INNOVATION AGENCIES IN AFRICA NETWORK

Aligning National Innovation Agencies with STISA-2034: Translating Continental Priorities into National Action

POLICY BRIEF

Innovation Agencies in Africa Network (IAA Network)
Headquarters: Rainbow Towers, 2nd Floor, Muthithi Road, Westlands, Nairobi, Kenya

Email: communications@iaanetwork.org | info@iaanetwork.org
Website: **iaanetwork.org**

The Innovation Agencies in Africa Network is a pan-African platform that brings together national and regional innovation agencies to promote collaboration, capacity building, knowledge exchange, and policy harmonization across the continent. Its mission is to strengthen the capabilities of innovation institutions and accelerate Africa's transition to an inclusive, sustainable, and innovation-driven economy.

For general information on the work of the IAA Network, visit **iaanetwork.org**.

Executive Summary

Africa's transformation into a knowledge-based, innovation-driven continent depends on how effectively countries translate continental strategies into action. The Science, Technology and Innovation Strategy for Africa (STISA-2034) represents the African Union's renewed commitment to use science, technology and innovation as the foundation for sustainable, inclusive and resilient development. It is the continent's guiding framework for leveraging knowledge and technology to deliver on the aspirations of Agenda 2063 and the Sustainable Development Goals.

STISA-2034 builds upon the lessons of its predecessor, STISA-2024, which mobilized awareness and policy attention around science and innovation. The earlier strategy encouraged the creation of national innovation agencies, the adoption of innovation policies and the strengthening of research systems across the continent. However, the review of STISA-2024 revealed that implementation was uneven. Many countries established policy frameworks but lacked institutional capacity, dedicated funding, and mechanisms to coordinate the diverse actors required for innovation to translate into measurable socio-economic outcomes.

National innovation agencies now stand at the center of Africa's next phase of transformation. They are the connecting tissue between governments, research institutions, private sector actors, and civil society. Their role is to coordinate, fund, and operationalize innovation policies that directly contribute to STISA-2034's priorities. They transform continental intent into national action and local results.

This policy brief interprets the objectives of STISA-2034 from the perspective of national innovation agencies. It explains the strategy's six priority areas and provides practical guidance on how agencies and their line ministries can align national innovation frameworks, programs, and partnerships with the continental agenda. The brief identifies four pathways that agencies can pursue to embed STISA-2034 into their operations: policy alignment, programmatic demonstration, institutional strengthening, and partnership development.

The document also highlights Africa's innovation gap as the underlying rationale for action. The continent invests on average only 0.45 percent of GDP in research and development compared to a global average of 1.95 percent. Africa contributes about 2 percent of global research output and only 0.1 percent of patents worldwide. Fewer than ten African countries have achieved the African Union target of investing 1 percent of GDP in R&D. Private sector participation remains below 25 percent of total R&D expenditure, compared to over 60 percent in industrialized economies.

These figures demonstrate the urgency of aligning policies, institutions, and resources with STISA-2034 to bridge the gap between Africa's potential and performance. The brief calls upon national innovation agencies, ministries, and partners to act collectively and deliberately so that science, technology, and innovation become central instruments of Africa's structural transformation.

Evidence Snapshot — Why Alignment Matters

Africa's R&D investment averages only 0.45% of GDP, compared to 1.95% global average *(UNESCO, 2024).*

The continent accounts for 2% of world research output and 0.1% of global patents *(Brookings, 2023).*

Fewer than 10 African countries have achieved the AU target of 1% of GDP invested in R&D.

Private sector R&D investment in Africa remains below 25%, compared to over 60% globally.

STISA-2034 seeks to close this gap by fostering stronger institutional frameworks, domestic financing, and policy coherence.

Background: From STISA-2024 to STISA-2034

The first Science, Technology and Innovation Strategy for Africa (STISA-2024), adopted in 2014, was a milestone in recognizing the role of science and technology in achieving the African Union's vision of "an integrated, prosperous and peaceful Africa driven by its own citizens." It marked the beginning of a coordinated continental effort to strengthen research systems, enhance human capacity, and promote evidence-based policymaking.

Over the past decade, STISA-2024 inspired the creation of national innovation agencies, science granting councils, and technology funds in several member states. It facilitated collaboration through regional research programs and helped embed innovation within continental initiatives such as the African Space Policy, the Continental Education Strategy for Africa, and the African Digital Transformation Strategy.

Despite these achievements, implementation challenges persisted. The African Union Commission's review of STISA-2024 found that many member states lacked dedicated mechanisms to finance and coordinate innovation. Policy coherence between ministries was weak, and monitoring systems were fragmented. The private sector, though identified as a key partner, contributed only marginally to national innovation spending. The limited integration of gender and youth perspectives further constrained inclusivity.

Global trends reinforced the need for a new approach. Rapid technological change, climate pressures, and shifting global value chains demanded a strategy that would not only promote science but also embed innovation within industrial policy, environmental sustainability, and social inclusion. These realities shaped the evolution of STISA-2034, adopted to guide Africa's innovation agenda for the next decade.

STISA-2034's vision is of an integrated and prosperous Africa where science, technology, and innovation drive sustainable socio-economic development. Its mission is to harness the transformative power of science and technology to accelerate Africa's transition into a knowledge-based economy. The strategy aligns closely with the Second Ten-Year Implementation Plan of Agenda 2063 (2024-2033), positioning innovation as a cross-cutting enabler of industrialization, human development, and environmental stewardship.

A central innovation of STISA-2034 is its focus on implementation capacity. It emphasizes stronger governance, financing, and coordination structures at national and regional levels. It calls for countries to institutionalize science, technology, and innovation through empowered agencies that link research, industry, and policy. It promotes evidence-based decision-making and harmonized monitoring systems to track progress toward continental targets.

The strategy defines six strategic priorities that provide the foundation for continental action:

1. **Accelerating sustainable and inclusive industrialization.**
2. **Building human capital, infrastructure, and skills.**
3. **Strengthening capabilities in frontier and emerging technologies.**
4. **Enhancing science diplomacy and international partnerships.**
5. **Expanding private sector engagement and financing.**
6. **Advancing gender equality, youth participation, and inclusion.**

Each of these priorities connects directly to the mandate of national innovation agencies. They require institutions that can coordinate multi-sectoral programs, mobilize investment, and translate innovation policy into tangible outcomes that improve productivity, competitiveness, and quality of life.

For Africa to fully realize the promise of STISA-2034, implementation must occur where it matters most: at the national level. Innovation agencies must work closely with their ministries and regional partners to align priorities, design responsive programs, and track progress against clear performance indicators. They are the implementing arms of continental ambition.

The following sections of this policy brief build on this foundation. They examine how national innovation agencies can interpret the six STISA-2034 priorities in their local contexts, strengthen institutional capacity, and establish mechanisms for partnership, financing, and learning. Through coordinated action, Africa's innovation ecosystem can become the driving force for achieving Agenda 2063 and positioning the continent as a global leader in sustainable, inclusive development.

STISA-2034 Strategic Priorities and the Role of Innovation Agencies

Accelerating Sustainable and Inclusive Industrialization

Industrialization remains the engine of Africa's long-term growth and job creation. STISA-2034 emphasizes a shift toward high-value, technology-intensive production to increase productivity, diversify exports, and reduce dependence on raw commodities. Achieving this vision requires targeted investment in industrial research and development (R&D), digitalization, and smart manufacturing. Innovation agencies are well-positioned to operationalize this agenda. They can:

- Finance industrial innovation and applied R&D to increase the share of high-technology products in manufacturing exports;
- Facilitate linkages between academia, research institutions, and industry through innovation clusters and hubs;
- Support the development of industrial parks and incubation programs for technology-driven enterprises;
- Promote open innovation platforms and technology foresight to identify priority areas for industrial competitiveness.

For example, the Technology Innovation Agency (TIA) of South Africa has put in place a fund-of-funds model called the Industry Matching Fund (IMF) which, since its launch in 2019, has disbursed around R170 million and leveraged in excess of R1 billion through partnerships with venture capital firms, angel investors and corporates. TIA also offers a Technology Development Fund which supports technology progression from proof-of-concept through prototype to demonstration.

Likewise, the Kenya National Innovation Agency (KeNIA) runs the Presidential Innovation Challenge & Award (PIA) aimed at scouting, recognising and commercialising youth and startup-led innovations in priority sectors such as food security, digital transformation and climate action.

These institutional mechanisms illustrate how innovation agencies can align funding instruments, talent development and commercialization pathways with national industrial objectives. They therefore serve as valuable precedents for replication by other national innovation agencies across the continent.

Building Human Capital, Infrastructure, and Skills

STISA-2034 identifies the shortage of skilled personnel and weak R&D infrastructure as critical constraints to Africa's innovation performance. It calls for substantial investment in science, technology, engineering, and mathematics (STEM) education, technical and vocational training (TVET), and the modernization of research infrastructure.

Innovation agencies can contribute by:

- Supporting national scholarship programs and innovation fellowships for young researchers and entrepreneurs. This builds the human capital pipeline required for STISA-2034. National and regional examples illustrate practical models. South Africa's Technology Innovation Agency has hosted the Leaders in Innovation Fellowship and runs targeted funding instruments that support technology development from proof of concept to demonstration. These programmes combine skills development, mentorship and access to commercialization support. Kenya's Presidential Innovation Fellowship and the Presidential Innovation Challenge identify, train and accelerate young innovators and start-ups in priority areas such as agriculture, digital transformation and climate action. The initiative provides cohorts with human-centred design training, accelerator support and links to commercialization pathways. Regionally, the PASET Regional Scholarship and Innovation Fund (RSIF) provides doctoral scholarships and institutional support to build research capacity across multiple countries, while national research councils such as South Africa's National Research Foundation continue to provide structured bursaries and postgraduate funding that sustain researcher pipelines. These approaches demonstrate how scholarship and fellowship instruments can be combined with incubators, accelerator programmes and funding windows to produce researchers and entrepreneurs ready to commercialize technologies.
- Facilitating public–private partnerships to equip research and training institutions with modern laboratories and prototyping facilities;
- Promoting scientific literacy and public awareness campaigns to build a culture of innovation;
- Strengthening linkages between universities and industries to enhance employability and skill transfer.

By promoting targeted skills development, agencies not only build capacity for innovation but also contribute directly to STISA-2034's objective of inclusive socio-economic transformation.

Building African Capabilities in Frontier and Emerging Technologies

Frontier technologies such as artificial intelligence (AI), biotechnology, the Internet of Things (IoT) and quantum computing are redefining global competitiveness. STISA-2034 positions Africa to participate actively in these technological frontiers while developing appropriate governance frameworks.

Innovation agencies are critical in fostering national capabilities in emerging technologies through:

- Establishing foresight and technology assessment units to guide evidence-based policy;
- Supporting research consortia and centers of excellence in priority fields such as AI, space technology, or biotechnology;
- Piloting regulatory sandboxes that enable responsible experimentation and innovation. Such enables responsible experimentation and innovation within controlled environments, helping regulators and innovators collaborate to test new technologies safely. For instance, Capital Markets Authority of Kenya launched its regulatory sandbox in 2019 to admit early-stage fintech firms under a guided testing regime. In Rwanda, the National Bank of Rwanda has run multiple cohorts of its regulatory sandbox, enabling firms to trial services in payment systems and digital platforms. These initiatives illustrate how national innovation agencies and regulators can create frameworks that support experimentation while maintaining oversight, offering models for other countries seeking to align with STISA-2034.
- Providing targeted funding for technology startups operating in frontier sectors. For instance, Kenya's startup ecosystem achieved US $638 million in funding in 2024, with climate-tech and agritech sectors receiving disproportionate support and signaling strong private sector interest. In South Africa, the Technology Innovation Agency provides structured funding and commercialization pathways for high-technology enterprises, enabling them to move from ideation through to market-ready products. In Kenya, the National Innovation Agency is developing a policy framework to channel corporate CSR budgets into a national innovation fund dedicated to early-stage ventures, thereby enlarging the financing pool available to frontier technology startups. These examples demonstrate how innovation agencies can design funding instruments, mobilise private and corporate capital, and align financial support with priority technological domains. Such models are highly relevant for other agencies across Africa seeking to translate the six strategic priorities of STISA-2034 into measurable innovation outputs.

Through these interventions, agencies can help African economies leapfrog development barriers and integrate into global value chains driven by innovation.

Strengthening Science Diplomacy and Partnerships

Science diplomacy is an increasingly vital tool for Africa's integration into global STI systems. STISA-2034 calls for member states to appoint science attachés in embassies, strengthen intra-African collaboration, and promote open science practices.

Innovation agencies can institutionalize science diplomacy by:

- Acting as focal points for international cooperation and representing their countries in regional STI programs;
- Building partnerships with other agencies through platforms such as the IAA Network;
- Developing guidelines for equitable research partnerships and technology transfer;
- Facilitating the exchange of expertise and resources among African and global innovation ecosystems. Innovation agencies can enhance their impact by facilitating the exchange of expertise and resources across African and global innovation ecosystems. For instance, the Innovation Agencies in Africa Network (IAA Network) convenes national and regional agencies from across the continent, providing a platform for knowledge sharing, capacity-building and joint programming. Another example is the partnership between AfriLabs and global innovation networks, such as their joint programme presented at the 5th India-Africa Entrepreneurship & Investment Summit, which strengthens collaboration and investment opportunities for African innovators. These models illustrate how national innovation agencies can broker cross-border alliances, leverage global technical expertise and access broader networks of resources, thereby aligning with the objectives of STISA-2034 for inclusive, pan-African innovation.

By embracing science diplomacy, agencies can expand Africa's participation in global scientific dialogues and attract external investments for innovation.

Private Sector Engagement

The private sector is a key driver of R&D investment globally, yet its contribution to STI in Africa remains minimal. STISA-2034 prioritizes the creation of enabling environments for private-sector participation through incentives, financing mechanisms, and regulatory reforms.

Innovation agencies can catalyze private-sector engagement by:

- Introducing innovation vouchers and tax incentives for companies investing in R&D. In South Africa, for example, companies that undertake qualifying scientific or technological R&D activities may claim a deduction of 150 % of their operational expenditure under Section 11D of the Income Tax Act, and may access accelerated depreciation for capital equipment used in R&D. These fiscal incentives reduce the cost of investing in innovation and improve cash-flow for firms. At the same time, innovation vouchers can support smaller companies by subsidising their access to research institutions or technical services. Evidence suggests that voucher schemes enhance collaboration between SMEs and research providers and stimulate new product development. By combining targeted voucher programmes and tax incentives, innovation agencies can create a dual-track financing system that mobilises industry participation, supports early-stage enterprises, and aligns with the STISA-2034 priority of private-sector engagement.
- Establishing co-financing mechanisms that de-risk private investment in innovation;

- Supporting incubators and accelerators that nurture technology-based SMEs;
- Promoting public procurement of innovation to stimulate domestic technological development.

By positioning the private sector as a co-creator rather than a beneficiary, agencies can unlock new financing and accelerate technology adoption.

Addressing Youth and Gender Inequalities

Africa's demographic dividend presents both an opportunity and a challenge. With nearly 60% of its population under 25, Africa must invest in inclusive innovation systems that empower youth and women. STISA-2034 emphasizes gender equality, youth participation, and indigenous knowledge as cross-cutting priorities.

Innovation agencies can contribute by:

- Mainstreaming gender-responsive budgeting and monitoring within innovation programs;
- Establishing youth innovation funds and mentorship networks;
- Promoting recognition of women innovators, youth (including those not in education, employment, or training), persons with disabilities, and other marginalized groups in science, technology, and innovation.
- Integrating indigenous knowledge systems into research and innovation frameworks. Innovation agencies can play a crucial role in integrating indigenous knowledge systems (IKS) into national research and innovation frameworks, thereby enriching scientific inquiry and enhancing development outcomes. For instance, South Africa's "Indigenous Knowledge Systems Policy" (2004) formalised the recognition, promotion, and protection of IKS and provided a foundation for inclusion in research and innovation policies. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has also stressed that mobilising diverse knowledge traditions, including indigenous and local knowledge, is essential for a transformative knowledge system in Africa. These examples show how innovation agencies can facilitate the documentation of indigenous knowledge, support collaborative research with communities, ensure appropriate intellectual property protection, and create platforms where traditional and modern science converge. By embedding these mechanisms into innovation policy, agencies align with STISA-2034's ambition of inclusive, context-sensitive science and technology for development.

In doing so, agencies help close systemic gaps and build innovation ecosystems that reflect the continent's diversity and inclusivity.

The strategic priorities and actions presented here draw on the African Union's Science, Technology and Innovation Strategy for Africa (STISA-2034), which outlines the continent's collective vision for using science, technology, and innovation to drive inclusive growth, industrialization, and knowledge-based development.

Institutional Implications for National Innovation Agencies

The implementation of STISA-2034 depends fundamentally on the strength, coordination, and credibility of national innovation agencies. These institutions sit at the intersection of policy, research, and enterprise. Their ability to align national innovation ecosystems with continental priorities will determine whether Africa's science, technology, and innovation agenda moves from strategy to sustained impact.

A central implication of STISA-2034 is the need for **policy coherence**. Innovation agencies must ensure that national science, technology, and innovation frameworks are explicitly aligned with the six strategic priorities of the continental strategy. This means integrating STISA-2034 principles into national development plans, industrialization policies, digital strategies, and education frameworks. Achieving coherence requires close collaboration between ministries of science, industry, finance, education, and environment, as well as coordination with regional economic communities and continental partners. Innovation agencies can serve as the intermediaries that harmonizes these relationships and ensures consistency between national actions and Africa-wide goals.

Equally important is **institutional coordination**. The innovation landscape in many African countries remains fragmented, with overlapping mandates and weak communication between government departments, research institutions, and funding entities. STISA-2034 calls for a governance model that emphasizes clarity of roles, accountability, and joint implementation. Innovation agencies can play a convening role, bringing together actors through inter-ministerial committees, innovation councils, or technical working groups that align efforts across sectors. By functioning as coordinators rather than isolated implementers, agencies can create synergy, reduce duplication, and enhance national coherence.

Domestic resource mobilization emerges as another critical implication. Sustainable implementation of STISA-2034 requires predictable and diversified funding. Innovation agencies should work with ministries of finance and planning to establish dedicated innovation funds, introduce innovation levies, or create blended finance mechanisms that combine public resources with private and development partner contributions. Agencies must also build capacity in financial management and investment promotion to position innovation as an economic growth driver rather than a cost center.

Monitoring, evaluation, and learning form the backbone of accountability within the STISA-2034 framework. Agencies must develop robust data systems that track inputs, outputs, and outcomes across the innovation ecosystem. This involves standardizing indicators, collecting disaggregated data on gender and youth participation, and linking national reporting systems to continental dashboards managed by the African Union Commission and AUDA-NEPAD. Evidence generated through these systems will support better decision-making, strengthen advocacy for innovation financing, and contribute to Africa's collective learning.

Institutional effectiveness also depends on **organizational capacity and leadership**. Many agencies require strengthened technical skills in foresight, policy design, and program management. Targeted capacity-building programs can enable them to lead complex, cross-sectoral innovation initiatives. Leadership development is equally critical; agency executives must possess the strategic and diplomatic skills to engage ministries, negotiate partnerships, and advocate for policy reform. Investing in people is as vital as investing in infrastructure.

A further implication lies in **ecosystem orchestration and partnerships**. Innovation thrives in networks, not in isolation. Agencies should see themselves as facilitators of collaboration among government bodies, universities, research organizations, civil society, and the private sector. By building strategic partnerships and engaging with regional and international networks such as the IAA Network, agencies can amplify their reach, attract technical assistance, and participate in joint programs that enhance collective impact.

Finally, **transparency and governance integrity** must be guiding principles. Effective innovation governance requires trust, fairness, and inclusivity. Agencies should embed transparency in funding allocation, ensure gender-balanced participation in decision-making structures, and uphold ethical standards in research and technology development. In doing so, they will build credibility and public confidence in national innovation systems.

The institutional implications of STISA-2034 therefore extend beyond program implementation. They redefine how innovation agencies operate, how they are funded, and how they engage with their ecosystems. Agencies that embrace these roles will not only advance national priorities but also contribute to Africa's collective transformation into a continent powered by science, technology, and innovation.

Translating STISA-2034 into Action: Operational Pathways for Innovation Agencies

The transition from strategy to measurable implementation requires innovation agencies to serve as translators between continental ambition and domestic execution. This section outlines four operational pathways that agencies and ministries can pursue to internalize STISA-2034 within their national systems.

Rather than prescribing timelines, it identifies actions and design considerations that agencies can adapt to their context and resource levels. Each pathway connects directly to one or more of STISA-2034's six strategic priorities.

National Alignment and Policy Coherence
Objective: Embed STISA-2034 principles within national innovation policies, plans, and coordination structures.
Why it matters:
Without deliberate integration, STISA-2034 risks remaining a continental reference document rather than a working guide. Alignment ensures that national STI frameworks reinforce rather than duplicate continental goals and that national resources contribute to collective outcomes.

What agencies can do:
- Undertake policy mapping to identify where national innovation policies, industrial strategies, or digital agendas intersect with STISA-2034 priorities such as industrialization, frontier technologies, and gender inclusion.
- Develop a National STISA Alignment Framework or annex to existing policy documents, clearly linking domestic initiatives to STISA-2034 outcomes.
- Engage ministries and RECs through coordination forums to institutionalize STI considerations in agriculture, energy, health, and digital economy strategies.
- Issue a national STISA brief or communiqué to signal political commitment and guide sub-national implementation actors, including universities, parastatals, and local innovation hubs.

Success indicators: Coherent policy language referencing STISA-2034; inclusion of STI indicators in national planning frameworks; budget allocations reflecting continental priorities.

Programmatic Experimentation and Demonstration
Objective: Translate STISA-2034 priorities into flagship programs that demonstrate innovation's contribution to development.

Why it matters:
Demonstration programs show that STISA-aligned innovation delivers tangible socio-economic outcomes such as jobs, exports, inclusion and provide proof points for further investment.

What agencies can do:
- Design flagship initiatives anchored on one or more STISA priorities (e.g., "Green Industry Innovation Facility" or "Digital Inclusion Accelerator").
- Use competitive challenge mechanisms to surface and support innovations in priority sectors such as renewable energy, agritech, or health resilience.
- Foster university–industry–government partnerships that apply research outputs to national production and service delivery needs.
- Integrate inclusivity criteria; gender, youth, geographic balance into all program designs.
- Promote blended financing by combining public grants with private co-investment or development-partner resources.

Success indicators: Number of operational pilot programs aligned to STISA pillars; measurable socio-economic impacts; participation of women and youth; documented lessons for scaling.

Institutional Capacity and Governance Strengthening
Objective: Build resilient, well-coordinated institutions capable of managing complex, multi-actor innovation ecosystems.

Why it matters:
STISA-2034 highlights weak governance and coordination as key barriers under its predecessor. Strengthening institutional arrangements ensures sustainability, credibility, and cross-sectoral impact.

What agencies can do:
- Clarify mandates and coordination roles through updated legal or policy instruments.
- Establish inter-ministerial innovation councils or technical working groups to coordinate STI across government sectors.

- Invest in human-resource development for foresight, policy analysis, and program evaluation within agencies.
- Digitalize internal operations — databases for innovators, funding management platforms, monitoring dashboards.
- Adopt governance principles aligned with STISA's guiding values: inclusivity, integrity, excellence, and pan-African collaboration.

Success indicators: Improved coordination mechanisms; functional monitoring systems; professionalized agency staff; increased stakeholder satisfaction with agency performance.

Partnerships, Financing, and Knowledge Exchange
Objective: Build coalitions and resource partnerships that extend national capabilities and enable participation in continental initiatives.

Why it matters:
STISA-2034's implementation model depends on networked collaboration among member states, RECs, the private sector, and knowledge institutions. No single agency can deliver the strategy in isolation.
What agencies can do:
- Establish dedicated partnership and resource-mobilization units within their structures.
- Join or initiate regional consortia under the IAA Network or AUDA-NEPAD to co-develop projects in frontier technologies, green innovation, or inclusive entrepreneurship.
- Negotiate memoranda of understanding with peer agencies to exchange expertise, host staff secondments, or implement joint funding calls.
- Engage the diaspora and development partners in co-financing innovation infrastructure or research collaboration.
- Document and disseminate success stories through open-access repositories and regional learning events.

Success indicators: Increased volume of co-funded projects; expanded partnerships across regions; participation in continental knowledge platforms; replication of models across member states.

Together, these four pathways provide a practical menu of actions through which innovation agencies can internalize STISA-2034, each reinforcing the strategy's impact pathways — from industrialization and human capital to inclusive growth and enhanced diplomacy.

Monitoring, Outcomes, and Learning

Monitoring and learning are foundational to the credibility and sustainability of STISA-2034. The strategy's Impact Pathway outlines a chain linking strategic actions to outcomes and, ultimately, to an integrated and prosperous Africa driven by competitive science, technology, and innovation. National innovation agencies play a critical role in operationalizing this pathway through consistent data collection, analysis, and feedback into policy cycles.

Building a National STISA Monitoring Framework
Agencies should work with ministries and national statistical offices to establish monitoring systems that capture both quantitative indicators and qualitative learning.

Key elements include:
- Indicator alignment: Select measurable indicators drawn from STISA-2034 such as R&D expenditure as a share of GDP, private-sector investment in innovation, number of innovation-based enterprises, and gender/youth participation rates.
- Outcome tracking: Go beyond activity counts to assess results, such as improved productivity in supported firms, patents filed, or technologies adopted in key sectors.
- Baseline mapping: Establish reference points for each indicator to track progress over successive reporting cycles.
- Data integration: Embed innovation data into national development information systems for coherence with Agenda 2063 reporting.

Establishing Learning Loops
Monitoring must feed into decision-making rather than exist as a compliance exercise.

Agencies can:
- Conduct annual reflection sessions with stakeholders to review progress, discuss barriers, and adjust programs.
- Publish knowledge briefs summarizing what works in policy design, funding models, and partnership management.
- Host peer-learning workshops through the IAA Network to share insights and cross-fertilize ideas between countries.
- Promote open science and transparency by making non-sensitive data and findings publicly available.

Using Evidence for Policy Influence

Reliable evidence empowers agencies to advocate for stronger innovation governance.

- Present synthesized findings to ministries of finance and planning to justify increased investment in STI.
- Contribute data and case studies to AU-led continental progress reports.
- Demonstrate the return on investment of innovation programs through economic impact assessments.
- Engage the media to communicate results and build public support for innovation.

Continental Coordination and Aggregation

At the continental level, the IAA Network and AUDA-NEPAD can support harmonization of monitoring tools, aggregation of national data, and dissemination of lessons.

Agencies are encouraged to:

- Report through standardized templates that feed into a continental dashboard.
- Participate in periodic policy dialogues where national experiences inform regional strategies.
- Contribute case studies to the AU's Biennial STI Outlook or similar publications.

What Success Looks Like

A mature STISA-aligned monitoring and learning ecosystem will exhibit:

- Evidence-driven policy formulation at national and regional levels;
- Regular publication of innovation performance indicators;
- Feedback mechanisms connecting innovators, agencies, and policymakers;
- Stronger accountability and transparency in the use of STI resources;
- Enhanced cross-country collaboration based on shared data and experience.

Ultimately, the measure of success will not lie in the number of reports produced but in the responsiveness of innovation systems, their ability to learn, adapt, and deliver solutions that improve lives and drive Africa's transformation.

Way Forward

Africa's path toward sustainable, inclusive, and knowledge-based development depends on its ability to transform ambition into coordinated action. The Science, Technology and Innovation Strategy for Africa (STISA-2034) provides the framework for this transformation. It sets out the vision, priorities, and mechanisms for building a continent where science and innovation are not peripheral activities but central pillars of economic and social progress.

To realize this vision, implementation must be anchored in capable, connected, and accountable national institutions. Innovation agencies are uniquely positioned to serve as the operational arms of STISA-2034. They convert policy intent into measurable results by supporting innovators, mobilizing investments, coordinating research, and linking science to national development priorities. When effectively empowered, these agencies become catalysts for structural transformation—enabling governments to deliver new industries, competitive enterprises, and inclusive growth.

The coming decade presents both urgency and opportunity. Global technological change, demographic growth, and environmental challenges are reshaping development trajectories. If Africa strengthens its innovation systems now, it can capture a growing share of global value chains, create millions of high-quality jobs, and provide solutions to pressing continental challenges in food security, climate resilience, health, and energy. Failing to act risks widening the innovation divide and perpetuating dependence on external technologies and financing.

Implementing STISA-2034 requires deliberate alignment of policies, financing, and governance. Governments must integrate the strategy's priorities into national development plans and budget frameworks. Innovation agencies must strengthen coordination with ministries, research institutions, and the private sector. Regional Economic Communities should facilitate cross-border collaboration, knowledge exchange, and harmonized standards. Development partners and the private sector should align their support with continental frameworks rather than parallel initiatives.

The IAA Network stands ready to play a facilitative role in this process. It will continue to build the institutional capacities of innovation agencies, promote policy coherence, and provide platforms for joint programming, research, and knowledge exchange. Through collaborative learning, shared evidence, and collective advocacy, the Network will help ensure that the aspirations of STISA-2034 translate into visible transformation on the ground.

The success of STISA-2034 will be measured not only by policies written or meetings held but by the tangible outcomes achieved: new technologies commercialized, research translated into impact, youth and women empowered through innovation, and enterprises that compete globally while addressing local challenges. These are the metrics of Africa's innovation renaissance.

The call to action is clear. Every national innovation agency, ministry, and stakeholder has a role in shaping Africa's innovation future. By aligning strategies with STISA-2034, mobilizing partnerships, and institutionalizing monitoring and learning systems, the continent can turn its innovation potential into a continental advantage. The next decade must therefore be defined by implementation, collaboration, and results.

Africa has the ideas, talent, and determination to lead in science, technology, and innovation. What remains is sustained coordination, investment, and accountability. STISA-2034 provides the blueprint. National innovation agencies hold the keys to make it real.

IAA Network Headquarters
Rainbow Towers, 2nd Floor, Muthithi Road, Westlands, Nairobi, Kenya
Email: communications@iaanetwork.org | info@iaanetwork.org
Website: www.iaanetwork.org

IAA INNOVATION
AGENCIES IN AFRICA NETWORK