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**OFFICE OF PRIME CABINET SECRETARY AND
MINISTRY OF FOREIGN AND DIASPORA AFFAIRS**

**STATE DEPARTMENT FOR SCIENCE, RESEARCH AND
INNOVATION**

ZERO DRAFT

**THE NATIONAL ARTIFICIAL INTELLIGENCE (AI) POLICY
FOR SCIENCE, RESEARCH AND INNOVATION**

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FOREWORD

Kenya stands at a pivotal moment in its scientific and technological evolution. The rapid advancement of Artificial Intelligence (AI) and its increasing integration into global research ecosystems present both unprecedented opportunities and complex challenges. Nations that proactively shape the governance, deployment, and development of AI are better positioned to lead in innovation, drive economic growth, and strengthen global competitiveness.

This National AI Policy for Science, Research, and Innovation provides a strategic direction for leveraging AI as a catalyst for modern scientific discovery and knowledge creation, as well as the use of AI to generate economic benefit. It defines the principles, a governance architecture, ethical safeguards, capacity-building mechanisms, and investment priorities needed to transform Kenya into a regional AI research and innovation hub. More importantly, it aligns the country's research and innovation agenda with global standards, ensuring that emerging technologies are developed, adopted and used responsibly, inclusively, and sustainably.

This policy also reaffirms Kenya's commitment to nurturing a research and innovation environment that is people centric, ethically grounded, data-driven, collaborative, and globally competitive. By empowering researchers, academic institutions, industry players, and government agencies with clear guidelines and enabling frameworks, we aim to accelerate scientific & innovation breakthroughs, strengthen national resilience, and unlock opportunities for future generations.

The Office of the Prime Cabinet Secretary and Ministry of Foreign and Diaspora Affairs will support the State Department for Science, Research and Innovation to remain committed in working with all stakeholders to implement this policy. We call upon universities, research centers, private sector partners, development agencies, innovators, and civil society to join hands in making Kenya a leader in AI-powered scientific and innovation excellence.

**PRIME CABINET SECRETARY
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PREFACE

Kenya's science, research and innovation (SRI) ecosystem has over the last two decades expanded considerably. Universities, national research institutes, innovation hubs and a vibrant private sector are collectively generating new knowledge and solutions that contribute to national development. Artificial Intelligence is increasingly being embedded within the National Innovation ecosystem; in genomics, precision agriculture, climate modelling, epidemiology, language technologies, engineering design and data-driven policymaking. However, the adoption still remains fragmented, unevenly resourced and insufficiently governed.

This Policy has been developed in response to this reality. It addresses the gap left by the absence of a coherent, adequately resourced and ethically grounded framework to guide the development, adoption and governance of AI within Kenya's research and innovation ecosystem. It provides policy guidance on AI research ethics, institutional coordination, infrastructure, human capacity, financing, data governance, intellectual property, and international engagement.

The development of this Policy was led by the State Department for Science, Research and Innovation, working with the AI Policy Technical Committee. The drafting process involved a review of existing national, regional and international AI and STI policy instruments; stakeholder consultations with universities, public research institutes, county governments, private-sector AI firms, innovation hubs, civil society organisations, development partners and professional bodies; technical working sessions; a public participation phase; and validation workshops.

The Policy is informed by a wide range of evidence, including the Kenya National AI Strategy 2025–2030, the Kenya Vision 2030 and BETA, the Science, Technology and Innovation Act (2013), the Data Protection Act (2019) and associated subsidiary instruments, African Union Continental AI Strategy (2024), Smart Africa Strategic Vision,

African Union Convention on Cyber Security and Personal Data Protection (Malabo Convention, 2014), African Union Data Policy Framework (2024), UNESCO Recommendation on the Ethics of Artificial Intelligence (2021), EU White Paper on AI (2020), OECD AI Principles (2024), reports on Governance of AI for Global Health in Africa, and national AI policy of Rwanda, South Korea and other comparator jurisdictions.

The State Department gratefully acknowledge the financial and technical support provided by Science for Foundation Africa (SFA). We also recognize the invaluable contributions of the Technical Committee, comprising of members drawn from both the private and public sectors including the Council of Governors (CoG), as listed herein. In addition, we appreciate the input of all the stakeholders across the national innovation ecosystem and the county government under the umbrella of CoG, as well as the dedicated efforts of the Secretariat from SRI and SFA for coordinating the entire process.

This Policy is issued as a living document and will be implemented in partnership with all stakeholders.

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ABBREVIATIONS AND ACRONYMS

Acronym	Meaning
AfCFTA	African Continental Free Trade Area
AI	Artificial Intelligence
AI-SRI	Artificial Intelligence in Science research and Innovation
AU	African Union
BETA	Bottom-Up Economic Transformation Agenda
CAK	Communications Authority of Kenya
CIDPs	County Integrated Development Plans
CoG	Council of Governors
DPA	Data Protection Act
EU	European Union
GDPR	General Data Protection Regulation
GPU	Graphics Processing Unit
HPC	High-Performance Computing
HRD	<i>Human Resource Development</i>
ICT	Information and Communication Technology
IoT	Internet of Things
IP	Intellectual Property
KALRO	Kenya Agricultural and Livestock Research Organization
KEBS	Kenya Bureau of Standards
KEMRI	Kenya Medical Research Institute
KENIA	Kenya National Innovation Agency
KIRDI	Kenya Industrial Research and Development Institute
KNBS	Kenya National Bureau of Statistics
MDCAs	Ministries, Departments, Counties and Agencies
MERL	Monitoring, Evaluation, Reporting and Learning
MFA	<i>Ministry of Foreign and Diaspora Affairs</i>
MTEF	Medium-Term Expenditure Framework
NACOSTI	National Commission for Science, Technology and Innovation
NCAI	<i>National Council on AI for SRI</i>
NCAIR	<i>National Centre for AI Research</i>
NIS	National Innovation System
NLP	Natural Language Processing
NRF	National Research Fund
NSCAISRI	National Steering Committee on AI in Science, Research and Innovation
ODPC	Office of the Data Protection Commissioner
OECD	Organisation for Economic Co-operation and Development

PPP	Public-Private Partnerships
R&D	Research and Development
SDGs	Sustainable Development Goals
<i>SDSRI</i>	<i>State Department for Science, Research and Innovation</i>
SFA	Science for Africa Foundation
SRI	Science, Research and Innovation
STEM	Science, Technology, Engineering and Mathematics
STI	Science, Technology and Innovation
<i>TTO</i>	<i>Technology Transfer Office</i>
TVET	Technical and Vocational Education and Training
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization

DEFINITION OF TERMS

Algorithmic accountability: The principle that entities that design, deploy or use AI systems are responsible for the outcomes of those systems and must be able to explain, justify and correct the decisions those systems produce.

Algorithmic bias: Systematic and repeatable errors in an AI system that create unfair outcomes, such as privileging one arbitrary group of users over others, often arising from biased training data or design choices.

Artificial Intelligence (AI): A set of technologies and computational methods, including machine learning, deep learning, natural language processing, computer vision, robotics and generative models, that enable machines to perform tasks that typically require human cognition, such as learning, reasoning, perception and decision-making.

AI tools: Software applications or utilities that use artificial intelligence techniques to perform specific tasks or assist users (e.g., text generation, data analysis, image recognition).

AI systems: Integrated combinations of AI models, software, hardware, data, and processes that operate together to perform tasks autonomously or semi-autonomously in real-world environments.

AI models: Mathematical and computational representations trained on data to recognize patterns, make predictions, or generate outputs.

AI Technologies: The capability of machines to imitate intelligent human behavior using data, algorithms, and computational models.

AI solutions: End-to-end applications of AI systems and tools designed to address specific problems or deliver defined outcomes within a particular context or sector.

Data governance: The overarching framework of policies, standards, roles and processes that ensures the secure, ethical, lawful and effective collection, storage, sharing, use and disposal of data.

Explainability: The degree to which the internal mechanics and outputs of an AI system can be described and understood by a human in meaningful terms.

Foundation model: A large-scale AI model trained on broad data at scale and adaptable to a wide range of downstream tasks, including generative applications.

Generative AI: AI systems capable of producing new content (text, images, code, audio, video) based on patterns learned from training data.

Innovation: The translation of new knowledge, discoveries and inventions into products, services, processes or models that deliver economic, social or environmental value.

Open science: The practice of making scientific research, data, methods and publications accessible, reproducible and reusable, subject to ethical and legal safeguards.

Policy: A policy is a set of principles, rules, or guidelines established by an organization, government, or individual to guide decisions and actions toward specific goals.

Research data: Data generated, collected, observed, measured or produced during scientific research, including primary data, derived data and metadata.

Research ecosystem: It's an interconnected network of individuals, organizations, resources, and processes that drive scientific advancement and innovation.

Responsible AI: The design, development and deployment of AI systems in a manner consistent with human rights, ethical principles, transparency, accountability, safety, inclusivity and environmental sustainability.

Science: The systematic enterprise of building and organising knowledge about the natural and social world through observation, experimentation and reasoning.

Science, Research and Innovation (SRI): The integrated ecosystem comprising basic and applied scientific research, technology development, experimental development and innovation activities carried out in public, private, academic and civil-society institutions.

Technology transfer: The process by which knowledge, skills, technologies and intellectual property generated through research are transferred to users in the private or public sector for wider application.

County Government: The Government of each county established under article 171 of the constitution of Kenya, consisting of a county executive and a county assembly.

EXECUTIVE SUMMARY

The National AI Policy for Science, Research and Innovation set out Kenya's vision, goal, objectives and strategies for developing, governing and applying Artificial Intelligence to drive scientific excellence, research impact and inclusive innovation. The Policy is issued by the State Department for Science, Research and Innovation under the Office of the Prime Cabinet Secretary and Ministry of Foreign and Diaspora Affairs, and anchored in the Constitution of Kenya, Kenya Vision 2030, , the Science, Technology and Innovation Act (2013), the Data Protection Act (2019) and the Kenya National AI Strategy 2025–2030.

The Policy responds to the absence of a coherent, adequately resourced, and ethically grounded framework for AI in the SRI ecosystem. It addresses weaknesses in governance, infrastructure, human capital, data ecosystems, financing, ethics, intellectual property and international positioning, and focusses at harnessing Kenya's strengths to become a regional AI innovation hub.

The Policy goal is to establish, by 2036, a coordinated, well-governed, ethically grounded and globally competitive AI ecosystem for science, research and innovation in Kenya that enhances scientific innovation, strengthens national capacity, promotes ethical and responsible adoption, development and AI use for sustainable socio-economic development. Six SMART objectives operationalise the goal across governance; human capital; infrastructure and data; AI-driven research and development , AI usage in Research Innovation and commercialisation; ethics, inclusion and responsibility; international collaboration; and sustainable financing.

Chapter One provides a general introduction of this national AI policy for SRI. Chapter Two of the Policy presents a detailed situation analysis, identifying global, regional and national trends; institutional capacity; human resources; infrastructure; funding; data governance; ethics; IP; opportunities and gaps. Chapter Three sets out eleven Policy Statements with strategies and expected outcomes covering responsible AI, governance, infrastructure, data, human capital, PPPs, innovation and IP, international engagement, cross-sectoral coordination, inclusion and financing. Chapter Four sets out the implementation framework, including institutional arrangements, phased implementation, funding and risk management. Chapter Five establishes the MERL framework with indicators, reporting and learning arrangements. Chapter Six sets the ten-year review interval and triggers for early review, and the annexes provide the policy implementation matrix, M&E matrix and coordination framework.

Successful implementation of the Policy will position Kenya as a regional leader in AI for science, research and innovation; strengthen research & innovation excellence and global

competitiveness; promote inclusive and ethical AI; and deliver tangible benefits for researchers, government, industry and society.

Artificial Intelligence is transforming the global scientific and research landscape in genomics, climate modelling, materials discovery and social sciences. The technology enables deeper insights, improved accuracy, faster experimentation, and greater innovation. For Kenya, the adoption of AI in science, research and innovation presents an opportunity to accelerate national development, strengthen research institutions, and improve the country's competitiveness in the knowledge economy.

Despite its potential, AI adoption in Kenya's research and innovation ecosystem faces multiple challenges including limited computational infrastructure, inadequate data governance frameworks, insufficient AI-skilled personnel, fragmented research efforts, and gaps in ethical and regulatory systems.

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CHAPTER 1: INTRODUCTION

1.1 Overview

This Chapter provides the foundational context for the National AI Policy for Science, Research and Innovation (SRI). It presents the background and rationale for the Policy, identifies the core policy issues the Policy seeks to address, articulates the policy goal and objectives, defines the scope and coverage of the Policy, and describes the structure of the document. The Chapter positions AI as a transformational enabler for science, research and innovation ecosystem and sets the strategic direction for the Policy.

1.2 Background

Artificial Intelligence (AI) refers to the development of computer systems and computational methods capable of performing tasks that typically require human intelligence, including learning, reasoning, perception, language understanding and decision-making. The conceptual foundations of AI date back to the 1950s, notably following the 1956 Dartmouth Conference that formally established AI as an academic discipline. Early AI research focused on symbolic reasoning and rule-based systems; however, progress was constrained by limited computational power and data scarcity. The field experienced cycles of optimism and stagnation before the resurgence of AI from the late 1990s, driven by advances in computing power, the availability of large datasets, and algorithmic breakthroughs in machine learning, deep learning and, more recently, generative AI and large foundation models.

Today, AI is applied across virtually every sector of the economy and society, including healthcare (diagnostics, drug discovery, epidemiological modelling), agriculture (precision farming, yield prediction, pest and disease surveillance), finance (credit scoring, fraud detection, risk management), education (adaptive learning and assessment systems), environment (climate and weather modelling, natural-resource monitoring), manufacturing (predictive maintenance, process optimisation), transport and logistics (smart mobility, supply-chain optimisation), and public administration (service automation and data-driven policymaking). In scientific research, AI is transforming the way hypotheses are generated and tested, how experiments are designed and run, how literature is synthesised, and how large and complex datasets are analysed and interpreted.

Globally, governments and regional bodies have developed comprehensive AI policies and strategies. The African Union Continental AI Strategy (2024) emphasises inclusive digital transformation, capacity building and the use of AI to address Africa's development challenges which aligns well with STISA 2034 priorities including; knowledge-based economies, research commercialization and human capital development. The Smart Africa Strategic Vision promotes a unified continental digital market and an AI-driven innovation ecosystem. The European Union's White Paper on AI and subsequent AI Act advocate for a human-centric and trustworthy AI framework grounded in safety, transparency and accountability. The UNESCO Recommendation on the Ethics of Artificial Intelligence (2021) provides a global normative framework addressing human rights, fairness, data governance, environmental sustainability and inclusivity. The OECD

AI Principles (2019, updated 2024) anchor trustworthy AI in transparency, robustness and accountability.

At national level, countries are increasingly tailoring their AI strategies to their development priorities. Rwanda's National AI Policy focuses on innovation, data infrastructure and skills development. The Republic of Korea's National AI Strategy, AI National Strategy Blueprint and AI Basic Act (2025) aim to position the country as a global AI powerhouse through heavy investment in research, talent and industrial applications. Nigeria has emphasised digital sovereignty and local capacity development as part of its technology policy direction. Several regional studies including the reports on Governance of AI for Global Health in Africa and on Opportunities and Gaps in the Governance of AI for Global Health in Africa highlight both the transformative potential of AI in health systems and critical governance gaps in data protection, regulatory capacity and equitable access.

Kenya has taken deliberate steps to position itself within the global AI landscape. The Kenya National AI Strategy 2025–2030 signal a strong commitment to establishing a structured and forward-looking governance framework for AI. These efforts build on existing national priorities set out in Kenya Vision 2030, the Bottom-Up Economic Transformation Agenda (BETA), the National ICT Policy (2019) and the Digital Economy Blueprint. Kenya's vibrant innovation ecosystem, often described as the "Silicon Savannah", a well-established mobile-money and fintech sector, and a growing community of data-science and AI practitioners provide a strong foundation on which a dedicated AI policy for science, research and innovation can be built.

However, Kenya's AI ecosystem remains nascent. The country contributes a small fraction of global AI research output, and AI-related academic programmes are still concentrated in a limited number of universities. Research and development (R&D) investment has remained below 1% of GDP, and high-performance computing and research data infrastructure are limited and unevenly distributed. Ethical, legal and regulatory frameworks have not kept pace with the rapid growth of AI, and AI is not yet fully integrated into the mandates and funding priorities for science, research and innovation programmes and projects. Addressing these challenges in a coordinated, ethical and sustainable manner is the central purpose of this Policy.

1.3 Policy Issue

The core policy issue is the absence of a coherent, coordinated and adequately resourced framework to guide the ethical development, adoption, governance and deployment of Artificial Intelligence within the science, research and innovation (SRI) ecosystem. While AI adoption is accelerating globally and regionally, Kenya's uptake in SRI remains fragmented, uneven and insufficiently regulated, with implications for the quality, integrity and competitiveness of national research, and for the rights and welfare of citizens.

1.3.1 Evidence of the Policy Problem

According to Stanford AI Index (2026), Sub-Saharan Africa has contributed for the last 10 years approximately 0.83% of global AI research publication while China and United States accounts for 20 -23% and 12-15% respectively, of global AI output.

Within Africa, Kenya is among the top contributors to AI research alongside South Africa and Nigeria, but scaling of research impact remains constrained by infrastructure, funding and human-capital gaps.

Only a limited number of Kenyan universities offer dedicated AI-related programmes, compared with hundreds of specialised programmes in advanced AI economies such as the European Union, the United States and the Republic of Korea.

Global AI investments exceed USD 150 billion annually, with limited participation from African countries, including Kenya whose gross expenditure on R&D remains below 1% of GDP, African Union target.

Kenya currently lacks a dedicated national framework for use of AI in research, standardised AI research protocols, data sharing mechanisms between research institutions, or AI-specific funding windows for scientific discovery.

1.3.2 Severity and Importance of the Issue

Without deliberate policy intervention, the identified gaps carry significant risks, including: widening of the technological and scientific gap between Kenya and advanced economies; entrenchment of Kenya's position as a consumer rather than a producer of AI technologies; erosion of digital sovereignty through deep dependence on foreign AI systems and infrastructure; exclusion from the economic benefits of AI, which is projected to contribute between 10% and 15% of GDP growth in emerging economies by 2030; and missed opportunities in the Fourth Industrial Revolution, with consequences for unemployment, low productivity and national data security.

1.3.3 Who is Affected and How

The policy issue affects a wide set of stakeholders across the research and innovation ecosystem:

- a) Researchers, research and academic institutions face limited access to AI funding, data and high-performance computing, and reduced global competitiveness in AI-intensive scientific fields.
- b) Students and the future workforce face insufficient AI training opportunities, widening the skills gap and reducing employability in emerging digital and scientific sectors.
- c) Government institutions, including ministries, regulators and county governments, have limited capacity to leverage AI for evidence-based policymaking, service delivery and risk management.
- d) Private-sector actors, innovators, and start-ups face regulatory uncertainty, a fragmented data ecosystem and limited infrastructure for scaling AI solutions derived from publicly funded research.
- e) Citizens are exposed to risks of algorithmic bias, privacy violations, misuse of personal data and unequal access to AI-driven public services.

1.3.4 Sectors and Areas Affected by AI

AI technologies are already influencing multiple sectors of the Kenyan economy and society, including:

- a) Agriculture, Rural and Urban Development (ARUD) [precision farming, crop and livestock monitoring, yield prediction, pest and disease surveillance]
- b) health (diagnostics, treatment, disease surveillance, predictive analytics and drug discovery)
- c) ICT (Cyber security, financial services, credit scoring, fraud detection and mobile lending)
- d) education (adaptive learning systems and digital content)
- e) environment Protection, Water and Natural Resources (climate modelling, forestry and water-resource monitoring)
- f) General Economic and Commercial Affairs (GECA) manufacturing and engineering (process automation and predictive maintenance)
- g) Public Administration and International Relations (PAIR) (e-government, data-driven policymaking and service automation).
- h) Governance, Justice, Law and Order (GJLO)
- i) Social Protection, Culture, Recreation and Creative industry
- j) Energy and Infrastructure (smart grids and energy management, predictive maintenance of infrastructure, renewable energy optimization, traffic management and urban planning, contruction and project management, water and sanitation infrastructure)
- k) National Security (surveillance and threat detection, cybersecurity and digital defense, intelligence analysis and early warning, border control and immigration, sisaster response and emergency, counter-terrorism operations)

The SRI ecosystem cuts across all of these sectors and must therefore be governed through a cross-cutting AI policy.

1.3.5 Nature and Evolution of the Problem

The policy issue has emerged gradually, shaped by the rapid growth of digital technologies and internet penetration, expansion of Kenya's innovation ecosystem, increasing global AI adoption, and the acceleration of digital transformation during and after the COVID-19 pandemic. The pandemic exposed gaps in AI infrastructure, data governance and institutional preparedness, while at the same time demonstrating AI's potential in health surveillance, remote learning and digital service delivery.

1.3.6 Underlying Causes

- a) Fragmented policy and institutional coordination in AI and STI governance.
- b) Inadequate investment in high-performance computing infrastructure and research data systems.
- c) Skills and talent gaps in AI, data science and interdisciplinary research methods.
- d) Weak regulatory and ethical frameworks for AI deployment in research contexts.
- e) Limited access to high-quality, locally relevant and interoperable data
- f) Insufficient and short-term funding cycles for AI research and innovation.

1.3.7 Previous Government Efforts

The Government of Kenya has taken important preparatory steps relevant to AI in SRI, including Kenya Vision 2030, the National ICT Policy, the Digital Economy Blueprint, the Science, Technology and Innovation Act (2013), the Data Protection Act (2019), the Kenya National Digital

Master Plan 2022–2032 and the Kenya National AI Strategy 2025–2030. These instruments provide a platform on which this Policy builds. However, they do not individually or collectively provide a dedicated, coherent and implementable framework for the use of AI in science, research and innovation.

1.3.8 Why Government Intervention is Urgent

Delaying policy intervention would deepen digital and economic inequalities, entrench dependence on foreign AI systems, weaken Kenya’s ability to influence international standards, and result in missed opportunities for scientific, social and economic transformation. Urgent Government action is therefore required to ensure that Kenya actively shapes, rather than passively adopts, AI; strengthens national competitiveness and innovation capacity; and aligns its SRI ecosystem with global ethical, safety and interoperability standards.

1.4 Rationale for the Policy

The rationale for this Policy is grounded in the need to enhance governance, capacity, infrastructure and ethical consideration in the SRI ecosystem, harness emerging opportunities offered by AI, and ensure that AI development and application are aligned with national priorities, constitutional values and global best practices. It is justified through a public value approach ensuring AI delivers:

- 1) Economic value (productivity, innovation)
- 2) Social value (equity, inclusion)
- 3) Scientific value (knowledge generation)
- 4) Governance value (transparency, accountability)

1.4.1 Public Good and Strategic National Interest

AI is a foundational general-purpose technology with wide-ranging implications for economic growth, national security, public health, food security, environmental sustainability, and social well-being. The Government has a constitutional responsibility to ensure that AI development contributes to public value, scientific advancement and inclusive growth, and that public resources allocated to science, research and innovation are optimally leveraged.

1.4.2 Market and Coordination Failures

The private sector alone cannot address gaps in basic AI infrastructure, long-horizon research funding, foundational skills development, data systems and ethical oversight. Fragmentation across ministries, agencies, research institutions and counties requires coordinated national planning and resource allocation, with the State acting as steward, convenor and standards-setter.

1.4.3 Regulatory and Governance Gaps

The absence of clear, enforceable standards for data governance, algorithmic accountability, transparency and ethical AI use in research exposes institutions and citizens to avoidable risks. Government intervention is required to establish enforceable frameworks and institutional arrangements that ensure responsible AI deployment across the SRI ecosystem.

1.4.4 Global Alignment and Competitiveness

Countries are rapidly adopting national AI strategies to secure their position in the global knowledge economy. Kenya must align with international and regional frameworks including the UNESCO Recommendation on the Ethics of AI, the AU Continental AI Strategy, the Smart Africa Strategic Vision, the OECD AI Principles and emerging risk-based regulatory standards to remain competitive and credible in global research collaborations, maintain access to international funding, and influence global AI norms.

1.4.5 Protection of Rights and Public Trust

The Government has a duty to safeguard citizens against harms such as data misuse, algorithmic bias, discriminatory outcomes and exclusion. Establishing clear governance structures for AI in SRI enhances public trust in AI systems and their application in research, policymaking and innovation, and strengthens the social license for AI-driven scientific inquiry.

1.5 Policy Goal and Objectives

The overall goal and specific objectives of this Policy are framed to be Specific, Measurable, Achievable, Relevant and Time-bound (SMART) and are aligned with national priorities, the identified policy issues and proposed Government interventions.

1.5.1 Policy Goal

To establish a coordinated, well-governed, ethically grounded and globally competitive AI ecosystem for science, research and innovation that enhances scientific excellence, strengthens national capacity, promotes ethical and responsible AI use and contributes to sustainable socio-economic development.

1.5.2 Specific Objectives

Objective 1: Strengthen AI Governance and Regulatory Frameworks

To develop and operationalize a comprehensive legal, policy, and institutional framework for AI in science, research, and innovation by 2028.

- a) Develop and implement national guidelines on ethical, transparent, and accountable AI use in research by 2027.
- b) Establish a national AI governance and coordination mechanism by 2026.
- c) Align national frameworks with international standards such as those of the UNESCO and the African Union by 2028.

Objective 2: Enhance AI Research Capacity and Human Capital Development

To increase the number and quality of AI-skilled researchers, scientists, and practitioners by at least 50% by 2030.

- i. Expand AI-related academic and development programs in academic to approximately 75% institutions by 2029.
- ii. Integrate AI training into academic programs across all major disciplines by 2028.

- iii. Support continuous professional development and certification programs in AI for researchers, public and private sector professionals by 2027.

Objective 3: Develop and Strengthen AI Infrastructure and Data Ecosystems

To establish robust, accessible, and secure AI research infrastructure and data systems to support innovation by 2029.

- a) Invest in national high-performance computing (HPC) infrastructure and shared research facilities by 2028.
- b) Develop and operationalize national research data repositories and open data platforms by 2027.
- c) Promote equitable access to AI tools, cloud computing, and datasets across research institutions by 2029.
- d) Provide incentives for infrastructure investments

Objective 4: Promote AI-Driven Research, Innovation, and Commercialization

To increase Kenya's contribution to global AI research output and innovation by at least 100% by 2030.

- a) Provide targeted funding and incentives for AI research and interdisciplinary innovation projects starting 2026.
- b) Establish AI research and innovation hubs and centers of excellence in key sectors (health, agriculture, fintech, climate, education) by 2028.
- c) Strengthen linkages between academia, industry, and government to support commercialization of AI solutions by 2029.

Objective 5: Ensure Ethical, Inclusive, and Responsible Use of AI

To institutionalize ethical AI practices that safeguard human rights, equity, and societal well-being by 2028.

- a) Develop and enforce ethical guidelines and standards for AI use in research by 2027.
- b) Establish mechanisms for algorithmic accountability, bias mitigation, and transparency in AI systems by 2028.
- c) Promote inclusive AI development that considers gender, regional, and socio-economic disparities by 2029.

Objective 6: Strengthen Collaboration and Global Positioning

To enhance Kenya's participation in global AI research and policy platforms by 2030.

- a) Increase participation in international AI SRI collaborations and funding programs by 50% by 2030.
- b) Align national AI SRI standards with global best practices by 2028.
- c) Promote Kenya as a regional hub for AI research and innovation in Africa by 2030.
- d) Promote and collaborations and partnerships among Academic and Research Institutions and private sector

Objective 7: Resource Mobilization

To secure sustainable and diversified funding to support the growth, implementation, and scaling of AI Science, Research, and Innovation (SRI) initiatives in Kenya by 2030.

- a) Increase national budgetary allocation to AI SRI programs by at least 40% by 2030.
- b) Establish a dedicated National AI Innovation Fund by 2027 to support research, startups, and commercialization efforts.
- c) Mobilize at least USD 500 million in blended financing (public, private, and development partners) for AI SRI initiatives by 2030.
- d) Incentivize private sector investment in AI through tax incentives, public-private partnerships, and innovation grants by 2028.
- e) Strengthen capacity to access international funding opportunities, including grants and venture capital, by building proposal development and fundraising expertise across institutions by 2028.
- f) Promote sustainable financing models, including revenue-generating AI solutions and commercialization pathways, to ensure long-term viability of AI SRI initiatives.
- g) Encourage diaspora engagement and investment in Kenya's AI ecosystem through targeted programs and co-investment platforms by 2029.

1.6 Policy Scope

This Policy defines the breadth of application of Artificial Intelligence within SRI ecosystem. It is anchored in the Science, Technology and Innovation Act (2013) and encompasses all scheduled sciences, relevant institutions, and key sectors where AI-enabled research and innovation are applicable. The scope is structured across three interlinked dimensions: SRI domains, stakeholders and sectors, and AI technologies and applications.

1.6.1 Research and Innovation Domains

All science, research and innovation areas including

- i. Natural Sciences — physics, chemistry, biological sciences, earth and environmental sciences.
- ii. Formal Sciences — mathematics, statistics, computer science, data science and artificial intelligence.
- iii. Applied Sciences and Engineering — civil, electrical, mechanical, industrial and software engineering.
- iv. Health and Medical Sciences — clinical sciences, public health, biomedical research, pharmacology and genomics.
- v. Agricultural and Veterinary Sciences — crop and livestock sciences, food systems and aquatic sciences.

- vi. Environmental and Climate Sciences — climatology, ecology, water and natural-resource sciences.
- vii. Social Sciences and Humanities — sociology, political science, psychology, law, ethics, governance and development studies.
- viii. Economics, Finance and Actuarial Sciences
- ix. Interdisciplinary and Emerging Sciences — bioinformatics, computational biology, climate informatics, digital humanities, smart systems and integrated AI applications.

1.6.2 Stakeholders and Sectors Covered

This Policy applies to all stakeholders involved in the development, use, governance, and application of AI in Science, Research and Innovation (AI-SRI) in Kenya. including:

- i. Public-sector institutions — ministries, departments, agencies, counties, research institutions, national laboratories and standards of bodies.
- ii. Academic and research institutions — public and private universities, higher-education institutions, TVET institutions, research centres and centres of excellence.
- iii. Private sector and industry — technology companies, start-ups, innovation hubs, incubators, accelerators and industry associations.
- iv. Civil society and development partners — NGOs, community-based organisations, international organisations and development agencies.

Adjacent sectors covered by the Policy include, among others, agriculture and food systems, health and life sciences, manufacturing and industry, financial services and the digital economy, education and training, environment and climate change, transport and logistics, and public administration and governance.

1.6.3 AI Technologies and Applications

This policy covers the full spectrum of AI technologies and their application in science, research, and innovation, including:

- i. Machine learning and deep learning — predictive analytics, pattern recognition and data-driven modelling.
- ii. Natural Language Processing — language translation, text analysis, knowledge systems.
- iii. Computer vision — image recognition, remote sensing and visual data analysis.
- iv. Robotics and autonomous systems — intelligent machines, drones and automated research and laboratory systems.
- v. Generative AI and Large Language Models- Generation of text, audio and video, Knowledge graphs, Generative Adversarial Networks and Agents
- vi. Big data and AI-driven analytics — large-scale data processing, decision-support systems and digital twins.

1.6.4 Cross-Cutting Issues

- i. Data governance, including personal data protection, research and innovation data management, data sharing and cross-border data flows.

- ii. Cybersecurity, including AI model security, supply-chain security and digital infrastructure protection.
- iii. Ethics, fairness, equity and bias mitigation, including gender, regional, linguistic and socio-economic dimensions.
- iv. Intellectual property rights in AI-generated works, models and datasets.
- v. Capacity building, talent retention and diaspora engagement.
- vi. Sustainability, including energy and environmental footprints of AI systems.

1.6.5 Guiding Principles

Implementation of this Policy shall be guided by the following principles:

- i. *Ethical integrity*: AI in SRI shall uphold human dignity, human rights, fairness, justice, non-discrimination and the rule of law.
- ii. *Scientific excellence and innovation*: AI shall be used to enhance rigour, reproducibility and integrity of research, and to strengthen the global standing of Kenyan science.
- iii. *Inclusivity and equity*: AI shall serve all Kenyans, with deliberate attention to gender, youth, persons with disabilities, marginalised communities and under-resourced regions.
- iv. *Innovation and competitiveness*: AI shall drive innovation, entrepreneurship and Kenya's competitiveness in the global knowledge economy.
- v. *Public trust*: AI systems shall be trustworthy, transparent, explainable, accountable and safe.
- vi. *Data stewardship*: data used for AI shall be ethically sourced, secure, well-governed, high-quality, interoperable and, where appropriate, open.
- vii. *Collaboration and co-creation*: AI shall be advanced through partnerships among Government, academia, industry, civil society and development partners.
- viii. *Sustainability and environmental responsibility*: AI systems shall be designed and operated with due regard for energy efficiency, e-waste management and long-term environmental impact.
- ix. *Subsidiarity and devolution*: AI initiatives shall recognise and support the role of county governments and local research actors.
- x. Data Sovereignty
- xi. Prioritization of locally developed AI models

1.6.6 Policy Alignment

This Policy aligns with and operationalises, among others, the Constitution of Kenya (2010), Kenya Vision 2030, the Science, Technology and Innovation Act Cap 511, the Data Protection Act, Cap 411C, the National ICT Policy, the Digital Economy Blueprint, the Kenya National Digital Master Plan 2022–2032, the Kenya National AI Strategy 2025–2030 Regionally, it aligns with the African Union Continental AI Strategy (2024), the AU Data Policy Framework (2024), the AU Convention on Cyber Security and Personal Data Protection (Malabo Convention, 2014) and the Smart Africa Strategic Vision. Globally, it aligns with the UNESCO Recommendation on the Ethics of Artificial Intelligence (2021), the OECD AI Principles, the UN Sustainable Development Goals and related instruments.

1.6.7 Expected Benefits of the Policy

1.6.7.1 For Researchers

Researchers will benefit from improved access to AI infrastructure, data and funding; clear ethical guidelines; stronger interdisciplinary collaboration; and enhanced opportunities for global research partnerships and publication in leading outlets.

1.6.7.2 For National and County Governments

National and County Governments will gain stronger evidence-based policymaking; better-coordinated AI investments; improved service delivery through AI-enabled public services; and a more robust regulatory framework for managing AI risks.

1.6.7.3 For Industry and Innovators

Industry and innovators will benefit from a predictable regulatory environment, enhanced access to research outputs, stronger technology-transfer pathways, and opportunities for commercialization of AI-enabled solutions.

1.6.7.4 For Society

Society will benefit from ethically governed AI systems, increased AI literacy, inclusive participation in AI development, protection against AI-related harms and the wider social and economic gains of AI-driven innovation.

1.6.8 Structure of the Policy Document

This Policy is organised into five chapters complemented by annexes. Chapter One sets out the background, policy issue, rationale, goal and objectives, scope, guiding principles, policy alignment, and expected benefits. Chapter Two presents a situation analysis of AI in SRI at global, regional and national levels. Chapter Three articulates the Policy Statements and associated strategies. Chapter Four sets out the framework for implementing the Policy. Chapter Five establishes the monitoring, evaluation, reporting, learning framework and defines the policy review interval. The annexes contain the policy implementation matrix, monitoring and evaluation matrix, institutional coordination framework and supporting material.

CHAPTER 2: SITUATION ANALYSIS

2.1 Introduction

This Chapter presents the context within which the National AI Policy for Science, Research and Innovation is being developed. It analyses global, regional and national trends in AI; reviews the prevailing national context for AI in SRI; examines institutional capacity, human resource, infrastructure and funding; identifies opportunities and gaps; and sets out the evidence base for the policy interventions

Kenya's current landscape for AI adoption in science, research and innovation reflects a nascent but rapidly evolving ecosystem characterised by fragmented policy instruments and emerging institutional capabilities. The Kenya National AI Strategy 2025–2030 identifies AI as a strategic enabler for economic transformation, yet implementation remains siloed across ministries, departments, agencies and counties without a unified governance framework for SRI. Institutional capacity is unevenly distributed where some of the leading Universities are developing AI research clusters, while many public research institutions lack dedicated AI units and cross-sectoral coordination mechanisms.

Infrastructure gaps persist, particularly in high-performance computing, lack of local data required for training AI models and standardised data repositories. Such hinder large-scale AI-driven research in critical sectors such as agriculture, health, climate and manufacturing. Human resources present both strengths and critical weaknesses. Kenya's vibrant tech ecosystem produces a growing cohort of data scientists and software developers, yet the country faces severe shortages in specialised AI expertise, particularly at the PhD and senior-researcher levels. The digital ecosystem demonstrates robust mobile penetration and a thriving fintech sector, but data governance for AI in research remains underdeveloped.

This analysis is based on a review of national policy instruments, regional and global frameworks, sector-specific studies and stakeholder consultations with research institutions, universities, private-sector AI firms, civil society organisations and development partners. The analysis is based on national, regional and global frameworks.

2.2 Global Trends in AI for Science, Research and Innovation

AI governance globally is evolving through a mix of soft law (guidelines, principles), Hard law (regulations such as EU AI Act) and Hybrid governance models. There is no single global AI governance regime, but a convergence around shared principles.

Global developments point to a clear trajectory toward AI systems that augment human expertise in scientific discovery, with ethical governance and cross-border collaboration

becoming non-negotiable elements of credible research. As the European Union operationalises the EU AI Act, the United States institutes AI governance frameworks through the National Institute of Standards and Technology, and leading research economies invest heavily in foundation models and data infrastructure, Kenya must align with these evolving norms to ensure its research outputs are globally recognised, interoperable and attractive to international partners.

2.2.1 AI-Driven Automation and Decision Support

AI is increasingly automating complex research workflows including drug discovery, materials design, genomic analysis, protein structure prediction and climate modelling compressing timelines that traditionally spanned years into months.

2.2.2 AI Data-Intensive Research and Analytics

The rise of AI-powered data platforms, data lakes and federated analytics systems is transforming how science is organised. Initiatives such as the European Open Science Cloud and federated biomedical data networks enable cross-border sharing of genomic and clinical data while preserving privacy. Kenya's research data ecosystem is still fragmented: institutions hold data in incompatible formats with limited interoperability, and national data repositories for AI research are underdeveloped.

2.2.3 Ethical AI and Responsible Innovation

The UNESCO Recommendation on the Ethics of AI calls for transparency & explainability, fairness, accountability, fairness & non-discrimination, safety & robustness, data governance, inclusivity and respect for human rights in AI development and use. The EU Ethics Guidelines for Trustworthy AI and the OECD AI Principles reinforce similar norms. These standards increasingly shape research practices globally, including requirements for bias audits, model documentation, impact assessments and human oversight in high-risk applications.

2.2.4 Public-Private Partnerships in AI

Public-private partnerships are a dominant feature of leading AI ecosystems. In such ecosystems, there are initiatives that leverage all PPPs to mobilise funding, infrastructure and expertise. The United States National Science Foundation's AI Institutes programme, the United Kingdom's Alan Turing Institute, Germany's AI research alliance and Singapore's AI Singapore initiative all leverage PPPs to mobilise funding, infrastructure and expertise. In Africa, the Smart Africa Alliance's AI for Agriculture initiative and similar regional programmes demonstrate the viability of collaborative models, although the research-focused AI PPP landscape in Kenya remains underdeveloped.

2.2.5 AI Governance and Regulation

Global regulatory trends show a shift toward harmonised frameworks. The EU AI Act adopts a risk-based regulatory model; Singapore’s Model AI Governance Framework offers voluntary guidance; and the Council of Europe’s AI Convention introduces binding human-rights-based standards

2.2.6 Emerging Trends in Generative and Foundation AI Models

The rapid rise of large language models and multimodal foundation models has created new research opportunities and risks: accelerated hypothesis generation, literature synthesis and code generation on the one hand; hallucinations, misinformation, IP disputes, data-provenance challenges and concentration of compute on the other. Research systems globally are adapting through model evaluation standards, red-teaming, alignment research and open science practices, all of which have direct implications for Kenya.

2.2.7 Investment in AI for SRI

Evidence from global benchmarks shows that leading economies are investing in AI and AI-related research at significantly higher levels, both directly and through broader R&D intensity than emerging economies such as Kenya. For instance, cumulative AI investments (2010–2024) amount to approximately 3.4–5.1% of GDP in the United States, 1.7–2.6% in China, and 1.2–1.8% in India, reflecting sustained, large-scale commitments to AI ecosystems. In parallel, overall research and development (R&D) a key proxy for AI investment in science and innovation accounts for about 3.5% of GDP in the United States, 2.7% in China, and 2.8% in the United Kingdom, compared to below 1% in India and many African countries, including South Africa which typically invests just above 0.8%–1% of GDP.

These figures demonstrate that globally competitive AI ecosystems are underpinned by sustained investments typically exceeding 2–5% of GDP, highlighting the scale of financing required to build robust AI capacity in science, research and innovation.

2.3 Regional Trends and Peer Experience

Across Africa, governments are rapidly responding to AI opportunities. Rwanda’s National AI Policy sets out objectives in governance, skills, infrastructure and innovation. Egypt and Mauritius have issued national AI strategies. Nigeria and South Africa have developed national AI policy drafts and research priorities. The AU Continental AI Strategy (2024) sets the continental direction on governance, talent, infrastructure, data and investment, with explicit attention to equitable access and African data sovereignty. The Smart Africa Alliance has anchored cross-country collaboration on AI skills, infrastructure and market development, while the African Union Convention on Cyber Security and Personal Data Protection (Malabo Convention, 2014) and the AU Data Policy Framework (2024) provide

the emerging continental data governance backbone. Kenya's Policy is designed to align with and operationalise these frameworks.

2.4 National Context for AI in Science, Research and Innovation

Kenya's AI in SRI context reflects significant ambition and early momentum, but also systemic constraints. The Kenya National AI Strategy 2025–2030 positions AI as a driver of national development through investment in local research ecosystems, innovation hubs and academic–industry partnerships, with an explicit ambition for Kenya to transition from a consumer to a producer of home-grown AI solutions. Realising this ambition requires coordinated action across policy, institutional capacity, infrastructure, human capital, financing and data governance.

2.4.1 Policies and Regulatory Framework

Kenya's current policy landscape for AI in SRI includes the Kenya National AI Strategy 2025–2030, the Science, Technology and Innovation Act (2013), the Data Protection Act Cap 411c, the National ICT Policy, the Kenya National Digital Master Plan 2022–2032 and the Digital Economy Blueprint. While these instruments provide an enabling foundation, they do not individually or collectively constitute a dedicated AI policy framework for the SRI ecosystem. Specific gaps include:

- a) Absence of AI-specific research ethics guidelines and limited capacity of existing ethics review boards to evaluate AI-based research.
- b) Inadequate data-sharing protocols across research institutions, impeding cross-institutional AI model training and validation.
- c) Outdated intellectual property frameworks that do not clearly address ownership and rights in AI-generated research outputs.
- d) Limited dedicated AI research funding mechanisms and grant windows.
- e) Jurisdictional overlaps between the Communications Authority of Kenya and the Office of the Data Protection Commissioner in AI-related governance.

2.4.2 Research Centres and National Laboratories

Kenya hosts a network of public research institutions with significant latent capacity for AI application. These include KALRO (agriculture), KEMRI (health and biomedical research), KIRDI (industrial research), KEFRI (forestry), KMFRI (marine and fisheries), the Kenya National Bureau of Statistics (official statistics), KIPPRA (development of an AI system for economic planning) and the Kenya Space Agency (geospatial data). Early-adopter activities include AI-powered soil-health monitoring, crop-disease prediction, malaria and epidemiological modelling, geospatial analytics for climate and land use, and statistical modelling for official statistics. However, AI adoption remains predominantly at the pilot stage, with limited integration into core institutional mandates.

2.4.3 Universities and Higher Education Institutions

Public and Private Universities and HEIs have established AI-related programmes in computer science, data science, statistics and engineering. Institutions are developing AI research clusters, data-science degree programmes and innovation hubs. However, most AI programmes remain concentrated at the postgraduate level in a limited number of institutions, and AI is not yet systematically integrated across STEM and social-science disciplines.

2.4.4 Innovation Hubs and Private Sector

Kenya's innovation ecosystem, often described as the "Silicon Savannah", numerous innovation hubs and university-based incubators. Kenyan start-ups, mobile-money platforms and fintech firms have generated globally recognized innovations. Most private-sector AI activity remains focused on application services rather than upstream AI research, with limited participation in public research grant systems.

2.5 Human Resources for AI in SRI

Human resources represent both a major asset and a critical bottleneck. Kenya produces a growing pipeline of data scientists, software developers and statisticians; however, depth in specialised AI research including machine learning theory, large-model engineering, AI safety, causal inference and interdisciplinary AI applications remains limited. Gender disparities persist, with women underrepresented in AI research and leadership roles. Brain drain is a continuing risk, as highly skilled talent is attracted to opportunities outside the country or outside the research sector.

Kenya's diaspora policy recognizes the country's global talent pool as a strategic asset and provides a framework for harnessing the expertise of Kenyans living abroad particularly in emerging fields like Artificial Intelligence (AI) and related technologies.

Addressing the human-capital gap requires sustained investment in undergraduate, postgraduate and continuous professional development programmes; targeted PhD and postdoctoral programmes; AI-focused centres of excellence; curriculum reform across STEM and social sciences; deliberate gender, youth and disability inclusion; and structured diaspora engagement.

2.6 Infrastructure for AI in SRI

2.6.1 Overview of AI Infrastructure

AI research requires high-performance computing, scalable data storage, high-bandwidth connectivity, cybersecurity infrastructure and specialised tooling for model development,

training and deployment. Kenya has made significant progress in national connectivity and has a growing data-centre footprint, but dedicated HPC capacity for AI research is limited, and access is unevenly distributed across institutions.

2.6.2 Connectivity for Scientific Research and Innovation

The Kenya Education Network (KENET) provides research-and-education networking across universities and research institutions. National backbone infrastructure has expanded through the National Optic Fibre Backbone Infrastructure (NOFBI), undersea cables, digital hubs and county connectivity initiatives. However, the last-mile connectivity, bandwidth for large-scale data transfers, and reliable power remain inconsistent across many research sites, particularly in counties.

2.6.3 Infrastructure Gaps and Investment Opportunities

Despite the foundational digital gains outlined in the preceding subsections, Kenya's research and innovation ecosystem continues to face significant infrastructure deficits that constrain the scale and impact of AI-enabled scientific work. Disparities in access to high-performance computing, research-grade data centres, stable power supply, and high-capacity connectivity persist across institutions and regions, creating structural bottlenecks that limit the country's capacity to conduct, commercialise, and compete in AI and AI-driven research. These gaps, however, also represent a clear and time-sensitive investment opportunity. With targeted public expenditure, strategic public-private partnerships, and alignment with frameworks such as the AU Continental AI Strategy and Kenya's own AI Strategy 2025–2030, Kenya is well positioned to leapfrog legacy infrastructure constraints and build a world-class AI research ecosystem that serves both national development priorities and regional scientific leadership.

2.7 Funding for AI in SRI

2.7.1 Government Funding for AI in SRI

Kenya's gross expenditure on research and development remains below 1% of GDP, below the African Union target and far below the levels of leading innovation economies. Government funding for research flows primarily through the National Research Fund, budget allocations to ministries and public institutions, and project-specific grants. AI-specific funding windows are limited, and funding cycles are often short, constraining long-term AI research programmes.

2.7.2 External Financing and Sustainability

External financing from development partners, multilateral institutions and international research funders plays a significant role in AI-related research. While this funding has catalysed important work in health, agriculture, climate and data science, heavy reliance

on external funding raises sustainability, agenda-setting and data-sovereignty concerns. The Policy therefore seeks to diversify and stabilise funding sources.

2.7.3 Private Sector Participation and Geographic Disparities

Private-sector investment in AI research remains modest compared to leading economies, and is concentrated in Nairobi and selected urban centres. County-level research ecosystems face significant funding and infrastructure disparities. Deliberate incentives, co-financing instruments and county-level interventions are needed to broaden participation and reduce geographic inequities.

2.8 Data Governance and Ethics

The General Data Protection Regulation (GDPR) is a comprehensive data protection law in the EU that enhances individuals' rights over their personal data and establishes strict guidelines for data processing by organizations. It is also an ethics framework because it emphasizes fairness, human dignity, informed consent, purpose limitation, and safeguards against harmful automated decision-making.

The AU convention of cyber security and person data protection (Malabo Convention, 2014) affirms that the protection of personal data is a fundamental right and an essential component of building trust in the digital economy. It requires member states to adopt legislative, regulatory, and institutional measures to ensure that personal data is collected, processed, stored, and transferred in a lawful, fair, and transparent manner.

The Data Protection Act, 2019, establishes rights for data subjects and obligations for data controllers and processors. However, it does not address AI-specific risks such as data bias in training datasets or algorithmic transparency requirements, leaving researchers and innovators without clear guidance on ethical data use.

2.8.1 Data Protection, Data Sharing and Compliance Gaps

The Data Protection Act Cap 411C establishes a baseline framework for personal data protection in Kenya, administered by the Office of the Data Protection Commissioner. The Act is complemented by subsidiary regulations and guidance on consent, cross-border data transfers and sensitive data categories. Nonetheless, AI-specific provisions on research data processing, model training data, synthetic data, federated learning and cross-border research data sharing are still evolving. Gaps include limited institutional data protection officers in smaller research entities, inconsistent consent regimes in research, and the absence of a harmonised research data-sharing framework for AI.

2.8.2 Ethical Challenges in AI-Driven Research and Innovation

Key ethical challenges include algorithmic bias in health, agricultural, educational and social-science applications; opacity of complex models that limits researcher and user understanding; risks of privacy violations in health and behavioural data; gender, linguistic and socio-economic inclusion gaps; intelligence assisted research versus AI generated research and the potential for AI to exacerbate existing inequalities if not intentionally designed and governed. The absence of AI-research and innovation specific ethics review capacity in many institutions compounds these risks.

2.9 AI and Intellectual Property

Artificial intelligence (AI) is increasingly driving important developments in science, research, technology advancements, and innovation. The application of AI to science, research and innovation discovery raises largely unresolved questions regarding the ownership, licensing, and protection of AI-generated intellectual assets. According to WIPO, AI intersects with intellectual property in several ways. These include patentability of AI-driven inventions; copyright protection for AI-generated content, and inventorship and authorship in AI. The continental AI policy identified AI as a potential risk to IP in their appropriation and digital material specifically generative AI technologies.

Kenya's current intellectual property laws recognize human-originated creative works and inventions. As AI technologies continue to evolve, the need for legal frameworks that can protect outputs from AI research and innovation and facilitate the commercialization of AI-related intellectual assets becomes increasingly evident. These should include the unique characteristics of emerging technologies such AI-assisted or AI-generated creations, inventions, datasets, and models. The areas requiring legislative attention include ownership, licensing, and liability and accountability for AI failures.

2.10 Opportunities

The following opportunities exist in the use of AI for science, research and innovation:

- a) Application of AI to accelerate progress on Kenya's development priorities in health, agriculture, climate, education, manufacturing, water and sanitation, and the digital economy.
- b) Leveraging Kenya's mobile, fintech and digital-services infrastructure for AI-driven research and deployment.
- c) Growth of African languages and local-context datasets to anchor culturally appropriate and inclusive AI applications.
- d) Strengthening of Kenya's role as a regional AI research hub through partnerships with AU institutions, Smart Africa, development partners and global research networks.

- e) Emergence of a national AI research fund, centres of excellence and cross-sector coordination to channel public and private investment.
- f) Integration of AI into Kenya's Monitoring, Evaluation, Reporting and Learning (MERL) systems to improve public-sector performance and accountability.

2.11 Gaps Summary

The situation analysis demonstrates that while Kenya has made notable progress in establishing foundational digital infrastructure, policy intent, and early AI adoption in science, research and innovation (SRI), the overall ecosystem remains fragmented, under-coordinated and insufficiently resourced to support large-scale, globally competitive AI-driven research. A key lesson is that ambition without alignment across governance, infrastructure, human capital, data systems and financing limits impact. Furthermore, global and regional trends underscore that effective AI ecosystems are built on integrated governance frameworks, sustained investment, strong research–industry linkages, and robust ethical and data governance systems. Kenya's experience highlights the need to transition from isolated, pilot-driven initiatives to a coherent, well-funded and institutionally coordinated AI research ecosystem. The identified gaps include:

- i. Policy and Governance Gaps**
 - a. Absence of a dedicated, unified AI policy framework for SRI.
 - b. Fragmented implementation across ministries, departments, agencies and counties.
 - c. Lack of AI-specific research ethics guidelines.
 - d. Limited capacity of ethics review boards to assess AI-based research.
 - e. Jurisdictional overlaps in AI governance among regulatory bodies.
- ii. Institutional and Coordination Gaps**
 - a. Uneven institutional capacity across universities and research institutions.
 - b. Lack of dedicated AI units in many public research institutions.
 - c. Weak cross-sectoral and inter-institutional coordination mechanisms.
 - d. Limited integration of AI into core institutional mandates (mostly pilot-stage adoption).
- iii. Data and Digital Infrastructure Gaps**
 - a. Limited access to high-performance computing (HPC) infrastructure.
 - b. Lack of national, standardised and interoperable data repositories.
 - c. Fragmented data systems and incompatible data formats across institutions.
 - d. Inadequate data-sharing protocols for AI research.
 - e. Limited availability of local, high-quality datasets for training AI models.
 - f. Connectivity, bandwidth and reliable power challenges, especially outside major urban centres.
- iv. Human Capital Gaps**

- a. Shortage of specialised AI expertise, particularly at PhD and senior researcher levels.
 - b. Limited depth in advanced AI fields (e.g., AI safety, large-scale model engineering).
 - c. Inadequate integration of AI across disciplines beyond select programmes.
 - d. Gender disparities and underrepresentation of women in AI research and leadership.
 - e. Brain drain of highly skilled AI talent.
- v. **Funding and Investment Gaps**
- a. Low national R&D expenditure (below 1% of GDP).
 - b. Limited AI-specific funding mechanisms and research grant windows.
 - c. Short-term funding cycles that do not support long-term AI research.
 - d. Heavy reliance on external funding with sustainability and sovereignty risks.
 - e. Limited private-sector investment in upstream AI research.
 - f. Geographic disparities in funding distribution.
- vi. **Innovation and Private Sector Engagement Gaps**
- a. Private-sector focus on application-layer AI rather than core research.
 - b. Limited participation of private firms in public research funding systems.
 - c. Underdeveloped public-private partnership (PPP) frameworks for AI research.
- vii. **Data Governance and Ethics Gaps**
- a. Lack of AI-specific provisions in existing data protection frameworks.
 - b. Absence of harmonised research data-sharing frameworks.
 - c. Inconsistent consent regimes in research.
 - d. Limited institutional capacity for data protection compliance.
 - e. Risks of algorithmic bias, lack of transparency, and weak accountability mechanisms.
 - f. Insufficient AI-focused ethics review capacity.
- viii. **Intellectual Property (IP) Gaps**
- a. Outdated IP frameworks that do not address AI-generated outputs.
 - b. Lack of clarity on ownership, authorship and inventorship in AI-driven research.
 - c. Unclear legal frameworks for licensing, liability and commercialization of AI innovations.
- ix. **Infrastructure and Regional Equity Gaps**

- a. Unequal distribution of research infrastructure across regions and institutions.
- b. Limited access to research-grade data centres and AI tools.
- c. Persistent urban–rural disparities in infrastructure and innovation capacity.

x. Ecosystem Maturity Gaps

- a. Predominance of pilot projects with limited scaling and institutionalisation.
- b. Weak linkage between research, commercialization and policy uptake.
- c. Limited integration of AI into national research and innovation systems at scale

2.12 Conclusion of the Situation Analysis

Kenya has the foundational assets to become a regional leader in AI for science, research and innovation: a dynamic innovation ecosystem, committed research institutions, supportive policy direction and deepening digital infrastructure. At the same time, structural gaps in governance, skills, infrastructure, data and financing must be closed decisively. The Policy Statements and strategies in Chapter Three, and the implementation framework in Chapter Four, are designed to address these gaps and harness the identified opportunities.

CHAPTER 3: POLICY STATEMENTS AND INTERVENTIONS

3.1 Introduction

This chapter outlines the strategic policy statements and interventions required to implement the National AI Policy for Science, Research, and Innovation. This policy commits to address the objectives and issues on ethical AI, governance, research infrastructure, human capacity development, innovation and partnerships, international alignment, and cross-sectoral coordination. It translates the AI for SRI Policy objectives into practical, actionable strategies aimed at fostering ethical, responsible, and impactful development and adoption of AI in Kenya's SRI ecosystem. Each policy statement is paired with strategies and anticipated outcomes to ensure accountability, effectiveness, and measurable impact.

3.2 Policy Statement 1: Governance of AI in Science, Research and Innovation

3.2.1 Policy Statement

The Government shall establish a coordinated, governance and regulatory mechanisms to oversee the development, deployment, and use of Artificial Intelligence in science, research and innovation.

3.2.2 Overview

The situation analysis underscores that effective governance of AI in Science, Research and Innovation requires a coherent, unified framework that aligns policy, regulation and institutional mandates across sectors. It also highlights that without clear coordination mechanisms, defined roles and AI-specific ethical and regulatory guidance, fragmented oversight can undermine trust, efficiency and the scalability of AI-driven research.

Effective oversight of AI in SRI requires a coordinated governance and regulatory framework that provides clarity, accountability, and consistency across institutions and sectors. As AI systems increasingly influence research processes, outputs, and innovation pathways, it is essential that their development, deployment, and use are guided by clear institutional mandates and enforceable rules. Establishing structured governance and regulatory mechanisms will ensure that AI in SRI activities are conducted transparently, responsibly, and in a manner that safeguards public interest while enabling scientific advancement and innovation.

3.2.3 Identified gaps

- a) Absence of a centralized national governance mechanism to coordinate oversight of AI in Science Research and Innovation across institutions and sectors

- b) Fragmented and inconsistent institutional approaches to governance of AI-enabled research activities
- c) Lack of AI-specific legal and regulatory frameworks tailored to science, research and innovation contexts
- d) Weak alignment of AI-SRI governance with existing national legislation and relevant international standards and obligations

3.2.4 Interventions

- a) Establish a national multi-agency steering committee for science, research and innovation to provide oversight, coordination, and policy guidance.
- b) Institutions to develop AI governance committees to oversee the ethical, legal and operational implementation of AI
- c) Establish reporting, compliance, and review mechanisms requiring research institutions to document, report, and periodically review the development and deployment AI systems in SRI.
- d) Develop and implement legal and regulatory frameworks for AI-SRI aligned with national laws and relevant regional and international instruments.

3.2.5 Expected Outcomes

- a) Coordinated governance of AI research and innovation.
- b) Transparent, accountable, and legally compliant AI systems
- c) Enhanced national oversight of AI development, deployment and use in research and innovation

3.3 Policy Statement 2: Capacity Building and Human Capital Development

3.3.1 Policy Statement

The government shall build skilled, diverse and future-ready AI workforce capable of designing, developing, deploying, governing and critiquing AI systems across diverse research domains, with deliberate attention to the national priorities including special groups such as gender, youth, persons with disabilities and under-represented regions.

3.3.2 Overview

The integration of artificial intelligence (AI) with human capital development is essential for nations and organizations seeking to harness AI's potential for sustainable socioeconomic advancement. The National Artificial Intelligence Strategy prioritizes capacity building in AI research and the application of AI in research and innovation as fundamental to the nation's transition toward a knowledge-based economy. A critical focus area is the development of a skilled workforce, encompassing AI literacy from primary and secondary education through tertiary institutions, as well as the cultivation and promotion of AI-driven innovations across all administrative levels from local wards to national governance.

3.3.3 Identified gaps

- a) *Insufficient AI Skills Across the Research Ecosystem:* Kenya faces a shortage of AI-capable researchers, engineers, and interdisciplinary experts who can design, deploy, and critically evaluate AI systems within scientific and research contexts.
- b) *Weak Integration of AI in education, research and training programmes:* AI education remains concentrated in specialised programmes, with limited integration across STEM, health, agriculture, social sciences, and humanities at undergraduate, postgraduate, and research training levels.
- c) *Limited Advanced and Specialized AI-SRI Training Opportunities:* There are inadequate pathways for advanced training at master's, doctoral, and postdoctoral levels, particularly in domain-specific AI research areas such as health, climate, agriculture, finance, cybersecurity and language technologies.
- d) *Inequitable Participation in AI-SRI Workforce Development:* Women, youth, persons with disabilities, and researchers from under-represented regions remain disproportionately excluded from AI research training, funding, and leadership opportunities.
- e) *Weak Academia–Industry Linkages and Practical Exposure:* Limited structured collaboration between academia, industry, and public sector institutions restricts experiential learning, mentorship, and practical deployment skills for AI-SRI practitioners.
- f) *Under-utilisation of the Kenyan Diaspora professionals in AI and related subject matter:* for skills transfer, collaborative research and innovation, and supervision of AI-research and innovation projects and programmes

3.3.4 Interventions

- a) *Mainstream AI Competencies Across Education and Research Training Systems by Integrating AI, data science, and computational thinking into undergraduate and postgraduate curricula across STEM, health, agricultural, and social-science disciplines, and embed AI skills within postgraduate and research training programmes.*
- b) *Establish National Pathways for Advanced and Specialized AI-SRI Training by launching a National AI Fellowship and Scholarship Programme targeting master's, PhD, and postdoctoral researchers, supported by the establishment of AI Centres of Excellence in institutions of higher learning and research institutes with thematic specialisations aligned to national priorities.*
- c) *Strengthen Lifelong Learning and Workforce Upskilling for AI-SRI by Expanding TVET, micro-credentialing, and lifelong learning programmes to support continuous AI skills development and rapid upskilling of researchers, educators, and relevant public-sector workforce.*
- d) *Promote Interdisciplinary and Practice-Oriented AI-SRI Training by fostering interdisciplinary training linking AI with life sciences, engineering, social sciences, law, and humanities, and support applied learning models that integrate technical, governance, ethical, and critical AI competencies.*

- e) Strengthen Industry–Academia Collaboration and Practical Exposure by establishing structured industry–academia mentorship, internship, and exchange programmes to enhance hands-on experience, innovation skills, and deployment readiness for AI-SRI practitioners.
- f) Advance Equity, Diversity, and Inclusion in AI-SRI Workforce Development by implementing deliberate inclusion measures within all AI-SRI training and funding programmes to promote participation of women, youth, persons with disabilities, and researchers from under-represented regions.
- g) Leverage Diaspora Expertise for Advanced Skills and Research Collaboration by Operationalising a diaspora engagement framework for AI-SRI, including visiting researcher schemes, joint supervision, and collaborative research initiatives to accelerate skills transfer and global integration.

3.3.5 Expected Outcomes

- i. Expanded and Future-Ready AI-SRI Workforce
- ii. Improved Quality and Depth of AI-Driven Research
- iii. Stronger Interdisciplinary and Cross-Sectoral Research Capacity
- iv. Inclusive and Equitable Participation in AI-SRI
- v. Enhanced Practical Skills and Industry Readiness
- vi. Strengthened Institutional Capacity and Centres of Excellence
- vii. Leveraged Diaspora Expertise and Global Integration
- viii. Enhanced National and International Competitiveness

3.4 Policy Statement 3: AI Infrastructure for Scientific Research and Innovation

3.4.1 Policy Statement

The Government shall develop and promote shared, secure, and environmentally sustainable infrastructure and data repositories to support AI excellence in SRI.

3.4.2 Overview

Advanced AI research requires access to high-performance computing infrastructure, quality datasets, secure data environments, and modern experimentation facilities.

3.4.3 Identified gaps-;

Kenya's AI SRI ecosystem currently faces:-

- i. Limited national high performance computing capacity for AI research and Innovation
- ii. Fragmented and insecure research data infrastructure
- iii. Limited high-quality, locally relevant datasets leading to less accurate, less inclusive, and sometimes unusable in the Kenyan context.
- iv. Unequal access to AI research infrastructure across institutions and regions
- v. Environmental sustainability concerns of computing systems

3.4.4 Interventions

- i. Invest in National and Counties HPC centres within key academic and research institutions.
- ii. Establish a National and County integrated data repository
- iii. Promote high quality data collection and transmission from **local** institutions.
- iv. Support establishment of AI laboratories for applications of emerging technologies (**robotics, drones and IoT**)
- v. Promote energy efficient and renewable powered computing infrastructure.
- vi. Support efficient connectivity and network infrastructure for AI services:- high speed internet, cloud connectivity and edge computing networks
- vii. Promote Public-Private Partnership both at local and international to accelerate AI infrastructure development.
- viii. Promote national AI policy for science, research and innovation incentives that encourage local and international investment in AI infrastructure

3.4.5 Expected Outcomes

- a) Enhanced computational capabilities for AI research and innovation
- b) Accelerated scientific discovery
- c) Improved data storage, sharing, and reproducibility

3.5 Policy Statement 4: Promotion of AI Innovation and Commercialization

3.5.1 Policy Statement

The shall Government accelerate the transition of AI research from laboratories into market-ready products, services, and industrial applications while ensuring ethical, safe, and inclusive growth.

3.5.2 Overview

The situation analysis highlights that while Kenya has a vibrant innovation ecosystem, AI activity remains largely concentrated at the application layer with limited translation of research into scalable products and enterprises. This underscores the need for deliberate policy measures to strengthen the innovation pipeline through strengthening of intellectual property regime, commercialization of AI research outputs, and foster stronger linkages between academia, industry and investment ecosystems.

3.5.3 Identified gaps-;

Kenya's AI SRI ecosystem currently faces:-

- a) Limited mechanisms exist to translate AI research into market-ready products and scalable enterprises.
- b) AI innovators face significant challenges in accessing early-stage and growth financing.

- c) Current intellectual property frameworks are not adequately adapted to AI-related innovations.
- d) There is low capacity and uptake of patenting, licensing, and commercialization of AI research outputs.
- e) Collaboration between academia, industry, and investors is weak and fragmented.
- f) Incubation and acceleration infrastructure for AI innovation is insufficient and unevenly distributed.
- g) Researchers and innovators have limited commercialization and entrepreneurial skills.
- h) Regulatory uncertainty hinders the development and market entry of AI-driven solutions.
- i) Adoption of locally developed AI technologies by industry and government remains low.
- j) There are inadequate incentives to stimulate private sector investment in AI research and commercialization.

3.5.4 Interventions

- a) Launch national AI research competitions, grand challenges and innovation prizes in priority sectors.
- b) Provide grants, seed funding and acceleration support for AI-based start-ups emerging from universities and research institutions.
- c) Modernise IP frameworks to address AI-generated inventions, software, datasets, models and related rights, and align with relevant international instruments.
- d) Facilitate patenting, licensing, open-source release and technology transfer of AI research products.
- e) Strengthen incubation, acceleration and venture-support programmes in research hubs and counties.

3.5.5 Expected Outcomes

- a. Increased number and quality of AI-driven start-ups and spin-outs.
- b. Higher adoption of AI innovations in industry, public services and society.
- c. Improved IP management and returns on public research investment.

3.6 Policy Statement 5: Ethical, Inclusive, and Responsible AI for SRI Policy Statement

The government shall ensure that all AI systems in scientific research and innovation are developed deployed and used responsibly, upholding ethical standards, protecting privacy, promoting fairness and inclusivity, and ensuring accountability.

3.6.1 Overview

AI systems used in science, research and innovation must be developed and deployed in a manner that upholds ethical standards, protects privacy, promotes fairness and inclusivity, and ensures accountability, fairness and non-discrimination throughout the research lifecycle. Responsible AI-SRI is essential to safeguarding scientific integrity, maintaining public trust, and ensuring that AI-enabled research outcomes are credible, lawful, and socially beneficial.

3.6.2 Identified Gaps

- a) Absence of a nationally harmonised ethical framework governing the use of AI in SRI
- b) Limited transparency, explainability, and traceability of AI models used in SRI activities
- c) Inadequate AI-specific expertise within existing institutional ethics review boards
- d) Lack of structured oversight mechanisms for continuous monitoring of AI-SRI systems after deployment
- e) Limited awareness and skills on responsible, fair, and inclusive practices of AI-SRI

3.6.3 Interventions

- a) Develop and adopt a National AI ethics code for SRI.
- b) Implement mandatory transparency documentation for AI model development, including explainability and decision-logging.
- c) Strengthen institutional ethics review boards at SRI institutions by building AI-specific ethical review capacity and guidance.
- d) Develop and operationalise a national AI policy in SRI auditing framework to enable periodic assessment of bias, safety, and ethical compliance of AI systems.
- e) Promote awareness and training on responsible AI practices among researchers and students.

3.6.4 Expected Outcomes

- a) Increased public trust in AI research
- b) Reduced risk of unethical or harmful AI practices
- c) Standardized ethical oversight across all research institutions

3.7 Policy Statement 6: Collaboration and Global Positioning for AI in SRI

3.7.1 Policy Statement

The Government shall strengthen local cross-sectoral coordination and international positioning to ensure that AI-SRI is globally competitive and address national priorities to become a continental leader.

3.7.2 Overview

AI in SRI operates simultaneously within local, cross-sectoral research systems and international scientific ecosystems. At the national level, AI-SRI involves multiple actors across government, academia, research institutions, and industry. At the international level, AI-SRI increasingly depends on shared standards, collaborative research, cross-border data use, and participation in global knowledge networks.

3.7.3 Identified Gaps

The following gaps require deliberate action at both local and international levels:-

- a) Fragmented coordination of AI-SRI initiatives across national sectors and institutions
- b) Duplication of AI-SRI research efforts and inefficient use of resources
- c) Limited participation in regional and global AI-SRI networks
- d) Weak alignment with international AI-SRI ethical, technical, and scientific standards
- e) Insufficient integration of AI-SRI research outputs into national development planning

3.7.4 Interventions

- a) Promote cross-institutional collaboration in AI activities focused on National and county priorities.
- b) Set up funding to promote cross- institutional collaborations on AI activities
- c) Align national AI systems with regional and international best practices. policies, frameworks, including those of the African Union, UNESCO, OECD, and other relevant bodies.
- d) Promote the country as a leader in AI development, deployment and utilization in SRI in Africa.
- e) Promote participation in regional and global AI in SRI consortia and collaborative programmes.
- f) Enhance bilateral and multilateral partnerships with leading AI institutions.
- g) Align national AI systems and practices with the global best practices.

3.7.5 Expected Outputs and Outcomes

- a) Improved local coordination and reduced duplication of AI-SRI initiatives
- b) More efficient utilisation of research resources and infrastructure
- c) Stronger alignment with international AI-SRI standards and best practices
- d) Increased participation of Kenyan researchers in global AI-SRI collaborations
- e) Enhanced national and international profile of Kenya's AI-SRI ecosystem
- f) Greater contribution of AI-SRI to national development priorities

3.8 Policy Statement 8: Funding and Resource Mobilization

3.8.1 Policy Statement

The Government shall establish a robust, sustainable, and diversified resource mobilization framework to accelerate the development, deployment, and scaling of Artificial Intelligence in Science Research and Innovation.

3.8.2 Overview

The Country needs a resilient, diversified, and sustainable financing ecosystem to accelerate the growth of Artificial Intelligence in Science, Research, and Innovation (SRI). This will prioritize strategic mix of public funding, private sector participation, and international partnerships to ensure that AI initiatives are adequately resourced from early-stage research through to commercialization and scale. By strengthening national commitment and leveraging blended finance, Kenya seeks to position itself as a leading AI innovation hub in Africa.

The policy further emphasizes institutional capacity building, financial innovation, and inclusive participation in resource mobilization. It promotes mechanisms such as a National AI Innovation Fund, targeted incentives for private investment, and diaspora engagement platforms. These efforts are designed not only to increase the volume of funding but also to improve access, efficiency, and long-term sustainability of AI SRI financing.

3.8.3 Identified Gaps

- a) Limited and inconsistent national budget allocation to AI SRI programs.
- b) Absence of a dedicated funding mechanism for AI innovation.
- c) Low levels of private sector investment due to unclear incentives and perceived risks.
- d) Weak institutional capacity in grant writing, fundraising, and venture financing.
- e) Fragmented coordination among public, private, and development financing actors.
- f) Limited access to global funding ecosystems and venture capital networks.
- g) Underdeveloped commercialization pathways for AI research outputs.
- h) Lack of sustainable financing models for long-term AI project viability.

3.8.4 Interventions

- a) Increase government funding allocation to AI SRI programs by at least 40% by 2030.
- b) Establish and operationalize an AI Research and Innovation grant by 2027.
- c) Develop blended financing frameworks to mobilize at least USD 500 million from public, private, and development partners.
- d) Introduce tax incentives, innovation grants, and risk-sharing instruments to attract private sector investment.

- e) Strengthen institutional capacity through training in proposal development, fundraising, and venture engagement.
- f) Create structured public-private partnership (PPP) models for AI research and commercialization.
- g) Build international partnerships to improve access to global grants and venture capital.
- h) Promote revenue-generating AI solutions and sustainable business models within SRI institutions.

3.8.5 Expected Outcomes

- a) Increased and more predictable public funding for AI SRI initiatives.
- b) A fully operationalized AI research and innovation grant catalyzing research, startups, and commercialization.
- c) Mobilization of at least USD 500 million in blended financing..
- d) Enhanced private sector participation and investment in AI innovation..
- e) Stronger linkages between research, industry, and commercialization ecosystems.
- f) Increased number of scalable, market-ready AI solutions emerging from Kenya.
- g) Sustainable and self-reinforcing financing models supporting long-term AI ecosystem growth.

CHAPTER 4: POLICY IMPLEMENTATION FRAMEWORK

4.1 Introduction

This chapter sets out the coordination, legal, financial and risk-management arrangements that translate the policy statements in Chapter 3 into measurable action. It specifies who is responsible for what, how those responsibilities interlock with existing legal and institutional regimes, how resources will be mobilised and safeguarded, and how implementation will be sequenced over a ten-year horizon. The framework addresses coordination and administrative mechanisms, legal and regulatory alignment, funding arrangements, a Policy Implementation Matrix, risk management, and communication and change management. It is designed for coherent execution across State Departments, research and academic institutions, counties, the private sector, civil society and development partners.

The framework is anchored in Kenya's overarching development priorities, including Kenya Vision 2030, the Bottom-Up Economic Transformation Agenda (BETA) and the Kenya AI Strategy 2025-2030. It operationalises the objectives of this Policy without duplicating structures established under those instruments; rather, it plugs the science, research and innovation (SRI) portfolio into the national AI governance architecture and clarifies the SRI-specific mandates that sit alongside it.

Implementation shall be guided by four design principles: (a) subsidiarity decisions taken at the most appropriate level (b) institutional AI committees and with the Kenya AI Strategy's horizontal governance structures; (c) proportionality oversight scaled to the risk profile of each AI research activity; and (d) accountability with clear reporting lines, verifiable indicators and public disclosure of progress.

4.2 Institutional and Governance Arrangements

4.2.1 National Committee on AI for Science, Research and Innovation (NSCAISRI)

The Principal Secretary responsible for Science, Research and Innovation will constitute the NSCAISRI with representation from relevant national and county governments, academia, research institutions, private sector, civil society, and development partners.

The committee will convene quarterly to oversee strategic alignment, resolve inter-agency conflicts, and review progress against KPIs. A dedicated Secretariat, housed within the ministry responsible for Science, Research and Innovation, will manage day-to-day operations, including stakeholder engagement, resource mobilization, and reporting.

Roles and Responsibilities shall include:

- a) Overseeing AI Research and use of AI in research in Science and Innovation within all sectors of the economy
- b) Provide strategic advisory on priorities for AI research and use of AI in science, research and innovation
- c) Championing responsible development and deployment in Science, Technology and Innovation Sector
- d) Any other role that will contribute to the successful implementation of this policy

4.2.2 Institutional AI Committees

All stakeholders within the NIS including Academia, Research institutions, MDCAs *will* be expected to establish institutional AI committees charged with overseeing the ethical, legal and operational implementation of AI. Their key responsibilities will include:

- a) Institutional policy development and implementation aligned with the national AI policy as guided by NSCAISRI
- b) Identifying and mitigating any risks associated with AI research and use of AI in science, research and innovation.
- c) Oversee ethics and compliance of AI governance framework within their institutions
- d) Approve data-use, model-release and commercialisation plans for AI research.
- e) Conduct annual audits of active AI projects and file summary returns to NCAIR.
- f) Advise on AI research and use of AI in science, research and innovation.

4.3 Policy Alignment with National and International Frameworks

Global Frameworks

- a) UNESCO Recommendation on the Ethics of AI
- b) UN Sustainable Development Goals
- c) OECD AI Principles
- d) WHO guidance on AI for health research
- e) Global Open Science movement

Regional Frameworks

- a) African Union's Continental AI Strategy
- b) African Data Policy Principles
- c) African Open Science Platform

National Frameworks

- a) Constitution of Kenya (2010)
- b) Kenya National AI Strategy (2025–2030)

- c) Data Protection Act (Cap 411C)
- d) National ICT Policy (2019)
- e) Science, Technology and Innovation Act (Cap 511)
- f) Digital Masterplan (2022-2032)
- g) Computer Misuse and Cybercrimes Act (Cap 79C)
- h) Digital Economy Blueprint
- i) Vision 2030
- j) BETA

4.4 Coordination Mechanisms

To avoid duplication and conflicts in policy implementation, the following coordination mechanisms are established:

- a) A Joint Coordination Protocol between the NSCAIRI and the Ministry of ICT & Digital economy, clarifying mandates on AI for SRI versus cross-sector AI regulation.
- b) A standing Inter-Agency Technical Working Group (IA-TWG) co-chaired by SD-SRI and SD-ICT, meeting quarterly.
- c) An annual National AI Research Forum that convenes government, counties, academia, industry, civil society and development partners.

Table 1: Accountability and funding flows across the implementation architecture.

Tier	Institution / Forum	Primary Function
Strategic	Ministry responsible for Science, Research and Innovation	Whole-of-government direction; approval of Cabinet Memoranda and budget.
Policy	State Department for Science, Research and Innovation (Lead)	Policy ownership, reporting to Parliament, chair of NC-AISRI.
Governance	National Committee on AI for Science, Research and Innovation (NSAISRI)	Strategic oversight, priority setting, arbitration.
Regulatory interface	National AI Authority (per AI Bill, 2026)	Cross-sector AI regulation; coordinates with NC-AISRI via Joint Protocol.
Technical	National Centre for AI Research (NCAIR)	Technical delivery hub, compute, data, training, standards.
Funding	NRF, KeNIA, NACOSTI	Grant-making, innovation financing, accreditation of research.
Delivery	Universities, research institutes, private sector, counties	Research execution, commercialisation, regional reach.

Oversight	Institutional AI Committees (IAICs)	Proposal review, audits, first-line ethics and risk control.
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4.5 Implementation Phases and Sequencing

Implementation shall proceed in three phases over ten years, sequenced to move from foundation-building, through scaling, to consolidation and institutionalisation. Each phase concludes with an independent evaluation that informs the next.

Table 2: Phased implementation

Phase	Timeframe & Theme	Priority Actions	Milestones
Phase 1	Years 1-2 Foundation	- Establish NSCAISRI and its membership. - Establish NCAIR through a Legal Notice; appoint interim leadership. - Enact supporting regulations and model charters. - Conduct a National AI Capacity and Infrastructure Audit. - Launch first cohort of AI research fellowships - Design the National AI Research Fund and seed it from the Treasury and donor pool.	- NSCAISRI fully constituted and operational. - NCAIR legally established with approved strategic plan. - Baseline capacity audit published. - Seed Funding operationalised - First cohort of AI research fellowships launched
Phase 2	Years 3-5 Scaling	- Expand national HPC and research cloud; launch shared GPU access programme. - Roll out national AI postgraduate curriculum, 5 AI Centres of Excellence and industry-linked PhDs. - Operationalise regional AI hubs in	- At least 3 HPC sites and a national research cloud live. 5 Centres of Excellence operational. - Researcher pool expanded by 500%. - Minimum 30 commercialised AI research outputs.

		partnership with counties. Launch second- and third-generation research programmes in AI for agriculture, health, climate and language technology. Activate cross-border collaborations under AU Continental AI Strategy and Smart Africa.	
Phase 3	Years 6-10 Consolidation	Mainstream AI into all publicly funded research funding calls. Institutionalise IAICs across all accredited research institutions. Transition NCAIR to self-sustaining status through co-financing. Conduct a summative evaluation and update the Policy.	Policy-level integration of AI into all State Department plans. NCAIR cost-recovery above 40%. Updated policy adopted by Cabinet.

4.6 Funding and Resource Mobilization

Implementation shall be funded through a diversified resource base combining public allocations, earmarked levies, partner contributions and private capital. The National Treasury, SD-SRI and the National Research Fund shall jointly develop a ten-year financing plan to match the phases in section 4.5.

4.7 Policy Implementation Matrix

Detailed strategies, actions, outputs, indicators, timelines, responsible institutions and indicative budgets are set out in the Policy Implementation Matrix at Annex 3, in the format prescribed by the Public Policy Handbook (2025). Implementers shall translate the Matrix into annual workplans aligned with their Strategic Plans, Performance Contracts, and, where applicable, County Integrated Development Plans. The Matrix shall be reviewed annually by NCAISRI.

4.8 Risk Register and Mitigation

The implementation of this Policy is accompanied by a range of strategic, operational, financial and ethical risks that could affect the achievement of its objectives if not

proactively managed. Drawing from the situation analysis, this subsection identifies key risks associated with AI in Science, Research and Innovation and outlines targeted mitigation measures to strengthen resilience, ensure responsible deployment, and safeguard public trust while enabling innovation.

Table 3: Probable Risks

	Risk Category	Description	Likelihood / Impact	Mitigation
Ethical and rights-based risks	Bias, privacy violations, misuse of research outputs, dual-use research of concern.	Medium	Mandatory ethics and social impact assessments; tiered IAIC review; red-teaming of high-risk systems; publication of model documentation.	Enforce strict ethics reviews, privacy by design, bias audits, and controlled release of sensitive models, with clear documentation and researcher training.
Data and cyber-security risks	Breach of research datasets, compromise of compute infrastructure, supply-chain attacks.	High	Alignment with Data Protection Act, 2019 and Computer Misuse and Cybercrimes Act, 2018; minimum-security baseline for NCAIR and partner institutions; incident response plans; data classification.	Adopt zero trust systems, secure data environments, continuous monitoring, and strong supply chain controls with tested backup and response plans.
Talent and brain-drain risks	Loss of AI researchers to overseas institutions; thin talent pipeline.	High	AI scholarships and fellowships; research chairs; dual-affiliation arrangements; diaspora engagement programme; retention incentives.	Retain and grow talent through competitive incentives, local research funding, diaspora programs, and stronger education-to-career pipelines.

Infrastructure and access inequity	Concentration of compute and expertise in Nairobi; exclusion of counties, women and persons with disabilities.	Medium	Regional AI hubs; shared GPU access; targeted capacity building for under-represented groups; universal design standards.	Decentralize infrastructure beyond Nairobi, fund underrepresented groups, and ensure accessibility and local language support.
Regulatory and coordination risks	Duplication or conflict with the National AI Authority; regulatory uncertainty slowing research.	Medium	Joint Coordination Protocol; research exemptions in subsidiary legislation; regulatory sandboxes for high-risk research.	Coordinate roles and standards with the National AI Authority, using sandboxes and streamlined approvals.
Environmental risks	Energy and water footprint of AI compute; e-waste from accelerators.	Medium	Renewable-energy preference for HPC procurement; efficiency reporting; circular-economy disposal rules.	Reduce environmental impact with energy-efficient compute, renewable power, responsible water use, and proper e-waste management.
Fiscal and financing risks	Budget shortfalls, donor dependence, foreign-exchange exposure.	High	Diversified funding base; multi-year indicative funding; hedging policy; ring-fenced NRF window.	Diversify funding sources, secure multi-year budgets, manage foreign exchange risk, and improve cost efficiency.
Public trust risks	Misinformation about AI research; incidents that damage public confidence.	Medium	Public communication strategy; incident disclosure protocol; citizen engagement and redress channels.	Maintain transparent communication, respond quickly to incidents, and actively counter misinformation through outreach and education.

4.9 Communication, Advocacy and Change Management

Sustainable implementation depends on clear communication, legitimate public debate and the capacity of implementing institutions to absorb change. A Communication and Change Management Sub-Plan shall be adopted by the NSCAIRI within six months of Policy approval.

4.9.1 Stakeholder Engagement

- a) Yearly multi-stakeholder dialogues convened by SD-SRI covering researchers, counties, industry, civil society and development partners.
- b) Structured engagement with the Council of Governors and County Executive Committee Members responsible for Innovation.

4.9.2 Public Awareness and Demand Generation

- a) Annual National AI Research Week, featuring citizen-science showcases and open days at Centres of Excellence.
- b) Public-interest translations and plain-language summaries of all major publicly funded AI research.
- c) Partnerships with public and community media to demystify AI research and address misinformation.

4.9.3 Change Management within Institutions

- a) Change-management toolkits for research and higher learning institutions.
- b) Technical assistance to smaller universities and research institutes on policy adoption.
- c) Knowledge management platforms to capture and share implementation learning.

CHAPTER 5: MONITORING, EVALUATION, REPORTING AND LEARNING (MERL)

The Monitoring, Evaluation, Reporting, and Learning (MERL) framework provides a structured approach to track implementation progress, assess performance, ensure accountability, and support continuous improvement of this policy.

5.1 Monitoring

The policy establishes a coordinated monitoring system to ensure effective tracking of activities, outputs, and resource utilization.

5.1.1 Data Collection, Analysis and Storage

A centralized data management system will be established to support standardized data collection, analysis, and storage across all implementing institutions. Data quality assurance mechanisms, including validation protocols and periodic audits will ensure reliability.

5.1.2 Baselines, Indicators, and Targets

Baseline studies will be conducted at the start of implementation to establish reference values. A results framework will define clear input, output, outcome, and impact indicators aligned to policy objectives, with measurable annual and medium-term targets. Indicators will be disaggregated where appropriate.

5.1.3 Monitoring of Timelines and Budgets

Implementation will be guided by annual work plans with defined milestones, timelines and budgets. Performance and financial tracking tools will be used to monitor progress and expenditure. Regular reviews will help identify delays or cost overruns and trigger corrective action.

5.1.4 Identification of Challenges and Bottlenecks

Ongoing monitoring will enable early identification of implementation challenges such as institutional capacity gaps, funding delays, coordination issues and regulatory barriers. Regular review meetings and field visits will support timely resolution of bottlenecks.

5.2 Evaluation

Evaluation will provide systematic and objective assessments of the policy's performance and outcomes to determine if the policy achieves its intended objectives in order to inform

continuous improvement. Evaluation covers all AI systems, projects, and processes governed by this policy, including technical performance, ethical compliance, and organizational impact.

5.2.1 Assessment of Outcomes and Objectives

Mid-term and end-term evaluations will assess the extent to which policy objectives have been achieved by comparing actual results with planned targets, and examining efficiency and value for money.

5.2.2 Evaluation Indicators

Indicators will be used to assess:

- a) Effectiveness for achievement of objectives
- b) Coherence to assess the alignment with other policies
- c) Impact from long-term outcomes
- d) Sustainability for continuity of benefits
- e) Efficiency to assess the resource use, cost-effectiveness and operational performance
- f) Compliance to assess the adherence to legal, regulatory, and ethical standards.
- g) Sustainability to assess the ability to maintain responsible AI practices over time

Both quantitative and qualitative measures will be applied.

5.2.3 Evidence Collection Methods

Evidence will be gathered through mixed methods, including surveys, interviews, case studies, administrative data, and independent evaluations. This will ensure credibility and comprehensiveness of findings.

5.2.4 Assessment of Intended and Unintended Effects

Evaluations will identify both intended and unintended consequences—positive or negative—through stakeholder consultations and feedback mechanisms, ensuring a balanced understanding of policy effects.

5.3 Reporting

A structured reporting system will ensure transparency, accountability, and informed decision-making. Reporting shall be done through the following periodic reports:

- a) Progress reports that indicate the status
- b) Financial reports for budget utilization
- c) Performance reports to assess the outputs and outcomes
- d) Evaluation reports for mid-term and final assessments progress monitoring

- e) Thematic or ad hoc reports as needed

5.3.1 Frequency and Formats

Reporting will occur on a monthly or quarterly basis for internal monitoring, with annual consolidated reports and periodic evaluation reports. Standardized templates and dashboards will be used to ensure consistency and accessibility.

5.3.2 Users of Reports

Reports will be used by government institutions, funding agencies, Science, research and innovation institutions, private sector stakeholders, development partners, and, where appropriate, the public.

5.4 Learning

The learning process will ensure that the insights from implementation inform continuous improvement of the effectiveness of this policy through:

5.4.1 Collation of Lessons Learned

Lessons learnt will be systematically documented through annual policy review workshops, feedback from the community of practice (researchers, innovators, and policy implementers), knowledge sharing platforms, and repositories to refine policy implementation.

5.4.2 Replication of Successes

Successful policy initiatives will be identified, documented, and scaled up through dissemination of best practices and integration into future AI programs and investments to spur scientific research and innovation.

5.4.3 Addressing Weaknesses

Unsuccessful policy initiatives will be analyzed to identify root causes and inform adjustments in strategies and implementation approaches.

5.4.4 Improving Management, M&E and Partnerships

Continuous learning will strengthen program management, enhance M&E systems, and improve stakeholder engagement. Capacity-building initiatives will support implementing institutions to effectively apply MERL practices.

5.5 Policy Review Interval

5.5.1 Review Interval

This Policy shall be reviewed after three (3) years of implementation. The review shall assess the extent to which the Policy goal, objectives and expected outcomes have been achieved, and shall inform the successor policy framework.

5.5.2 Triggers for Early Review

Notwithstanding the three-year review interval, the Policy may be reviewed earlier in response to significant developments, including:

- a) Changes in the Constitution of Kenya affecting the policy or its implementation.
- b) Significant changes in national development priorities, Vision 2030 or successor frameworks, or BETA.
- c) Major shifts in AI technologies (including generative AI, foundation models and emerging scientific paradigms) with material implications for research and innovation.
- d) Occurrence of calamities, pandemics or national-security incidents with AI-related dimensions.
- e) Material changes in regional or international AI frameworks (AU, UN, UNESCO, OECD, EAC, Smart Africa) to which Kenya is party.
- f) Findings from MERL reports that indicate the need for significant mid-course corrections.

5.5.2 Process for Review

Reviews shall be led by the State Department for Science, Research and Innovation through SCAISRI, with broad stakeholder consultation, public participation and evidence from MERL reports, independent evaluations and international benchmarking. Outcomes of each review shall be submitted to the Cabinet Secretary and,

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Annexes

NATIONAL AI POLICY FOR SCIENCE, RESEARCH AND INNOVATION

ANNEX 3: POLICY IMPLEMENTATION MATRIX

State Department for Science, Research and Innovation

This matrix translates the policy statements in Chapter 3 into actionable strategies, assigns institutional responsibilities, establishes timelines aligned to the three implementation phases, specifies resource requirements, and defines measurable performance indicators.

Policy Area	Policy Statement	Key Interventions	Lead Institution	Collaborating Institutions	Timeline / Phase	Resource Requirements	Expected Output / Outcome	Performance Indicator
Ethical , Inclusive and Responsible AI for SRI								
Strengthen AI Governance and Regulatory Frameworks	The government shall ensure that all AI systems in scientific research and innovation are developed, deployed and used responsibly, upholding ethical standards, protecting privacy, promoting fairness and inclusivity, and ensuring accountability.	Develop and adopt a National AI Ethics Code for academia	SDSRI / NACOSTI	Universities, Research Institutes, Ethics Boards	Phase 1 (Yrs 1–2)	Budgetary allocation; Consultant support	National AI Ethics Code adopted across all research institutions	% of institutions adopting the AI Ethics Code
—	—	Mandate ethic and social impact assessments for all AI research projects	NACOSTI / Institutional AI Committees	SDSRI, NRF, Universities	Phase 1 (Yrs 1–2)	Training resources; Review board operational budget	Ethics review process operational in all institutions	AI projects that have undergone ethical assessment
—	—	Implement transparency documentation including explainability and decision-logging for AI models	NCAIR	NACOSTI, Universities, Private Sector	Phase 2 (Yrs 3–5)	Technical infrastructure; HRD	Standardised transparency frameworks in use	AI models with published transparency reports

Policy Area	Policy Statement	Key Interventions	Lead Institution	Collaborating Institutions	Timeline / Phase	Resource Requirements	Expected Output / Outcome	Performance Indicator
	—	Establish independent ethics review boards at universities and research institutes	SDSRI / Universities	NACOSTI, Civil Society	Phase 1 (Yrs 1–2)	Operational funds; Capacity building	Functional ethics boards in all major research institutions	active institutional ethics review boards
	—	Conduct periodic audits of AI systems for bias, safety, and ethical compliance	NACOSTI / NC-AI	NCAIR, Institutional AI Committees	Phase 2–3 (Yrs 3–10)	Audit tools; Expert personnel	Regular audit cycle established and reported	audits conducted annually; % of non-compliant systems corrected
	—	Promote participation of women and youth in AI research programs	SDSRI / State Dept. for Gender	Universities, NACOSTI, Civil Society	Phase 1–3 (ongoing)	Targeted scholarship funding; Outreach budget	Increased female and youth enrolment in AI programs	% of women in AI research programs; % youth participation
	—	Integrate gender and social inclusion into AI datasets and algorithms	NCAIR / NACOSTI	Universities, Civil Society, Development Partners	Phase 2 (Yrs 3–5)	Technical support; Training resources	Gender-disaggregated and inclusive AI datasets	# of AI datasets with documented inclusion safeguards
	—	Ensure equitable access to AI research infrastructure across all regions	SDSRI / ICT Authority	County Governments, Universities	Phase 2–3 (Yrs 3–10)	Infrastructure decentralisation budget	Regional AI infrastructure access points established	# of counties with access to AI research infrastructure
Governance of AI in Science, Research and innovation								
Strengthen Governance Regulatory Frameworks	AI and The Government shall ensure the AI research and AI in science, research and innovation operate under coherent and robust governance arrangements that ensure compliance with national laws,	Establish the National Multiagency Steering Committee on AI for Science, Research and Innovation (NMSCASRI)	SDSRI	NACOSTI, NRF, KENIA, Universities, Private Sector	Phase 1 (Yrs 1–2)	Legal/policy framework; Secretariat budget	National Council on AI (NC-AI) operational	NC-AI meetings held; # of policy decisions made
”	—	institutions to develop AI governance committees	SDSRI / NACOSTI	Academia/ TVET; MDCAs, Private sector	Phase 1 (Yrs 1–2)	Institutional operational funds	Functional AI Governance Committees in all institutions	institutions with operational AI governance committees

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”	—	Introduce AI project classification systems based on risk (low, medium, high)	NACOSTI / NMSCAISRI	NCAIR, Institutional AI Committees	Phase 1 (Yrs 1–2)	Technical expertise; Regulatory support	Risk classification framework in use	AI projects classified and governed appropriately
”	—	Develop legal and regulatory guidelines aligned with the DPA, IP law, and international standards	SDSRI / AG's Office	NACOSTI, CAK, KEBS, DPA	Phase 1–2 (Yrs 1–5)	Legal expertise; Consultation processes	Comprehensive AI legal framework in place	regulatory guidelines developed and adopted
AI Infrastructure for Scientific Research and Innovation								
Develop and Strengthen AI Infrastructure and Data Ecosystems	Kenya shall establish world-class AI research infrastructure to enable advanced computation, big data analytics, and innovative research.	Establish AI Supercomputing Centres in key research institutions	SDSRI / NCAIR	Universities, ICT Authority, Private Sector	Phase 1–2 (Yrs 1–5)	Capital budget; PPP financing	At least 3 AI Supercomputing Centres operational	# of HPC centres established; % uptime
	—	Develop shared GPU clusters accessible to universities, research labs, and innovation hubs	NCAIR	ICT Authority, Universities, Private Sector	Phase 2 (Yrs 3–5)	Infrastructure capital; Technical HR	Shared GPU infrastructure accessible to all public universities	# of institutions with GPU cluster access; usage rate
	—	Create a National Research Cloud for secure scientific dataset storage and sharing	SDSRI / ICT Authority	KNBS, NCAIR, Universities	Phase 2 (Yrs 3–5)	Cloud infrastructure funding; Cybersecurity budget	Operational National Research Cloud	# of datasets hosted; # of institutions using the cloud
	—	Invest in renewable and energy-efficient computing infrastructure	SDSRI / NCAIR	Ministry of Energy, Private Sector	Phase 2–3 (Yrs 3–10)	Green energy investment; PPP	Sustainable AI infrastructure with reduced carbon footprint	% of AI infrastructure powered by renewable energy
Capacity Building and Skills Development								
Enhance AI Research Capacity and Human Capital Development	Kenya shall build a highly skilled workforce capable of	Integrate AI modules into undergraduate	State Dept. for Higher Education	SDSRI, Universities, Private Sector	Phase 1 (Yrs 1–2)	Curriculum dev. budget; Faculty training	AI curricula integrated in at least 20 universities	# of universities with AI in curriculum; # of graduates

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	designing, developing, and deploying AI in diverse research domains.	and postgraduate STEM curricula						
	—	Launch a National AI Fellowship and Scholarship Program	SDSRI / NRF	Universities, Development Partners	Phase 1–2 (Yrs 1–5)	Scholarship fund; Donor co-financing	At least 500 AI fellows and scholars supported annually	# of scholarships awarded; # of research outputs
	—	Establish AI Centres of Excellence in leading universities and research institutes	SDSRI / NCAIR	Universities, Private Sector, Development Partners	Phase 2 (Yrs 3–5)	Capital and operational grants	At least 5 operational AI Centres of Excellence	# of CoEs established; # of researchers trained
	—	Conduct continuous professional development programs for academic staff	SDSRI / NACOSTI	Universities, NCAIR, Private Sector	Phase 1–3 (ongoing)	Training budget; Facilitator fees	Increased AI competency among researchers	# of researchers trained annually; pre/post competency scores
	—	Encourage industry-led mentorship and internship programs in AI research	SDSRI / Private Sector	Universities, NACOSTI, KENIA	Phase 2 (Yrs 3–5)	PPP financing; MOU facilitation	Structured industry-academia AI mentorship program in place	# of internships/mentorships created per year
	—							
Public-Private Partnerships (PPPs)								
Public-Private Partnerships	Kenya shall foster collaborative partnerships between public institutions, industry, and civil society to accelerate AI-enabled scientific discovery.	Facilitate joint AI research programs between universities and private AI companies	SDSRI / NACOSTI	Universities, Private Sector, KENIA	Phase 1–2 (Yrs 1–5)	PPP facilitation funds; MOU framework	Functional joint research programs established	# of joint university-industry AI research projects

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Public-Private Partnerships	—	Establish co-creation platforms for AI-based scientific solutions	SDSRI / NCAIR	Universities, Private Sector, NGOs	Phase 2 (Yrs 3–5)	Platform development; Operational budget	Operational co-creation hubs	# of AI solutions co-created and published
Public-Private Partnerships	—	Support commercialisation of AI research through technology transfer offices (TTOs)	Universities / NRF	SDSRI, KEBS, Private Sector	Phase 2–3 (Yrs 3–10)	TTO operational budget; Legal support	Active TTOs in major research institutions	# of AI patents filed; # of technologies transferred
Promotion of AI Innovation and Commercialisation								
Promote AI-Driven Research, Innovation, and Commercialization	The Government shall promote innovation, entrepreneurship, and commercialisation of AI research outputs to enhance socio-economic impact.	Launch national AI research competitions and innovation challenges	SDSRI / NCAIR	NRF, Universities, Private Sector	Phase 1–3 (annual)	Prize funds; Coordination budget	Annual AI innovation challenges held	# of competitions held; # of innovations generated
	—	Provide grants and seed funding for AI-based startups from research institutions	NRF / SDSRI	Development Partners, Venture Capital, KENIA	Phase 2 (Yrs 3–5)	Dedicated AI startup grant fund	AI startup grant programme operational	# of AI startups funded; # of jobs created
	—	Strengthen IP frameworks to protect AI-generated discoveries and facilitate patenting	Kenya Industrial Property Institute / SDSRI	Universities, KEBS, Legal experts	Phase 1–2 (Yrs 1–5)	Legal and technical support	Robust AI IP framework in place	# of AI patents filed annually; turnaround time
Funding and Resource Mobilization								
Funding and Resource Mobilisation	The Government shall establish a robust, sustainable, and diversified resource mobilization framework to accelerate the development, deployment, and scaling of Artificial	Increased government funding allocation to AI SRI programmes	SDSRI/ National Treasury	Government funding	Phase 1 (Yrs 1–2)	Seed government allocation; Donor co-financing	Increased and more predictable public funding	Ksh value of AI Research Fund;

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	Intelligence in Science Research and Innovation.							
	—	Establish a dedicated AI Research and Innovation Grant	SDSRI / National Treasury	NRF, Development Partners	Phase 1 (Yrs 1–2)	Seed government allocation; Donor co-financing	National AI Research Fund operational	Ksh value of AI Research Fund; disbursement rate
	—	Promote public-private and development partners co-financing models for AI research	SDSRI / NRF	Private Sector, Development Partners	Phase 2 (Yrs 3–5)	Matching grant framework	PPP co-financing mechanisms in place	Ksh value of private co-financing leveraged annually
	—	Introduce tax incentives and risk sharing instruments	National Treasury / SDSRI	Parliament, NRF	Phase 1 (Yrs 1–2)	Budget policy review; Advocacy	Enhanced private sector participation and investment in AI innovations	% of STI budget allocated to AI research annually
	—	Facilitate access to venture capital and grants for AI startups from research	SDSRI / KENIA	NRF, Private Sector, Development Partners	Phase 2–3 (Yrs 3–10)	Fund facilitation; Ecosystem support	AI startup financing ecosystem active	# of AI startups accessing VC/grants per year