

To guide and support African Union Member States in transitioning to a low-carbon, resource-efficient, innovation-driven, and inclusive green economy through sustainable technological and systemic innovation.

Objectives

1. To promote green innovation as a core driver of Africa's sustainable development agenda
2. To create synergies between national innovation systems and continental STI frameworks
3. To enable AU Member States to tap into global green financing and technology opportunities

Stakeholders

- African Union Commission (AUC)
- AU Member States,
- Regional Economic Communities (RECs)
- African Development Bank (AfDB)
- Research institutions and universities
- Private sector and green entrepreneurs
- Civil society organizations
- International development partners and donors.

Activities

- Commissioning and development of the AU-GIF strategy document
- Situational analysis of green innovation policy landscapes in Africa
- Engagement with experts and regional stakeholders
- Alignment of AU-GIF with STISA-2024, Agenda 2063, and the SDGs

Outcomes

- The AU Green Innovation Framework (AU-GIF) developed and adopted as a continental guide for promoting sustainable, innovation-driven growth.
- Comprehensive situational analysis generated actionable insights into Africa's green innovation landscape, informing national and regional policy formulation.
- Strengthened collaboration and consensus among experts, regional bodies, and Member States, ensuring inclusivity and shared commitment to green innovation.
- AU-GIF fully aligned with STISA-2024, Agenda 2063, and the SDGs, reinforcing integration of green innovation into Africa's broader development agenda.

11. CAPACITY BUILDING INITIATIVE ON INCLUSIVE /COMMUNITY-BASED INNOVATION FOR AU MEMBER STATES

Background

Innovation is often associated with high-tech industries and advanced research institutions, yet some of the most impactful solutions to Africa's development challenges emerge from local communities. Across the continent, people have been creating practical, low-cost, and adaptive innovations that respond directly to their daily realities; from agriculture and water management to healthcare and energy use. Unfortunately, many of these grassroots innovations remain under-recognized, unsupported, and disconnected from formal systems of knowledge and policy.

To address this gap, the African Union Scientific, Technical and Research Commission (AU-STRC) developed the flagship publication on Inclusive Community-Based Innovation. The study sought to highlight, analyze, and promote locally-driven innovations while exploring how they can be better supported and scaled up to contribute meaningfully to sustainable development.

The process began with stakeholder consultations involving innovators, community representatives, policymakers, and researchers. These discussions identified the barriers limiting grassroots innovation, such as lack of financing, weak intellectual property awareness, and limited access to technical and institutional support. AU-STRC then guided a problem tree and objective tree analysis, mapping the challenges and linking them to potential solutions.

An extensive literature review and data collection was carried out, examining examples of inclusive innovation across Africa and assessing their social and economic impacts. To complement this, case studies of successful community-based innovations were documented, showcasing how individuals and groups were solving pressing local problems with creativity and resilience.

AU-STRC convened forums and workshops where policymakers, researchers, and grassroots innovators came together to exchange knowledge and shape strategies for scaling community innovations. The outcomes were compiled into knowledge products and awareness materials, creating a valuable reference for governments, institutions, and communities alike.

Through this approach; combining consultation, structured analysis, case documentation, and knowledge dissemination, AU-STRC reaffirmed its role as a bridge between local innovation and continental policy, ensuring that the creativity of African communities contributes directly to inclusive and sustainable development.

Africa's development cannot depend solely on external technologies or formal scientific institutions. By recognizing and supporting local innovations, the continent can unlock a wealth of homegrown solutions that are affordable, adaptable, and sustainable. Community-based innovations reflect the lived realities of people and can directly improve livelihoods when adequately supported.

AU-STRC's work in this area ensures that grassroots creativity is not left behind but is integrated into continental innovation systems, aligning with Africa's development priorities under Agenda 2063 and STISA-2024.

Aim

To highlight, analyze, and promote locally-driven innovations while exploring how they can be better supported and scaled up to contribute meaningfully to sustainable development.

Objectives

1. To identify and showcase community-based innovations that address local challenges in Africa.
2. To analyze barriers and opportunities for scaling grassroots innovations.
3. To recommend practical measures for supporting, recognizing, and integrating inclusive innovations into broader development frameworks.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)
- Community innovators and local groups
- National governments and policymakers
- Universities and research institutions
- Civil society organizations
- Private sector partners supporting grassroots innovation
- International partners and donors

Activities

- Integrate community-based innovations into national and regional STI policy frameworks.
- Provide financial and technical assistance to support and scale grassroots innovations.
- Facilitate partnerships among communities, governments, academia, and private sector actors.
- Conduct capacity-building and awareness programmes on intellectual property, commercialization, and market access for community innovators.

- Document, publish, and disseminate best practices and success stories on inclusive community-based innovations across Africa.

Outcomes

- Policy Integration: Community-based innovations recognized and mainstreamed within national and regional innovation systems.
- Empowered Innovators: Grassroots innovators gain access to resources and technical support, enhancing scalability and sustainability of their solutions.
- Collaborative Ecosystem Strengthened: Increased cooperation among key stakeholders driving innovation-driven local development.
- Enhanced Capacity and Market Readiness: Community innovators equipped with skills in IP protection, product development, and commercialization.
- Knowledge Sharing and Replication: Documented innovations serve as reference models for adoption and adaptation across African Member States.

12. TOWARDS WOMEN PARTICIPATION IN SCIENTIFIC RESEARCH IN AFRICA

Background

Africa continues to grapple with a significant gender gap in scientific research, where women remain underrepresented in Science, Technology, Engineering, and Mathematics (STEM) fields. This disparity stems from deep-rooted societal, cultural, economic, and institutional barriers. Although women make up more than half of Africa's population, their participation in scientific research remains disproportionately low limiting the continent's potential for innovation, inclusive development, and sustainable progress.

Recognizing the urgency and strategic importance of closing this gap, the African Union Scientific, Technical and Research Commission (AU-STRC) took a proactive step by developing this publication. The book was conceived as a comprehensive effort to examine the underlying causes of low female participation in science, explore practical strategies to improve recruitment and retention, and propose targeted interventions that can foster gender equity in African scientific communities. This book is structured into two parts. The first part is a review of the Gross Enrollment Ratio (GER) of Male and Female cutting across Primary, Lower Secondary, Upper Secondary and Tertiary Institutions; from gender disparity to gender equality bringing about a paradigm shift in support for women in science.

The second part is a strategic analysis conducted on a focus group that identifies the root cause and effects of less participation of women in scientific research which also portrays the methodology and analysis of the problem, with an overall objective of enhancing technical and professional competencies to accelerate Africa's transition to innovation led knowledge-based economy. This overall objective is addressing the second pillar of STISA-2024 "building a critical mass of technical and professional competencies". The analysis shows that there is need to carry out key activities that will spearhead a paradigm shift in women participation in scientific research.

This initiative reflects AU-STRC's strong commitment to advancing gender inclusion within Africa's science and innovation ecosystems. It is also aligned with the African Union's Science, Technology, and Innovation Strategy for Africa (STISA-2024), particularly its pillar on building a critical mass of technical and professional competencies. Through this work, AU-STRC reinforces its leadership in shaping evidence-based policies and capacity-building programmes that empower African women to actively contribute to the continent's scientific and technological advancement.

Aim

To advance gender equity in Africa's STEM fields by addressing barriers to women's participation and strengthening capacities for inclusive scientific and technological development.

Objectives

1. To identify and analyze the root causes of low female participation in science and research.
2. To enhance capacity and provide recognition platforms for African women in STEM.
3. To advocate for policies and actions promoting gender equality in science at continental, regional, and national levels.

Stakeholders

- African Union Scientific, Technical and Research Commission (AUSTRC)
- UNESCO
- Merck Foundation
- National governments and education ministries
- Universities and research institutions
- Women scientists and researchers across Africa

Activities

- Conducted stakeholder and expert focus group sessions on gender and STEM to identify barriers to women's participation in scientific research.
- Developed a problem and objective tree analysis to map root causes, effects, and practical solutions for increasing female participation in science.
- Carried out a comprehensive literature and data review (1990–2012) using UNESCO and World Bank sources to assess gender disparities in STEM education and research.
- Compiled a publication highlighting profiles of leading African women scientists as role models and advocates for gender equity.
- Showcased platforms such as the UNESCO–Merck Africa Research Summit (2016) and the AU Kwame Nkrumah Regional Awards for Women Scientists to promote visibility and international collaboration.
- Formulated policy and programmatic recommendations to strengthen gender mainstreaming, capacity building, and mentorship in science across Africa.

Outcomes

- Enhanced understanding of the structural and cultural barriers limiting women's participation in STEM across Africa.
- Evidence-based framework developed to guide gender-responsive STI policies at national and continental levels.

- Increased visibility and recognition of African women scientists as role models for young researchers.
- Strengthened advocacy and collaboration platforms promoting gender inclusion in research, innovation, and leadership.
- Improved policy awareness and institutional commitment to mainstream gender equity in STI strategies aligned with STISA-2024 and Agenda 2063.
- Expanded networks and mentorship opportunities fostering the growth of women scientists and future leaders in African research communities.

13. CLIMATE CHANGE IMPACT IN AFRICA: CHALLENGES AND OPPORTUNITIES WITHIN THE REALMS OF SCIENCE, TECHNOLOGY AND INNOVATION

Background

Climate change poses one of the most pressing challenges to Africa's development, threatening food security, health, water resources, and livelihoods. Despite contributing minimally to global emissions, Africa remains disproportionately vulnerable due to its reliance on climate-sensitive sectors such as agriculture, coupled with limited adaptive capacity. The urgency of this challenge required a coordinated, evidence-based response.

In recognition of this, the AU-STRC undertook this comprehensive programme to study and address the impacts of climate change on the continent. The Commission approached the issue systematically by first convening focus groups and expert consultations, bringing together scientists, policymakers, and stakeholders to identify the root causes of Africa's climate vulnerability. This was followed by a problem tree and objective tree analysis, which mapped the barriers in detail and translated them into practical, solution-driven goals.

To ensure the findings were rooted in facts, AU-STRC led an extensive data collection and literature review, drawing on both African and global sources such as UNESCO, UNEP, and the IPCC. This analysis revealed the scale of the risks faced by African societies and the urgent need for coordinated adaptation measures. AU-STRC further enriched the work by documenting case studies across the continent, showcasing both the challenges faced by communities and the innovative responses already being implemented.

In addition, the Commission used its convening power to organize consultative workshops and forums, creating spaces where policymakers, researchers, and practitioners could deliberate on solutions and strategies. Knowledge products, awareness materials, and reports were produced and disseminated to ensure that insights reached the widest possible audience.

Through this deliberate process of combining stakeholder engagement, strategic analysis, data-driven research, case documentation, and policy dialogue, AU-STRC provided Africa with not just a study, but a roadmap. The Commission demonstrated its unique role as a bridge between science, policy, and practice, ensuring that Africa has the scientific evidence, tools, and strategies needed to confront climate change with resilience and confidence.

The climate change flagship publication was developed through a structured process that combined research, consultation, and knowledge sharing, coordinated under the leadership of the AU-STRC. The work began with expert and stakeholder consultations**,** where scientists, policymakers, and practitioners came together to identify Africa's most pressing climate challenges. These engagements provided the foundation for a deeper analysis of the continent's vulnerabilities.

As part of the research, a problem tree and objective tree analysis was conducted to map the root causes of climate-related challenges and translate them into achievable solutions. This approach ensured the study moved beyond identifying barriers to proposing clear, solution-oriented pathways.

The process also included an extensive literature review and data collection**,** using information from African institutions as well as international sources such as UNESCO, UNEP, and the IPCC. This helped build a solid evidence base on the impacts of climate change across sectors and regions. To complement the data, case studies from across Africa were documented, highlighting both the risks faced by communities and the innovative measures already being applied to adapt.

AU-STRC further organized consultative workshops and forums**,** which brought together researchers, policymakers, and community representatives to validate findings and co-develop practical recommendations. The outcomes were then compiled into knowledge products and awareness materials**,** ensuring that the insights were accessible and useful for decision-making at different levels.

Through these carefully coordinated activities, AU-STRC ensured that the publication provided not just a record of Africa's climate challenges but also a roadmap of strategies and solutions tailored to the continent's realities.

Objectives

1. To assess the current and future impacts of climate change on Africa's socio-economic and environmental systems, led by AU-STRC's scientific analysis.
2. To promote research, innovation, and knowledge-sharing across the continent, coordinated by AU-STRC as the AU's think tank on science and technology.
3. To recommend actionable measures and policies that reduce vulnerability and strengthen resilience, ensuring Africa benefits from context-specific, science-driven solutions.

Stakeholders

1. African Union Scientific, Technical and Research Commission (AU-STRC)**, t**he lead agency, driving scientific research, coordination, and policy advisory.
2. African governments and policymakers supported by AU-STRC's expertise for evidence-based decision-making.
3. Universities and research institutions, working with AU-STRC to generate data and innovations.
4. International partners such as UNFCCC, UNEP, IPCC, etc.
5. Civil society and local communities.
6. Private sector actors in energy, agriculture, and environment.

Activities

- Formulate and implement national and regional climate change policies integrated into development and sectoral planning.
- Conduct Africa-focused climate research and establish data systems and research networks for evidence-based decision-making.
- Deliver capacity-building and training programmes for policymakers, institutions, and communities on climate adaptation and mitigation.
- Promote renewable energy adoption, low-carbon technologies, and facilitate technology transfer to local contexts.
- Mobilize financial and technical resources and strengthen partnerships with international organizations for climate action.
- Support community-based adaptation initiatives and civil society-led projects to enhance local climate resilience.

Outcomes

- Strengthened policy and institutional frameworks integrating climate resilience across national and regional development agendas.
- Improved scientific capacity and data availability supporting informed climate policy and planning.
- Enhanced institutional and community competence in climate adaptation, mitigation, and sustainable resource management.
- Increased deployment of renewable energy and green technologies, driving low-carbon development across Africa.
- Expanded funding and partnerships enabling sustainable implementation of climate programmes.
- Empowered local communities actively engaged in adaptation efforts, resulting in greater resilience to climate impacts.

14. CAPACITY BUILDING TRAINING WORKSHOP ON VIRAL HEPATITIS FOR AU MEMBER STATES & AFRICAN LIVER PATIENTS ASSOCIATION (ALPA)

Background

Viral hepatitis remains a silent but devastating epidemic in Africa, contributing significantly to the continent's burden of infectious diseases. With mortality rates in the region standing at 13.7 per 100,000, hepatitis B and C continue to drive preventable illness and deaths, while also leading to life-threatening complications such as liver cirrhosis and Primary Liver Cell Carcinoma (PLCC). Despite its high prevalence, viral hepatitis is often under-recognized in national health agendas, creating an urgent need for coordinated responses that combine prevention, diagnosis, treatment, and monitoring. Addressing this challenge requires a continental approach that aligns with the African Union's Agenda 2063 and the Sustainable Development Goal 3 (Good Health and Well-being).

In response, the African Union Scientific, Research and Innovation Council (ASRIC), with the technical partnership of the African Liver Patients Association (ALPA) and support from the AU Commission on Research and Technical Affairs, convened the Capacity Building Training Workshop on Viral Hepatitis for AU Member States. The workshop served as a platform to strengthen Africa's collective capacity by sharing knowledge, best practices, and innovative models—such as Egypt's "Hepatitis-Free Villages" programme—that have proven effective in reducing the disease burden. By bringing together policymakers, health professionals, researchers, and patient associations, the workshop emphasized science-driven solutions and cross-border collaboration as critical tools for hepatitis elimination.

This training workshop showcased ASRIC's strategic role as a continental convener, knowledge broker, and driver of health innovation. Through its mandate under **STISA-2024**, ASRIC is committed to building Africa's technical and professional competencies in disease prevention and control. By empowering Member States with the skills, networks, and tools to combat viral hepatitis, ASRIC is not only addressing an urgent health crisis but also advancing Africa's long-term resilience to infectious diseases. This initiative demonstrates how science, technology, and innovation can be translated into practical, people-centered solutions, positioning ASRIC at the forefront of Africa's journey toward a hepatitis-free future.

The activities performed during the capacity building include:

- Community Engagement & Advocacy: Political and traditional buy-in; bilingual awareness campaigns.
- Volunteer Recruitment & Training: 50+ local health workers trained in testing, treatment, counselling, and data collection.
- Mapping & Data Collection: Covered 7 settlements, 3,000+ residents mapped.

- Screening, Testing & Education: 3,000 people screened; community sessions held. The statistics for Treatment & Vaccination were: 1,169 HBV positive and 457 HCV positive cases treated; and 1,172 HBV-negative individuals vaccinated (73% coverage).

The capacity building training workshop leverage on the stakeholders, pharmaceutical companies, foundations, philanthropies, international organizations, non-governmental organization, among others to see how the requisite capacity to manage the viral hepatitis can be built and to see how immediate action to mitigate the problem to bring relief to the African Union Member States that are threatened by the infection. That can be achieved by tapping in the experiences of ALPA and to extend its coverage to the entire continent gradually.

Aim

The aim of the capacity building training workshop on viral hepatitis is to equip participants with the requisite knowledge, and competencies to fight the endemic hepatitis and to share the experience on the challenges and successes of hepatitis through establishing a lasting intra-African co-operation and to set a periodic meeting to track progress.

Objectives

1. To raise awareness on Viral Hepatitis situations in the African continent.
2. To enhance intra-Africa cooperation among existing organizations and stakeholders fighting Viral Hepatitis.
3. To share the experiences on the prevalence and surveillance of the epidemic.
4. To benefit from the Egyptian experiences in the management of Viral Hepatitis.
5. To estimate the real situation of hepatitis in Africa and to know how drugs and vaccines on Viral Hepatitis can be accessible and affordable to the other Member States.

Stakeholders

- National Chairman of Parliament Committee on Science from the AU Member States.
- National Chairman of Parliament Committee on Health from the AU Member States.
- Health Ministry Representative.
- Science Ministry Representative.
- Food and Drugs Authorities from the AU Member States.
- Pharmaceutical Companies.
- International Organizations' Representatives.
- Funding Agencies
- ALPA’s Member Organizations

Activities

- Conducted post-treatment monitoring to assess adherence, recovery, and recurrence.
- Expanded the pilot model to additional communities in Nasarawa and other AU Member States.
- Implemented sustained awareness campaigns to promote second-dose uptake and reduce stigma.
- Engaged in policy advocacy and resource mobilization through AU-level lobbying and partnerships with private sector and donors.
- Independently, the state government continued with the second phase of the capacity building and training sessions

Outcomes

- Improved treatment adherence and reduced recurrence rates among beneficiaries.
- Scaled-up implementation of the hepatitis-free model across multiple regions.
- Increased public awareness and reduced stigma associated with hepatitis.
- Strengthened policy support, financing, and continental alignment under the Africa Free of Hepatitis Initiative.

15. CAPACITY BUILDING WORKSHOP ON ACCESSING THE GREEN CLIMATE FUND (GCF)

Background

Climate change poses an increasing threat to Africa's development, economy, and human well-being. While the continent contributes the least to global greenhouse gas emissions, it remains one of the most vulnerable regions to climate impacts such as floods, droughts, and desertification. Recognizing this urgent challenge, the African Union Scientific, Technical and Research Commission (AU-STRC) in collaboration with the African Centre for Technology Studies (ACTS) organized a Capacity Building Workshop for AU Member States on Accessing the Green Climate Fund (GCF).

Several workshops were held designed to strengthen the capacity of African countries to access and effectively utilize the Green Climate Fund which is one of the world's largest multilateral climate finance mechanisms. It provided Member States with practical guidance on developing, submitting, and managing GCF proposals aligned with national climate priorities. The Capacity Building Workshops on Accessing the Green Climate Fund brought together participants from several AU Member States, including policymakers, scientists, and representatives from government ministries and research institutions.

The initiative formed part of AU-STRC's wider mandate to enhance Africa's scientific and technical capacity for sustainable development. By facilitating this training, AU-STRC demonstrated its commitment to supporting African nations in mobilizing climate finance, translating science into policy, and ensuring that Africa's unique needs and priorities are adequately represented in global climate financing mechanisms.

The sessions were designed to enhance participants' understanding of GCF access modalities, project development, and implementation strategies. Experts from AU-STRC and ACTS facilitated the workshop, providing technical presentations, practical exercises, and interactive discussions. Participants were introduced to key GCF concepts such as accreditation, proposal formulation, funding windows, and evaluation criteria.

The training also covered topics on climate finance mechanisms, institutional frameworks, and the role of national designated authorities (NDAs) in coordinating GCF projects. Group exercises and breakout sessions enabled participants to apply what they learned to real-world scenarios, preparing them to develop project concept notes for submission to the GCF.

These collaborative workshops underscored AU-STRC's leadership in strengthening Africa's capacity to engage effectively with international partners and finance mechanisms, ensuring that

scientific and technical knowledge contributes directly to climate action and policy implementation.

Many African countries face significant barriers in accessing international climate finance due to limited institutional and technical capacity, inadequate understanding of GCF procedures, and insufficient experience in developing fundable project proposals. The workshops were therefore a crucial intervention to bridge these gaps by training participants on the GCF framework, accreditation processes, and proposal development requirements.

Through this initiative, AU-STRC and ACTS sought to strengthen Africa's readiness to attract climate funding, promote regional collaboration, and support Member States in aligning national development strategies with climate action priorities.

Aim

To build the capacity of AU Member States in understanding and accessing the Green Climate Fund, equipping participants with the knowledge and tools required to develop bankable proposals that meet GCF's investment and environmental standards.

Objectives

1. To enhance the technical capacity of participants from AU Member States to understand and navigate Green Climate Fund (GCF) access modalities.
2. To equip policymakers, scientists, and institutional representatives with practical skills in project formulation, accreditation, and proposal submission to the GCF.
3. To promote awareness of climate finance mechanisms and the institutional frameworks required for effective GCF engagement.
4. To strengthen the role of National Designated Authorities (NDAs) in coordinating and facilitating national access to GCF resources.
5. To foster regional collaboration and knowledge exchange among African institutions for joint project development and implementation.
6. To support the alignment of national climate initiatives with international financing opportunities, enhancing Africa's participation in global climate action.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)
- African Centre for Technology Studies (ACTS)
- African Union Member States
- Green Climate Fund (GCF)
- National Designated Authorities (NDAs)
- Climate change institutions, ministries, and agencies
- Civil society and private sector representatives

- Academia and research institutions

Activities

- Organized a three-day Capacity Building Workshop on Accessing the Green Climate Fund (GCF) from 28–30 August 2018 in Abuja, Nigeria.
- Conducted technical sessions and practical exercises on GCF access modalities, project development, and implementation strategies.
- Delivered expert presentations by AU-STRC and ACTS on accreditation processes, funding windows, and evaluation criteria.
- Facilitated group exercises and breakout sessions for participants to draft sample project concept notes.
- Provided training on climate finance mechanisms and the roles of National Designated Authorities (NDAs).

Outcomes

- Enhanced understanding of GCF structures and access procedures among policymakers, scientists, and institutional representatives from AU Member States.
- Improved capacity for project formulation and proposal development aligned with GCF requirements.
- Strengthened institutional readiness to engage with international climate finance mechanisms.
- Fostered collaboration between national institutions and accredited GCF entities for project implementation.
- Generated recommendations for sustained capacity building, including advanced training sessions, an online GCF knowledge platform, and stronger institutional frameworks for climate finance access.

16. FRAMEWORK FOR CAPACITY BUILDING OF JOURNALISTS IN REPORTING SCIENCE AND TECHNOLOGY

Background

The development of science, technology, and innovation (STI) in Africa remains constrained by a significant communication gap among key actors scientists, policymakers, industry, and the public. This gap is compounded by high illiteracy rates, limited communication infrastructure, and inadequate investment in professional science journalism. As a result, many scientific breakthroughs remain confined to laboratories and research institutions, with minimal translation into practical applications that benefit communities.

The lack of effective communication has also contributed to low public awareness and weak policy prioritization of science and technology as drivers of socio-economic transformation. Consequently, the STI sector often suffers from limited funding, as policymakers and stakeholders undervalue its contribution to national and continental development.

A science led and knowledge-driven development agenda is essential for Africa's sustainable progress. This requires the establishment of robust systems for disseminating scientific information and building the capacity of media professionals to communicate science effectively. Journalists and media institutions can play a transformative role in bridging the gap between scientific research and public understanding particularly in critical areas such as health, climate change, and technological innovation.

Recognizing these challenges, the African Union Commission (AUC), in collaboration with UNESCO, UNECA, and ECOWAS, has initiated a capacity-building programme aimed at strengthening the professional competencies of science and technology journalists in Africa. This effort aligns with continental priorities under Agenda 2063 and STISA 2024, emphasizing knowledge sharing, innovation, and inclusive development.

Science journalism serves as a critical interface between research, policy, and society. However, the lack of training and professional development opportunities for African journalists has limited the visibility and understanding of science in mainstream media. Empowering journalists with the skills and knowledge to communicate scientific concepts clearly will not only bridge the information gap but also foster informed policymaking, increased investment in science, and greater community engagement.

This initiative directly contributes to achieving Africa's long-term development goals by enhancing evidence-based decision-making, supporting knowledge economies, and promoting innovation-driven growth.

Aim

To enhance the capacity of African journalists to effectively communicate scientific and technological information, thereby improving public understanding, policy engagement, and the uptake of research outcomes for sustainable development.

Objectives

1. Strengthen the capacity of science and technology journalists to report accurately and accessibly on scientific and innovation issues.
2. Promote continuous professional development and collaboration among science journalists in Africa.
3. Improve the quality, frequency, and impact of scientific reporting in public and policy domains.
4. Facilitate exchanges on innovative communication tools and approaches in science journalism.
5. Identify challenges and best practices for strengthening science communication systems across the continent.

Stakeholders

- African Union Commission (AUC)
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- United Nations Economic Commission for Africa (UNECA)
- Economic Community of West African States (ECOWAS)
- African Federation of Science Journalists (AFSJ)
- National Governments and Ministries of Information, Science, and Technology
- Media Organizations and Journalists' Associations
- Academic and Research Institutions

Activities

- Conceptualized the initiative through AUC–UNESCO collaboration under their MoU framework.
- Established partnerships with UNECA and ECOWAS to support regional implementation.
- Identified training needs and thematic priorities for science journalism in Africa.
- Organized continental workshops pertaining to making science and technology information more accessible for Africa's development.

- Conducted capacity-building sessions through regional workshops and hands-on training in science communication.
- Developed training materials, facilitated group discussions, and compiled a comprehensive workshop report with recommendations.

Outcomes

- Strengthened partnerships among African regional and international organizations for science communication.
- Enhanced skills of journalists and communicators in science reporting, ethics, and use of modern tools.
- Improved media coverage of key development themes such as climate change, biodiversity, health, and innovation.
- Created sustainable training resources and a framework for continuous capacity development in science journalism across Africa.

17. INDIA AFRICA HEALTH RESEARCH COLLABORATION AND CAPACITY BUILDING

Background

The India-Africa Health Sciences Partnership, established under the auspices of the India-Africa Forum Summit III held in October 2015, represents a strategic collaboration between the Government of India and the African Union to jointly address pressing health challenges affecting both regions. The initiative was conceived in recognition of the growing burden of communicable and non-communicable diseases, limited health infrastructure, and the need to strengthen research and innovation capacities across the two continents.

Following the Summit, the first stakeholder meeting convened in 2016, bringing together representatives from Indian and African governments, research institutions, and health organizations. This engagement led to the development and signing of a Memorandum of Understanding between the AU-STRC and the Indian Council of Medical Research (ICMR) on 27th March, 2019 in India that outlines the framework for cooperation.

The India-Africa Health Sciences Partnership Implementation Plan translates this MoU into actionable programmes and projects structured around three interlinked priority areas: capacity strengthening and training; health research collaboration; and pharmaceutical trade and manufacturing. The plan demonstrates a strategic alignment with mutual needs capacity building, innovation, and pharmaceutical independence while emphasizing South-South cooperation model, which places emphasis on equity, mutual benefit, and long-term development impact.

Furthermore, this partnership addresses shared health challenges across India and Africa, such as communicable diseases, access to medicines, and insufficient local manufacturing capacity. By leveraging India’s established healthcare and pharmaceutical sectors and Africa’s emerging health research environment, the initiative promotes sustainable development, innovation, and self-reliance within both regions.

Aim

To implement joint programmes and projects that strengthen health systems, foster research collaboration, and enhance pharmaceutical manufacturing and trade between India and Africa.

Objectives

1. Build capacity of health professionals, researchers, regulators, and industry staff.
2. Promote joint health research initiatives targeting shared diseases and priorities.
3. Facilitate technology transfer, harmonization of regulatory frameworks, and local pharmaceutical manufacturing.

Stakeholders

- ICMR
- African Union Commission, AU-STRC, ASRIC
- Health Ministries of AU Member States and India
- Universities and Research Institutions
- Regulatory Authorities in AU Member States
- Pharmaceutical Manufacturers and Industry Associations
- Private Sector and Development Partners

Activities

- Established the India-Africa Health Sciences Partnership framework
- Developed and signed at Memorandum of Understanding.
- Formed expert groups to identify priority diseases and research themes.
- Launched the AU-India Health Research Exchange Programme for academic and professional exchanges.
- Implemented virtual and short-term capacity-building programmes for African medical practitioners.
- Initiated the AU-India Research Grant for joint research funding.
- Constituted the AU-India Forum on Pharmaceutical Trade, Drugs, and Diagnostics for regulatory and industrial collaboration.

Outcomes

- Formalized a structured framework for India-Africa collaboration in health sciences.
- Strengthened research partnerships and institutional linkages between African and Indian institutions.
- Enhanced technical and professional capacities of African health practitioners through training and exchanges.
- Increased joint research output addressing priority health challenges.
- Improved access to pharmaceuticals and diagnostics through harmonized regulations and technology transfer.
- Trained hundreds of African health and medical practitioners in priority areas of prevention and control of diseases

18. SCIENCE, TECHNOLOGY AND INNOVATION (STI) FOR POST-CONFLICT RECOVERY IN AFRICA: INTEGRATING YOUNG ARMS INTO THEIR SOCIETIES

Background

The Science, Technology and Innovation for Post-Conflict Recovery in Africa initiative, developed under the frameworks of STISA 2024, the AU Post Conflict Reconstruction and Development Policy, and the African Youth Charter, provides a strategic approach to rebuilding societies affected by war. It recognizes that sustainable peace and recovery require rebuilding human capital and restoring economic resilience through innovation, skills development, and technology-driven growth.

Across the continent, conflicts have eroded infrastructure, weakened institutions, and displaced millions, with youth bearing the greatest burden. More than 300,000 children worldwide have been involved in conflicts tens of thousands in African countries such as Uganda, Liberia, and Sierra Leone. The loss of educational and economic opportunities has left many young people vulnerable to re-recruitment and social exclusion, threatening long-term stability.

This programme positions Science, Technology, and Innovation as a cornerstone for peacebuilding and inclusive development. By providing war-affected youth with technical and entrepreneurial skills, it enables their reintegration as productive contributors to their communities. Drawing lessons from successful recovery models such as Rwanda, the initiative promotes national ownership, social inclusion, and environmentally responsible technologies to support local livelihoods.

Science, Technology, and Innovation (STI) are critical enablers for rebuilding Africa's post-conflict societies and transforming them into engines of inclusive growth and stability. In the aftermath of war, countries often face destroyed infrastructure, weakened governance, and high unemployment conditions that perpetuate poverty and social fragmentation. By integrating STI into post-conflict recovery, Africa can shift from dependency on humanitarian relief to sustainable, innovation driven development that empowers its people and restores community resilience.

The STI for Post-Conflict Recovery in Africa initiative provides a timely and strategic framework to guide this transformation. It promotes entrepreneurship, skills development, and technology adoption as key instruments for economic reintegration and peacebuilding. Through practical training, technology transfer, and local innovation, the programme enables ex combatants and war affected youth to rebuild livelihoods, create jobs, and contribute meaningfully to their societies.

Aim

To empower and reintegrate youth affected by conflict through Science, Technology, and Innovation, enabling them to become productive members of their communities and drivers of sustainable development.

Objectives

1. Provide hands on experience with essential technologies relevant to post conflict community needs.
2. Introduce participants to business and entrepreneurship skills to promote wealth creation and integration.
3. Reduce youth recruitment into armed groups by offering meaningful economic opportunities.
4. Support community development and job creation through sustainable micro enterprises.

Stakeholders

- AUC Departments of ESTI, and PAPS
- Targeted Member States: Governments of post conflict countries
- Development Partners: UNDP, UNEVOC, ILO, local NGOs, and financial institutions
- Local Communities and Youth Organizations: Beneficiaries and implementers
- Private Sector: Technology providers and investors

Activities

- Launch additional training and capacity-building cohorts in new post-conflict Member States.
- Conduct a mid-term evaluation and scale up successful implementation models.
- Develop a digital knowledge-sharing platform featuring resources, success stories, and best practices.

Outcomes

- Expanded reach and strengthened institutional capacities in post-conflict Member States.
- Improved programme effectiveness through evidence-based scaling of successful models.
- Enhanced access to knowledge and peer learning across participating countries.

19. RESEARCH TRANSLATION FROM THE BENCH TO THE BEDSIDE

Background

Africa produces substantial health and biomedical research, but much of it remains confined to laboratories without being translated into clinical or policy applications. Weak protocols, inadequate funding, limited technical capacity, and low public participation hinder the movement of discoveries from research benches to patient bedsides. The African Union Scientific, Technical and Research Commission (AU-STRC) initiated this study to develop frameworks, mechanisms, and guidelines that bridge these gaps and promote a culture of ethical, harmonized, and practical research translation across AU Member States. The study led to the production of the book Research Translation from the Bench to the Bedside. The book explores the fundamental concepts related to research translation from the laboratory to clinical application, encompassing themes such as research translation, clinical research practice, and clinical ethics.

Part One focuses on research translation in Africa. Its first section introduces the concept of research translation and clinical research, outlining translation models, clinical trial phases, and the roles and interests of various stakeholders. The second section presents a historical overview of science and technology development on the continent, highlighting milestones achieved under the African Union Commission's Science, Technology, and Innovation agenda. The third section examines Africa's major health challenges and their links to poverty, food insecurity, and malnutrition. The final section of Part One details the study's methodology, which investigates "Weak Research Translation and Pathways in Africa" through face-to-face consultations and e-surveys conducted with health practitioners and researchers.

Part Two of the book provides a strategic analysis aimed at strengthening research translation in Africa. The first section identifies strategies and interventions structured around "four pillars and three cross-cutting pillars" designed to enhance stakeholder engagement and build a comprehensive system for translating research into practice. The second section proposes mechanisms to support and sustain this process. Part Three offers guidelines to improve and harmonize good clinical research practices among AU Member States. It outlines the structure and functions of Independent Ethics Committees, including their terms of reference and educational qualifications. The book also presents Standard Operating Procedures (SOPs) that ensure compliance with ethical and regulatory standards, and provides protocols for data handling, sampling, recordkeeping, and adherence to national and international requirements.

Aim

To establish a continental roadmap and operational mechanisms that enhance research translation from laboratory discoveries to clinical and community health applications, strengthening Africa's capacity to generate, regulate, and apply health innovations effectively.

Objectives

1. To identify and analyze the main barriers to effective research translation in Africa.
2. To propose harmonized guidelines and policies for ethical and high-quality clinical research.
3. To strengthen institutional, technical, and financial systems supporting clinical research.
4. To enhance capacity building, mentorship, and knowledge sharing among researchers.
5. To promote public awareness and participation in clinical research and trials.
6. To foster sustainable partnerships among governments, academia, industry, and development partners for translational research.

Stakeholders

- Lead Institutions: African Union Commission (AUC), AU-STRC, AU-CDC, ASRIC.
- Regional/Continental Bodies: Regional Economic Communities (RECs), OAPI, ARIPO, PAIPO, NEPAD.
- National Stakeholders: Ministries of Health, Science and Technology, National Regulatory Authorities, National Ethics Committees.
- Academic/Research Institutions: Universities, Research Centers, and Hospitals.
- Private Sector and Civil Society: Pharmaceutical companies, SMEs, NGOs, professional medical societies, community leaders.
- International Partners: WHO, UNESCO, UNDP, UNFPA, UNAIDS, ICMR, CIOMS, AfDB, and development partners.

Activities

- Development of the book Research Translation from the Bench to the Bedside whic provided harmonized Good Clinical Practice (GCP) guidelines for AU Member States.
- Establish an AU Regulatory Council on Clinical Research to coordinate standards and ethics oversight.
- Strengthen ethical approval systems by creating or upgrading National Independent Ethics Committees and Institutional Review Boards.
- Upgrade laboratory and clinical research infrastructure to meet international standards.
- Conduct periodic reviews and harmonization of national research and ethics policies.
- Implement capacity-building and mentorship programmes for researchers and regulators.
- Launch awareness campaigns to increase public understanding and participation in clinical research.
- Create platforms for data management, sharing, and record-keeping protocols that ensure transparency and reproducibility.
- Promote Public–Private Partnerships (PPPs) to increase funding and research investment.
- Institutionalize monitoring mechanisms for performance and adherence to ethics and standards.

Outcomes

- Harmonized and efficient Good Clinical Practice (GCP) as well as regulatory systems for clinical research across Africa.
- Enhanced ethical review and approval mechanisms promoting transparency and accountability.
- Improved infrastructure and technical capacity for clinical research and trials.
- Increased funding and sustainable financial mechanisms for health research.
- Greater researcher competence through continuous training and mentorship.
- Strengthened public confidence and participation in research activities.
- Functioning networks linking academia, government, and industry for translational innovation.
- Tangible increase in the translation of African research into clinical practice and policy for improved health outcomes.

20. AFRICAN PHARMACOPOEIA

Background

The Organization of African Unity (OAU), now the African Union (AU), declared 2000–2010 as the Decade of Traditional Medicine in Africa, recognizing the sector's cultural, economic, and public health value. The 2001 Abuja Declaration (Assembly/AU/Dec.291(XV)) urged Member States to prioritize research on traditional medicines for HIV/AIDS, malaria, tuberculosis, and other infectious diseases. This was followed by the 2003 Maputo Summit, which endorsed the African Traditional Medicine Day (31 August) as part of a broader strategy to promote traditional medicine within national health systems.

These commitments led to the development of frameworks and action plans for integrating traditional medicine into formal healthcare. As a cross-cutting issue, traditional medicine offers an avenue for regional cooperation, scientific collaboration, and sustainable trade in medicinal products.

The first edition of the African Pharmacopoeia (1985), developed under the OAU Council of Ministers' resolution, served as a scientific reference for African medicinal plants. However, rapid scientific progress and increased demand for standardized herbal products now necessitate a second edition, aimed at ensuring quality, safety, efficacy, and sustainability in African traditional medicine. As such the second edition of the African Pharmacopoeia (2014), was developed. In this edition more than a hundred plant species were added into the monographs. Also included in this edition were the adopting measures to control and regulate herbal product quality in terms of identity, purity, safety, efficacy and sustainability. African Pharmacopoeia (2014) will aid in the appropriate utilization of African medicinal plants to provide quality herbal drugs to African populations as well as boost international trade in African herbal products.

Aim

To develop and implement the African Pharmacopoeia as a comprehensive, standardized reference that strengthens the regulation, utilization, and trade of African traditional medicinal products.

Objectives

1. To update and harmonize scientific data on African medicinal plants, ensuring quality control and regulatory compliance.
2. To promote the safe, effective, and sustainable use of traditional medicines within national health systems.
3. To facilitate research collaboration and knowledge sharing across AU Member States and regional institutions.

4. To enhance Africa's capacity for herbal product standardization, certification, and international trade.
5. To support policy alignment with AU health and innovation frameworks, including the STISA-2024 and AU Agenda 2063.

Stakeholders

- African Union Commission
- African Union Scientific, Technical and Research Commission (AU-STRC)
- World Health Organization (WHO–AFRO)
- Regional Economic Communities (RECs)
- National Health and Drug Regulatory Authorities
- Pharmaceutical Research Institutions and Universities
- Traditional Medicine Practitioners Associations
- African Pharmacognosy and Ethnobotany Networks
- Development Partners (AFD, EU, UNECA, UNESCO, UNDP)
- Private Sector and Herbal Industry Stakeholders

Activities

- Review and update the first edition of the African Pharmacopoeia through expert consultations and regional validation workshops.
- Compile, verify, and standardize scientific data on medicinal plants, including taxonomy, chemical profiles, and pharmacological properties.
- Integrate multilingual nomenclature and geographic distribution for improved accessibility and applicability.
- Develop regulatory guidelines for herbal drug identity, purity, safety, and efficacy testing.
- Establish partnerships with national laboratories and research institutions for continuous data generation and validation.
- Disseminate the finalized Pharmacopoeia across AU Member States and promote its adoption through training and policy advocacy.
- Promote intellectual property protection and benefit-sharing mechanisms for indigenous knowledge holders.

Outcomes

1. Publication and adoption of the African Pharmacopoeia (Second Edition) as a recognized continental reference.
2. Strengthened national and regional regulatory systems for traditional medicine products.

3. Enhanced quality, safety, and efficacy of African herbal drugs.
4. Increased research collaboration and data harmonization across AU Member States.
5. Expanded access to standardized herbal medicines and improved integration into public health systems.
6. Boosted intra-African and international trade in certified herbal products.
7. Recognition and preservation of indigenous medicinal knowledge within formal innovation frameworks.

C

ASRIC report on the Programmes and Projects for the STISA-2024 Implementation

1.0 ASRIC REPORT ON THE PROGRAMMES AND PROJECTS FOR THE STISA-2024 IMPLEMENTATION

This section offers a comprehensive review of the programmes and projects undertaken by the ASRIC to meet the STISA-2024 objectives. It details the progress, challenges, and lessons learned among others from the projects

1. ASRIC STRATEGIC PLAN 2022–2028

Background

The African Scientific, Research and Innovation Council (ASRIC), inaugurated in 2018 and supported by the AU-STRC as its Secretariat, was established to mobilize African research excellence, provide a platform for dialogue among scientists, and strengthen the link between science, policy, and socio-economic development. To guide its work over the coming years, ASRIC developed the Strategic Plan 2022–2028 under the Bureau II, building on lessons from its first strategic cycle 2018–2021 under the Bureau I.

The plan was prepared through a detailed problem tree and objective tree analysis, identifying the root challenges facing Africa's science, technology, and innovation (STI) ecosystem: weak intra-African research cooperation, limited human resource capacity, low awareness of STI's role in development, and limited participation of ASRIC members in decision-making. These challenges have hindered Africa's ability to translate STI into tangible economic transformation.

Using these analyses, ASRIC defined four impact focus areas: (1) enhancing intra-Africa research cooperation, (2) promoting human capacity development, (3) raising awareness and sensitizing stakeholders on STI's contribution to Africa's economy and livelihood, and (4) strengthening participation of ASRIC members in decision-making. This strategic plan provides a comprehensive roadmap to mobilize partnerships, strengthen research systems, and promote innovation as a driver of Africa's Agenda 2063 aspirations.

The strategic plan was developed through a participatory and evidence-based process. ASRIC convened experts, bureaus, and congress members to review lessons from the 2018–2021 plan. A problem tree analysis mapped the causes of weak STI impact, while an objective tree analysis reframed these into solutions, leading to the identification of the four impact focus areas.

Extensive consultations were conducted with stakeholders, including governments, academies, universities, and international partners, to ensure the plan addressed real gaps and opportunities. The process also integrated continental policies such as the African Continental Free Trade Agreement (AfCFTA), Africa CDC, and the African Medicines Agency, to ensure synergy with broader development frameworks. The result is a forward-looking plan that reflects both ASRIC's mandate and Africa's strategic needs.

Objectives

1. Strengthen intra-African research through investment, collaboration, policies, and partnerships.
2. Build human capacity by training, mobility, and lifelong learning opportunities for African researchers.

3. Promote STI awareness and partnerships to support industrialization, trade, and improved livelihoods.
4. Enhance governance, participation, and visibility of ASRIC in continental and international decision-making.

Stakeholders

- ASRIC
- AU-STRC
- National Academies of Sciences (NAS) and National Research Councils (NRC)
- Universities and research institutions across Africa
- African Union Commission (AUC) bodies and sister organizations
- International and regional partners (UNESCO, UNIDO, UNDP, AAU, ARIPO, OAPI)
- Industry, philanthropists, and the African diaspora

Activities

- Organized dialogues between National Academies of Sciences (NAS) and National Research Councils (NRC); established virtual laboratories; developed research ethics guidelines; launched flagship collaborative projects; and supported joint research calls and grant-funded initiatives.
- Engaged industry partners; appointed ASRIC Ambassadors and Research Chairs; instituted awards for scientific excellence; and organized the African STI Souk to showcase innovations and promote intra-African trade in technology and research outputs.
- Expanded the ASRIC Scholarship Scheme; established the African Union Network of Sciences (AUNS); strengthened PhD training and researcher mobility; launched lifelong learning programmes in priority sectors; and promoted Diaspora engagement through visiting chairs and exchange programmes.
- Enhanced digital presence through an upgraded website and multimedia channels; produced policy briefs; trained STI journalists; conducted awareness campaigns; and established the ASRIC Partners' Forum to strengthen collaboration and visibility.
- Advocated for ASRIC's integration into AU resource mobilization mechanisms; diversified funding through partnerships; engaged policymakers and parliamentarians; strengthened internal governance via annual congress and bureau meetings; and represented ASRIC at major global forums.

Outcomes

- Increased intra-African cooperation through shared research platforms, joint projects, and harmonized ethics standards.
- Elevated African research excellence through awards, ambassadors, and high-profile events that connect science, industry, and society.

- Greater number of trained researchers and PhD graduates benefiting from scholarships, mobility schemes, and lifelong learning opportunities.
- Broader awareness of ASRIC's mission and STI achievements through policy briefs, media engagement, and active digital platforms.
- Secured diversified funding, strengthened governance structures, and increased participation in international forums, ensuring ASRIC's long-term impact and credibility within Africa's STI ecosystem.

2. RESOURCE MOBILIZATION STRATEGY FOR ASRIC 2022-2028

Background

The African Scientific, Research and Innovation Council (ASRIC) was established by AU Executive Council Decision EX.CL/Dec.747 (XXII) and launched in 2018, with the AU Scientific, Technical and Research Commission (AU-STRC) serving as its Secretariat. ASRIC was created to promote scientific research and innovation, mobilize Africa's research excellence, and strengthen the voice of the continent's scientific community.

To sustain this momentum and deliver on its Strategic Plan (2022–2028), ASRIC required a robust Resource Mobilization Strategy. This strategy was therefore developed to secure predictable, flexible, and adequate funding for implementing flagship projects and strengthening Africa's STI ecosystem.

Since its inception, ASRIC, has laid the groundwork for resource mobilization by:

1. Establishing the ASRIC Fund, approved by the AU Deputy Chairperson, to manage donations transparently.
2. Launching the ASRIC Scholarship Scheme in partnership with institutions such as the Euro Mediterranean University of Fez for 10 PhD scholarships. An additional 10 scholarships from the Government of Algeria for doctoral students have been offered under this scheme.
3. Attracting financial and in-kind contributions from 18 AU Member States and partner institutions.
4. Building credibility through annual congresses, scientific journals, and strategic partnerships, which strengthened ASRIC's visibility and trust across Africa and internationally.

These steps demonstrated ASRIC's capacity to mobilize and manage resources, paving the way for a structured, long-term strategy.

Without adequate resources, ASRIC cannot fully implement its mandate of driving Africa's socio-economic development through science, technology, and innovation. This strategy ensures that ASRIC is not overly dependent on a single source but instead builds a diversified, trusted, and innovative funding model aligned with Agenda 2063, the STISA-2024 framework, and the Sustainable Development Goals (SDGs).

Objectives

The Resource Mobilization Strategy is guided by the overarching objective that "ASRIC receives adequate funding." Its specific objectives are to:

1. Secure substantial and sustained funding.
2. Develop smart partnerships with donors and partners.
3. Ensure diversity of the donor base.

4. Build trust through transparency, accountability, and visible impact.
5. Explore innovative and alternative funding mechanisms.

Stakeholders

- AU Member States and the African Union Commission.
- National academies of sciences and research councils.
- International donors and foundations.
- African and international private sector actors.
- The African Diaspora, philanthropists, and civil society.
- Similar scientific networks and institutions worldwide.

Activities

- Advocated for dedicated funding, including allocation of 1% of AU Member States' contributions and voluntary national support for ASRIC programmes.
- Developed strategic partnerships by aligning ASRIC initiatives with Agenda 2063 and the SDGs, and engaging donors for joint, priority-based projects.
- Diversified the donor base through creation of multi-donor pooled funds, engagement with bilateral and multilateral partners, and outreach to international agencies, private sector actors, philanthropists, and diaspora networks.
- Enhanced financial governance by instituting external audits, publishing annual financial statements, and promoting transparency in fund utilization.
- Introduced innovative financing mechanisms such as endowment funds, research contracts, and certification services to ensure long-term financial sustainability.

Outcomes

- Increased and diversified funding streams secured for ASRIC programmes, reducing reliance on a single funding source.
- Strengthened strategic partnerships that align ASRIC's work with continental and global development agendas.
- Improved donor confidence and institutional credibility through transparent, accountable, and results-driven financial management.
- Enhanced financial sustainability achieved via innovative funding models and broader stakeholder participation.
- Greater institutional autonomy and stability, enabling consistent implementation of ASRIC's research and innovation priorities across Africa.

3. ASRIC STATUTORY MEETING - ASRIC CONGRESS

Background

ASRIC is governed by the ASRIC Congress, its apex decision-making body to fulfil its mandate effectively. The Congress is among others composed of 55 voting members representing AU Member States. The ASRIC Congress convenes and discusses on Africa's pressing research and innovation challenges, evaluates progress, and formulates strategic directions.

Specifically, the Congress deliberates on matters related to ASRIC's flagship projects, strategic programmes, and legislative decisions. Since its inception, seven successful Congresses have been convened 2018 and 2019 – Abuja, Nigeria, 2020 – Virtual (due to the COVID-19 pandemic), 2021 – Nairobi, Kenya, 2022 – Mombasa, Kenya, 2023 – Rabat, Morocco, 2024 – Zanzibar, Tanzania, 2025 – Mombasa, Kenya.

Each Congress provides a continental forum where keynote speeches on the Congress theme are delivered, reports from working committees, diaspora committees, and principal investigators of flagship projects are reviewed, and strategic directions are set. The outcomes are consolidated into communiqués, which reflect the decisions, outputs, and recommendations of the Congress.

By providing a forum for dialogue and collaboration, the ASRIC Congress strengthens Africa's ability to mobilize resources, coordinate research efforts, and integrate scientific outputs into development policies.

Aim

To serve as the apex platform for decision-making, coordination, and strategic guidance for th e ASRIC scientific, research and innovation programmes.

Objectives

1. To direct the overall policies of ASRIC, including formulation and review of the annual ASRIC Work Programmes, approves action plans, funding and resource mobilisation strategies in accordance with the AU policy in this area;
2. To develop its internal guidelines and rules of procedures in line with the relevant AU legal instruments;
3. To elect the ASRIC Bureau;
4. To define and adopt interdisciplinary programs, approves associated draft budget and produce annual reports to be submitted to the AU Policy organs;
5. To establish strategic partnership with similar global institutions in accordance with AU rules and regulations; and

6. To establish scientific sub-committees and other sub-committees whose functions and responsibilities shall be elaborated in the rules of procedure of ASRIC, as may be proposed by its Bureau.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)
- ASRIC
- ASRIC Congress Members
- ASRIC Working Committees including thematic, diaspora, and flagship project teams
- National research councils, academies of science, and universities.
- African governments and Regional Economic Communities (RECs).
- African diaspora scientific community.
- International partners
- Private sector, civil society, and media

Activities

- Annual ASRIC Congress sessions hosted in rotation across AU Member States.
- Thematic discussions and keynote addresses on pressing continental research and innovation challenges.
- Presentation and review of reports from committees, investigators, and diaspora representatives.
- Adoption of communiqués and resolutions reflecting Congress deliberations and recommendations.
- Side events including exhibitions, innovation showcases, and networking sessions.
- Capacity-building and policy dialogues linking research outputs to AU strategies.
- Recognition and awards ceremonies honouring outstanding contributions by African scientists.

Outcomes

- Strengthened governance and strategic direction for ASRIC flagship projects and programmes.
- Adoption of communiqués guiding Member States and partners on scientific priorities.
- Enhanced intra-African and diaspora collaboration in research and innovation.
- Greater visibility and impact of ASRIC activities across the continent and internationally.
- Mobilization of resources and partnerships to sustain research and innovation initiatives.
- Inclusive participation of youth, women, and diaspora in continental decision-making on science.

4. ASRIC ENGINEERING CONFERENCE

Background

The ASRIC Engineering Conference, organized by ASRIC and the Obour Institutes in partnership with the Ministry of Higher Education and Scientific Research of Egypt. This biannual conference is dedicated to fostering dialogue, knowledge exchange, and collaboration in engineering and applied sciences. Since its inception, the conference has emerged as a hub for African researchers, scholars, and professionals to engage with policymakers, industry leaders, and international partners.

- 1st ASRIC Engineering under the theme – "Engineering and Informatics for Africa's Urbanization".
- 2nd ASRIC Engineering Conference under the theme – "Utilization of Engineering and Informatics for Africa's Trade and Development".
- 3rd ASRIC Engineering Conference under the theme – "Engineering and Informatics Empowering Africa's Community and Inclusive Innovation".

The conferences attract over 150 participants, including scientists, researchers, and scholars from Africa and beyond, demonstrating the growing relevance of engineering research and innovation in Africa's transformation.

Aim

To provide a continental platform that leverages engineering and informatics to address Africa's critical developmental challenges and to foster inclusive innovation for sustainable growth.

Objectives

1. To deliberate on thematic challenges where engineering and informatics can provide practical solutions.
2. To showcase African research and innovation addressing urbanization, trade, and community development.
3. To build networks among African and international scholars, industry, and policymakers.
4. To strengthen intra-African collaboration in engineering sciences and applied informatics.
5. To promote inclusivity by engaging youth, women, and diaspora scientists in engineering research and innovation.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)

- African Scientific Research and Innovation Council (ASRIC)
- Obour Institutes
- Ministry of Higher Education and Scientific Research, Egypt (partner host).
- African universities, technical institutions, and research centres.
- National engineering associations, syndicates, and councils.
- Federation of African Engineering Organisations (FAEO).
- Private sector and industry leaders
- International partners
- Young engineers, women scientists, and diaspora researchers.

Activities

- Biannual thematic conference sessions addressing Africa's developmental priorities through engineering and informatics.
- Keynote speeches and high-level panels led by scientists, policymakers, and industry leaders.
- Technical paper presentations and workshops on engineering and informatics.
- Roundtable dialogues linking research with policy and industry applications.
- Special tracks for youth and women engineers, highlighting their contributions.
- Exhibitions and poster sessions showcasing African innovations and projects.
- Publication of articles in the ASRIC journals, proceedings and communiqués to disseminate outcomes and guide future action.
- Networking sessions for fostering partnerships and collaborative projects.

Outcomes

- Increased visibility and recognition of African engineering and informatics research.
- Strengthened collaboration between academia, industry, and policymakers in engineering fields.
- Practical solutions generated for urbanization, trade facilitation, and community innovation.
- Enhanced participation of young and women researchers in engineering sciences.
- Establishment of the ASRIC Engineering Conference as a flagship biannual event for engineering excellence in Africa.

5. ASRIC SCIENTIFIC JOURNALS

Background

The ASRIC Scientific Journals were established by the ASRIC Bureau and Congress in 2020, as a continental peer-reviewed publishing platform dedicated to showcasing African-led research and innovation. This was to address the perennial challenges facing African researchers particularly the limited visibility and accessibility of their scientific output, often due to weak publishing platforms, high barriers to international journals, and limited open-access opportunities.

The Journals aim to provide credible outlets for scientific work that addresses Africa's development priorities while also ensuring that African voices are more visible in global scientific discourse. This strengthens research dissemination and supports evidence-based policymaking while enhancing global visibility, and supporting knowledge-driven development.

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. There are no publishing costs that are borne by the authors. 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.

Aim

To provide a credible, accessible, and continental outlet for publishing high-quality African scientific research outputs

Objectives

1. To provide a peer-reviewed publishing platform for African scientists and researchers.
2. To enhance the visibility and impact of African research globally.
3. To support knowledge sharing and dissemination across disciplines and countries.
4. To promote open-access publishing, ensuring inclusivity and accessibility.
5. To strengthen the research-policy interface by publishing evidence that informs development strategies.
6. To foster collaboration among African scientists, institutions, and diaspora communities.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)
- African Scientific Research and Innovation Council (ASRIC)

- African researchers, scholars, and scientists across all disciplines.
- African universities and research institutions as contributors and beneficiaries.
- National academies of science and research councils.
- ASRIC Scientific Committees and Editorial Boards.
- International partners
- African governments and Regional Economic Communities (RECs).
- Civil society, policymakers, and industry

Activities

- Regular publication of ASRIC Journals with multiple issues annually, covering thematic areas of health, engineering, agriculture, natural sciences and social sciences
- Establishment of editorial boards with experts across Africa and the diaspora.
- Capacity-building workshops on scientific writing, peer review, and publication ethics.
- Integration of an open-access digital platform to increase visibility and accessibility.
- Special issues and thematic volumes addressing Africa's priority challenges.
- Outreach and call for papers targeting African researchers and postgraduate students.
- Partnership development with indexing services to ensure global reach and credibility.
- Ccitation tracking to measure impact and visibility of published research.

Outcomes

- A sustainable continental peer-reviewed journal platform with global recognition.
- Increased publication and visibility of African research outputs in indexed journals.
- Strengthened culture of scientific publishing and peer review among African researchers.
- Improved capacity of African scholars in academic writing and dissemination.
- Greater integration of African research into policymaking and development strategies.
- Enhanced collaboration among African researchers, institutions, and the diaspora.
- Repository of knowledge is developes
- No journal publishing costs for Scientists and researchers

6. ASRIC SCHOLARSHIP SCHEME

Background

The ASRIC Scholarship Scheme stands as one of the epic ASRIC flagship projects and programmes. The scheme was launched by the ASRIC Bureau and endorsed by the ASRIC Congress to strengthen Africa's human capital base in science, research, and innovation through building the capacity of Africa's young scientists through doctoral-level training support.

The ASRIC Scholarship Scheme was pioneered by the Euro-Mediterranean University of Fes (UEMF), Kingdom of Morocco, which generously offers 10 PhD scholarship slots annually for African students to carry out their doctoral studies at this world-class institution. By championing the ASRIC initiative, UEMF has positioned itself as a dedicated partner in advancing African science, innovation, and knowledge.

Since the launch of the ASRIC Scholarship Scheme in 2020, the scholarship has supported more than 50 African doctoral students in cutting-edge fields such as digital engineering, robotics, artificial intelligence, and additive manufacturing. The scholarship covers full tuition fees, accommodation, an annual return ticket (up to $1,000), and a stipend allowance of $1,000 per month for 11 months each year. To date, UEMF has invested over $15 million in the programme.

The scheme is strictly merit-based, with no other criteria considered, ensuring fairness and excellence. Each year, a continental call for applications is launched, receiving hundreds of responses from across Africa: In 2020, 383 applications were received from 39 AU Member States; in 2021, 337 applications were received from 33 AU Member States; in 2022, 298 applications were received from 30 AU Member States; in 2023, 444 applications were received from 32 AU Member States; in 2024, 406 applications were received from 28 AU Member States. This strong demand reflects both the credibility of the scheme and the pressing need for opportunities among Africa's young researchers.

In May 2025, a new batch of seven PhD candidates was selected to join the programme. Furthermore, an additional 10 scholarships were granted by the Government of Algeria for doctoral students to conduct their studies in select universities in Algeria.

Aim

To strengthen Africa's scientific capacity by supporting doctoral training of African students in world-class institutions within the member states, thereby cultivating the continent's next generation of scientists, innovators, and leaders.

Objectives

1. To provide fully funded PhD opportunities for African students in science and technology fields.
2. To build a strong pool of African researchers capable of addressing continental development priorities.
3. To enhance intra-African cooperation in higher education and research.
4. To reduce brain drain by creating opportunities for advanced training within Africa.
5. To promote excellence, fairness, and meritocracy in the allocation of research opportunities.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)
- African Scientific Research and Innovation Council (ASRIC)
- Euro-Mediterranean University of Fes (UEMF), Morocco
- Government of Algeria
- Universities in Algeria
- African universities and Centres of Excellence
- National research councils and ministries of higher education
- African member states
- Regional Economic Communities (RECs).
- International partners and donors
- Private sector and industry
- Young African scientists

Activities

- Annual launch of a scholarship call across all AU Member States.
- Rigorous evaluation and selection process by ASRIC and UEMF, based strictly on merit.
- Enrollment and placement of selected PhD students at UEMF and other potential partner universities.
- Provision of scholarships covering tuition, accommodation, stipend, and travel.
- Research supervision and mentorship, linking students with African and diaspora scientists.
- Monitoring and evaluation of student progress to ensure high-quality research outputs.
- Publication of research findings in ASRIC Journals and other reputable journal platforms.
- Development of an alumni network to sustain collaboration and knowledge exchange.

Outcomes

- Over 50 and growing African PhD students enrolled and trained in scientific fields.
- Strengthened research capacity in areas for Africa's industrialization and innovation.
- Increased intra-African and diaspora collaboration in science and research.

- Reduced brain drain by retaining talent through continental opportunities.
- Establishment of the ASRIC Scholarship Scheme as a sustainable model for doctoral training in Africa.

7. ASRIC SCIENTIFIC CONFERENCE

Background

The African Scientific Research and Innovation Council (ASRIC) Congress introduced Pre-Congress Activities, notably the ASRIC Scientific Conference, as a platform to stimulate and showcase African scientific excellence. Through calls for scientific papers, the conference aims to strengthen the scientific community's contribution to Africa's sustainable development. Since then, each ASRIC Congress has adopted a central theme aimed at focusing attention on specific priority areas in science, technology and innovation (STI). These themes help guide the calls for scientific papers, the Scientific Conference pre-congress activities, and the ASRIC Journals.

Over the years, the ASRIC Scientific Conferences have attracted more than 200 research papers across diverse thematic areas including Agricultural Sciences, Engineering Sciences, Health Sciences, Natural Sciences, and Social Sciences. Peer-reviewed papers presented at these conferences are subsequently published in the ASRIC Journals, reinforcing the Council's mandate to promote and disseminate African research outputs.

Aim

To promote scientific research, collaboration, and dissemination of knowledge across Africa through an annual scientific conference linked to the ASRIC Congress.

Objectives

1. To provide a platform for African researchers to present and discuss their scientific findings.
2. To encourage multidisciplinary collaboration across various fields of science and innovation.
3. To enhance the visibility and impact of African scientific research through publication in the ASRIC Journals.
4. To foster engagement between researchers, policymakers, and industry stakeholders for translating research into development solutions.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)
- African Scientific Research and Innovation Council (ASRIC)
- African Union Member States and National Research Institutions
- Universities and Higher Education Institutions
- Research Councils and Scientific Associations
- Private Sector and Industry Partners
- Development Partners and Donor Agencies

- Peer Reviewers, Editors, and the ASRIC Journal Committee

Activities

- Launch annual call for scientific papers under selected thematic areas.
- Conduct peer review and selection of high-quality papers for presentation.
- Organize the ASRIC Scientific Conference as part of Pre-Congress Activities.
- Facilitate plenary and thematic sessions for presentation and dialogue.
- Publish accepted papers in the ASRIC Journals and related scientific outlets.
- Promote networking and collaboration among participants.

Outcomes

- Increased visibility and recognition of African scientific research.
- Strengthened research collaboration across African institutions.
- Enhanced quality and dissemination of scientific publications through ASRIC Journals.
- Greater linkage between research findings and policy or industrial application.
- Sustained platform for scientific exchange and innovation within the AU framework.

8. AFRO-CENTERED NON-PHARMACEUTICAL INTERVENTIONS FOR COVID-19

Background

A large proportion of Africa's population depends on daily income from informal sectors, lives in densely populated peri-urban settlements, and has limited access to clean water and adequate sanitation. Consequently, the strict enforcement of lockdowns or stay-at-home orders often caused severe economic hardship, hunger, and disruptions to essential services. These realities highlighted the need for interventions that are contextually relevant, community-driven, and grounded in African cultural, social, and economic systems.

In recognition of this, ASRIC through its Advisory Board on STI Strategic Interventions for COVID-19, undertook an initiative to examine and develop Afro-centered non-pharmaceutical interventions (NPIs). The study emphasized the value of integrating Africa's indigenous knowledge systems, cultural practices, and community structures into public health response strategies. It aimed to reimagine pandemic management approaches that align with Africa's communal lifestyles, environmental conditions, and resource realities.

This initiative stresses that many communities in Africa have longstanding cultural systems of resilience such as traditional quarantine practices, herbal hygiene methods, and community solidarity networks that could be re-engineered and integrated into modern health frameworks. Additionally, innovations emerging from local scientists, engineers, and entrepreneurs such as touch-free handwashing devices, affordable sanitizers, and local mask production demonstrate that African solutions can be both practical and sustainable.

This Afro-centered framework calls for a paradigm shift: rather than adopting externally imposed models, African nations should develop homegrown, adaptive, and culturally responsive strategies for pandemic preparedness and control.

Aim

To promote and institutionalize Afro-centered non-pharmaceutical interventions that align with Africa's socio-cultural and economic contexts to strengthen pandemic preparedness, response, and resilience.

Objectives

1. To develop evidence-based, culturally relevant non-pharmaceutical interventions for African communities.

2. To integrate indigenous knowledge systems and local innovations into public health response frameworks.
3. To enhance the capacity of Member States and community actors to adopt Afro-centered health strategies.
4. To foster policy dialogue and collaboration among African researchers, policymakers, and innovators.
5. To ensure sustainability and community ownership of public health interventions through local engagement.

Stakeholders

- African Union (AU) and its Specialized Agencies (ASRIC, Africa CDC)
- Member States and their Ministries of Health, Science and Technology
- Regional Economic Communities (RECs)
- Research institutions and universities
- Community and traditional leaders
- Non-Governmental Organizations (NGOs)
- Local innovators and private sector partners
- Development partners and donor agencies

Activities

- Conduct an assessment of traditional and community-based health practices applicable to pandemic response.
- Develop and disseminate Afro-centered NPI guidelines for policymakers and health authorities.
- Facilitate regional workshops and stakeholder dialogues to validate and adopt best practices.
- Support local innovators in developing low-cost, culturally appropriate health technologies (e.g., handwashing systems, masks).
- Establish monitoring mechanisms to evaluate implementation effectiveness across Member States.

Outcomes

- Increased adoption of Afro-centered NPIs in national and regional health response strategies.
- Strengthened community participation and compliance with pandemic control measures.
- Integration of indigenous knowledge into science and innovation frameworks.

- Enhanced coordination and resilience of Africa's health systems against future pandemics.
- Recognition of Africa's contribution to global health innovation through indigenous and locally-driven solutions.

9. INVENTORY ON R&D INTERVENTIONS TO COVID-19 IN AFRICA

Background

The Inventory on R&D Interventions to COVID-19 in Africa was developed by the Taskforce on Mapping out and inventory of R&D interventions for COVID-19 to map and document ongoing research and development (R&D) initiatives across AU Member States. These initiatives include the development of diagnostic kits, non-pharmaceutical interventions, ventilators, vaccines, and drug research. The inventory also aims to promote knowledge exchange, policy formulation, and cooperation among African nations to strengthen continental preparedness and response capabilities.

To consolidate and showcase Africa's scientific response to the pandemic, the Inventory on Research and Development (R&D) Interventions to COVID-19 in Africa was developed. The inventory serves as a comprehensive repository documenting Africa's R&D effort during the pandemic, with the aim of highlighting innovative initiatives, supporting policy alignment, and strengthening collaboration across the continent.

The mapping exercise covered 44 African Union Member States and collected data on more than 500 R&D initiatives led by universities, research centers, government agencies, and private innovators. The projects span diverse fields such as epidemiological modeling, vaccine development, local ventilator fabrication, herbal medicine trials, telemedicine, and public health communication.

Aim

To document, coordinate, and promote Africa's R&D interventions in response to COVID-19, strengthening the continent's capacity for scientific innovation and pandemic preparedness.

Objectives

1. To map and analyze COVID-19-related R&D initiatives across AU Member States.
2. To promote collaboration and knowledge exchange among African researchers and institutions.
3. To identify innovation gaps, needs, and opportunities for improving R&D systems.
4. To provide data-driven insights to guide policymaking, funding, and partnership strategies.
5. To enhance visibility of Africa's scientific contributions to global health challenges.

Stakeholders

- African Union Commission (AUC)
- African Scientific Research and Innovation Council (ASRIC)

- African Union Scientific, Technical and Research Commission (AU-STRC)
- National research councils and academies of science
- African universities and research institutions
- Ministries of Science, Technology, and Health in AU Member States
- Regional Economic Communities (RECs)
- International partners, WHO, and the African CDC
- Private sector innovators and manufacturers
- Civil society and local communities

Activities

- Conduct a comprehensive survey of R&D interventions addressing COVID-19 across Africa.
- Establish and maintain a digital inventory and database of documented initiatives.
- Organize stakeholder validation workshops to assess findings and share best practices.
- Develop policy briefs and recommendations for strengthening R&D coordination and investment.
- Disseminate the inventory outcomes through AU platforms, reports, and collaborative networks.

Outcomes

- A centralized and accessible inventory of Africa's COVID-19-related R&D initiatives.
- Strengthened scientific collaboration and knowledge-sharing among African researchers.
- Informed policymaking and funding strategies based on documented R&D data.
- Enhanced recognition of Africa's innovation capacity in global health responses.
- Improved preparedness and resilience for future public health emergencies through evidence-based STI interventions.

10. RELEVANCE OF INVESTMENT IN THE HEALTH SECTOR FOR IMPROVEMENT OF HEALTH RESEARCH SYSTEMS

Background

The health sector is one of the most critical pillars of sustainable development in Africa, directly influencing economic growth, productivity, and human capital development. However, despite the continent's progress in public health policy and disease control, significant gaps persist in health system financing, research capacity, and innovation infrastructure. The COVID-19 pandemic starkly exposed these weaknesses, revealing Africa's heavy dependence on external funding, imported technologies, and foreign health interventions. This dependency underscored the urgent need for increased domestic investment to build resilient health research systems capable of generating local solutions to health challenges.

Evidence from global health economies demonstrates that countries with higher public health investment enjoy stronger GDP growth, greater productivity, and reduced poverty levels. However, most African Union (AU) Member States continue to allocate far less than the 15% of national budgets pledged under the 2001 Abuja Declaration, and less than 1% of GDP toward research and development (R&D). As a result, Africa's health research output remains among the lowest globally, with many health policies still guided by external priorities rather than indigenous evidence.

A sustainable solution lies in mainstreaming health research investment into national development plans and strengthening the science-policy interface to ensure evidence-based decision-making. Enhanced funding will enable the establishment of robust research infrastructure, promote the translation of findings into innovation, and support the local manufacture of vaccines, diagnostics, and pharmaceuticals. The integration of research and innovation into the health system will also help reduce the brain drain of skilled professionals, increase regional collaboration, and ensure self-reliance in addressing current and emerging health crises.

Aim

To promote sustainable investment in Africa's health sector as a catalyst for building robust health research systems, enhancing innovation, and achieving self-reliance in health and development.

Objectives

1. Assess the current status and funding levels of health and health research systems across AU Member States.
2. Identify gaps and challenges in research infrastructure, human resources, and institutional capacity.
3. Advocate for increased national and regional investment in health research and innovation.

4. Strengthen public-private partnerships and regional collaboration for health R&D.
5. Integrate research outcomes into national health policies and development strategies.

Stakeholders

- African Union Institutions: AU-STRC, ASRIC, AUDA-NEPAD, Africa CDC, and AUC-Department of Health, Humanitarian Affairs, and Social Development.
- National Governments: Ministries of Health, Science and Technology, and Finance.
- Regional Economic Communities (RECs): ECOWAS, SADC, EAC, COMESA, etc.
- Research and Academic Institutions: Universities, Centers of Excellence, National Research Councils.
- Private Sector and Development Partners: Pharmaceutical industries, healthcare investors, donor agencies, and venture capitalists.
- Civil Society and Local Communities: Public health organizations and patient advocacy groups.

Activities

- Conduct comprehensive mapping of health research systems and funding mechanisms in Africa.
- Organize policy dialogues and capacity-building workshops for health sector financing and governance.
- Develop frameworks for national health research investment strategies aligned with STISA-2024 and Agenda 2063.
- Promote partnerships between governments, academia, private sector, and development partners to co-fund health research.
- Establish monitoring and evaluation mechanisms to track progress in health research investment and outputs.

Outcomes

- Improved and sustained national investment in health and R&D.
- Strengthened research infrastructure and institutional capacity across AU Member States.
- Enhanced policy integration of research outcomes into public health systems.
- Increased innovation and local production of medical technologies and pharmaceuticals.
- A resilient and self-reliant African health research ecosystem capable of addressing emerging health challenges.

11. AFRICA'S INDIGENOUS KNOWLEDGE FOR PREVENTION AND CONTROL OF EMERGING INFECTIOUS DISEASES: UTILIZING AN AFRO-CENTRIC RESPONSE (ACTIONS AND INTERVENTIONS)

Background

The COVID-19 pandemic exposed Africa's vulnerability to infectious diseases and its dependence on external interventions for public health emergencies. Since the first continent confirmed COVID-19 case in Algeria in February 2020, the spread of this pandemic across Africa, compounded impact of existing infectious diseases.

In response, ASRIC, established the ASRIC Working Group on Africa's Indigenous Knowledge for Prevention and Control of Emerging Infectious Diseases on the Continent like COVID-19: Utilizing an Afro-Centric Response as advisory working group to explore Africa's indigenous knowledge systems (IKS) as viable resources for combating pandemics.

This workgroup group was tasked to harness the rich biodiversity and traditional medicinal knowledge across the continent, integrating them with modern scientific research to develop Afro-centric health solutions as a response to the COVID-19 pandemic. The findings were reported in ASRIC STI Intervention on COVID-19: Report on Africa's Indigenous Knowledge for Prevention and Control of Emerging Infectious Diseases on the Continent like COVID-19: Utilizing an Afro-Centric Response"Actions and Interventions"

Aim

To investigate and utilize Africa's indigenous knowledge systems and biodiversity resources in developing Afro-centric scientific responses for the prevention, control, and management of emerging infectious diseases, including COVID-19, Ebola, and Lassa fever.

Objectives

1. To identify, evaluate, and document African medicinal plants with antiviral and immune-boosting properties.
2. To promote community-driven prevention and control measures against infectious diseases.
3. To develop Afro-centric guidelines for integrating traditional medicine with orthodox healthcare systems.
4. To enhance Africa's capacity for indigenous biopharmaceutical production and clinical research.
5. To strengthen collaboration among African scientists, traditional healers, and global partners for knowledge exchange and innovation.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)
- African Scientific Research and Innovation Council (ASRIC) Secretariat, Advisory Boards, Working Groups, and Task Forces
- African Union Specialized Technical Committees (STC-EST)
- Africa CDC, AUC Departments (DHRST, DREA, DSA)
- Ministries of Health of AU Member States
- National Research Institutes and Universities
- National Drug and Food Regulatory Authorities
- Pharmaceutical Industries (public and private)
- World Health Organization (WHO)
- Traditional Medicine Practitioners and Herbal Associations
- Community Leaders and Civil Society Organizations
- Researchers in Africa and the Diaspora

Activities

1. Compile a compendium of African antiviral medicinal plants for biopharmaceutical production.
2. Identify and test quinoline alkaloid analogues from local herbs for antiviral efficacy against COVID-19, Ebola, and Lassa fever.
3. Assess already licensed African herbal products for immune support and initiate clinical trials following WHO guidelines.
4. Develop community prevention guidelines and standard operating procedures (SOPs) for locally produced sanitizers, disinfectants, and face masks.
5. Conduct randomized control clinical trials on identified antiviral plant extracts and products proven effective in vitro.
6. Formulate policy briefs and guidelines for integrating traditional and orthodox medicine within Africa's health systems.

Outcomes

1. A validated compendium of African medicinal plants with proven antiviral and immune-boosting properties.
2. Development of indigenous-based antiviral therapies and immune-enhancing products through clinical validation.
3. Strengthened community-based public health practices leveraging traditional knowledge and local materials.
4. Adoption of standardized Afro-centric guidelines for herbal medicine research, production, and regulation.

5. Enhanced collaboration among African researchers, traditional healers, and policymakers for pandemic resilience.
6. Increased self-reliance of African nations in responding to infectious disease outbreaks using indigenous innovations.

12. IMPACT OF COVID-19 ON AFRICA'S FOOD AND NUTRITIONAL SECURITY "ACTIONS AND INTERVENTION"

Background

The outbreak of the COVID-19 pandemic in late 2019 rapidly evolved into an unprecedented global health and socio-economic crisis, exposing deep structural vulnerabilities in health systems, food security mechanisms, and research and innovation capacities worldwide. In Africa, the pandemic exacerbated pre-existing development challenges, including fragile health infrastructure, low investment in research and development (R&D), weak science-policy linkages, and heavy dependence on external supply chains for essential commodities and technologies. The impact was not confined to the health sector alone it extended to food and nutrition security, resulting in disruptions that affected the continent's food productivity and nutritional wellbeing.

Against this backdrop ASRIC took a proactive approach by establishing the ASRIC Working Group on Food and Nutrition to mobilize Africa's scientific community and provide coordinated, evidence-based responses to the pandemic. This initiative was launched in response to the urgent need for science-based solutions and coordinated research actions to mitigate the pandemic's impact and to strengthen Africa's capacity for resilience and recovery.

The findings from the ASRIC Working Group on Food and Nutrition are reflected in the report "Impact of COVID-19 on Africa's Food and Nutritional Security: Actions and Interventions", which revealed that the pandemic severely disrupted agricultural value chains, restricted labor mobility, and hindered access to markets, particularly affecting smallholder farmers and vulnerable groups. School closures and economic downturns further contributed to increased malnutrition rates, poverty, and food insecurity across sub-Saharan Africa. The pandemic also unveiled the fragility of Africa's import-dependent food systems, underscoring the need for localized, innovation-driven agricultural and food security strategies.

Aim

To develop a guided response that will minimize the impact of COVID-19 on Africa's Food and Nutrition Security in order to ensure the wellbeing of Africa's citizens.

Objectives

1. Develop a situational analysis on the food and nutritional security in Africa in light of the COVID-19 pandemic.
2. Develop a guideline to assist Member States in developing their own regulation on transport/shipment of foods and Agro-products i.e. (in country movement and transboundary movement) in light of the COVID-19 pandemic.

3. Examining the consequences of COVID-19 by critically examining crop yields, Agro safety, nutrition, food security, plant improvement programmes, environmental pollution and impact on less fortunate vulnerable members of society and proffering solutions to overcome these impacts and estimated cost of the proffered interventions.
4. Examine the possibilities and the way that COVID-19 may present any opportunity for our continent to domesticate the economy through promotion of local production, value addition and processing, regional trade thus reducing foreign domination and reliance on imports.
5. Identify research gaps/opportunities to strengthen the continent's capacity to respond to future threats to Food and Nutrition Security.
6. Develop policy brief and policy guidelines to address the current and future challenges to food and nutrition security in Africa.

Stakeholders

- African Union Commission (AUC)
- African Union Scientific, Technical and Research Commission (AU-STRC)
- African Scientific Research and Innovation Council (ASRIC)
- National Academies of Science and Research Councils
- Universities and Research Institutes across AU Member States
- Regional Economic Communities (RECs)
- African Centers of Disease Control and Prevention (Africa CDC)
- International partners such as FAO, WHO, and UNESCO
- Private sector and innovation hubs in biotechnology and digital solutions

Activities

- Conduct a continental situational analysis on food and nutritional security to assess the short- and long-term impacts of the COVID-19 pandemic on agriculture, food systems, and vulnerable populations.
- Develop harmonized guidelines to assist AU Member States in regulating and facilitating the safe transport and shipment of food and agricultural products within and across borders during and after pandemics.
- Evaluate the socio-economic and environmental consequences of COVID-19 on crop yields, agro-safety, food quality, and nutrition, identifying effective interventions and estimating implementation costs.
- Explore opportunities for economic domestication through local production, value addition, regional trade, and reduced reliance on food imports, leveraging lessons from the pandemic.
- Identify research gaps and innovation priorities to strengthen Africa's scientific and institutional capacity for future food and nutrition security threats.

- Develop policy briefs and strategic guidelines to support Member States in formulating evidence-based, resilient food and nutrition security frameworks for pandemic preparedness and response.

Outcomes

- A comprehensive continental report detailing the state of food and nutritional security in Africa in the context of COVID-19.
- Adopted AU guidelines for food and agro-product transport and trade under emergency conditions.
- Policy recommendations and costed interventions addressing agricultural productivity, nutrition, and resilience.
- Enhanced local production and regional value chains contributing to Africa's food sovereignty and economic self-reliance.
- A research and innovation roadmap identifying priority areas for investment and collaboration in food security.
- Evidence-based policy briefs and frameworks guiding Member States toward sustainable and resilient food systems aligned with STISA-2024, Agenda 2063, and the SDGs.

13. ASRIC ADVISORY BOARD ON STI STRATEGIC INTERVENTION FOR COVID-19 ACTIONS AND INTERVENTION

Background

The COVID-19 pandemic disrupted public health systems, food supply chains, transportation networks, education, trade, and community livelihoods, revealing the continent's vulnerability and dependence on external systems for essential goods, healthcare technologies, and innovation capacities. In recognition of the urgent need for a coordinated continental response anchored in science, technology, and innovation (STI), the African Scientific Research and Innovation Council (ASRIC) established the ASRIC Advisory Board on STI Strategic Intervention for COVID-19 Actions and Intervention. The Advisory Board was mandated to provide a science-driven framework for action and to mobilize Africa's scientific community to respond collectively and effectively to the health, food, and socio-economic challenges posed by the pandemic.

The Advisory Board identified that Africa's capacity to respond to the pandemic was constrained by weak health research infrastructure, low STI investment, fragmented policy coordination, and limited indigenous innovation in health systems. However, the crisis also provided an opportunity to leverage African knowledge systems, enhance cross-sectoral collaboration, and promote localized STI-based solutions. To operationalize its mandate, the Advisory Board structured its work around three major pillars:

1. Enabling Environment – focusing on establishing an institutional, policy, and regulatory environment conducive to STI-led pandemic management, including the creation of legal frameworks and strategic partnerships.
2. Research and Development (R&D) – emphasizing the generation and application of scientific knowledge, technology transfer, and the development of indigenous innovations in diagnostics, therapeutics, and health systems.
3. Publicity and Outreach – aimed at communicating scientific knowledge, raising public awareness, and fostering community engagement to ensure inclusive participation in STI-driven recovery processes.

Through this structure, the Advisory Board set out to produce actionable policy recommendations, conduct situational analyses, and guide AU Member States in designing responsive and resilient STI interventions for COVID-19 and future pandemics.

Aim

To strengthen Africa's capacity for coordinated STI-based responses to the COVID-19 pandemic and future infectious disease threats through scientific innovation, policy development, and inter-sectoral collaboration.

Objectives

1. Develop policy and operational guidelines to support Member States' health systems and research capacity.
2. Promote Afro-centric research and innovation for pandemic preparedness, diagnostics, and health interventions.
3. Enhance intra-Africa and diaspora scientific collaboration for knowledge and technology exchange.
4. Foster stakeholder engagement, communication, and awareness on STI-led pandemic responses.
5. Generate evidence-based recommendations for future outbreak preparedness and mitigation.

Stakeholders

- ASRIC Bureau,
- AU-STRC,
- ASRIC Advisory Board Members,
- Working Groups (Food Security, Socioeconomic Impact, Indigenous Knowledge).
- Africa CDC,
- AU Member States' Ministries of Health and STI,
- National Research Institutes, Universities, Regional Economic Communities (RECs),
- WHO,
- UN Agencies,
- SMEs,
- African and Diaspora scientists, policy-makers, and the media.

Activities

- Conduct situational analyses on the health, food, and socio-economic impacts of COVID-19 across AU Member States.
- Develop policy frameworks and guidelines to strengthen STI integration in national pandemic response systems.
- Facilitate research coordination and capacity building for diagnostics, vaccine development, and indigenous health innovations.
- Establish communication and knowledge exchange platforms to disseminate STI findings and foster collaboration.
- Engage stakeholders through workshops, advisory sessions, and technical reports to support Member States' evidence-based policymaking.

Outcomes

- A continental STI framework guiding Member States on coordinated pandemic preparedness and response.

- Strengthened research and innovation capacity for health security and resilience.
- Enhanced inter-African scientific collaboration and integration of indigenous knowledge in STI policy.
- Improved policy coherence and institutional coordination for managing health and socio-economic crises.
- Increased public and governmental awareness of the role of STI in achieving sustainable development and pandemic resilience.

14. ASRIC FLAGSHIP PROJECT ON CORONA VIRUS DIAGONSTIC AND TREATMENT FOR ALL "MADE IN AND FOR AFRICA"

Background

The COVID-19 pandemic underscored Africa's urgent need for local innovation, research capacity and homegrown scientific solutions to health crises. The continent's reliance on imported diagnostics, therapeutics, and vaccines limited timely response and equitable access, exposing structural vulnerabilities.

In response, the African Scientific, Research and Innovation Council (ASRIC) initiated its Flagship Project on Coronavirus Diagnostic and Treatment for All, "Made in and for Africa." This project focuses on building the continent's scientific capacity to design, develop, and deploy indigenous biomedical innovations that address Africa's specific realities.

The project is supported technically and financially by the Hassan II Academy of Science and Technology and the Euro-Mediterranean University of Fes (UEMF), Morocco. It combines cutting-edge biotechnology with African-led research collaboration to generate diagnostics and treatments accessible to all. This fits within the narrative to develop Africa-based solutions for COVID-19 diagnostics and treatment while building the capacity of African researchers to lead biomedical innovation for future pandemics.

Aim

To develop innovative, African-led solutions for COVID-19 diagnosis and treatment while building the capacity local scientific capacity through research, training, and continental collaboration and strengthening African researchers to lead biomedical innovation for future pandemics.

Objectives

1. To develop a rapid, reliable, early detection and low-cost COVID-19 diagnostic platform using Clustered Interspaced Short Palindromic Repeats (CRISPR) based technology.
2. To design and discover new inhibitors of SARS-CoV-2 main protease (Mpro) as potential therapeutic agents.
3. To advance the prototype diagnostic equipment into scalable clinical applications.
4. To promote collaboration among African universities, research centres, and scientific institutions.
5. To foster collaboration between African and diaspora scientists in virology, biotechnology, and medical innovation.
6. To strengthen Africa's pandemic preparedness and reduce dependence on imported medical technologies.

Stakeholders

- AU-STRC
- ASRIC
- Hassan II Academy of Science and Technology (Morocco)
- Euro-Mediterranean University of Fes (UEMF)
- African universities, research centres, and laboratories
- Africa CDC and national ministries of
- International partners
- African and diaspora scientists and researchers particularly those in biomedical sciences

Activities

- Research and development of CRISPR-based diagnostics for rapid detection and variant tracking.
- Discovery and testing of new SARS-CoV-2 Mpro inhibitors for therapeutic applications.
- Prototype development of diagnostic equipment and testing in laboratory and field settings.
- In vitro and in vivo testing of inhibitors (cells, then mice, followed by eventual human trials).
- Collaborative research networks linking African laboratories and institutions in biomedical sciences.
- Dissemination of findings through conferences, and policy briefs.
- Engagement with policymakers and industry for scaling up production and deployment of outcomes.

Outcomes

- A prototype CRISPR-based diagnostic tool tailored for African contexts.
- Novel SARS-CoV-2 protease inhibitors validated in vitro and progressing to animal/human trials.
- Strengthened African biomedical research ecosystem through continental collaboration.
- Reduced dependence on imported medical technologies by developing affordable, locally produced diagnostics and treatments.
- Establishment of a replicable “Made in Africa” model for addressing infectious diseases beyond COVID-19.

15. PARTICIPATION OF LEADING UNIVERSITIES IN ASRIC SCHOLARSHIP SCHEME

Background

The ASRIC Scholarship Scheme, established by the African Union–African Scientific, Research and Innovation Council (AU-ASRIC), is a flagship programme designed to strengthen Africa's scientific research, technological advancement, and innovation capacity. It addresses critical challenges such as brain drain, limited intra-African research collaboration, and inadequate investment in research and development (R&D).

Since its launch in partnership with the Euro-Mediterranean University of Fes (UEMF), Morocco, the scheme has provided fully funded PhD opportunities to African students across the continent, focusing on priority fields such as digital engineering, artificial intelligence, renewable energy, robotics, and additive manufacturing. UEMF's participation has set a benchmark for excellence and demonstrated how leading African institutions can contribute significantly to Agenda 2063 and the Science, Technology and Innovation Strategy for Africa (STISA-2024).

Building on this success, the ASRIC Congress has called for the active participation of leading African universities to expand the scheme. By joining, universities will not only support Africa's youth but also position themselves as hubs of scientific excellence, strengthen their global reputation, and foster a network of collaboration across the continent. In response to the call, the Government of Algeria has granted 10 scholarships for doctoral students to conduct their studies in select universities in Algeria.

Aim

To expand the ASRIC Scholarship Scheme through the participation of leading African universities, thereby building a robust and interconnected academic network that empowers young scientists, advances African-led research, and supports the continent's socio-economic transformation.

Objectives

1. To invite leading African universities to commit scholarship slots for PhD students under the ASRIC scheme.
2. To diversify research opportunities across disciplines including natural sciences, health sciences, agriculture, social sciences, engineering, and humanities.
3. To strengthen research capacities of host institutions through collaboration, mentorship, and innovation.
4. To enhance intra-African academic mobility and cultural inclusivity.

5. To attract donor, philanthropic, and government support for sustainable scholarship funding.

Stakeholders

- AU-STRC
- ASRIC
- African universities
- Euro-Mediterranean University of Fes (UEMF)
- African Ministries of Higher Education.
- Regional Economic Communities (RECs).
- International organizations and donors
- STI development.
- African prospective PhD students.

Activities

- Calls for participation inviting African universities to commit PhD scholarships under the ASRIC scheme.
- Formal agreements (MoUs) between ASRIC and participating universities.
- Annual calls for PhD applications with competitive, merit-based selection across AU Member States.
- Placement of students in participating universities across diverse fields.
- Joint research projects and collaborations among participating institutions.
- Publicity and outreach campaigns by participating universities to attract top-tier applicants.
- Creation of a continental network of universities of excellence, fostering collaboration, exchange, and knowledge transfer.

Outcomes

- Expanded participation of leading African universities in the ASRIC Scholarship Scheme.
- Increased availability of fully funded PhD opportunities across a wider range of disciplines.
- Stronger research and innovation ecosystems in host universities.
- Enhanced intra-African mobility, cultural inclusivity, and scientific collaboration.
- Increased donor and philanthropic investment in African higher education.
- Creation of a continental academic network of excellence, uniting Africa's top universities.
- Contribution to Africa's socio-economic transformation by equipping a new generation of scientists and innovators.

16. ASRIC DIASPORA SUMMIT ON STI FOR AFRICA'S PROSPERITY

Background

The African Union recognizes the Diaspora as the 6th Region of Africa and a vital partner in the continent's transformation. The African Diaspora is a vast reservoir of expertise and resources that has long contributed to global economic growth. While remittances remain vital for Africa, they are insufficient to drive the transformation required in science, technology, and innovation (STI). Greater engagement of the Diaspora is needed to bridge gaps in research infrastructure, counter brain drain, and foster knowledge transfer, capacity-building, and innovation. In line with this, the ASRIC Congress at its 6th annual meeting decided to that a diaspora Africa science dialogue summit is organized in order to engage more African Diaspora in AU-ASRIC programmes and activities.

The ASRIC Diaspora Summit on STI for Africa's Prosperity will strengthen the linkages between Africa-based scientists and the Diaspora, creating synergies for research, innovation, and entrepreneurship tailored to Africa's unique development needs. The Summit will serve as a platform to harness the Diaspora's expertise, resources, and networks; foster **brain circulation**, mobilize resources, and leverage ASRIC as a platform to build STI solutions for Africa's prosperity

Aim

To engage and mobilize the African Diaspora as a key driver of Africa's science, technology, and innovation agenda, fostering collaboration, knowledge exchange, and resource mobilization for Africa's prosperity.

Objectives

1. To facilitate knowledge exchange and networking opportunities between Diaspora experts and Africa-based stakeholders.
2. To promote joint research, academic cooperation, and capacity-building initiatives.
3. To identify key STI challenges and opportunities where Diaspora expertise can add value.
4. To foster partnerships for sustainable STI development and innovation-driven growth.
5. To showcase successful Diaspora-led initiatives with impact on African communities.
6. To encourage Diaspora participation in policymaking and strategic planning for Africa's development.
7. To advocate for the Diaspora's role as a recognized partner in achieving Africa's Agenda 2063 aspirations.

Stakeholders

- AU-STRC
- ASRIC

- ASRIC Diaspora Chapters
- African Union Member States
- Diaspora scholars, professionals, entrepreneurs, and innovators.
- African universities, research institutions, and academies of science.
- African Union policy organs, STCs
- Regional Economic Communities (RECs).
- International partners and donors
- Private sector and civil society stakeholders.

Activities

- Plenary sessions and keynote speeches by distinguished Diaspora and Africa-based experts.
- Panel discussions and/or breakout sessions on sub-themes: Strengthening STI ecosystems.; STI funding and investment (resource mobilization, innovative financing).; Brain circulation vs. brain drain.; Capacity-building, education, and entrepreneurship.
- Showcasing Diaspora success stories and best practices in STI.
- Networking forums to connect researchers, innovators, and policymakers.
- Policy dialogues on mechanisms for Diaspora engagement in AU and Member State STI strategies.
- Adoption of a Summit communiqué outlining commitments and recommendations.
- Post-Summit working groups to operationalize action plans and monitor outcomes.

Outcomes

- Strengthened networks between Africa-based and Diaspora scientists and innovators.
- Enhanced understanding of opportunities and mechanisms for Diaspora engagement in Africa's STI development.
- Concrete partnerships and collaborative research initiatives launched.
- Mechanisms developed for brain circulation through sabbaticals, staff exchanges, and joint projects.
- Defined roadmap for Diaspora participation in STI resource mobilization and investment.
- Establishing capacity-building initiatives for example having Diaspora chairs in universities, mentorship programmes.
- A unified voice of the African Diaspora in supporting Africa's STI agenda.

17. ASRIC FLAGSHIP PROJECT DRINKING ON WATER FOR ALL

Background

Access to safe and clean drinking water is a fundamental human right and a cornerstone of sustainable development. Yet, millions of Africans continue to suffer from inadequate access to potable water, with far-reaching consequences on public health, food security, livelihoods, and economic productivity.

Over 2.1 billion people worldwide lack access to safe water sources within their homes, with more than half of Sub-Saharan Africa's population relying on unsafe surface water. Even in relatively high-income African nations such as South Africa, some provinces experience water scarcity for days. Water stress is increasing in North Africa, and projections indicate that 350–600 million people in Sub-Saharan Africa will be affected in the coming decades.

The consequences of unsafe water are devastating. Waterborne diseases remain among the leading causes of mortality, especially in children under five, while inadequate water access hampers education, gender equality, and poverty reduction. Waterborne diseases such as cholera, typhoid, and hepatitis A are preventable yet remain prevalent across Africa. According to WHO, cholera causes between 1.3 to 4 million cases annually, resulting in up to 143,000 deaths, the majority in Sub-Saharan Africa. Similarly, typhoid fever is responsible for approximately 217,000 deaths globally each year, with the disease disproportionately affecting low- and middle-income countries. Beyond viruses and parasites, water pollution from agrochemicals, industrial waste, and algal blooms contributes to chronic conditions such as stunted growth and kidney disease.

The economic burden of these preventable diseases is immense. For instance, the 2016 cholera outbreak in Malawi affected 1,786 people and cost households and health facilities an estimated USD 116,000, excluding the economic cost of lost productivity and lives. Such expenditures far exceed the cost of preventive measures, highlighting the need for affordable, scalable, and locally adaptable water purification solutions.

The AU-ASRIC Flagship Project on Drinking Water for All introduces an Afrocentric, science-driven solution, the project contributes not only to Africa's well-being but also offers a model that can be shared with the world. The projects is aligned with STISA-2024 priorities on disease prevention, well-being, and societal development, as well as Agenda 2063 aspirations and the Sustainable Development Goals particularly SDG 3: Good Health and Well-being and SDG 6: Clean Water and Sanitation

Aim

To eradicate waterborne diseases in Africa by ensuring access to safe, affordable, and sustainable drinking water for all populations.

Objectives

1. To build the capacity of African communities to adopt and use the Moringa Sand Filter–Ultraviolet (MSF-UV) hybrid technology.
2. To design and produce pre-fabricated MSF-UV hybrid units for rural, peri-urban, and urban deployment.
3. To raise public awareness and sensitize stakeholders on the health and economic benefits of clean water access.
4. To foster innovation and continuous improvement of water purification technologies adapted to Africa's needs.
5. To strengthen partnerships with regional and global stakeholders, including WHO, for scaling and dissemination.

Stakeholders

- AU-ASRIC
- AU-STRC
- AU Member States
- WHO Innovation Hub and innovation networks
- African universities, research institutions, and innovation hubs
- Local communities and civil society organizations
- Private sector partners
- International donors and development partners.

Activities

- Pilot testing of MSF-UV hybrid technology across different water sources and community settings.
- Production and distribution of pre-fabricated MSF-UV filters using locally available materials.
- Capacity-building workshops for communities and local technicians on the use and maintenance of filters.
- Awareness campaigns on the health and economic benefits of safe drinking water.
- Collaboration with WHO Innovation Hub to upscale and disseminate the technology continent-wide.
- Monitoring and evaluation of technology adoption, performance, and health impact.
- Resource mobilization from governments, private sector, and international partners for scaling.

Outcomes

- Widespread availability and use of affordable, locally adaptable MSF-UV hybrid filters across Africa.

- Reduction in cases and deaths from waterborne diseases such as cholera, typhoid, and hepatitis A.
- Increased community awareness and resilience regarding water purification and sanitation practices.
- Strengthened research, innovation, and manufacturing capacity in Africa's water sector.
- Significant savings in healthcare costs and productivity losses, redirecting resources to development.

18. CAPACITY BUILDING WORKSHOP ON LOW COST MORINGA SAND FILTER HYBRID TECHNOLOGY FOR HOUSEHOLD AND COMMUNITY WATER IN AFRICA

Background

Access to safe drinking water remains a critical challenge in Africa, where millions of people still rely on unsafe surface water sources, exposing them to **waterborne diseases** such as cholera, typhoid, and hepatitis A. health and economic burden on households and governments from preventable waterborne diseases is immense, yet affordable technological solutions exist.

The African Scientific Research and Innovation Council has prioritized clean drinking water as a flagship area of research and innovation. Its scientists have designed and tested the Moringa Sand Filter–Ultraviolet (MSF-UV) hybrid technology, a low-cost, locally adaptable solution for purifying household and community water supplies. Constructed using accessible materials that is sand, gravel, charcoal, and moringa seeds, the MSF-UV has been piloted successfully and meets WHO drinking water standards.

To accelerate adoption and ensure sustainability, there is a need for capacity-building workshops to train communities, technicians, and policymakers on the use, maintenance, and scaling of the MSF-UV hybrid technology. ASRIC conducted a capacity building workshop on moringa sand filter hybrid technology for household and community water in Africa to improve livelihoods and contribute to disease prevention and support Africa Union's commitments under to ensure clean water and sanitation.

Aim

To build the technical and community capacity required for the adoption, operation, and scaling of the MSF-UV hybrid technology, thereby improving access to safe drinking water at household and community levels in Africa.

Objectives

1. To train participants on the design, construction, and maintenance of the MSF-UV hybrid water purification system.
2. To enhance local technical capacity for scaling up the technology at household and community levels.
3. To raise awareness of the health and economic benefits of clean water.
4. To strengthen collaboration among researchers, policymakers, and communities for sustainable water solutions.

5. To integrate the MSF-UV technology into national and community water management strategies.

Stakeholders

- AU-ASRIC
- AU-STRC
- WHO Innovation Hub and partners
- AU Member States particularly Ministries of Water, Health, Science & Technology
- African universities and research institutions
- Local governments and community leaders
- Private sector and SMEs
- Civil society and NGOs
- Beneficiary households and communities

Activities

- Organizing regional and national workshops for knowledge transfer on MSF-UV hybrid technology.
- Practical hands-on training sessions on construction and maintenance of the filters.
- Developing and distributing training manuals and technical guides in multiple languages.
- Engaging community leaders, women's groups, and youth associations in awareness campaigns.
- Facilitating policy dialogues with government officials on integrating MSF-UV into water strategies.
- Establishing pilot demonstration sites in selected rural and peri-urban communities.
- Creating a network of trained technicians and trainers for sustainability.

Outcomes

- Trained pool of technicians, community leaders, and households capable of adopting and maintaining the MSF-UV hybrid system.
- Increased uptake of affordable, locally adaptable water purification technology.
- Reduction in cases of waterborne diseases in participating communities.
- Greater awareness among communities of the importance of clean water for health and productivity.
- Strengthened collaboration between research institutions, governments, and communities.

19. ASRIC JOURNAL STAKEHOLDERS' CAPACITY BUILDING WORKSHOP

Background

Among the flagship initiatives of the ASRIC is the ASRIC Journals which to provide African researchers with a publishing platform that amplifies African scientific excellence globally as reputable research outlets for Africa and the Diaspora. The journals cover the thematic areas of Agricultural Sciences, Engineering Sciences, Health Sciences, Natural Sciences, and Social Sciences and Humanities.

A capacity building workshop for journal stakeholders is being convened to strengthen the skills of stakeholders specifically editors, reviewers, and editorial board members with the intent to further improve the journals in order to realize their goals, while building strategies to enhance the quality, credibility, visibility, and global ranking of the ASRIC Journals.

Aim

The aim of this workshop is to strengthen the capacities of the stakeholders to improve the quality, visibility, and impact of the ASRIC Journals.

Objectives

1. To enhance editorial competencies on best practices for managing scientific journals, peer review processes, and editorial workflows to ensure the efficient production of high-quality research papers.
2. To improve author skills in advanced scientific writing, focusing on creating guidelines and templates for structuring papers and adhering to ethical research standards of the ASRIC journals.
3. To strengthen peer review processes with tools and guidelines to perform rigorous and unbiased peer reviews, ensuring the integrity and academic value of research published in the ASRIC journals.
4. Setup mechanisms for ensuring the ASRIC Journals adheres to global ethical standards in scientific publishing, such as plagiarism, data manipulation, and conflicts of interest.
5. To explore strategies for increasing the ASRIC journals' visibility and impact such as indexing in major databases, improving online accessibility, and adopting open access practices.
6. To facilitate knowledge exchange, networking and collaboration among African researchers, and institutions to promote cross-disciplinary and cross-border research initiatives and intra-Africa research.

Stakeholders

- ASRIC Journals Editorial Board and Secretariat
- ASRIC Editors and Reviewers
- African Union Scientific, Technical and Research Commission (AU-STRC)
- Pan African University and Association of African Universities (AAU)
- National Young Academies of Science in Africa
- Early-career African scientists and researchers
- Regional and international scientific publishing partners

Activities

- Editorial training sessions on best practices in journal management, peer review, and ethical standards.
- Scientific writing workshops for researchers, focusing on structure, clarity, and international publishing requirements.
- Panel discussions and case studies on plagiarism prevention, data integrity, and publication ethics.
- Strategic planning sessions to explore indexing, abstracting, and open access publishing pathways.
- Networking forums to connect African researchers, journal editors, and international partners for collaborative projects.
- Development of guidelines and templates for ASRIC Journals' submissions and review processes.

Outcomes

- Enhanced editorial management and peer review capabilities.
- Strategies and action plans for increasing the visibility and impact factor of the ASRIC Journals.
- Improved scientific writing among African young researchers.
- Increased adherence to ethical standards in research and publishing.
- Strengthened collaboration among African researchers, fostering intra-African scientific research.

20. AFRICAN ENVIRONMENTAL SOCIETY (AES)

Background

Africa faces complex and urgent environmental challenges, ranging from desertification, deforestation, air pollution, biodiversity loss, to the intensifying impacts of climate change. While Africa contributes less than 5% of global carbon emissions, the continent disproportionately bears the brunt of climate-related crises, making environmental protection central to sustainable development and resilience.

In recognition of this, the African Union Scientific, Technical and Research Commission (AU-STRC), in partnership with the Nigerian Environmental Society (NES), initiated the establishment of the African Environmental Society (AES). The AES was conceptualized during working sessions between AU-STRC and NES, with the aim of creating a continental scientific body dedicated to environmental protection, sustainable development, and the promotion of environmental professionalism.

The AES seeks to provide a robust platform that unites experts, institutions, and agencies across Africa, enabling the exchange of knowledge, policies, and practices. It will also serve as a trusted continental observatory and information hub on environmental issues, working closely with AU Member States and their environment ministries or agencies. The initiative aligns with Agenda 2063 and the African Union's climate action frameworks, ensuring that Africa responds proactively to its environmental vulnerabilities.

Environmental challenges threaten Africa's long-term sustainability, food security, and human health. Despite many national and regional policies, fragmented efforts and limited collaboration have slowed progress. By creating the AES, Africa gains a consolidated platform to mobilize expertise, strengthen coordination, and elevate environmental advocacy to the continental level. This initiative also reinforces Africa's commitment to Agenda 2063's vision of a prosperous and sustainable continent, while giving environmental societies a collective voice in shaping Africa's future.

Since the conception of the AES, a series of vigorous planning and consultations have been undertaken. AU-STRC and NES jointly developed the concept, with NES playing a central role as the lead institution. To strengthen coordination, NES seconded a staff member to the AU-STRC Secretariat, ensuring dedicated follow-up and communication.

Through extensive outreach, letters and emails were sent to over 145 environmental societies across Africa. Alternative channels, were employed to ensure strong connectivity and inclusivity. These efforts successfully linked the Secretariat with over 150 environmental societies, fostering dialogue and paving the way for continental collaboration.

The first milestone came with 11 societies signing a Letter of Intent, representing 10 AU Member States that is Burkina Faso, Burundi, Egypt, Congo Brazzaville, Ghana, Liberia, Rwanda, Sierra Leone, Togo, and Nigeria. This step marked a significant foundation for the AES.

Although the inauguration was originally scheduled for 2018 and later rescheduled to 2025, logistical challenges, particularly funding for societies' participation, caused a further postponement to 2026. Despite these setbacks, the process demonstrated strong momentum, with AU-STRC and NES continuing to mobilize support and refine frameworks to ensure the AES launches successfully with broad participation.

Aim

To establish and operationalize a continental scientific society that strengthens environmental professionalism, fosters collaboration among African environmental institutions, and provides sound, independent information to guide Africa's sustainable environmental management.

Objectives

1. To unite African environmental societies, agencies, and experts under one continental platform.
2. To develop an African environmental observatory network that strengthens knowledge sharing and coordination.
3. To provide science-based and independent policy recommendations to address environmental challenges.
4. To promote sustainable development and enhance Africa's preparedness and response to climate change and related environmental crises.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)
- Nigerian Environmental Society (NES)
- African Environmental Societies and Associations
- AU Member States' Ministries/Agencies of Environment.
- Regional and International Partners (World Bank, FAO, UNEP).

Activities

- Finalize institutional framework by revising the AES Statute and ensuring alignment with AU protocols and continental policies.
- Inaugurate the AES in 2026 through a major continental event in Abuja, Nigeria, co-hosted by AU-STRC and NES, bringing together stakeholders from across Africa.
- Strengthen partnerships and membership by expanding outreach to additional societies and agencies, building on the 11 signatories already secured.

- Develop the Environmental Observatory Network, which will serve as the AES's flagship platform for information exchange, monitoring, and knowledge dissemination.
- Publicize and advocate for the AES through targeted communication campaigns, ensuring visibility across AU Member States and the global environmental community.
- Sustain collaboration and capacity building by organizing conferences, workshops, and training programmes for African environmental experts and societies.

Outcomes

- Revised AES Statute aligned with AU protocols, ensuring strong governance and policy coherence across the continent.
- Successful inauguration of the AES in 2026, enhancing continental visibility and stakeholder engagement in environmental science and policy.
- Broadened network of environmental societies and agencies beyond the initial 11 signatories, strengthening regional representation and collaboration.
- Environmental Observatory Network established as a functional flagship system for data sharing, environmental monitoring, and research dissemination.
- Increased recognition of AES through targeted communication and outreach, positioning it as a leading continental voice on environmental issues.
- Continuous professional development and knowledge exchange achieved through regular conferences, workshops, and training programmes across Member States.

21. GUIDELINE ON INTELLECTUAL PROPERTY STRATEGY IN JOINT RESEARCH AND COLLABORATION DURING OUTBREAKS

Background

Collaborative research is a cornerstone of Africa's response to health and development challenges, particularly during pandemics such as COVID-19, Ebola, and other infectious outbreaks. While joint projects between African institutions and global partners have produced important knowledge, they often face challenges in the management of intellectual property (IP). Issues of ownership, benefit-sharing, protection of indigenous knowledge, and equitable commercialization have sometimes limited the continent's ability to fully benefit from its research outputs.

To address these challenges, the ASRIC, spearheaded the development of the Guideline on Intellectual Property Strategy in Joint Research and Collaboration during Outbreaks. This flagship guideline provides a framework to guide African institutions, governments, and researchers on how to handle IP matters in joint and collaborative research projects. The aim is to balance protection of rights, equitable access, and the commercialization of outputs, while ensuring that Africa's interests and contributions are safeguarded.

The process of developing the guideline involved extensive literature reviews, stakeholder consultations, and policy analysis coordinated by ASRIC, drawing lessons from Africa's experiences during COVID-19 and from global IP governance frameworks such as the TRIPS Agreement, Nagoya Protocol, and Access and Benefit-Sharing (ABS) mechanisms. By combining these insights with Africa's unique realities, the guideline strengthens the continent's research ecosystem while promoting innovation, fairness, and sustainability.

The preparation of the guideline followed a structured process under the coordination of ASRIC and AU-STRC. It began with consultations with researchers, policymakers, and IP experts to map gaps in current collaborative research agreements. This was followed by a review of existing IP frameworks in Africa and globally, focusing on how intellectual property is governed in collaborative projects, particularly during emergency health contexts.

Case studies, such as the Rooibos Access and Benefit-Sharing agreement in South Africa, were examined to demonstrate best practices in ensuring equitable benefit for local communities. ASRIC and AU-STRC also ensured that the drafting process drew from international treaties and protocols including TRIPS, CBD, and the Nagoya Protocol to align the guideline with global standards while tailoring it to Africa's context.

Objectives

1. To provide a framework for ownership, management, and commercialization of IP in collaborative research.
2. To protect indigenous knowledge systems and ensure benefit-sharing with local communities.
3. To facilitate equitable partnerships between African and international research actors.

Stakeholders

- African Union through ASRIC and AU-STRC,
- National governments and policy bodies,
- African universities and research institutions,
- Indigenous communities and traditional knowledge holders,
- Regional IP organizations such as ARIPO and OAPI,
- International partners including WIPO, WHO, and UNESCO
- Pprivate sector and innovation hubs.

Activities

- Conduct IP literacy and awareness programmes for African researchers and institutions.
- Develop standardized IP strategies for collaborative research projects defining ownership, inventorship, and benefit-sharing.
- Establish mechanisms to protect indigenous knowledge through prior informed consent and equitable benefit-sharing.
- Promote open access practices, including open-source licensing and knowledge-sharing frameworks.
- Facilitate equitable commercialization through licensing models, start-ups, joint ventures, and Access and Benefit-Sharing (ABS) agreements.
- Introduce researcher incentive schemes linked to benefit-sharing, recognition, and innovation entrepreneurship.
- Align institutional IP policies with national, regional (ARIPO/OAPI), and international legal frameworks.
- Strengthen IP-related dispute resolution through adoption of alternative dispute resolution (ADR) mechanisms.

Outcomes

- Increased understanding among African researchers and institutions of intellectual property rights, responsibilities, and opportunities.
- Clear, equitable IP frameworks established for collaborative projects, enhancing transparency and trust.

- Strengthened safeguards for traditional knowledge and equitable benefit-sharing with local communities.
- Broader adoption of open-access and open-source principles promoting innovation diffusion and collaboration.
- Greater commercialization of research outputs through fair licensing, joint ventures, and start-ups, ensuring access to critical technologies during crises.
- Incentive systems promoting innovation, recognition, and entrepreneurship among African scientists.
- Harmonized IP frameworks across institutions and regions ensuring legal consistency and regional integration.
- Functional ADR mechanisms providing fair and timely settlement of IP-related conflicts.

22. REGIONAL INTEGRATION PROJECT FOR TECHNOLOGY HUNTING IN AFRICA

Background

Africa continues to face persistent challenges in the adoption of science, technology, and innovation (STI), particularly in transforming research outputs into practical solutions that address developmental priorities. Although innovations are emerging globally, African countries often encounter barriers in accessing, adapting, and integrating them, due to fragmented efforts, limited regional collaboration, and the absence of robust platforms for technology scouting and transfer.
As a result, many promising technologies remain underutilized, slowing progress toward inclusive and sustainable growth. The Regional Integration Project for Technology Hunting in Africa, initiated under the leadership of the African Scientific, Research and Innovation Council, was conceived to address this gap by establishing a coordinated continental mechanism for identifying, adapting, and deploying relevant technologies across Member States. It emphasizes collective action, regional integration, and structured knowledge exchange, ensuring that Africa moves beyond passive adoption to actively hunting, localizing, and developing technologies tailored to its unique context. In doing so, the initiative not only strengthens Africa's technological sovereignty but also accelerates socio-economic transformation in line with continental priorities.
Africa's underutilization of technology limits industrialization, undermines competitiveness, and slows development. Many Member States duplicate efforts or rely on imports due to the lack of mechanisms for collective technology scouting and adaptation.

The Regional Integration Project for Technology Hunting addresses this gap by offering a cost-effective, collaborative framework that reduces duplication, strengthens coordination, and fosters regional integration. Aligned with Agenda 2063, STISA-2024, and the SDGs, it reinforces the central role of STI in Africa's transformation while building innovation capacity, closing gaps in skills and infrastructure, and laying the foundation for sustainable growth and self-reliance.

Aim

To enhance Africa's capacity for technology acquisition, adaptation, and integration through regional collaboration, thereby strengthening innovation ecosystems and accelerating socio-economic development.

Objectives

1. Identify and map relevant technologies that address Africa's priority development needs (health, agriculture, energy, environment, industry).
2. Facilitate regional cooperation and integration in technology scouting, transfer, and utilization.
3. Build the capacity of African research institutions, innovators, and private sector actors to adapt and domesticate technologies.
4. Promote intra-African technology exchange and commercialization.

5. Strengthen Africa's position in global technology markets through coordinated hunting strategies.

Stakeholders

- African Union bodies (AU-STRC, ASRIC, AUC);
- Regional Economic Communities (ECOWAS, COMESA, SADC, EAC, IGAD);
- Member States through national ministries of STI, Industry, Agriculture, Health, and Energy; Research and Academic Institutions such as universities, centers of excellence, and research councils;
- Private Sector including technology firms, SMEs, and entrepreneurs; Development Partners such as AfDB, World Bank, UNDP, UNECA, and bilateral donors;
- Civil Society and Youth, including innovators, community enterprises, and women in STI.

Activities

- Developed a conceptual framework for technology hunting at regional and continental levels.
- Conducted stakeholder consultations and validation workshops with AU Member States and Regional Economic Communities (RECs).
- Identified priority technology areas for scouting and adaptation, including agriculture, energy, health, and ICT.
- Implemented pilot initiatives in selected regions to test and refine models for technology adaptation and transfer.

Outcomes

- A structured approach to technology hunting developed, guiding innovation discovery and adaptation across Africa.
- Broader participation of AU Member States and RECs ensured ownership and regional alignment.
- Clear focus on high-impact domains such as agriculture, energy, health, and ICT with enhanced targeted innovation efforts.
- Successful regional pilots validated practical models for technology transfer and commercialization.
- Set the groundwork for establishing an Africa-wide technology-hunting portal and integrated innovation ecosystem.

23. AFRICA FREE OF HEPATITIS HANDS ON CAPACITY BILDING – SHABU VILLAGE PROJECT

Background

Viral hepatitis remains one of the gravest public health crises confronting Africa. Each year, over 1.4 million people die from complications linked to hepatitis infections, particularly hepatitis B (HBV) and hepatitis C (HCV). These infections often go unnoticed due to asymptomatic progression and limited access to early diagnosis. Globally, over 240 million people live with chronic HBV, and 130–150 million with HCV. Sub-Saharan Africa is among the most burdened regions, with prevalence rates as high as 5–10% for HBV and 5.3% for HCV.Nigeria reflects this continental crisis, with approximately 20 million people infected. In Nasarawa State alone, studies estimate that nearly 13.2% of residents are seropositive for HCV. Recognizing the urgent need for intervention, the African Union Scientific, Research and Innovation Council (AU-ASRIC), in collaboration with key partners, launched the "Hepatitis Free Village" initiative under the broader framework of "Africa Free of Viral Hepatitis".

Shabu village in Nasarawa State was chosen for the pilot project due to its strategic location, accessibility, population size (over 3,000 people aged 16+), and existing high seroprevalence rates. The intervention was based on the Egyptian "Educate, Test, and Treat" model which has demonstrated effective hepatitis control. The model promotes five strategic pillars: Educate, Test, Treat, Prevent, and Monitor, underpinned by capacity building. This pilot aimed to demonstrate the practical application of a holistic, community-driven, science-based health intervention aligned with the AU Agenda 2063 and SDG 3 on Good Health and Well-being, offering a replicable model for nationwide and continental scale-up.

Some of the activities already performed include:

1. Community Engagement and Advocacy
    - High-level advocacy meetings with the Executive Governor of Nasarawa State and the Sangarin Shabu to secure political and traditional leadership buy-in.
    - Dissemination of bilingual (English and Hausa) publicity materials to ensure accessibility and reach.
    - Engagement of musicians, public figures, and religious leaders to promote awareness and encourage participation.
2. Volunteer Recruitment and Training
    - Recruitment of over 50 local health workers and volunteers.
    - Intensive 10-day training on screening techniques, counselling, treatment protocols, and data collection procedures.
3. Mapping and Data Collection
    - Identification of 7 settlements within Shabu (e.g., Angwan Kofar Pada, Angwan Wage).

- Comprehensive demographic mapping of over 3,000 individuals aged 16+.

4. Screening, Testing, and Education
    - Mass testing of 3000 individuals using rapid diagnostic kits (HBsAg and anti-HCV).
    - Health education sessions conducted prior to screening at the PHC Centre.
5. Treatment and Vaccination
    - Provision of antiviral treatment (e.g., Tenofovir, DAAs) to those testing positive.
    - 1,169 HBV positive and 457 HCV positive individuals were identified and linked to treatment.
    - 1,172 HBV-negative individuals received vaccination (representing 73% coverage).

The heavy burden of hepatitis in Africa, particularly in Nigeria, necessitates the adoption of innovative and scalable solutions. Shabu village presented an ideal microcosm for testing the feasibility of a continent-wide eradication strategy. With its manageable population size, high infection rates, and the strong commitment of the Nasarawa State public health system, the village was strategically positioned for a pilot intervention. The justification for implementing the project in Shabu village is multifaceted. First, the prevalence of hepatitis is alarmingly high, with a seroprevalence rate of 13.2% in Nasarawa State. Second, there is a noticeable absence of widespread education and structured hepatitis control programs in the area. Third, both governmental and traditional leadership demonstrated strong support and readiness to facilitate the intervention. Lastly, the village's accessibility and logistical suitability enabled the seamless implementation of comprehensive screening, treatment, and follow-up procedures. Beyond addressing the immediate health challenges posed by hepatitis, the initiative lays a solid foundation for long-term health system strengthening. It also enhances epidemic preparedness not only within the local community but across the broader African continent.

Aim

To eradicate hepatitis B and C infections in Shabu village through an integrated model of education, screening, treatment, vaccination, and monitoring while building community and institutional capacity to replicate the intervention across Africa.

Objectives

1. To promote widespread education and awareness on viral hepatitis transmission, risk factors, prevention, and available treatments within Shabu village.
2. To identify HBV and HCV cases through mass screening using rapid diagnostic tools, followed by confirmatory testing for positive cases.
3. To administer appropriate treatment for infected individuals and provide timely vaccinations for those uninfected, while ensuring follow-up monitoring and data collection for impact evaluation.

Stakeholders

- AU-STRC, ASRIC
- African Liver Patient Association (ALPA)
- Nasarawa State Ministry of Health & Directorate of Public Health
- Cairo Hospital
- Traditional and Community Leaders in Shabu
- Healthcare practitioners and laboratory technicians
- Volunteers and health educators
- National and local media

Activities

- Conducted post-treatment monitoring through follow-up visits and remote tracking to assess patient adherence, recovery, and recurrence rates.
- Expanded project implementation to additional communities in Nasarawa and initiated replication planning for other AU Member States.
- Implemented continuous awareness and sensitization campaigns to improve second-dose vaccination uptake and reduce disease-related stigma.
- Engaged in policy advocacy and resource mobilization to secure funding, promote policy alignment, and build partnerships with philanthropic and private-sector entities.

Outcomes

- Enhanced patient recovery, adherence, and early detection of recurrence through consistent post-treatment monitoring.
- Successful replication model established, enabling scale-up to other communities and AU Member States.
- Greater community participation and reduced stigma, leading to higher vaccination and treatment compliance rates.
- Secured multi-stakeholder commitment and financial backing, reinforcing sustainability and continental ownership of the initiative.

24. ASRIC FLAGSHIP PROJECT: ERADICATING STUNTING IN AFRICA

Background

Stunting, the impaired growth and development of children due to chronic malnutrition, remains one of Africa's most pressing public health and socio-economic challenges. It undermines human capital, limits educational attainment, reduces productivity, and perpetuates cycles of poverty. Despite decades of interventions, progress on reducing stunting across many African countries has been slow, with millions of children still affected.In response, the African Scientific, Research and Innovation Council (ASRIC), developed this flagship initiative as part of its mandate to mobilize scientific excellence in addressing continental challenges. The White Paper highlights the scale of the problem, analyzes policy gaps, and provides a coordinated framework for eradicating stunting through evidence-based and Afro-centric solutions.

The process of developing this framework included a comprehensive review of existing nutrition and health policies, a problem tree and objective tree analysis to understand the root causes of stunting, and consultations with health experts, policymakers, and research institutions. By combining scientific research with practical policy recommendations, ASRIC positions this project as a transformative initiative that aligns with Agenda 2063, the Sustainable Development Goals (SDGs), and the African Union's continental health priorities.

To design this flagship project, ASRIC, conducted a policy and evidence review of Africa's nutrition landscape. The process began with a problem analysis, identifying underlying drivers of stunting such as food insecurity, poor maternal health, inadequate infant feeding practices, weak health systems, and socio-economic inequalities.

This was followed by an objective tree analysis, which converted challenges into achievable outcomes and mapped clear intervention pathways. Consultations with policymakers, experts, and stakeholders across Africa informed the drafting of the White Paper, ensuring the recommendations reflected both scientific evidence and the realities on the ground.

The outcome is a practical, action-oriented document that serves as both a call to action and a roadmap for governments, partners, and communities to work together in eradicating stunting.
Without urgent action, stunting will continue to limit Africa's potential for socio-economic growth and sustainable development. Malnourished children face reduced cognitive and physical development, which lowers educational achievement and workforce productivity, perpetuating cycles of poverty. By addressing stunting, Africa invests in its future human capital, strengthens resilience, and builds the foundation for inclusive growth. This flagship project is therefore not only a health intervention but also an economic and social development priority

Aim

To eradicate stunting in Africa by providing a coordinated, evidence-based flagship programme that harnesses science, innovation, and partnerships to transform nutrition and health outcomes for children across the continent.

Objectives

1. To eradicate stunting in Africa by developing and implementing a coordinated, evidence-based flagship programme.
2. To strengthen nutrition policies and interventions at national and regional levels.
3. To mobilize partnerships and resources for sustainable nutrition and health outcomes.

Stakeholders

- African Scientific, Research and Innovation Council (ASRIC)
- African Union Commission and AU Member States
- National governments (Ministries of Health, Nutrition, Agriculture, Education)
- Universities, research institutions, and think tanks
- International organizations (WHO, UNICEF, FAO, WFP)
- Civil society, community groups, and the private sector

Activities

- Integrate stunting eradication into national nutrition and development policies through strengthened governance and inter-sectoral coordination.
- Implement maternal, infant, and young child nutrition (MIYCN) programmes, focusing on antenatal care, breastfeeding, and complementary feeding practices.
- Promote nutrient-rich agriculture and food fortification to enhance food security and dietary diversity.
- Strengthen health and community systems to extend nutrition services to rural and underserved populations.
- Conduct education and awareness campaigns on stunting prevention and good nutrition targeting families, schools, and communities.
- Establish monitoring, evaluation, and research frameworks to generate reliable data for planning and accountability.
- Mobilize continental and international partnerships and funding to sustain and scale up nutrition interventions.

Outcomes

- Stunting eradication institutionalized within national and continental policy frameworks.

- Increased adoption of optimal feeding and care practices, reducing malnutrition and stunting rates.
- Wider access to nutrient-rich and fortified foods through sustainable agricultural systems.
- Strengthened community and health systems providing equitable access to nutrition interventions.
- Increased knowledge and behavioural change toward healthy diets and child nutrition at community level.
- Availability of reliable nutrition data guiding policy and programme design.
- Secured multi-level funding and collaborations ensuring continuity and scalability of nutrition initiatives.

25. ASRIC GUIDELINES FOR ACCREDITATION OF CENTERS OF EXCELLENCE (ASRIC-CoE)

Background

The African Scientific, Research and Innovation Council (ASRIC), established by AU Executive Council Decision EX.CL/Dec.747 (XXII) in 2018 and supported by the AU-STRC as its Secretariat, was created to advance scientific research and innovation for Africa's socio-economic development. One of its core mandates is to mobilize African research excellence and provide a continental platform for collaboration.

Recognizing that world-class research requires collaboration, infrastructure, and the pooling of scarce resources, ASRIC developed the Guidelines for Accreditation of Centers of Excellence (ASRIC-CoE). This framework ensures that Africa's leading research institutions are strengthened and formally recognized as hubs capable of delivering solutions to the continent's most pressing challenges.

The guidelines were prepared through a systematic review of global best practices, drawing insights from sources such as the InterAcademy Council's Inventing a Better Future (2004), comparative reports, and international definitions of Centers of Excellence. This evidence-based approach was contextualized to Africa's needs under Agenda 2063 and STISA-2024, ensuring alignment with continental priorities.

To produce this framework, ASRIC undertook a systematic literature review using terms such as "Center of Excellence," "criteria," "selection," "ranking," and "accreditation." Authoritative references, including the IAC's Inventing a Better Future and comparative African studies were analyzed. The process included defining key terms, distilling the hallmarks of a Center of Excellence, and benchmarking existing CoE models globally. The document was refined through expert consultations within ASRIC's Bureau and Congress, ensuring it reflected Africa's realities. The outcome is a comprehensive, evidence-based guideline designed to standardize accreditation while fostering excellence, innovation, and sustainability.

Africa faces multiple socio-economic and technological challenges that require coordinated, high-impact research. By accrediting leading research centers, ASRIC strengthens institutional capacity, fosters multidisciplinary collaboration, and ensures resources are directed toward priority areas such as health, agriculture, climate change, renewable energy, and ICT. Accreditation guarantees quality, accountability, and alignment with AU strategies, while also improving the visibility of African research globally.

Objectives

1. To establish a transparent framework for the selection and accreditation of ASRIC Centers of Excellence.
2. To define the characteristics and hallmarks of a Center of Excellence within Africa's research ecosystem.
3. To identify priority areas of specialization in line with continental development goals.

Stakeholders

- ASRIC
- AU-STRC
- National governments and competent authorities endorsing CoEs
- Universities and research institutes across AU Member States
- International scientific bodies and partners

Activities

- Developed and implemented a transparent accreditation and evaluation framework for Centres of Excellence (CoEs), incorporating criteria on scientific merit, relevance, infrastructure, and governance.
- Identified and prioritized strategic areas of specialization essential to Africa's development, including ICT & AI, renewable energy, agriculture, oceanography, vaccine research, material sciences, and climate resilience.
- Established a structured application and review mechanism, including submission protocols, technical evaluations, site assessments, and final Bureau approval.
- Instituted a monitoring and renewal system, with three-year accreditation cycles supported by Memoranda of Understanding (MoUs) between ASRIC and accredited institutions.
- Promoted capacity building, technology transfer, and community engagement through CoE-led training, outreach programmes, and partnerships with industry and local stakeholders.

Outcomes

- Operationalized a transparent and merit-based accreditation process ensuring quality, credibility, and accountability of Centres of Excellence across Africa.
- Strengthened alignment of CoE specialization areas with continental development priorities under STISA-2024.
- Accredited CoEs equipped with robust governance, infrastructure, and skilled personnel to deliver impactful scientific and technological outcomes.

- Long-term partnerships formalized through MoUs, promoting continuity, accountability, and performance monitoring.
- Improved technology transfer, human capital development, and community engagement, translating research outputs into tangible development benefits.

26. INTERNATIONAL PLATFORM FOR ADAPTATION METRICS (IPAM)

Background

As climate change continues to threaten livelihoods, ecosystems, and economies across Africa, the need for clear, measurable adaptation strategies has become more urgent than ever. While numerous adaptation initiatives are being implemented across the continent, one of the persistent challenges lies in effectively measuring their impact. Without standardized metrics, it is difficult to determine whether adaptation actions truly build resilience or simply fill short-term gaps.

To address this challenge, the African Scientific, Research and Innovation Council became one of the founding members of the International Platform for Adaptation Metrics (IPAM). IPAM serves as a global collaboration dedicated to developing, testing, and standardizing adaptation metrics that bridge the gap between climate action and measurable outcomes.

This partnership represents a significant step for Africa, ensuring that the continent's unique environmental and developmental realities are reflected in global adaptation frameworks. Through ASRIC's engagement, Africa's voice is amplified in international climate discussions, reinforcing data-driven policymaking and scientific cooperation.

ASRIC's involvement in IPAM dates back to the tenure of its First Bureau in 2018, which recognized the critical importance of developing standardized adaptation indicators for the African context. Under this framework, ASRIC became an active founding member of IPAM, working alongside international experts to define methodologies and benchmarks for measuring climate adaptation success.

Throughout the tenure of the Second Bureau, ASRIC continued to play an instrumental role in strengthening IPAM's operations in Africa. The collaboration involved technical exchanges, expert meetings, and joint initiatives aimed at testing and refining adaptation metrics in real-world settings. ASRIC facilitated linkages between African researchers, policymakers, and international organizations, ensuring that local data and indigenous knowledge systems were integrated into adaptation assessments.

This effort positioned ASRIC as a key continental conduit between global adaptation measurement initiatives and African climate resilience strategies—promoting inclusivity, credibility, and data-driven policy planning.

Africa remains one of the region's most vulnerable to the impacts of climate change, despite contributing minimally to global emissions. The continent's diverse ecosystems and socio-

economic structures require context-specific adaptation approaches that can be measured and refined over time.

By participating in IPAM, ASRIC ensures that Africa's perspectives and data inform global standards for adaptation assessment. This collaboration supports evidence-based decision-making for climate policies and enhances the accountability and transparency of adaptation investments.

Aim

To promote the development and application of standardized adaptation metrics that enable Africa to effectively monitor, evaluate, and improve the outcomes of climate resilience initiatives.

Objectives

1. To contribute to the development and validation of global climate adaptation metrics.
2. To strengthen Africa's capacity to assess the effectiveness of climate adaptation actions.
3. To foster collaboration between African research institutions and international partners on adaptation monitoring and evaluation.
4. To integrate adaptation metrics into Africa's environmental and development frameworks.

Stakeholders

- African Scientific, Research and Innovation Council (ASRIC)
- International Platform for Adaptation Metrics (IPAM)
- African Union Member States
- Research institutions and universities
- International partners and climate-focused organizations
- Policy and decision-making bodies on environment and adaptation

Activities

- Engaged with IPAM and partners to test and validate climate adaptation metrics across diverse African ecosystems.
- Organized capacity-building workshops for researchers and policymakers on monitoring and evaluating adaptation initiatives.
- Developed a continental framework for adaptation metrics suited to Africa's ecological and socio-economic contexts.
- Strengthened collaboration with regional climate centers and national agencies for implementing adaptation measurement tools.
- Produced and disseminated reports and case studies showcasing Africa's progress in climate adaptation and resilience.
- Conducted advocacy initiatives to integrate adaptation metrics into national and regional policy frameworks.

Outcomes

- Validated and context-specific adaptation metrics established for diverse African ecosystems.
- Enhanced technical capacity of policymakers and researchers to monitor, evaluate, and report climate adaptation progress.
- Continental framework adopted to guide standardized measurement and reporting on adaptation outcomes.
- Improved coordination and data sharing among regional and national climate institutions.
- Increased visibility of Africa's adaptation progress through published case studies and analytical reports.
- Policy integration achieved, ensuring adaptation metrics inform planning, budgeting, and resource allocation across Member States.

27. AFRICAN TECHNOLOGY TRANSFER CENTER (ATTC)

Background

Africa stands at a critical point in its development trajectory, characterized by rapid urbanization, a youthful population, and expanding regional integration through the African Continental Free Trade Area (AfCFTA). Despite significant growth in research, innovation, and entrepreneurship, the continent continues to face systemic challenges in converting scientific and technological outputs into commercially viable solutions. Fragmented intellectual property (IP) systems, limited institutional capacity, weak linkages between academia, industry, and government, and insufficient investment in technology transfer mechanisms have constrained Africa's industrial competitiveness and innovation-driven growth.

The African Technology Transfer Center (ATTC) was conceived in direct response to these challenges. The ATTC was champion as a continental initiative by Obour University and the African Scientific, Research, and Innovation Council of the African Union (AU-ASRIC) under the African Union–Scientific, Technical and Research Commission (AU-STRC), the ATTC aims to serve as a continental hub for technology transfer, intellectual property management, and innovation commercialization.

Anchored in the aspirations of Agenda 2063, STISA-2024, and the Sustainable Development Goals (SDGs), the ATTC provides the institutional mechanism to protect African innovations, enhance capacity, foster partnerships, and monitor progress across the innovation ecosystem. By connecting innovators, researchers, industries, and policymakers, ATTC bridges Africa's technological gap and strengthens its ability to create, manage, and export homegrown innovations.

Africa's innovation landscape is rich in talent and ideas, but weak institutional and policy frameworks have hindered the continent's ability to commercialize research outcomes. Many universities and research institutes operate in isolation, lacking structured mechanisms for protecting and transferring intellectual property. The ATTC offers a unified solution by providing continental coordination, standardized IP management practices, and capacity development programs.

Moreover, the initiative addresses Africa's dependency on imported technologies by empowering local innovators to generate and protect intellectual assets. By institutionalizing technology transfer and fostering partnerships, the ATTC aligns with continental frameworks such as Agenda 2063 and STISA-2024 while contributing directly to global goals on innovation, industry, and infrastructure (SDG 9).

The ATTC also enhances Africa's participation in global knowledge networks, ensuring that the continent transitions from being a consumer of technology to an active producer and exporter of innovations.

The establishment and early operational steps of the ATTC Framework began with the development of a foundational document. This document meticulously outlined the center's institutional structure, defined its four strategic pillars—IP Management, Capacity Building, Partnerships, and Monitoring & Evaluation—and ensured its crucial alignment with AU Agenda 2063. This concept was subsequently presented and validated at the 7th ASRIC Congress, achieving recognition as an ASRIC Centre of Excellence hosted at Obour University.

Following this foundational work, the ATTC Working Group was officially formed, conducting its initial meeting in Sharm El-Sheikh in August 2025 to refine the center's mandates, detailed work plans, and overall timelines. Concurrently, the initiative began developing its core operational tools, including the initial design of the Technology Hunter Platform, an innovation designed to identify and protect disclosed innovations and intellectual properties across African research institutions, and the preparation of detailed Work Packages (WP1–WP4), each corresponding directly to one of the four strategic pillars.

Aim

To establish a continental platform that strengthens Africa's capacity for technology transfer, intellectual property management, and innovation commercialization, thereby driving industrial competitiveness, sustainable development, and socio-economic transformation across the continent.

Objectives

1. To develop and harmonize policy and legal frameworks for intellectual property and technology transfer across African Union Member States.
2. To build human and institutional capacity through training, awareness, and professional certification in IP management and innovation.
3. To promote strategic partnerships and networking among academia, industry, government, and international actors.
4. To institutionalize monitoring, evaluation, and impact assessment for evidence-based decision-making and accountability.
5. To establish an African Innovation Marketplace that connects innovators, investors, and policymakers within an integrated ecosystem.

Stakeholders

- African Union Commission (AUC)
- African Union–Scientific, Technical and Research Commission (AU-STRC)

- African Scientific, Research and Innovation Council (ASRIC)
- Obour University / Obour Institutes (Host Institution)
- National Governments and IP Offices of AU Member States
- Regional Economic Communities (RECs)
- African Regional Intellectual Property Organization (ARIPO)
- Organisation Africaine de la Propriété Intellectuelle (OAPI)
- Universities, Research Institutes, and Innovation Hubs
- Private Sector Enterprises and Start-ups
- International Partners (WIPO, UNESCO, WTO, UNCTAD, AfDB, EU)
- African Diaspora Networks and Mentorship Associations

Activities

- Establish the African Network of Technology Transfer Offices (ATTO) to coordinate and strengthen IP and innovation management across Africa.
- Launch specialized training and certification programmes in IP management, technology transfer, and commercialization with WIPO, ARIPO, and OAPI.
- Develop the African Innovation Marketplace, a digital platform for showcasing, licensing, and trading technologies.
- Implement a Monitoring, Evaluation, and Impact Assessment (MEIA) system with measurable KPIs.
- Create knowledge hubs and digital platforms to facilitate research dissemination, peer learning, and policy support.
- Form public-private partnerships (PPPs) to fund innovation projects and support co-development of technologies.
- Engage the African diaspora through mentorship networks, virtual collaborations, and reverse brain drain initiatives.
- Mainstream gender inclusion, youth empowerment, digital transformation, and ethical innovation governance across all programmes.

Outcomes

- Strengthened continental ecosystem for IP management, technology transfer, and innovation commercialization.
- Enhanced capacity and professional expertise among African institutions and innovators in managing and protecting IP assets.
- Increased visibility and market access for African technologies through a unified innovation marketplace.
- Improved accountability and performance measurement through an integrated MEIA framework.

- Expanded knowledge sharing, collaboration, and policy alignment across research and innovation stakeholders.
- Greater investment inflows and co-development opportunities through active PPPs.
- Strengthened diaspora engagement contributing to knowledge transfer and innovation growth.
- Promoted inclusive and sustainable innovation ecosystems that address digital, gender, and ethical dimensions.

28. ASRIC FOURTH INDUSTRIAL REVOLUTION (4IR)

Background

The Fourth Industrial Revolution (4IR) represents a transformative era defined by the fusion of digital, biological, and physical technologies such as artificial intelligence, robotics, the Internet of Things (IoT), big data, and biotechnology. While these technologies promise to drive productivity, economic growth, and social advancement, Africa faces unique challenges in fully harnessing their potential due to gaps in infrastructure, research capacity, and policy alignment.

Recognizing both the challenges and the immense opportunities presented by the Fourth Industrial Revolution (4IR), the ASRIC Secretariat established the Working Group on the Fourth Industrial Revolution. During the Sixth Assembly, the Congress underscored the urgency of formulating an African Strategy or Position Paper on 4IR and called upon the Secretariat to constitute a dedicated working group for this purpose. This initiative aims to evaluate Africa's preparedness for 4IR, foster research and innovation, and enhance coordination among science, technology, policy, and industry sectors.

The working group serves as a continental platform to guide Africa's 4IR strategy, focusing on developing indigenous solutions, building digital skills, and advancing research-driven policies. Through its activities, ASRIC and AU-STRC continue to play a leading role in positioning Africa to not only adapt to global technological shifts but to actively contribute to shaping them.

Africa stands at a critical juncture where rapid technological change can either deepen inequality or drive unprecedented transformation. Without deliberate coordination, capacity building, and research investment, the continent risks being left behind in the global digital economy.

This initiative is essential because it bridges research, innovation, and policy to create a cohesive framework for Africa's digital advancement. By empowering scientists, innovators, and institutions, the 4IR Working Group supports sustainable development and strengthens Africa's autonomy in science and technology governance. The ASRIC-led effort ensures that African perspectives and priorities remain central to shaping the 4IR agenda for the continent.

Since the establishment of the Working Group, several activities have been carried out to evaluate and enhance Africa's 4IR readiness. The ASRIC convened high-level consultations and expert meetings bringing together policymakers, researchers, and technologists across the continent and Diaspora. These engagements analyzed Africa's current innovation systems, digital infrastructure, and human capital development strategies in relation to global trends.

The working group conducted comprehensive situational analyses to identify gaps in data governance, digital literacy, and industrial competitiveness. Through expert collaborations, the

team reviewed national and regional policies, aligning them with the AU's strategic frameworks to ensure consistency in Africa's 4IR adoption.

Additionally, the ASRIC facilitated capacity-building sessions and discussions aimed at enhancing digital skills, promoting local innovation, and encouraging partnerships between academia and industry. These activities have collectively positioned the Working Group as a pivotal knowledge hub guiding Africa's transition into the Fourth Industrial Revolution.

Aim

To enhance Africa's readiness and active participation in the Fourth Industrial Revolution by strengthening scientific collaboration, innovation ecosystems, and policy frameworks that support inclusive technological growth and sustainable development.

Objectives

1. To assess Africa's capacity and preparedness for 4IR technologies and innovation.
2. To foster continental collaboration in research, capacity building, and technology transfer.
3. To develop strategic policy recommendations that ensures Africa benefits equitably from emerging technologies.

Stakeholders

- African Union Scientific, Technical and Research Commission (AU-STRC)
- African Scientific, Research and Innovation Council (ASRIC)
- African Union Member States
- Regional Economic Communities (RECs)
- Academic and Research Institutions
- Private Sector Innovators and Industry Leaders
- International Development and Research Partners (EU, Japan Scientific Institutions, etc.)
- Civil Society Organizations (CSOs) and Youth Networks

Activities

- Develop and publish the Africa 4IR Readiness Assessment Report as a strategic policy reference for AU Member States.
- Establish a continental innovation network linking research institutions, startups, and industries to promote collaboration and technology exchange.
- Organize training programmes and workshops on AI, data analytics, robotics, and automation targeting young researchers and entrepreneurs.
- Provide technical advisory support to AU Member States in formulating and implementing national 4IR strategies aligned with Agenda 2063 and STISA-2024.

- Promote public–private partnerships to catalyze innovation funding, research commercialization, and technology transfer.
- Facilitate regional pilot projects showcasing the use of emerging technologies in key sectors such as agriculture, health, education, and manufacturing.

Outcomes

- Comprehensive understanding of Africa's 4IR readiness established through an authoritative continental assessment report.
- Strengthened research–industry–policy collaboration through a functional continental innovation network.
- Increased technical capacity and digital literacy among young African innovators, researchers, and entrepreneurs.
- Alignment of national and regional 4IR strategies with continental development frameworks for coherent digital transformation.
- Expanded innovation ecosystems supported by sustainable funding mechanisms and active private sector engagement.
- Demonstrated impact of emerging technologies through successful regional pilot projects that inform large-scale implementation.

29. ASRIC PROJECT ON AI IN AGRICULTURE: DESIGN AND DEVELOPMENT OF AI-ENABLED IRRIGATION WITH A FERTIGATION SYSTEM

Background

Agriculture remains the backbone of Africa's economy, employing a significant portion of the population and contributing to food security and economic growth. However, the sector continues to face persistent challenges such as water scarcity, inefficient irrigation systems, unpredictable rainfall, and declining soil fertility. These issues are further compounded by the impacts of climate change, population growth, and unsustainable farming practices.

In recognition of these challenges, the African Scientific, Research and Innovation Council initiated the AI in Agriculture Project. This innovative project focuses on the design and development of an Artificial Intelligence (AI)-enabled irrigation system integrated with fertigation technology, an approach that combines precision agriculture with smart automation to enhance water use efficiency, nutrient delivery, and crop productivity.

The initiative underscores ASRIC's commitment to leveraging science, technology, and innovation to drive sustainable agricultural transformation in Africa. Through partnerships with African and international research institutions, the project aims to demonstrate how AI can address local agricultural challenges and contribute to achieving the goals of Agenda 2063 and STISA-2024, particularly in advancing food security and sustainable resource management.

Traditional irrigation and fertilization methods across Africa are largely inefficient and unsustainable. With the growing demand for food and the increasing effects of climate change, there is an urgent need for technologies that enable farmers to optimize resource use and improve productivity.

Artificial Intelligence offers the opportunity to revolutionize agricultural practices by enabling real-time decision-making, monitoring soil and crop conditions, and automating critical processes such as irrigation and fertigation. This project serves as a pioneering model for applying AI in Africa's agricultural systems, addressing both environmental and economic challenges while empowering local researchers and farmers with advanced technological tools.

The ASRIC Project on AI in Agriculture commenced with a multidisciplinary collaboration between researchers, agricultural engineers, and AI experts. Initial phases focused on defining the project's framework, identifying key agricultural challenges, and conceptualizing an integrated irrigation system enhanced by AI capabilities.

A prototype of the AI-enabled irrigation and fertigation system was designed using sensors, automated pumps, and data processing algorithms capable of analyzing soil moisture, nutrient

levels, and weather conditions in real time. The system can autonomously adjust water and fertilizer distribution based on precise crop needs, minimizing waste and improving efficiency.

Field studies and pilot testing were conducted to validate the functionality and adaptability of the system across varying climatic and soil conditions. The research team also engaged in training workshops and technical sessions with local institutions to build capacity in the development and operation of AI-driven agricultural technologies.

Through these efforts, the project has laid the groundwork for a scalable and sustainable technology model that integrates AI and environmental science to advance agricultural innovation in Africa.

Aim

To develop and deploy an AI-enabled irrigation and fertigation system that enhances water efficiency, optimizes nutrient delivery, and improves agricultural productivity in Africa.

Objectives

1. To design and develop a functional AI-powered irrigation system that integrates fertigation processes.
2. To promote precision agriculture by automating water and fertilizer management through data-driven decision-making.
3. To enhance crop yield and sustainability through efficient resource utilization.
4. To build local capacity in AI technology application for agricultural innovation.

Stakeholders

- African Scientific, Research and Innovation Council (ASRIC)
- African Union Member States
- Research institutions and universities in Africa
- Agricultural technology experts and engineers
- Local farming communities and cooperatives
- International development and technology partners

Activities

- Conduct large-scale field testing and validation of the AI-enabled irrigation and fertigation system across diverse agro-ecological zones.
- Refine and optimize AI algorithms to enhance precision, adaptability, and performance for different African soil and crop types.
- Design and deploy user-friendly interfaces and mobile applications for real-time monitoring, data visualization, and remote system control.

- Strengthen partnerships with African universities, research institutions, and innovation hubs to support collaborative R&D.
- Organize farmer training programmes and workshops on AI-driven smart agriculture technologies.
- Engage policymakers and stakeholders to establish regulatory and strategic frameworks for integrating AI in agriculture.

Outcomes

- Validated and field-proven AI-enabled fertigation system adaptable to various African farming contexts.
- Enhanced efficiency in water and fertilizer usage, reducing waste and production costs.
- Increased farmer adoption of digital and AI-based agricultural practices through improved accessibility and training.
- Strengthened institutional collaboration and innovation capacity across Africa's agricultural research ecosystem.
- Policy recommendations and frameworks developed to guide national integration of AI technologies in agriculture.
- Contribution to sustainable agricultural productivity and climate-smart farming practices across the continent.

30. AFRICAN DISASTER MITIGATION RESEARCH (ADMIR) – CENTER OF EXCELLENCE

Background

The African Disaster Mitigation Research Center (ADMIR), designated as an ASRIC Center of Excellence, serves as a continental platform for advancing research and collaboration in disaster mitigation and management. In partnership with the African Scientific, Research and Innovation Council (ASRIC), ADMIR has strengthened coordination among African Union (AU) Member States to address natural hazards such as floods, droughts, earthquakes, and other climate-related disasters.

In November 2024, ASRIC and ADMIR co-hosted a landmark conference in Cairo, Egypt, to promote collaboration, knowledge exchange, and scientific networking on disaster risk management. The center, supported by the National Research Institute of Astronomy and Geophysics (NRIAG), has provided over USD 10 million in technical equipment and capacity-building support to AU Member States. ADMIR's work aligns with the AU Agenda 2063 and the UN Sustainable Development Goals (SDGs 2030), promoting scientific excellence, community resilience, and inclusive innovation.

Aim

To strengthen Africa's capacity in disaster mitigation, risk reduction, and resilience through scientific collaboration, technological transfer, and policy-relevant research under the AU-ASRIC framework.

Objectives

1. To enhance scientific and technical capabilities of AU Member States in monitoring and managing natural disasters.
2. To facilitate regional collaboration and networking among African researchers, policymakers, and institutions in disaster risk management.
3. To develop and disseminate innovative tools and technologies for early warning, monitoring, and response.
4. To support Member States in integrating scientific research into national disaster mitigation strategies and policies.
5. To promote community-based and inclusive approaches to disaster resilience and sustainable development.

Stakeholders

- AU-STRC / ASRIC
- African Disaster Mitigation Research Center (ADMIR)

- National Research Institute of Astronomy and Geophysics (NRIAG), Egypt
- African Seismological Commission
- Ministries of Science, Environment, and Disaster Management in AU Member States
- Research and academic institutions across Africa
- International partners and donors (UN agencies, development partners, and scientific networks)
- Local communities and civil society organizations involved in disaster risk reduction

Activities

- Capacity-Building Programs: Implement training sessions on geophysical monitoring, risk assessment, and resilience planning across Member States.
- Regional Conferences and Workshops: Organize periodic events to share best practices, policy frameworks, and scientific findings.
- Technology and Equipment Support: Continue provision of technical equipment and advanced monitoring tools to national research institutions.
- Collaborative Research Initiatives: Conduct joint studies on seismic activity, climate change impacts, and community-based disaster mitigation.
- Policy Engagement and Advisory Services: Provide evidence-based recommendations to AU organs and Member States on disaster management.
- Knowledge Dissemination Platforms: Develop digital repositories and communication channels for sharing scientific data and research outputs.

Outcomes

- Enhanced regional capacity and expertise in disaster risk monitoring and management.
- Strengthened collaboration among African scientists, policymakers, and institutions in the field of disaster mitigation.
- Increased access to modern tools, technologies, and data for early warning and risk assessment.
- Integration of science-based evidence into national and AU-level disaster management policies.
- Improved community resilience and preparedness against natural hazards.
- Contribution to the realization of AU Agenda 2063 and SDG targets related to climate resilience and sustainable development.

31. AFRICAN UNION SCIENCE, TECHNOLOGY AND INNOVATION FRAMEWORK ON AFRICA FREE OF VIRAL HEPATITIS

Background

Viral hepatitis remains a major public health threat globally, causing an estimated 1.4 million deaths annually due to acute infection, liver cancer, and cirrhosis. In Africa, hepatitis B and C account for most cases, with chronic infections widespread. Inspired by Egypt's successful "Educate, Test and Treat" model led by Egyptian experts, the African Union through ASRIC seeks to replicate and scale up this approach to eliminate hepatitis across the continent. The framework operates within the broader AU Agenda 2063 and Universal Health Coverage (UHC) goals, focusing on science, technology, and innovation-driven community health interventions.

Aim

To establish Africa's villages free of viral hepatitis through preventive interventions, capacity development, and provision of comprehensive treatment and care services, contributing to resilient community health systems across AU Member States.

Objectives

1. Build the capacity of health practitioners and strengthen national health systems to diagnose, treat, and monitor hepatitis.
2. Educate and raise awareness among policymakers and communities on hepatitis prevention, control, and treatment.
3. Conduct comprehensive screening, vaccination, and treatment in target communities.
4. Establish data-driven monitoring systems and an African database on viral hepatitis.
5. Facilitate policy engagement for scaling up the "Hepatitis-free village" model to national and regional levels.

Stakeholders

- African Union (AU) and African Union Scientific, Technical and Research Commission (AU-STRC)
- ASRIC (African Scientific Research and Innovation Council)
- WHO, Mansoura University, Egyptian Liver Foundation, African Liver Patient Association (ALPA), World Hepatitis Alliance (WHA)
- National Ministries of Health, Science & Technology, and Parliaments of Member States
- Community-based associations, NGOs, and civil society organizations
- Public health practitioners, laboratories, universities, and training institutions

Activities

- AU-level and WHO events, awareness campaigns, and calls for Member State participation.
- Identification of beneficiary villages; creation of training materials in local languages.
- Training of Trainers (ToT) involving national teams, specialists, and community health workers.
- Community Implementation including: Awareness and education campaigns; Testing (RDT and PCR confirmation); Vaccination of negative cases and treatment of positive cases; Prevention of mother-to-child transmission (eMTCT).
- Post-treatment follow-up, data collection, and creation of national hepatitis databases.
- Development of a digital portal for technical exchange and telemedicine support.
- Technical assistance to extend the model to national “Hepatitis-free Nation” programmes.

Outcomes

- Five villages in participating Member States declared free of hepatitis B and C, achieving a 90% treatment success rate.
- 200% increase in awareness of hepatitis prevention and care among community populations.
- Well-trained national health consortia equipped to sustain and scale up interventions.
- Strengthened policy commitment and integration of hepatitis elimination in national health agendas.
- Establishment of a continental database and e-consultation network on viral hepatitis.
- Foundations laid for expanding the model to tackle other communicable and non-communicable diseases.

D

AU-STRC/ASRIC Challenges ; STISA 2034

1.0 AU-STRC/ASRIC CHALLENGES EXPERIENCED DURING IMPLEMENTATION OF PROGRAMMES AND PROJECTS

The AU-STRC and ASRIC face a range of challenges that affect the effective delivery of their mandates and programmes. A primary concern lies in the persistent limitation of human and financial resources. This constraint restricts the ability of the institutions to expand their operational reach, sustain ongoing initiatives, and respond in a timely manner to emerging continental priorities in science, technology, and innovation (STI). Without sufficient resources, both AU-STRC and ASRIC find it difficult to match the growing demands placed upon them by African Union frameworks and continental development agendas.

Another issue is the limited awareness among members of the AU Specialized Technical Committee on Education, Science, Technology and Innovation (ESTI-STC) regarding the substantive contributions of AU-STRC and ASRIC to the African STI landscape. This undermines institutional alignment, collaboration, and there denying that AU-STRC and ASRIC the necessary recognition and support from stakeholders would otherwise consolidate strategic relevance of the AU-STRC and ASRIC in advancing the continent's research and innovation agenda.

Thirdly, despite operating under the broader framework of the African Union Commission (AUC), the programmes and projects of AU-STRC and ASRIC have not benefited from the expected level of institutional backing from the ESTI Department. The AU-STRC and ASRIC have not been featured in multilateral cooperation discussions and agreements with partners. This omission has curtailed opportunities for resource mobilization, and reduced our potential to leverage international scientific and academic networks.

Furthermore, the level of participation from some ASRIC Congress Members in ASRIC-led projects has been relatively low. While the reasons for this vary and are not always explicitly articulated, contributing factors may include financial reward constraints, competing organizational priorities, and fluctuating levels of institutional or personal commitment. This limited participation has undermined institutional ownership, and diminished the collective impact and long-term sustainability of ASRIC's programmes.

A further challenge lies in the weak level of intra-African research collaboration. The continent's scientific landscape remains fragmented, with national academies and scientific bodies often operating in isolation resulting in poor coordination and dialogue among these institutions.

2.0 THE SCIENCE, TECHNOLOGY AND INNOVATION STRATEGY FOR AFRICA-2034 (STISA-2034)

The approach to the Science, Technology, and Innovation Strategy for Africa (STISA 2034) requires not only refining continental priorities but also strengthening institutional capacity, governance, research ecosystems, and partnerships that enable Africa to move toward a knowledge-based, innovation-driven economy. This has been framed as the catalyst for Agenda 2063's Second Ten-Year Implementation Plan (STYIP) 2024-2033. STISA 2034 defines Africa's strategic direction to accelerate its transition into a knowledge-based and innovation-driven continent to achieve an integrated, prosperous, and peaceful Africa where science, technology, and innovation drive sustainable socio-economic development. Its mission is to "harness the transformative power of STI to accelerate Africa's transition into a knowledge-based and innovation-driven continent"

2.1 Strategic Priorities of STISA 2034

The STISA 2034 is structured around six interconnected Strategic Priorities that are vital for Africa's transformation and are designed to position the continent as a knowledge-based economy. These priorities encompass a holistic approach, starting with (1) Accelerating Sustainable and Inclusive Industrialization by leveraging STI to catalyze growth, create sustainable jobs, and reduce reliance on commodities. This is fundamentally supported by (2) Building Human Capital, Infrastructure, and Skills, which focuses on strengthening digital and technological infrastructure alongside human resource development in critical fields. To ensure Africa is future-ready, the strategy prioritizes (3) Building African Capabilities in Frontier and Emerging Technologies, fostering innovation by applying advanced fields like AI, Big data, and IoT. On the external front, (4) Strengthening Science Diplomacy and Partnerships enhances Africa's participation in international negotiations and uses diplomacy to build national scientific capacities. Implementation relies heavily on (5) Private Sector Engagement, which mobilizes the private sector's role in R&D, technology development, and innovation activities. The strategy ensures inclusivity by (6) Addressing Youth and Gender Inequalities, actively engaging and empowering African youths and women in STI-driven entrepreneurship.

2.2 Proposed Actionable Implementation Steps for STISA 2034

Successful implementation depends on concerted actions across the six strategic priorities, focusing on mobilizing resources, enhancing capacity, and establishing governance.

1. Investing in Innovation and Industrialization

Investing in Innovation and Industrialization, involves: first, a significant Boost in R&D Investment to increase the financial resources allocated to R&D, innovation, and skills development, with the strategic objective of increasing the share of high technology products in manufactured exports to 20%

and the contribution of digital services to 6% of GDP. Second, the strategy mandates efforts to Establish Smart Infrastructure by creating world-class and disruptive smart infrastructure for manufacturing, extractive processing, and knowledge-driven products. Third is to Incentivize Enterprise through the establishment of continental industrial parks and the encouragement of tax incentives and incubator programs to stimulate the growth of the entrepreneurship ecosystem.

2. Developing Human Capital and Governance

Developing Human Capital and Governance requires a three-pronged approach to build the necessary foundation for STISA 2034. It is crucial to Prioritize STEM/TVET by increasing investments in Science, Technology, Engineering, and Mathematics (STEM) and Technical and Vocational Education and Training (TVET), with a deliberate focus on empowering women and youth. Secondly, to support advanced research, it is necessary to Modernize Infrastructure through the upgrade and development of critical Research and Innovation (R&I) infrastructure, particularly targeting shared facilities at all levels to enhance research capacity. Finally, to ensure responsible progress, there must be a move to Regulate Emerging Technologies by developing appropriate guidelines and regulatory regimes for the effective governance of frontier and emerging technologies to mitigate risks and maximize benefits.

3. Strengthening Partnerships and Global Reach

In terms of Strengthening Partnerships and Global Reach, the implementation of STISA 2034 calls for actions to Enhance Science Diplomacy; it is necessary to advocate for AU Member States to establish dedicated science and innovation attachés in their diplomatic offices and in key international institutions. Secondly, to Accelerate Open Science, the strategy requires providing support for the implementation of open science practices across disciplines and promoting an African Open Science Platform to make scientific knowledge more accessible and collaborative. To effectively Engage the Private Sector, efforts must be made to promote and advocate for increased Public-Private Partnerships (PPP) and investments in STI, especially targeting technology-based Small and Medium-sized Enterprises (SMEs).

3.0 CONCLUSION

This End of Term Report on Science, Technology and Innovation Strategy for Africa STISA-2024 underscores that AU-STRC and ASRIC have made substantial contributions to the operationalization of STISA-2024, despite structural, financial, and coordination challenges. Their collective efforts have advanced Africa's scientific capacity, supported research-driven policymaking, and strengthened regional collaboration in line with continental and global development goals. The period under review that is 2014-2024, demonstrated Africa's growing potential to use STI as a driver of transformation, with flagship initiatives providing practical solutions in health, environment, education, and innovation governance.

However, the report also reveals persistent systemic barriers most notably resource limitations, weak institutional synergy, and inadequate visibility within multilateral cooperation mechanisms. Addressing these bottlenecks is essential for the effective transition into STISA-2034. The future strategy must emphasize sustainable financing, stronger partnerships, private-sector engagement, enhanced human capital development, and inclusive governance mechanisms that reflect Africa's diverse innovation landscape.

The transition from STISA-2024 to STISA-2034 represents a continuation towards transformation of Africa's STI agenda. With the AU-STRC and ASRIC positioned as strategic enablers, STISA-2034 offers a forward-looking roadmap for embedding innovation into Africa's development architecture. It envisions a continent that produces knowledge, technologies, and solutions that drive prosperity, resilience, and self-reliance, which are true to the aspirations of Agenda 2063: The Africa We Want.