



GMASSURE Launch & Awareness Rising Workshop 2-3 July 2014, Pretoria, South Africa

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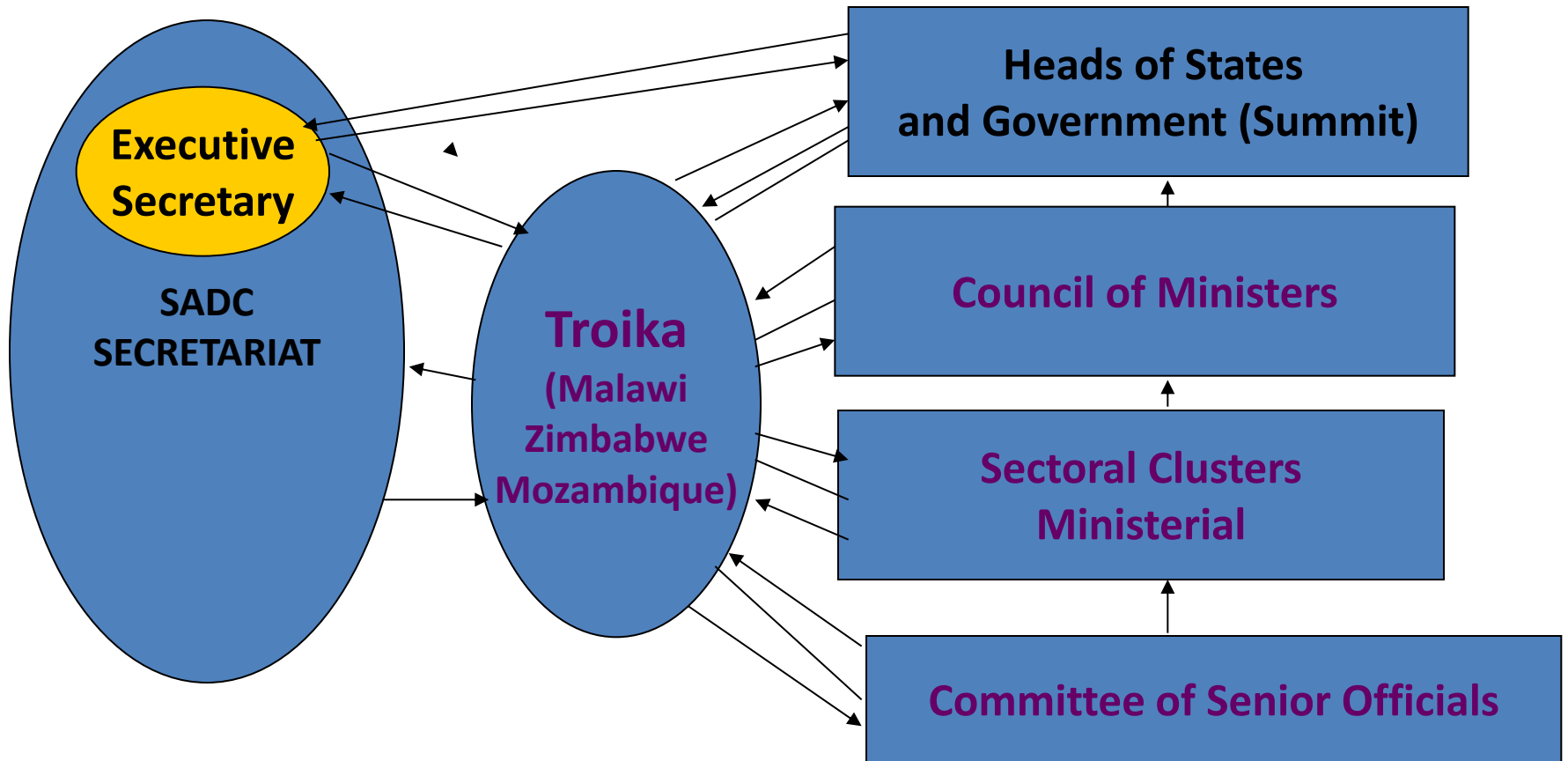
Outline

- SADC Mission
- SADC Institutional Arrangements and Governance Structures
- RISDP
- Agriculture and Food Security
- Policy Frameworks
- SADC STI Programmes
- Regional and Continental STI Programmes
- STI in Africa
- Conclusion

SADC MISSION STATEMENT

“To promote sustainable and equitable economic growth and socio-economic development through efficient productive systems, deeper co-operation and integration, good governance, and durable peace and security, so that the region emerges as a competitive and effective player in international relations and the world economy”.

SADC decision making



The Regional Indicative Strategic Development Plan (RISDP)

- Based on the strategic priorities of SADC and its Common Agenda, the RISDP aligns the strategic objectives and priorities with the policies and strategies to be pursued towards a delivery of those goals over a period of fifteen years. It is designed to provide strategic direction with respect to (implementation of) SADC programmes, projects and activities.”

RISDP

- Since its approval in 2003, the RISDP has guided the Member States, the Secretariat, key regional stakeholders and international development cooperation partners in planning the implementation of significant parts of the cooperation and integration agenda.

Review of RISDP

- Review of last 10 years (2005-2012) of the implementation of the RISDP
- RISDP Reprioritization 2015-2020
- Drive towards SADC Vision 2050
- This year marks the 50 years celebration of the AU since 1963
- AU Vision 2063

RISDP

The revised priorities:

- Trade/Economic liberalization and development
- Infrastructure in support of regional integration
- Peace and security cooperation
- Special programmes of regional dimension under Education and Human Resource Development, Health, HIV and AIDS and other Communicable Diseases, Food Security and Trans-boundary Natural Resources, Statistics, Gender Equality, and Science, Technology and Innovation and Research and Development

Agriculture and Food Security

- The overall goal of **Agriculture and Food Security** is to develop promote, coordinate and facilitate harmonisation of policies and programmes aimed at increasing agricultural and natural resources production and productivity, promoting agricultural trade, ensuring food security and sustainable economic development in the region.
- Priority focus areas for the **agriculture and food security sector** will be guided mainly by the SADC Regional Agricultural Policy, Dar-es-Salaam Declaration and Action Plan (2004) as well as the Protocols on Forestry, Fisheries, Wildlife Conservation and Law Enforcement, and Environment.

- **The agriculture and food security** sectors cover crops, livestock, forestry, fisheries, wildlife as well as environment. The objective of these sectors is to develop, promote, coordinate and facilitate harmonization of policies and programmes to increase agricultural production, productivity and competitiveness; promote sustainable utilisation of natural resources and the environment and promote agricultural trade.
- The sector facilitates regional integration through the supply of both primary and processed agricultural and natural resources products. These form the core of goods and services traded in the region. In addition, the sector is also a major source of raw materials for agro-industries. Furthermore, the sector also supports the region in achieving sustainable access to safe and nutritious food for an active and healthy life of the people of this region.

Policy Frameworks

- SADC Regional Agricultural Policy, Dar-es-Salaam Declaration and Action Plan (2004) as well as the Protocols on Forestry, Fisheries, Wildlife Conservation and Law Enforcement, and Environment.

SADC Multi-country Agricultural Productivity Programme (SADC MAPP) - 2008

Focus areas:

- Farmer Empowerment and market access
- Research and technology generation
- Farmer led advisory services and innovation systems
- Education, training and learning systems
- Knowledge, information and communication
- Institutional development and capacity development

Designed as a 15 year programme implemented in three 5 year phases

The Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA)

- Charter establishing CCARDESA was signed in November 2010, Windhoek, Namibia
- Charter serves as framework to establish and operationalise a Sub-regional Organisation that will coordinate agricultural research and development in the SADC region. To be located (Headquarters) in Botswana
- Establishment of relevant institutions for regional coordination of programmes such as the Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA) as a sub-regional autonomous body charged with the Region's Agricultural Research and Development Agenda

Objectives and Functions of CCARDESA

Objectives:

- To coordinate and promote collaboration among regional and National Agricultural Research and Development Systems (NARS) through regional and international cooperation
- To facilitate the exchange of information and technology among Member States
- To promote partnerships in the SADC region between public, private, civil society and international organizations
- To improve agricultural technology generation, dissemination and adoption in the region through collective efforts, training and capacity building
- To strengthen research and development in the Member States by mobilising human, financial and technological resources to implement and sustain demand-driven activities

Functions

- To coordinate harmonise, promote and advocate R&D policy among Member States
- To update regional agricultural R&D priorities and to coordinate, joint programmes among stakeholders, including promotion and development of agro-based value-adding technologies
- To mobilise and generate resources for SADC region and to foster partnership and collaboration with regional and international agricultural research organizations
- To empower strengthen farmers and their organisations or groups into effective partners in agricultural development and enhancing their access to markets and negotiating skills
- To facilitate regional capacity building of agricultural and natural resources scientists in terms of training, development and management

Regional Agricultural Policy (RAP)

- A Regional Agricultural Policy (RAP) was developed and approved in June 2013 and is expected to provide a framework for the harmonisation of SADC agricultural policies. It brings all agricultural policies, objectives, and investments under one umbrella for better coordination, increased efficiency and enforcement. RAP is geared towards: (1) enhancing sustainable agricultural production, productivity and competitiveness; (2) improving regional and international trade and access to markets of agricultural products; (3) improving private and public sector engagement and investment in the agricultural value-chains; and (4) enhancing disaster preparedness for food security.
- Establishment of relevant institutions for regional coordination of programmes such as the Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA) as a sub-regional autonomous body charged with the Region's Agricultural Research and Development Agenda

SADC Science, Technology and Innovation Landscape

- 2006: SADC Declaration on Science, Technology and Innovation adopted by Ministers responsible for STI in Pretoria, South Africa
- 2007: Ministers approved SADC Protocol on Science, Technology and Innovation in Pretoria, South Africa
- 2008: SADC Protocol on STI approved by the SADC Heads of States and Government during the SADC Summit in Johannesburg, South Africa
- 2014: SADC Science, Technology and Innovation Strategic Plan 2015-2020, approved by Ministers responsible for STI in Maputo, Mozambique, June 2014

Key objectives of the Protocol

- Provide a base for development of institutional mechanisms for regional cooperation and coordination of STI
- Ensure proper coordination of resources for regional STI programmes as identified in the RISDP and CPA
- Promote development and harmonisation of STI policies in the region
- Maximise public and private investment in R&D in the region

OBJECTIVE OF THE PROTOCOL

- The objective of the protocol is to foster cooperation promote the development, transfer and mastery of science, technology and innovation in member states

SADC STI Strategic Plan 2015-2020

Vision

- A region where STI is integrated into the development to drive sustainable socio-economic growth, eradicates poverty, disease, and underpins the creation of employment opportunities and wealth

Mission

To promote regional and international strategic cooperation that will accelerate the socio-economic development, through mastery and transfer of science, technology and innovation by allocating appropriate resources, developing and strengthening national innovation systems.

- The overall Goal is to promote cooperation amongst member states and with international partners as well as to create an enabling environment to harness STI as a tool to address socio-economic challenges for regional sustainable development

Strategic Objectives

- To establish and strengthen STI institutional arrangements at SADC Secretariat.
- Promote the development and harmonisation of science, technology and innovation policies in the region.
- To attract and promote PPP investment in STI and R&D infrastructure.
- Develop and promote research, innovation and technology transfer .
- Promote public understanding, advocacy and awareness of science, technology and innovation.
- Develop and strengthen regional STI capacity.
- Enhance and strengthen the protection of Intellectual Property Rights.
- Promote women and youth participation in science, engineering, and technology.
- Promote and strengthen regional cooperation on science, technology and innovation.

SADC STI Programmes

- SADC WISET
- SADC IKS
- SADC STI Policy Training
- SADC STI Climate Change Framework
- SADC HPC
- SADC Public Understand of STI

Regional STI Programmes

NEPAD FLAGSHIPS IMPLEMENTATION OF CPA



NEPAD S&T Flagships

- **Africa Laser Centre-Host CSIR/NLC-** 36 countries members
 - HCD programme (Scholarships, conferences and training)
 - R&D programme
 - Technology Transfer programme
- **African Institute for Mathematical Sciences**
 - HCD Programme
 - Participation by African Students
 - +/- 360 graduates to date
 - Postgraduate Diploma programme -9 months
 - Support from International Partners, Multi-nationals and 3 SA Universities

NEPAD S&T Flagships

- **Water Sciences Centres of Excellence**
 - Southern Africa-USA
 - West Africa-Senegal
 - Support provided by France, EU, International Partners
- **African Biosciences Network**
 - SANBio – Southern Africa-CSIR
 - Nodes in Malawi, Namibia, Botswana, Mauritius
 - Hubs in West -Senegal, East-Kenya and North Africa-Egypt
 - CIDA, Finnish support

SANBIO

- **SANBio –Platform for SADC**
- **countries networking in science**
- • **NEPAD Agency/African Biosciences Initiative(ABI)**
- **Thematic Areas**
- – Biodiversity, Biotechnology & Indigenous Knowledge
- • **NEPAD Agency/ABI Regional Networks**
- – **Southern Africa Network for Biosciences (SANBio) – South Africa**
- – West Africa Biosciences Network (WABNet) - Senegal
- – North Africa Biosciences Network (NABNet) – Egypt
- – Biosciences Eastern and Central African Network (BecANet) – Kenya
- – African Biosafety Network of Expertise (ABNE)

- **Six nodes**
- **1. Indigenous knowledge systems – South Africa**
- (North-West University)
- **2. Livestock - Zambia (NISIR)**
- **3. Plant Genetic resources – Zambia (SADC Plant**
- Genetic resources conservation, SPGRC)
- **4. Fish - Malawi (Bunda College of Agriculture**
- **5. Bioinformatics- Mauritius (University of Mauritius)**
- **6. Mushroom - Namibia (University of Namibia**

Achievements

- **Achievements**
- **1. An effective network was created**
- – Hub with 6 nodes across member countries
- – Successful implementation 8 flagship projects (**BioFISA**)
- – Peer learning from other networks (ANAFE, RuFORUM, BIOEARN, SARNISSA)
- – SF2000 formulated into capsules
- **2. HCD – cross cutting capacity**
- – 50 participants (Project coordinators and team members)
- trained in short courses – project life cycle management, IPR,
- ICT
- – 33 MSc students, 7 PhDs supported by the program
- (Bioinformatics, Fisheries, medicinal chemistry, molecular biology & medical sciences)

Key Challenges

- Absence of science, technology and innovation components in the planning, design, execution and maintenance of major infrastructure projects
- Limited academia-industry-government linkages
- Expansion of African universities inadequately informed by needs for the future
- Mechanisms to promote technological entrepreneurship just emerging or limited
- Limited programmatic synergy between STI and other key sectoral frameworks

Sources of Optimism and Action

- High and unprecedented economic growth rates in many African countries
- Increased demands for institutions to spur investments in research and innovation
- Increased foreign investment in Africa
- Increasing evidence of a growing technological and industrial base
- Growth in the introduction and application of ICTs
- The anticipated Africa's population demographic dividend

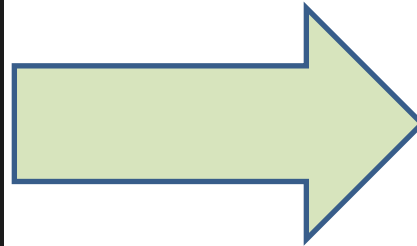
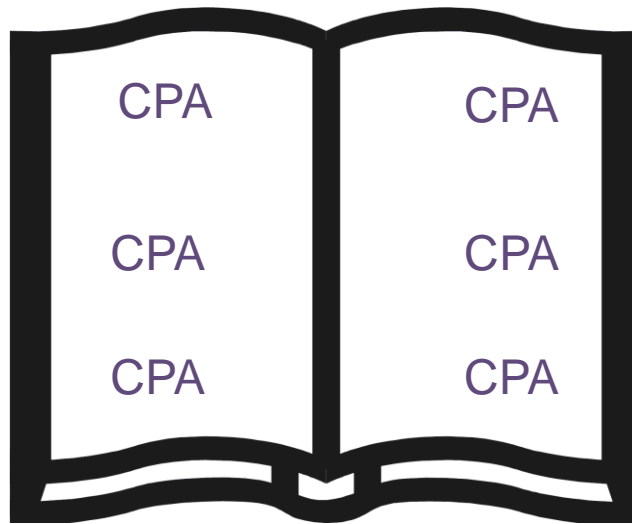
Sources of Optimism and Action (2)

- Africa's large market – stimulating economic growth and creating jobs (Regional trade agreements in RECs)
- Leveraging on local and international partnerships established in the implementation of the CPA
- Africa's abundant mineral and other natural resources (biodiversity and associated IK)
- Increase in political awareness and commitment in all AU levels

The CPA

- A Consolidated Plan of Action on science and technology (CPA) developed in 2005
- Consolidating the **programmes** of AUC and NEPAD
- A process of integrating NEPAD into AU structures and processes (2nd Ordinary assembly of AU in July 2003)
- The CPA aimed at guiding the continent to:
 - Build S&T capacities for addressing developmental challenges
 - Guide the continent in securing competitive advantage

From CPA to STISA-2024



A (consolidated) Plan of Action

➤ Strategic Pillars of the CPA:

- Capacity building
- Knowledge production
- Technological innovation

(Prerequisite actions of STISA-2024)

➤ 5 flagship R&D program clusters

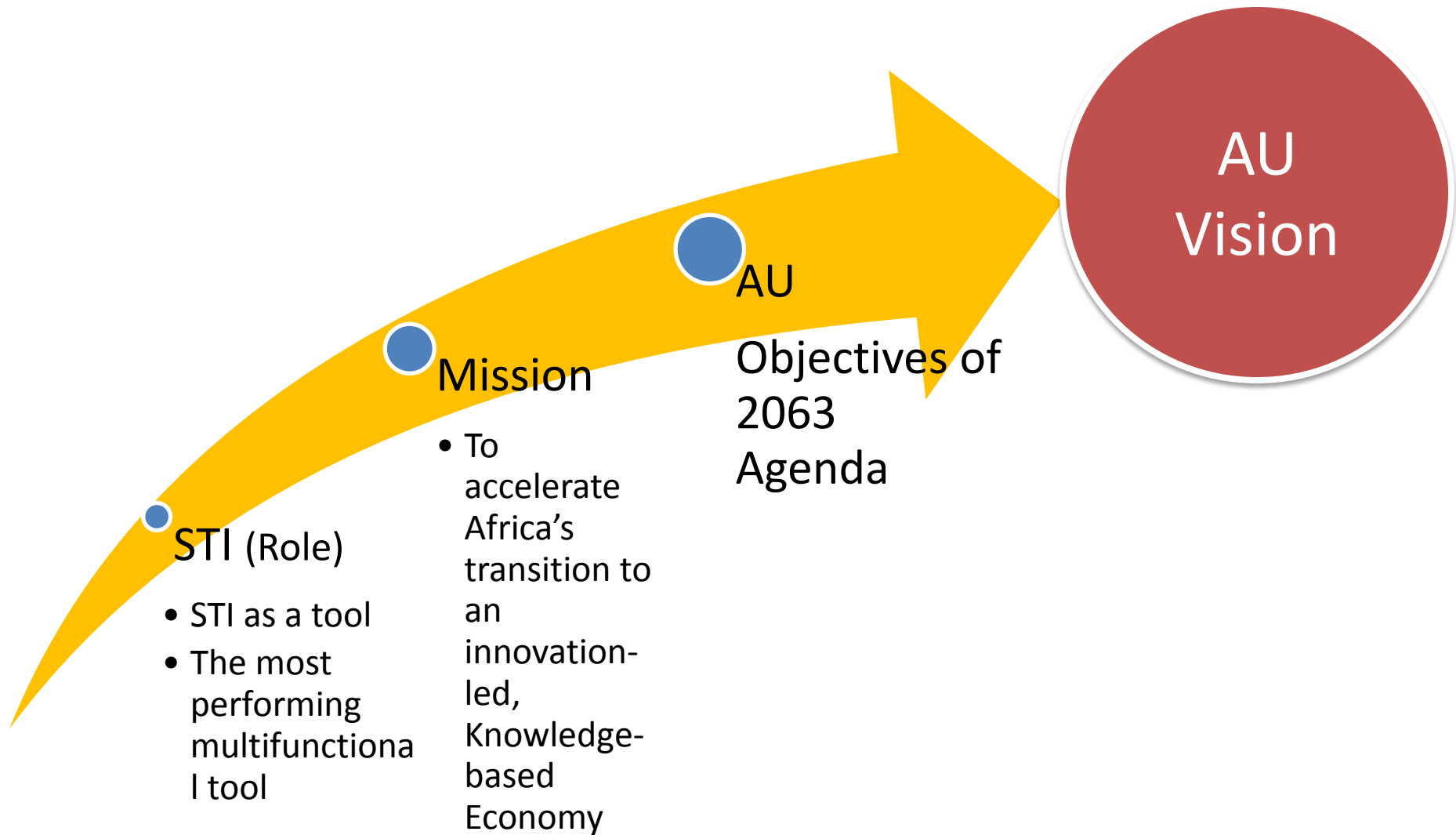
(To be transformed into Mobilizing Programmes of STISA-2024)

> STISA-2024 is a strategy that builds on the experience from CPA

➤ Part of the Agenda 2063 from which it is the first out of five ten-year phase

➤ Places STI at the epicenter of Africa's social and economic development and Respond to the demand for STI from various strategic sectors

Importance of the Strategy



Science, Technology and Innovation Strategy for Africa (STISA) Strategy 2024

- Guiding principles
 - ***Movement*** into innovation led, knowledge based development
 - Embedding STI into other sectors
 - Important role of capacity enhancement (Human, infrastructural and institutional)
 - Important role of entrepreneurship
 - Important role of enabling environment

Six STISA Impact Priority Areas

- Eradicate Hunger and Achieve Food & Nutrition Security
- Prevention and control of diseases and ensuring wellbeing
- Communication (Physical and Intellectual Mobility)
- Protect our space
- Live together – Build the community
- Create wealth

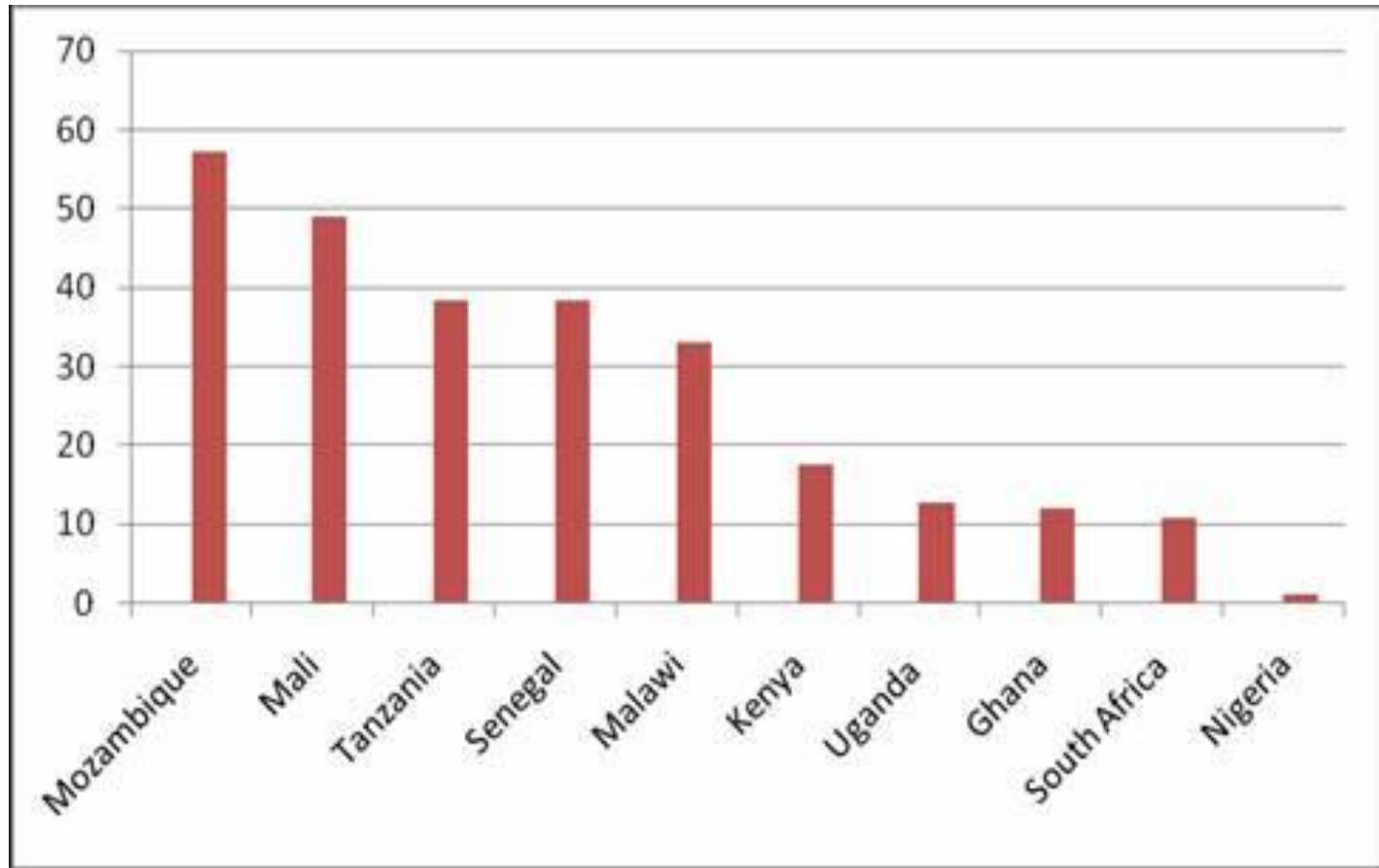
Prerequisite Actions

for building a robust foundation for STI

- Revamp STI infrastructure in African countries
- Enhance technical and professional competencies
 - Achieve the necessary critical mass (through education and training)
- Provide Enabling environment for STI
- Build a strong science culture
- Strengthen IP and regulatory systems
- Encourage collaboration within and between States in the area of Innovation and Entrepreneurship

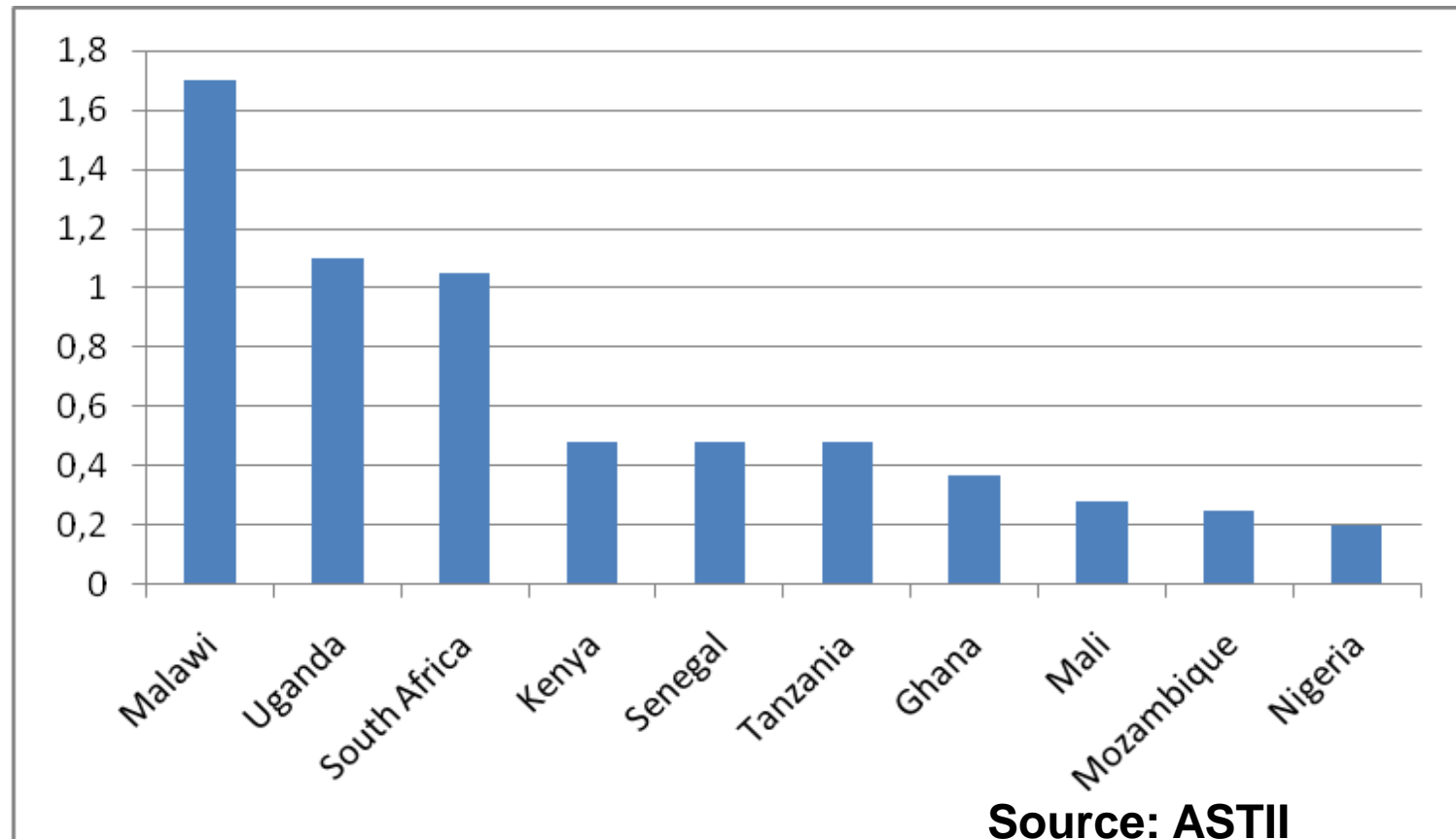
STI in Africa

Example of findings in the R&D Surveys: Share of Foreign Funding in R&D Activities (%)



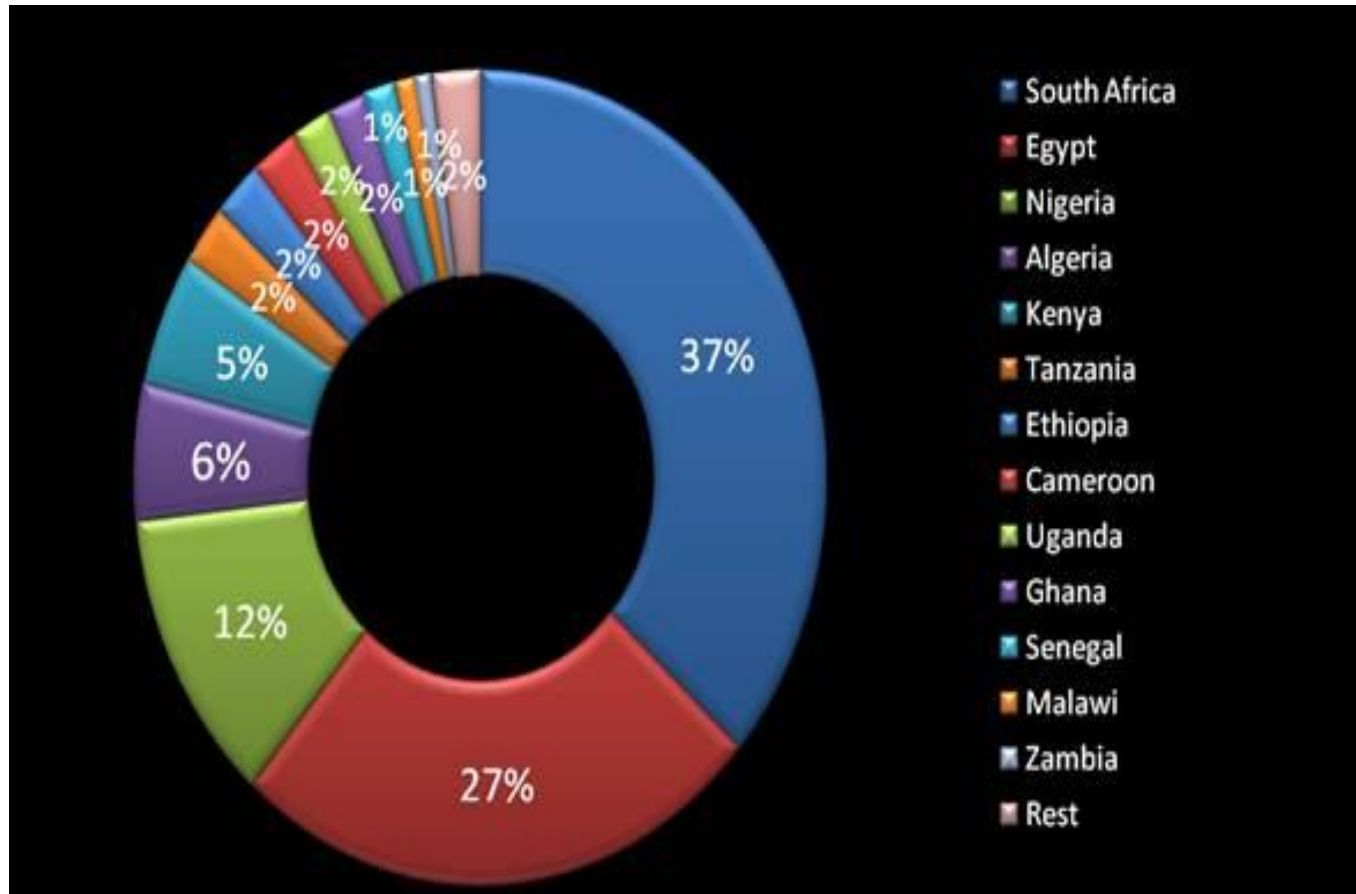
Source: ASTII

The R&D intensity: GERD as % of GDP



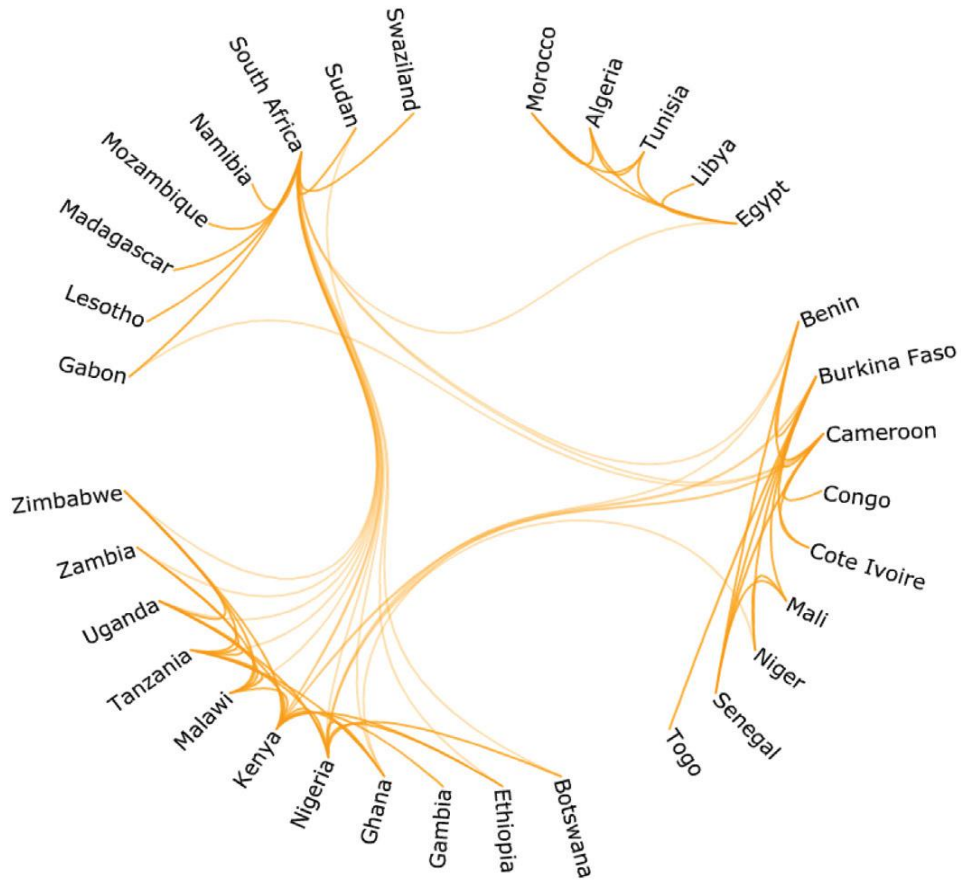
Example of Research Output for ASTII countries

Measured by the number of articles in the **Scopus** database;1990-2009.



Source: ASTII Surveys

Networks of collaboration (Global Research Report 2010)



Conclusion

- **Increasing funding for R&D**
- Promote North-South and South-South partnerships
- **Strengthen regional & continental cooperation**
- **Enhance multilateralism as international instrument for cooperation**
- Tap into Diaspora
- Harness and apply STI for sustainable socio-economic development
- Ensure that Africa contributes to the global pool of scientific knowledge and technological innovations
- Contribute to HCD in Africa
- Facilitate access to research infrastructure
- Exchange of knowledge and experience
- Promote and support research networks in Africa

THANK YOU

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- Africa Union Commission
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