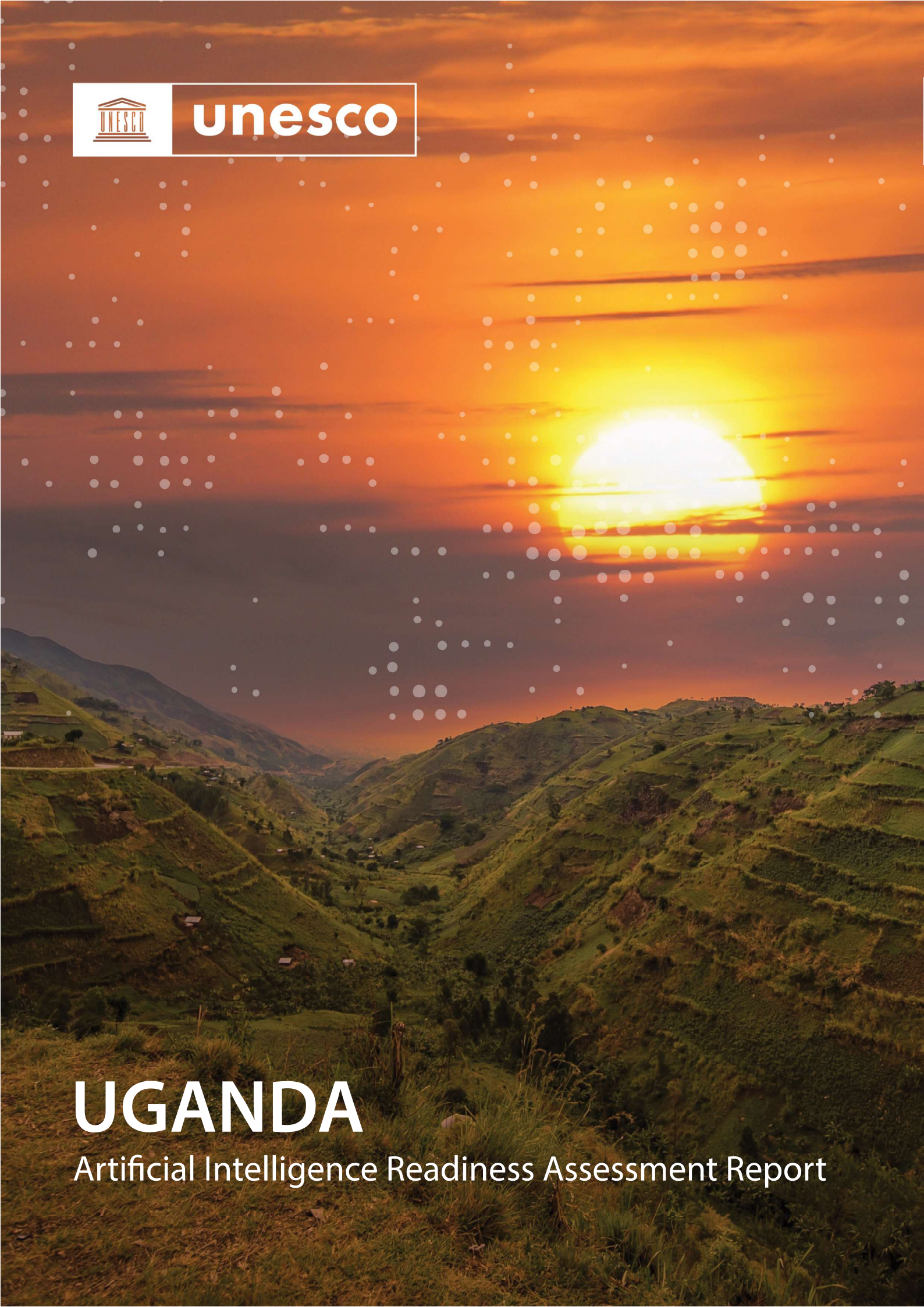


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UGANDA

Artificial Intelligence Readiness Assessment Report

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ACRONYMS AND ABBREVIATIONS

4IR	Fourth Industrial Revolution
AI	Artificial Intelligence
ARIPO	African Regional Intellectual Property Organization
ATMs	Agro-Industrialisation, Tourism Development, Mineral-based Industrialisation, and Science, Technology and Innovation
AU	African Union
CIPESA	Collaboration on International ICT Policy for East and Southern Africa
CSO	Civil Society Organisation
DHIS2	District Health Information Software 2
DPPA	Data Protection & Privacy Act
EAC	East African Community
EASTECO	East African Science and Technology Commission
EDGI	E-Government Development Index
e-GIF	Uganda e-Government Interoperability Framework
EIA	Ethical Impact Assessment
EMIS	Education Management Information System
EMRS	Electronic Medical Records System
EOC	Equal Opportunities Commission
EPI	E-Participation Index
ESG	Environmental, Social, and Governance
ESIA	Environmental and Social Impact Assessment
FGD	Focus Group Discussion
FITSPA	Financial Technology Service Providers Association of Uganda
FPIC	Free, Prior, and Informed Consent
GDP	Gross Domestic Product
GERD	Gross Expenditure on Research and Development
GII	Global Innovation Index
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GNI	Gross National Income
HIDH	Health Information and Digital Health
HMIS	Health Management Information System

HPC	High-Performance Computing
ICT	Information and Communications Technology
IoT	Internet of Things
IP	Intellectual Property
ISO	International Organization for Standardization
ITU	International Telecommunications Union
IPv6	Internet Protocol Version 6
KMC	Kiira Motors Corporation
LGs	Local Governments
LLMs	Large Language Models
MDAs	Ministries, Departments and Agencies
MIL	Media and Information Literacy
MoES	Ministry of Education and Sports
MoICT&NG	Ministry of ICT and National Guidance
MoJCA	Ministry of Justice and Constitutional Affairs
MoFPED	Ministry of Finance, Planning and Economic Development
NDA	National Drug Authority
NDPIV	Fourth National Development Plan
NEA	National Environment Act
NEMA	National Environment Management Authority
NISF	National Information Security Framework
NITA-U	National Information Technology Authority Uganda
ODIN	Open Data Inventory
ODRA	Open Data Readiness Assessment
OGD	Open Government Data
OPM	Office of the Prime Minister
OSI	Online Services Index
PDPO	Personal Data Protection Office
PISA	Programme for International Student Assessment
PPDA	Public Procurement and Disposal of Public Assets
PUE	Power Usage Effectiveness
PWDs	Persons With Disabilities

RAM	Readiness Assessment Methodology
REDD+	Reducing Emissions from Deforestation and Forest Degradation (Plus)
RENU	Research and Education Network for Uganda
REP	Renewable Energy Policy
SDG	Sustainable Development Goals
SLMs	Small Language Models
SPI	Statistical Performance Indicators
STEI	Science, Technology, Engineering and Innovation
STEM	Science, Technology, Engineering, and Mathematics
STI	Science, Technology and Innovation
TVET	Technical and Vocational Education and Training
UBOS	Uganda Bureau of Statistics
UCC	Uganda Communications Commission
UFZEPA	Uganda Free Zone and Export Promotion Authority
UNCST	Uganda National Council for Science and Technology
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNBS	Uganda National Bureau of Standards
UNICEF	United Nations Children's Fund
URSB	Uganda Registration Services Bureau
UTAMU	Uganda Technology and Management University
WIPO	World Intellectual Property Organization
WITU	Women in Technology Uganda
WMR	Waste Management Regulation
WOUGNET	Women of Uganda Network



FOREWORD

Artificial intelligence is not a new phenomenon. AI systems have been developed and used for decades. Recent advances in AI, including increasingly powerful and widely accessible systems, are accelerating the pace and scale at which these technologies are developed and deployed. AI is becoming more prevalent in many aspects of our lives, from how societies function and economies evolve to how people access information and services. This is opening new possibilities across education, sciences, culture and more.

But in its current form, these opportunities are not equally accessible. AI can reinforce existing inequalities and introduce new forms of exclusion or discrimination. In an increasingly connected world, we cannot overlook that around a quarter of the world's population still lacks adequate internet access. Upstream, AI development remains highly centralised, with investment, computing infrastructure and advanced AI capabilities concentrated among a relatively small number of companies in a few countries. This distribution risks widening existing inequalities in who can access and benefit from AI. This current landscape shapes not only who captures the economic value of AI, but also whose priorities and perspectives are reflected in the technologies that increasingly influence societies around the world. Non-diverse AI teams, unrepresentative datasets, and opaque and biased algorithms can cause harm, particularly to those who are already vulnerable, whether companies or individuals, children and young people, women, indigenous people, or entire democracies. At the same time, AI technologies offer significant potential to advance human knowledge, opening new research capabilities and approaches, and creating new opportunities for people and societies.

That is why UNESCO developed the Recommendation on the Ethics of Artificial Intelligence, adopted in 2021 by 193 countries, to provide a shared framework for ensuring that AI contributes to the good of humanity, individuals, societies and the environment. The Recommendation is grounded in four core values: respecting and promoting human dignity and human rights; fostering just, peaceful and interconnected societies; ensuring diversity and inclusiveness; and supporting the flourishing of the environment and ecosystems. It also sets out concrete policy actions that governments can draw on to steer technological developments in a responsible direction.

Experience has shown that relying primarily on self-regulation is not enough. We need capable governments that are well-equipped, in terms of competencies, institutions, and laws, to frame responsible AI development and protect the rule of law online – and offline. Supervisory authorities must also have the knowledge and tools to keep pace with rapidly evolving technologies, while leaving room for responsible innovation. Civil society organisations have an important role to play in bringing diverse perspectives into AI governance, raising concerns about its impacts and helping ensure that the voices of affected communities are heard. The Recommendation calls for the engagement of all stakeholders, including the public and private sectors, civil society, academia and research institutions, recognising that different actors have different responsibilities across the AI lifecycle. Public and private actors involved in the development and deployment of AI must, in turn, act responsibly and respect human rights and the principles set out in the Recommendation.

The Readiness Assessment Methodology (RAM) is a diagnostic tool intended to assist Member States in upholding their commitment to the Recommendation by helping them understand how prepared they are to implement AI ethically and responsibly in their national context. No two countries start from the same point, and readiness is not a destination reached once and for all. The RAM helps countries take stock of where they stand, identify areas requiring attention, and consider where investment in policy and institutional capacity can have the greatest impact. By highlighting gaps and challenges, but also strengths and opportunities, it provides a basis for setting priorities and for UNESCO to tailor its support for national needs.

Uganda's AI landscape is at an early but rapidly evolving stage, characterised by institutional growth, a vibrant research ecosystem, and a growing number of practical AI applications across domains such as health, agriculture, language technology, fintech, and environmental monitoring. Uganda's research community has produced work in health, agriculture, language technology, and environmental monitoring. At the international level, Uganda is engaged across multiple forums, from the African Union's Continental AI Strategy and the Africa Declaration on AI to ISO Global AI Standards Development group and the ITU's AI for Good initiative, reflecting a breadth of engagement.

However, the RAM assessment also reveals significant and urgent gaps. Uganda does not have yet a comprehensive, AI-specific legal or regulatory framework. The national AI strategy remains in draft, no independent AI oversight body exists, and existing instruments such as the Data Protection and Privacy Act were not designed with AI in mind and leave important questions, such as algorithmic transparency, automated decision-making rights, and AI-specific data governance, which are unaddressed. Uganda lacks dedicated mechanisms to monitor or redress AI-related gender harms. The Copyright Act is the primary instrument protecting the rights of Uganda's musicians, writers, filmmakers, visual artists, and other creators. However, AI ethics provisions were excluded from the Copyright and Neighbouring Rights (Amendment) Act signed into law in 2026. This exclusion leaves Uganda's creative community exposed to exploitation at a moment when (Generative) AI tools are most rapidly advancing. The health sector presents a particularly significant and urgent governance gap. While Uganda has developed AI applications in health, none of these deployments is governed by AI-specific binding instruments. None of the existing health guidelines address AI procurement standards, mandatory clinical validation requirements for AI diagnostics, algorithmic bias testing on Ugandan patient populations, or patient rights to be informed when AI systems contribute to clinical decisions affecting their care.

The RAM 2.0 process therefore identifies two priority recommendations. Uganda needs to finalise and adopt its National AI and Emerging Technologies strategy ensuring that it embeds human rights safeguards, a risk-based governance approach, and mandatory ethical impact assessment requirements for AI deployments across health, education, public services and other critical sectors. Furthermore, the Data Protection and Privacy Act should be amended to explicitly address AI, automated decision-making, and algorithmic transparency, and a national AI-ready data governance framework be established covering interoperability, open data, and secure access for AI research led by the Personal Data Protection Office and National Information Technology Authority Uganda. Together, these two steps would provide Uganda with the legal foundation and data infrastructure to enable the development of an ethical, inclusive, and sustainable AI ecosystem. Finally, AI literacy should be integrated across educational curricula at all levels. This will not only strengthen and increase knowledge and trust in AI systems but also increase participation of vulnerable communities for example women in AI.

Overall, this report presents a fundamentally optimistic vision that we at UNESCO share: that ethical governance and responsible AI regulation are necessary and consistent with innovation and are essential for ensuring a technological ecosystem that benefits the public good. This RAM report provides Uganda with a basis for deciding where to focus its efforts and how to move forward.

It was a pleasure working with the Government Uganda to conduct this exercise. We are grateful for their engagement with the RAM and for the openness and commitment demonstrated throughout the process. UNESCO looks forward to continuing to accompany Uganda as it builds on these findings and advances towards an AI ecosystem that serves its people and contributes to sustainable development.

Abou Amani
Assistant Director-General ad interim for Social and Human Sciences, UNESCO



FOREWORD

By the Minister of ICT and National Guidance

It is with great pleasure that I present the Uganda Artificial Intelligence (AI) Readiness Assessment Report, prepared through UNESCO's Readiness Assessment Methodology (RAM). This Report marks an important milestone in Uganda's journey to harness the transformative power of AI in a manner that is ethical, inclusive, secure, and firmly anchored in our national values and development aspirations.

Across the globe, Artificial Intelligence is rapidly redefining human capability. Uganda cannot risk being left behind. AI presents a strategic opportunity to advance the goals of Vision 2040, the Fourth National Development Plan (NDP IV) 2025/26–2029/30, the Tenfold Growth Strategy, and the Digital Transformation Roadmap 2023/24–2027/28, all of which recognise digital technologies as central drivers of socio-economic transformation.

Yet, without appropriate guidance and governance, AI may also reproduce and amplify the structural inequities that Uganda and the wider Global South continue to confront. Development teams that lack diversity, unrepresentative datasets, opaque algorithms, and unequal access to digital infrastructure risk deepening existing digital divides, undermining cultural heritage, and marginalising vulnerable communities, particularly women, youth, persons with disabilities, and rural populations.

Uganda fully embraces the principles underpinning the UNESCO Recommendation on the Ethics of Artificial Intelligence, adopted by 193 Member States in 2021, and recognises that light-touch regulation and unguided market forces alone are insufficient to ensure that AI serves the public interest. To realise the promise of AI and emerging technologies, Uganda requires capable and well-equipped institutions, supported by robust legal and regulatory frameworks, agile governance systems, and specialised public-sector competencies. These capabilities are essential to steering innovation towards the protection of human rights, transparency, equity, inclusion, accountability, and the public good.

This Readiness Assessment Report represents a significant step in the country's national AI journey. Building on the earlier National AI Landscape Assessment Report, this diagnostic evaluation provides an evidence-based assessment of Uganda's existing strengths, critical systemic gaps, and immediate operational priorities as the country seeks to develop and deploy AI ethically, responsibly, and inclusively. Uganda now joins Kenya, Mauritius, Rwanda, and Tanzania among Eastern African States that have completed this assessment, contributing to a shared regional evidence base and to the harmonisation of AI governance approaches under the East African Community AI Strategy.

The findings of this Report have significantly informed Uganda's National AI and Emerging Technologies Strategy, which is currently being finalised under the guidance of the National AI Task Force established by Government. We share UNESCO's fundamentally optimistic conviction that ethical governance and responsible regulation do not impede innovation; rather, they are essential to building the trust, legitimacy, and sustainability upon which innovation depends.

In direct response to the findings and priorities identified through this assessment, the Government of Uganda is committed to moving swiftly from assessment to strategy, and from strategy to implementation. Guided by the priority pathway set out in this Report, the Government commits to:

1) Finalising and adopting the National AI and Emerging Technologies Strategy: The Strategy embeds human rights safeguards, a defined risk-based governance architecture, and a deliberate commitment to promoting Ethical Impact Assessments (EIAs) for high-impact and critical public-sector AI deployments.

2) Updating legislative and data governance frameworks: Uganda will strengthen its data governance environment, including the review and updating of relevant provisions of the Data Protection and Privacy Act, 2019, and advance the development of an AI-ready framework for responsible data access, sharing, interoperability, and open data.

3) Strengthening sector-specific safeguards and inclusive AI literacy: The Government will promote appropriate standards for the procurement, validation, deployment, and monitoring of high-impact AI systems, including AI-enabled health diagnostics. It will prioritise safeguarding Uganda's linguistic, cultural, and creative assets from unauthorised extraction and exploitation, while expanding AI literacy across all levels of education and throughout the public sector. These efforts will be essential to building public trust, strengthening institutional capacity, and ensuring that Ugandans are empowered to participate meaningfully in the digital and AI economy.

This Readiness Assessment Report provides Uganda with a clear baseline and an actionable roadmap. Its value, however, will ultimately be measured by the extent to which its findings are translated into coordinated action, institutional reform, investment, and measurable improvements in the responsible use of AI and emerging technologies.

Uganda will invest in this agenda from its own means. We are equally clear, however, that the scale and pace of what is required call for partnership, particularly in equipping our people with AI skills and in securing the computing infrastructure on which research and innovation depend. Investment in Uganda's AI capability is an investment in the talent and enterprise of a young and ambitious nation.

I extend my sincere appreciation to UNESCO for its technical leadership, to the Government and People of Japan for their generous support to this process, and to all institutions and individuals whose contributions have enriched this assessment.

I therefore invite all sector players, multilateral and development partners, international financing institutions, regional coalitions, academic and research institutions, civil society organisations, and innovators to join hands with the Government of Uganda as we build an ethical, inclusive, innovative, and world-class digital future for all.

Rt. Hon. Justine Kasule Lumumba
Minister of ICT and National Guidance



FOREWORD

By the Permanent Secretary, Ministry of ICT and National Guidance

It is my privilege to present Uganda's Artificial Intelligence (AI) Readiness Assessment Report, developed under UNESCO's Readiness Assessment Methodology (RAM) and coordinated by the Ministry of ICT and National Guidance. As the technical lead for Uganda's digital transformation agenda, the Ministry undertook this assessment to establish a rigorous, evidence-based baseline of the country's preparedness to develop, deploy, and govern AI in a responsible, ethical, secure, and inclusive manner.

UNESCO's RAM is the principal instrument supporting implementation of the UNESCO Recommendation on the Ethics of Artificial Intelligence, and its deployment is mandated by the Recommendation itself. Its application in Uganda involved a comprehensive diagnosis of the national AI ecosystem across the five RAM dimensions, namely legal and regulatory; social and cultural; economic; scientific and educational; and technical and infrastructural. The assessment was led by the UNESCO Lead National Expert, Dr. Joyce Nakatumba-Nabende, and her team at the Makerere University Centre for Artificial Intelligence. Oversight on behalf of Government was exercised by the National AI Task Force, which served as the national Steering Committee for the exercise, with coordination provided by the Ministry's Department of Research and Development and the Task Force Secretariat. The process was informed by rigorous desk research, multi-stakeholder consultations, expert engagements, and nationwide validation workshops.

Importantly, the assessment was conducted concurrently with the development of Uganda's National AI and Emerging Technologies Strategy and of the East African Community AI Strategy. This convergence created a valuable opportunity to ensure that the evidence and diagnostic insights generated through the RAM directly informed national policy and implementation priorities, while positioning Uganda's AI governance architecture within emerging regional and global norms from the outset. Uganda's assessment also forms part of a wider Eastern Africa cohort, RAM exercises having been completed by Kenya, Mauritius, Rwanda, and Tanzania, and being under way in Ethiopia, Comoros, and Somalia. Uganda's findings therefore contribute to a growing regional evidence base and support the harmonisation of AI governance approaches among East African Community Partner States.

The assessment confirms that Uganda possesses important technical, institutional, and human-capital foundations upon which a responsible, innovative, and locally responsive national AI ecosystem can be built. The Data Protection and Privacy Act, 2019 established early and important safeguards for personal data. The country has also made significant progress in digital infrastructure and interoperability: the e-Government Interoperability Framework and the UGhub integration platform provide an important foundation for secure and seamless data exchange, connecting 146 public and private institutions. Uganda hosts a vibrant AI research community developing solutions in health, agriculture, and local language technologies. In addition, the National Green Data Centre Strategy and Guidelines, together with an electricity generation mix that is approximately 87 per cent renewable, position the country well to host sustainable computing capacity.

Uganda also continues to engage actively with international AI governance and standardisation processes. The country's membership of the Global Network on AI Supervision (GNAIS), a forum of competent supervisory authorities convened by UNESCO, and its technical participation in the International Organization for Standardization and International Electrotechnical Commission Joint Technical Committee 1, Subcommittee 42 on Artificial Intelligence (ISO/IEC JTC 1/SC 42)—including work on ISO/IEC 42001 on Artificial Intelligence Management Systems—demonstrate Uganda's commitment to both contributing to and learning from global efforts to develop trustworthy, responsible, and interoperable AI governance frameworks. As a further demonstration of this commitment, the Government of Uganda has supported ten officials from key Ministries, Departments and Agencies to qualify as certified Lead Implementers of the ISO/IEC 42001 Artificial Intelligence Management System (AIMS) standard, strengthening national capacity for the responsible implementation of AI management standards across the public sector.

While recognising these strengths, the Report is equally candid about the systemic gaps that require immediate operational, institutional, and legislative attention. Existing legal and regulatory instruments, including the Data Protection and Privacy Act, 2019, were not originally designed to address the full range of challenges associated with AI. Important areas requiring further policy and regulatory development include algorithmic transparency, automated decision-making, accountability for high-impact AI systems, and specialised mechanisms for AI oversight and supervision. The assessment also identifies critical gaps in high-performance computing capacity, data quality and availability, broadband affordability, research infrastructure, and specialised AI skills within the public sector. Addressing these challenges will require coordinated, sustained, and adequately resourced interventions involving government, academia, the private sector, civil society, development partners, and other stakeholders.

The Ministry is committed to translating the findings of this Report into action through four interconnected priorities, fully cognisant that their successful implementation will require strong partnerships and sustained collaboration.

First, legal and regulatory reform: The Ministry will support the review and strengthening of existing legal and regulatory instruments to incorporate AI-specific provisions and safeguards. This will include requirements for Ethical Impact Assessments (EIAs) for high-impact deployments, appropriate bias-mitigation measures, transparency and accountability requirements, and ethical and responsible AI procurement standards for the public sector.

Second, institutional coordination and oversight: The Ministry will strengthen and operationalise clear coordination and oversight mechanisms across Ministries, Departments, and Agencies (MDAs). This will help to minimise fragmented interventions and ensure that national AI development is guided by common principles, standards, institutional responsibilities, and strategic priorities.

Third, infrastructure and capability development: Uganda will prioritise investment in sustainable high-performance computing infrastructure, secure and interoperable data systems, open government data repositories, and the digital upskilling of the public service. These investments will be essential to strengthening national capacity to develop, evaluate, deploy, and govern AI systems that respond to Uganda's development priorities.

Fourth, financing and economic measurement: The Ministry will work with relevant stakeholders to strengthen mechanisms for increasing domestic investment in research and development, and to develop appropriate approaches for measuring AI's contribution to productivity, innovation, employment, public service delivery, and the wider national economy.

Two of these priorities will determine, more than any others, how quickly Uganda converts readiness into capability, and in both the Ministry actively seeks partnership. The first is skilling: building a critical mass of AI expertise within the public service, in our universities and technical institutions, and across the wider workforce, together with the training of regulators and supervisory authorities who must oversee these systems. The second is compute: access to the high-performance computing capacity, cloud resources, and research infrastructure without which our researchers and innovators cannot develop AI solutions in and for Uganda, particularly for our own languages and priority sectors. We therefore welcome the engagement of UNESCO and of our development, academic, and private-sector partners in these areas—through technical assistance, capacity development, co-investment in shared computing and data infrastructure, fellowships and exchange, and support for the implementation of the recommendations set out in this Report. Uganda offers, in return, an engaged national AI community, an established coordination structure, and a demonstrated commitment to ethical and inclusive AI governance.

I extend my sincere appreciation to UNESCO Headquarters and the UNESCO Regional Office for Eastern Africa in Nairobi; to our Lead National Expert, Dr. Joyce Nakatumba-Nabende, and her dedicated team; to the Uganda National Commission for UNESCO; to the members of the National AI Task Force; and to the Government and People of Japan for their generous financial support through the Japan Funds-in-Trust.

The publication of this Report marks not the conclusion of an assessment, but the beginning of an operational transition. Its true value will be realised through the extent to which its findings are translated into institutional reforms, strengthened digital infrastructure, expanded research and innovation, improved public-sector capability, and measurable benefits for the people of Uganda.

I therefore call upon technical officers across Government, academic and research institutions, civil society organisations, private-sector innovators, development partners, and international stakeholders to join the Ministry in translating this evidence into coordinated action. Together, we can build the institutional capabilities, digital infrastructure, human capital, and governance systems required to ensure that AI contributes meaningfully to Uganda's development and serves the interests of all Ugandans.

Dr. Aminah Zawedde

Permanent Secretary, Ministry of ICT and National Guidance

EXECUTIVE SUMMARY

Uganda is taking an important stand in shaping the ethical governance of Artificial Intelligence (AI). There have been initiatives driven by the government of Uganda through its Digital Transformation Roadmap 2023/24-2027/2028 to enhance digital infrastructure and connectivity, and to promote digital services among other pillars. The digital transformation is also aligned with Uganda's Fourth National Development Plan (NDPIV) 2025/26 - 2029/2030, which aims to accelerate Uganda's socio-economic transformation. Digital transformation is accelerating across various sectors in Uganda, including public service, the private sector, and academia. Therefore, there is a need to support the collection, curation, storage, and use of data from these sectors for decision-making, by using technologies such as AI. AI technologies must be adopted, developed, deployed and used responsibly, inclusively, and in alignment with international and regional standards on human rights and adhering to Uganda's national values and priorities.

In November 2021, the 193 Member States of UNESCO, including Uganda, adopted the Recommendation on the Ethics of Artificial Intelligence, establishing the first global framework that aims to guide countries in harnessing AI for the good of humanity, individuals, societies, the environment and the ecosystem and more importantly, to prevent harm from AI systems. The recommendations provide a globally accepted standard with values and principles to ensure the adoption, development and deployment of AI technologies in ways that uphold human rights and democratic values, and for the design of resources to support effective implementation, notably the Readiness Assessment Methodology (RAM) and the Ethical Impact Assessment (EIA), two essential actionable tools of the Recommendation.

The implementation of the RAM in Uganda consists of three stages:

- Diagnosis of Uganda's AI Landscape;
- Results from the National AI Multi-Stakeholder Consultations; and
- A Roadmap with Main Policy Recommendations

In this context, Uganda's commitment to undergo, through the Ministry of ICT and National Guidance, the UNESCO AI Readiness Assessment Methodology (RAM) presents an opportunity to examine the country's legal, sociocultural, educational, scientific, economic, and technical and infrastructural preparedness for the responsible and ethical adoption of AI.

This assessment will support the Government of Uganda and key national stakeholders in identifying existing strengths, gaps, and opportunities, as well as in setting actionable priorities across key policy domains, including: Ethical Governance, Stewardship and Impact Assessment; Data; Development and International Collaboration; Environment and Ecosystems; Gender; Culture; Education and Research; Communications and Information; Economy and Labour; Health and Social Well-being; and Technical Infrastructure, to build a trustworthy AI ecosystem aligned with the UNESCO Recommendation. This will allow reviewing what frameworks, capacities and competencies exist to support the ethical adoption, development, deployment and use of AI, while also providing informed policy recommendations to support a country-wide report and roadmap.

Ethical Governance, Stewardship and Impact Assessment: The RAM 2.0 process for Uganda is deployed at a moment where the Government has embarked on the development of a National AI & Emerging Technologies Strategy supported by the World Bank, including the setting up of a National AI Task Force to oversee this process, and in a sub-regional context where the East African Community (EAC) is developing its EAC AI Strategy. At the time of the development and publishing of this report, this process was still ongoing, with a Zero Draft under preparation and a validation workshop planned for May 2026.

Existing legal instruments, including the Data Protection and Privacy Act (GoU 2019), the Computer Misuse Act (MoICT&NG 2011a), and the Uganda Communications Act (GoU 2013), were not designed with AI in mind and leave critical aspects of AI governance unaddressed, including algorithmic transparency, automated decision-making rights, mandatory disclosure when AI systems affect individuals, and AI-specific procurement standards. No independent AI oversight body currently exists, and no mandatory ethical impact assessment framework has been established for high-risk AI deployments. Uganda is actively building these capacities, but the governance infrastructure has not yet kept pace with AI adoption.

Data: Uganda has meaningful data governance foundations including, the Data Protection and Privacy Act, the Uganda e-Government Interoperability Framework (NITA-U 2021), and the UGhub data integration platform now connecting over 146 public and private institutions, but these instruments were not designed for use of AI. The DPPA's individual consent model cannot accommodate the collective nature of community data, does not govern the use of training data and contains no AI-specific provisions on automated decision-making or algorithmic accountability. An Open Government Data policy has been in draft for over a decade without adoption, and while the SDG Open Data Portal now tracks over 169 targets and 232 indicators (OPM & UBOS 2025), data quality gaps and the absence of machine-readable open licensing limit its value for AI development. On information integrity, Uganda lacks specific legislation addressing AI-generated disinformation, deepfakes, or synthetic electoral content. Monitoring of AI-driven online harms relies entirely on civil society organisations such as CIPESA and Pollicy, without government mandate.

Development and International Collaboration: Uganda has shown active participation in international and regional AI governance bodies. At the international level, Uganda is engaged across multiple forums such as the such as the UN Independent International Scientific Panel on AI, ISO Global AI Standards Development group and ITU's AI for Good initiative. The participation at the regional level ranges from the African Union's Continental AI Strategy and the Africa Declaration on AI, reflecting a breadth of engagement.

Environment and Ecosystems: Uganda's environmental policy framework which is anchored in the National Environment Act (NEMA 2019) and the National Environment (Environmental and Social Assessment) Regulations of 2020 Environmental and Social Impact Assessment Regulations (GoU 2020), provides a foundation for environmental governance, but was not designed to address the specific environmental footprint of AI systems and digital infrastructure. A significant step forward is the Uganda National Green Data Centre Strategy and Guidelines (MoICT and NG & ITU 2025c), which provide guidelines for energy-efficient, low-carbon digital infrastructure and establish Power Usage Effectiveness targets for data centres. Beyond promoting energy-efficient computing infrastructure, Uganda should adopt a holistic approach to environmentally sustainable AI across the technology lifecycle. This includes encouraging renewable-energy-powered computing, circular economy approaches for ICT equipment, responsible electronic waste management, and climate-resilient digital infrastructure. AI should also be leveraged to support biodiversity conservation, ecosystem restoration, disaster risk reduction, climate adaptation, and sustainable natural resource management, ensuring that AI contributes not only to digital transformation but also to Uganda's environmental and sustainable development objectives However, mandatory reporting requirements have not yet been implemented. Climate-vulnerable and local communities are not formally involved in the design or oversight of AI systems used in environmental management, representing a governance gap that Uganda's emerging AI framework must address.

Gender: Despite ranking 80th globally on the World Economic Forum's Global Gender Gap Edition 2025 (WEF 2025) with a score of 0.707, Uganda lacks strategies or policies that specifically address the impacts of AI on gender equality. The digital gender divide is seen women are less likely than men to use the internet and to be digitally literate, which directly affects their participation in AI-related jobs and training. Monitoring of gender disparities in the AI workforce is led primarily by civil society organisations such as WOUGNET, Women in Technology Uganda (WITU), and Pollicy. Uganda has no dedicated mechanisms to monitor or redress AI-specific gender-related harms, including AI-generated videos targeting women in public life and AI-enabled online gender-based violence.

Culture: Uganda is one of Africa's most linguistically diverse countries, with over 65 ethnic groups and more than 41 indigenous languages. Significant work has been done to preserve and develop Ugandan languages in AI systems, most notably through Sunbird AI's Sunflower multilingual large language model (Akera et al. 2025) covering 31 Ugandan languages and through the Makerere University AI Lab's open-source AI models and language datasets (MakNLP 2023) covering languages such as Luganda, Acholi, Runyakitara, Ateso, and other under-resourced languages. However, Uganda has no dedicated strategy or policy addressing the intersection of AI and the cultural sector. The Copyright and Neighbouring Rights (Amendment) Act (Parliament of Uganda 2025), signed into law in April 2026, deliberately excluded AI provisions despite explicit parliamentary advocacy for their inclusion, leaving AI authorship, training data governance, and voice and likeness replication entirely unregulated. All significant language AI work is sustained by international research grants rather than domestic public funding, which raises sustainability concerns.

Education and Research: Uganda's education system is engaged with AI at the research level but has not yet developed the policy or governance infrastructure to manage AI's integration into formal learning. The Education Digital Agenda Strategy 2025-2032 (MoES 2021) provides a framework for digital technology in education, and a national policy on ICT in Education has recently been validated in partnership with UNESCO, a significant step. However, AI is not addressed in any binding education policy instrument, and its use through tools is spreading rapidly through informal student adoption without institutional governance, ethical guidance, or curriculum integration. Gross Expenditure on Research and Development stands at 0.31% of GDP (StatBase 2026), below Uganda's own NDP III target of 1% and well below the African Union's recommended threshold with, AI research almost entirely sustained by international grants rather than domestic public funding.

Communications and Information: Uganda's E-Government Development Index score of 0.4464 places it above the African average of 0.4247, reflecting progress in digital public service delivery. However, Uganda has no binding requirement to inform individuals when they interact with an AI system, no mandatory transparency obligations for AI-generated content or recommender systems, and no statutory regulation of political advertising using AI or synthetic media. There is a need to empower citizens to assess AI-generated content and mitigate the risks of AI-driven disinformation and other harmful online content.

Economy and Labour: Uganda has a well-developed set of economic strategies positioning AI as a driver of productivity and growth including Vision 2040, NDPIV (2025–2030), and the Digital Transformation Roadmap and its private sector AI ecosystem is active and growing. However, no official estimate of AI's contribution to Gross Domestic Product has been published, there is no dedicated AI budget line in the national accounts, and Uganda has no policy or strategy addressing AI's impact on the labour market, including the risks of automation, and algorithmic management of workers in the platform economy.

Health and Social Well-being: The health sector is one of Uganda's most active areas for AI applications with advances in malaria diagnostics, tuberculosis screening, cervical cancer detection, and maternal health monitoring. Despite this, Uganda has no binding instruments specifically governing the ethical development, deployment, or use of AI in health services. The Ministry of Health's National Health Information and Digital Health Strategic Plan (2020/21–2024/25) and the 2024 Compendium of Digital Health Guidelines (MoH 2024) provide a partial framework but do not address AI procurement standards, mandatory clinical validation, algorithmic bias testing, or patient rights to disclosure when AI systems contribute to clinical decisions.

Technical Infrastructure: Uganda's technical infrastructure presents a picture of genuine assets alongside deep structural constraints. Approximately 87% of electricity generation comes from renewable sources, predominantly hydropower, and generation capacity has grown to over 2,098 MW, including the recently commissioned 600 MW Karuma Hydropower plant (UEGCL 2024). However, only 51.5% of the population has access to electricity (World Bank, 2024), falling to 42.4% in rural areas. Internet connectivity is mobile-dependent: the UCC's Q4 2025 Market Performance Report (UCC 2026) records 18.5 million mobile internet subscriptions and only 103,838 fixed broadband connections, which places Uganda among the world's lowest

fixed broadband penetration rates. Broadband affordability is a critical barrier: the mobile broadband high-consumption basket costs 7.95% of monthly GNI per capita (ITU 2025a), nearly four times the UN Broadband Commission's 2% affordability target, which helps explain why active mobile broadband subscriptions reach only 39.8% of the population despite 4G coverage extending to 82% (UCC 2026). There is a need to improve Uganda's computing infrastructure to support AI research and development.

The Path Forward

This report presents a roadmap of 23 high-level policy recommendations across 11 policy areas, structured around three cross-cutting dimensions of regulation, institutional frameworks, and capacity building. The highest-priority actions include adopting the National AI and Emerging Technologies Strategy with embedded human rights safeguards and a risk-based governance approach; establishing a AI and Data Governance Council to coordinate oversight across government; developing mandatory AI impact assessment guidelines for high-risk deployments; amending the Data Protection and Privacy Act to address AI-specific gaps; developing sector-specific health AI governance guidelines including mandatory clinical validation requirements; creating a national AI infrastructure plan; and building a national AI literacy and competency framework for schools, universities, public servants, and citizens. Uganda has the institutional will, the research community, the regional convening presence, and the international partnerships to build an AI ecosystem that considers the ethical use and deployment of AI to serve its people.

DIAGNOSIS OF THE NATIONAL AI LANDSCAPE

UGANDA NATIONAL AI LANDSCAPE

The first phase of RAM 2.0 process focused on establishing a foundational understanding of Uganda's AI ecosystem through a desk review, inception workshop, stakeholder mapping, and preliminary country diagnosis. The desk review involved a systematic analysis of existing national policies, strategies, regulatory frameworks, and institutional reports relevant to AI ethics, digital transformation, data governance, research, and innovation. This review also examined international and regional frameworks and good practices, including UNESCO's normative instruments and AI governance guidelines, to assess how Uganda's existing policy environment aligns with global standards for responsible and inclusive AI development.

In parallel, a stakeholder mapping exercise was conducted to identify the key actors in Uganda's AI and digital ecosystem. This included government institutions, regulatory bodies, academic and research institutions, private-sector organisations, civil society groups, media actors, and international development partners. The mapping helped identify their roles, influence, and areas of engagement in the AI landscape. Insights from the desk review and stakeholder mapping informed a preliminary country diagnosis, which highlighted the current state of UNESCO RAM 2.0 in Uganda. A consultative workshop on the Deployment of the UNESCO AI Readiness Assessment Methodology (RAM) for Uganda was also held, with synergies built with the National Consultation for Uganda inputs on the EAC AI Strategy, organised by the East Africa Science and Technology Commission (EASTECO), with support from GIZ. The results from the stakeholder consultative workshop have enabled us to identify existing strengths and gaps across the RAM policy areas, and to use them as a basis for the next steps in prioritising stakeholders and themes for subsequent consultations and data collection in the RAM assessment. Finally, a national consultation workshop was held, where feedback was received on the RAM 2.0 findings and especially the recommendations in the report. This report is the collective feedback received from these consultations.

The results of this report build on previous reports by the Ministry of ICT and National Guidance, such as the Uganda National AI Landscape Assessment Report. This report assessed whether Uganda possesses the digital foundations on which artificial intelligence can be built and deployed, with aspects such as connectivity, data infrastructure, computing capacity, the skills pipeline, and the institutional digital capability of bodies such as NITA-U and the Personal Data Protection Office. The report established an AI ecosystem stakeholder mapping that included public, private and academic institutions, the technical infrastructure readiness with focus on connectivity, data centres, compute, government AI skills and capacity in Ministries, Departments and Agencies, Uganda's AI governance and regulatory gaps, benchmarking against other countries such as Rwanda, Kenya, and the United States. The report proposed an AI risk management framework.

The RAM 2.0 process and findings described in this report builds on these findings as key blocks and assess whether Uganda is positioned to develop, deploy, and govern AI systems responsibly and ethically with concerns such as safety, transparency, and accountability of AI systems, the protection of human rights as they use, AI systems and the existence of oversight mechanisms capable of evaluating AI models and the datasets used to train these models. The RAM covers a broader set of policy domains aligned with the RAM's eight thematic pillars: right to privacy and data protection; rule of law, access to justice, and accountability; safety and security; fairness and non-discrimination; sustainability; transparency and explainability; responsibility and accountability; and education and research. Crucially, the RAM covers areas that the National AI Landscape Assessment Report does not specifically address, such as cultural diversity, gender equality, indigenous and minority rights, environmental impacts, and the ethics of specific AI application domains, including health, education, labour, and the creative sector.

The RAM 2.0 process should be overseen by a multi-stakeholder National Steering Committee. This committee is important because it ensures that the assessment is not the product of a single ministry or perspective but rather reflects the full range of actors with a mandate to shape responsible AI in the country, through representation from government, the private sector, academia, and civil society. This oversight strengthens the quality and balance of the findings and recommendations needed to inform regulation, institutional frameworks, and the country's capacity building in the ethical governance and adoption of AI. In Uganda, rather than establishing a parallel body for this purpose, the approach was to leverage the existing National AI Task Force, established by the Ministry of ICT and National Guidance, to oversee the development of the National AI and Emerging Technologies Strategy. The reliance on this National AI Task Force, which is an established, multi-stakeholder structure, avoided duplication of mandates and institutional effort, ensured coherence between the RAM assessment and Uganda's national AI strategy it is intended to inform, and ensured efficient use of a coordination mechanism already convened for closely related purposes.

Uganda's AI landscape is still at an emerging yet rapidly evolving stage, characterised by growing government interest, an active academic and innovation ecosystem, increasing civil society engagement, and expanding experimentation with AI applications across multiple domains. Currently, Uganda relies on fragmented, indirect governance mechanisms for AI rather than a comprehensive, AI-specific legal or regulatory framework. However, at the time of preparation of this report, the development of a National AI & Emerging Technologies Strategy was ongoing under the leadership of the MoICT&NG. The strategy is being aligned with the NDPIV and places particular focus on AI and AR as priority emerging technologies for national development and digital transformation.

Uganda's AI ecosystem is primarily driven by higher learning institutions, innovation hubs, skilling initiatives, and development partners. Makerere University has emerged as one of the leading centres for AI research and innovation in the country through initiatives such as the Makerere Centre for AI, Marconi Lab, AirQo, and the AI Health Lab. Other universities such as Mbarara University of Science and Technology and Busitema University have also become important research centres for AI research in health and agriculture. Other major ecosystem actors include Sunbird AI, which focuses on AI for social impact and local-language technologies. Several notable AI applications and pilot initiatives have been developed locally, particularly within agriculture, healthcare, environmental monitoring, and language technologies. Uganda has also benefited from regional and continental AI capacity-building initiatives such as Data Science Africa (DSA) and the Deep Learning Indaba, which have significantly strengthened AI research, machine learning skills, and data science communities in the country.

However, human capital and AI skills development remain both opportunities and challenges. Although AI awareness and skilling initiatives are gradually increasing, AI literacy and public understanding of AI technologies remain relatively low. Infrastructure, data readiness and inadequate financing for AI research and innovation remain major constraints within Uganda's AI ecosystem. Many AI initiatives continue to rely heavily on donor support and external partnerships, raising concerns about long-term sustainability.

Uganda's broader innovation readiness indicators also reflect these structural challenges. According to the Global Innovation Index 2025 (WIPO 2025), Uganda ranked 124th out of 139 economies globally, 19th in Sub-Saharan Africa, and 4th among low-income economies. Uganda performed better in innovation inputs than innovation outputs, suggesting that while some enabling conditions for innovation exist, commercialisation, scaling, and deployment capacity remain limited. These rankings highlight persistent gaps in infrastructure, research funding, advanced technical skills, commercialisation capacity, and digital readiness, all of which continue to affect the growth and sustainability of the country's AI ecosystem. Despite these challenges, Uganda's AI landscape demonstrates strong innovation potential and increasing national recognition of AI as a strategic technology for socioeconomic transformation. Equally, Uganda is well positioned to become a regional leader in ethical AI through its strong academic institutions, growing innovation ecosystem, youthful population, expanding digital infrastructure, and active participation in regional and global AI governance initiatives. These comparative advantages provide a strong foundation for developing locally relevant AI solutions that address national development priorities while contributing to Africa's digital transformation agenda.



POLICY AREAS 1-2

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UGANDA

Artificial Intelligence
Readiness Assessment Report

ETHICAL GOVERNANCE, STEWARDSHIP AND IMPACT ASSESSMENT

Overview

The ethical governance, stewardship and impact assessment dimensions are key to addressing the institutional and human capacity of Member States to implement the Recommendation and, more generally, to unpack the major societal transformations induced by the increased adoption of AI across all sectors of the economy. This policy area assesses the laws, policies, and institutional capacity in place to govern the development, adoption, and use of AI ethically and responsibly, including impact assessment mechanisms and national cybersecurity frameworks. Uganda is actively building its capcity in this policy area. A National AI and Emerging Technologies Strategy is in advanced development under an 11-member Task Force of the Ministry of ICT and National Guidance, shaped by regional multi-stakeholder consultations in Uganda and is aligned with NDP IV, the Digital Transformation Roadmap, and the emerging EAC Regional AI Strategy. The 2022 Framework for Ethical AI sets out nine principles consistent with the UNESCO Recommendation. However, binding governance still rests on policies such as the Data Protection and Privacy Act (2019), the Electronic Transactions Act (2011), and related laws that were not designed for AI. Public procurement is a critical gap: the NITA-U acquisition guidelines (2013) and the health sector's Digital Health Systems Assessment Criteria treat procured systems as static products, with no requirements for training data provenance, accuracy validation on Ugandan data, bias evaluation, human oversight, or post-deployment monitoring. Uganda also lacks an independent statutory AI oversight body, standardised AI competencies for public servants, and formal foresight mechanisms; the report recommends reconstituting the National AI Task Force as a multi-stakeholder AI and Data Governance Council and ensuring the right to human intervention in high-risk automated decisions when AI systems are being used.

Does Your Country Have A National AI Strategy Or Equivalent?

Yes / In Progress

Uganda is currently developing a national AI strategy or framework to address the ethical implications of AI, in line with the government's existing strategies for AI ethical governance. The Strategy, still in draft at the time of the RAM 2.0 process, is anchored in the broader Digital Transformation Roadmap 2023/24-2027/2028 of the Ministry of Information Communications Technology and National Guidance (MoICT&NG 2023). Uganda developed its National Fourth Industrial Revolution (4IR) Strategy (MoICT&NG 2022; Abubakari et al. 2023), which amongst other emerging technologies, also considers AI as an enabler to improve the livelihoods of Uganda towards the achievement of national economic and development goals. MoICT&NG has provided guidelines on Developing a Framework for Ethical AI, which sets out a foundational implementation framework for AI Ethics in Uganda (UNGP & MoICT&NG 2022). Through desk reviews and stakeholder engagement processes, the report synthesises nine foundational principles of the Ethics of AI that guide the implementation of AI systems including 1) Human centeredness, 2) Transparency and explainability, 3) Safety, privacy and security, 4) Robustness and quality, 5) Fairness and non-discrimination, 6) Responsibility and accountability, 7) Adaptive Governance & Multi-stakeholder collaboration, 8) Awareness and Literacy and 9) Sustainability. These nine principles from Uganda's Framework for Ethical AI align with the principles outlined in the UNESCO Recommendation on the Ethics of AI (UNESCO 2022).

A key component of Uganda's Framework for Ethical AI is the principle of fairness and non-discrimination, with particular emphasis on protecting vulnerable and marginalized populations, including children, older persons, women, persons with disabilities, ethnic and religious minorities, gender minorities, and others who may be at risk of exclusion through the use of AI systems. Building on this foundation, the implementation of AI systems should be guided by a human rights-based approach that incorporates the principles of participation, accountability, non-discrimination, transparency, human dignity, privacy, and access to effective remedy

throughout the AI system lifecycle. Embedding these principles in the design, development, deployment, use, monitoring, and governance of AI systems will help ensure that AI-driven innovation protects fundamental rights, fosters public trust, and delivers equitable and inclusive benefits for all members of society.

Currently, the MoICT&NG has set up an 11-member Task Force to oversee the development of the National AI & Emerging Technologies Strategy, which is taking shape through an inclusive, nationwide stakeholder engagement process led by the Ministry of ICT and National Guidance, which guides the adoption of AI, blockchain, IoT, and robotics. This strategy development process sponsored by the World Bank, will address and provide strategic direction on the ethical development and deployment of AI in Uganda. The consultations to develop the National AI & Emerging Technologies Strategy were conducted regionally in the Central (Kampala), Western (Kabale), Eastern (Soroti), and Northern (Gulu) regions. These consultations were hosted at the national innovation hubs established by the MoICT&NG in the respective regions.

A broad range of stakeholders participated in the consultation process. In Kampala, participants included policymakers from government agencies and local governments, private-sector actors such as financial institutions and telecommunications companies, academic institutions, AI innovators, Civil Society Organisations (CSOs), and development partners. In the regional consultations held in Kabale, Soroti, and Gulu, participants included academia, student bodies representing youth, District Local Governments, Community Development Offices representing civil society organisations, AI innovators, and development partners. Unlike Kampala, private-sector actors such as financial institutions and telecom companies were not represented in the regional workshops.

Stakeholders were selected based on their relevance to emerging technologies, innovation ecosystems, governance, education, community engagement, and digital development. Representation was drawn from:

- Government and the public sector who are the core implementers;
- Academia and Research Institutions who are the primary knowledge producers;
- Private sector and the wider innovation system who are the solution developers;
- Development partners and international organisations who are the enablers;
- Civil society and End users as these capture demand-side perspectives.

to ensure multi-sectoral input into the strategy-development process. The stakeholders who participated are captured in Table 1.

Table 1: Key Stakeholders Engaged In The Development Of The National AI & Emerging Technologies Strategy.

Category	Organisation
Government and Regulatory bodies	Ministry of ICT & National Guidance (MoICT & NG) National Information Technology Authority-Uganda (NITA-U) Personal Data Protection Office (PDPO) National Planning Authority (NPA) Science Technology and Innovation Secretariat Uganda Communications Commission (UCC) Uganda Registration Services Bureau (URSB) National AI Task Force Electoral Commission of Uganda Uganda Police Ministry of Internal Affairs (MoIA) Ministry of Education and Sports Uganda Broadcasting Corporation (UBC) Uganda National Bureau of Standards (UNBS) Uganda National Council for Science & Technology (UNCST Ministry of Health Entebbe Expressway Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) Ministry of Finance, Planning and Economic Development (MoFPED) Ministry of Energy and Mineral Development (MEMD) Ministry of Trade, Industry and Cooperatives (MTIC) Ministry of Works and Transport (MoWT) Ministry of Tourism, Wildlife and Antiquities (MTWA) National Agricultural Research Organisation (NARO) Ministry of Defence and Veteran Affairs (MoDVA) Ministry of Justice and Constitutional Affairs (MoJCA) Ministry of Public Service (MoPS)
Private Sector & Technology	ICT Association of Uganda The Financial Technology Service Providers Association of Uganda (FITSPA) Signal Network (SIGNET) MTN Uganda Internet Service Providers Association of Uganda (ISPAU) Alliance for Trade in Information Technology Services (ATIS) Uganda Airlines Exquisite Solutions (BPO Sector) Multichoice Uganda

Category	Organisation
Financial Institutions	Stanbic Bank of Uganda DFCU Bank Finance Trust Bank Equity Bank Uganda Bankers Association
International and Development Partners	GIZ United Nations Development Programme (UNDP) Mastercard Foundation UNESCO World Bank ITU AUDA-NEPAD Smart Africa
Civil Society & Advocacy Organisations	Collaboration on International ICT Policy in East and Southern Africa (CIPESA) Women of Uganda Network (WOUGNET) Uganda Women's Network (UWONET) Unwanted Witness AI Association Uganda Financial Sector Deepening Uganda (FSDU) Enterprise Uganda, Uganda Bankers Association
Academia & Research	Makerere University/Infectious Diseases Institute (IDI) Research and Education Network for Uganda (RENU) Soroti University Gulu University Kabale University Victoria University

Engagement took place in a few phases. Stakeholders in Kampala were consulted twice, while stakeholders in the other regions were consulted once during the initial regional engagements. The consultations were conducted primarily through Focus Group Discussions (FGDs), organised to gather perspectives on AI and emerging technologies, including their opportunities and challenges. Except for government agencies, all stakeholder groups participated directly in the FGDs.

Following the FGDs, MoICT&NG organised an internal working retreat involving the national strategy task force to review and synthesise stakeholder feedback. Subsequently, in April 2026, the Ministry convened another consultative workshop involving representatives from the original stakeholder groups. This workshop focused on formulating strategic objectives and a plan for the National AI & Emerging Technologies Strategy based on

the outcomes of the earlier consultations. Five CSOs participated in the consultation process. One of these CSOs specifically represented women's interests and gender-related concerns. Community Development Offices also represented local civil society perspectives during the regional consultations.

Women and youth were represented through women-focused CSOs and student bodies that participated in the workshops. However, persons with disabilities were not included among the stakeholders consulted during the initial phases of the process. The Ministry indicated that consultations with persons with disabilities are planned after the Zero Draft report for the strategy is developed. There was no indication that indigenous peoples were consulted separately or formally during the process. Future consultations should continue to strengthen the meaningful participation of women, youth, persons with disabilities, Indigenous Peoples, local communities, refugee populations, private sector actors, academia, and civil society organizations to ensure that Uganda's AI governance framework reflects the diversity of its population and promotes equitable access to AI benefits. Particular attention should be given to engaging groups that remain underrepresented in the current consultation process and to ensuring that their perspectives are integrated throughout the strategy development, implementation, monitoring, and review processes.

Overall, the consultation process reflected an effort toward regional and multi-stakeholder participation involving government, academia, innovators, civil society, youth, and development partners. The inputs from the consultative workshops have directly influenced the development of Uganda's National AI & Emerging Technologies Strategy. For example, the strategy is now being developed with a focus on AI and AR rather than on Emerging Technologies more broadly.

During the consultations, concerns relating to the protection of people's data and the use of personal information in developing data-driven technologies were strongly raised by civil society organisations such as CIPESA (CIPESA 2026) and Unwanted Witness (UW 2026). These concerns have significantly shaped the strategy's direction and informed ongoing governance discussions. As a result, the strategy-development process is adopting a risk-based governance approach to AI and data-driven technologies. Data protection considerations are being integrated into the strategy, based on critical projects identified within priority sectors, to determine associated risks and safeguards. These discussions are being conducted in collaboration with the Personal Data Protection Office to ensure that governance, privacy, and regulatory considerations are incorporated from the outset. The identified risks are expected to inform subsequent AI policy and governance frameworks.

One major challenge has been the complexity of government processes, particularly the need to balance differing stakeholder views and interests, which has made the strategy-development process lengthy. The consultation and drafting process is still ongoing. Currently, a Zero Draft report is being developed based on the consultative workshops already conducted. The next planned step is a validation workshop scheduled for the end of May 2026, where stakeholders will review and validate the draft strategy. Following this process, the national task force will prepare a Fair Draft and hand it over to the MoICT&NG to initiate formal approval discussions and adoption procedures. The strategy is aligned with the Digital Uganda Vision 2040 (GOU 2022b) and Digital Transformation Roadmap 2023/24-2027/28 and will support the socio-economic transformation roadmap of Uganda as captured in Uganda's Fourth National Development Plan (NDPIV) 2025/26 - 2029/2030 (NPA 2025).

The East African Science and Technology Commission (EASTECO), with support from GIZ and UNESCO, has developed an EAC Regional Artificial Intelligence (AI) Strategy that will provide strategic direction and policy coherence for AI development and regulation across Partner States, including Uganda. EASTECO has carried out several consultative meetings in 2026 across the EAC Member States, including Uganda. The results of the consultations will enable the EAC strategy to also capture key priority areas for Uganda in its implementation roadmap for the ethical use and governance of AI towards the realisation of Uganda's NDP IV. The prioritisation of sectors within the strategy has been guided by NDP IV, the primary framework for aligning the strategy with Uganda's national development priorities over the next five years. The strategy is intended to operate within the same planning period and has therefore been designed to fit within programmes already prioritised by the MoICT&NG.

The East African Science and Technology Commission (EASTECO), with support from GIZ and UNESCO, has developed an EAC Regional Artificial Intelligence (AI) Strategy that will provide strategic direction and policy coherence for AI development and regulation across Partner States, including Uganda. EASTECO has carried out several consultative meetings in 2026 across the EAC Member States, including Uganda, with a national consultation held on 17 and 18 February 2026. The results of the consultations will enable the EAC strategy to also capture key priority areas for Uganda in its implementation roadmap for the ethical use and governance of AI towards the realisation of Uganda's NDP IV. The prioritisation of sectors within the strategy has been guided by the NDP IV, the primary framework for aligning the strategy with Uganda's national development priorities over the next five years. The strategy is intended to operate within the same planning period and has therefore been designed to fit within programmes already prioritised by the MoICT&NG.

Under the NDP IV, particular focus has been placed on the ATMS sectors, that is, Agro-Industrialisation, Tourism Development, Mineral-based industrialisation, and Science, Technology and Innovation, which includes ICT and Health (MoFPED 2025). These sectors have been prioritised as key drivers of socioeconomic transformation, industrialisation, innovation, employment, and economic growth in Uganda. The strategy development process has therefore focused on identifying how AI can support the objectives and strategic actions already defined under these national priority programmes. The AI strategy focus on key strategic themes including Infrastructure, Talent pipeline, Governance, legal and regulatory frameworks, R&D, innovation and commercialisation and financing. The priority use cases focus on agro-industrialisation, tourism development, mining, energy, transport, digital transformation, health, education, e-Governance, justice, and climate resilience.

In addition to the core ATMS sectors, the strategy considers support services and enabling sectors necessary for the successful implementation of these programmes. This approach recognises that the effectiveness of AI deployment within ATMS sectors depends on broader infrastructure and service ecosystems. For instance, agro-industrialisation relies heavily on transport systems, while ICT and mineral sectors depend on reliable energy and power infrastructure. As a result, sectors such as transport and energy have also been incorporated into the strategy to determine how they can support and benefit from AI adoption. Although the main emphasis remains on the ATMS sectors, the strategy-development process is also considering the broader set of the other 14 NDPIV programmes that provide complementary support to these priority areas. This reflects a cross-sectoral approach aimed at ensuring that AI contributes not only to individual sectors but also to wider national development and digital transformation objectives.

Has Your Country Introduced Binding Normative Instruments That Govern AI Development, Adoption Or Use, Either By Adapting Existing Ones Or By Developing New, AI-Specific Normative Instruments?

Yes / In Progress

Uganda has sectoral regulations for use of ICT across various ministries, including the Ministry of ICT and National Guidance, the Ministry of Health, the Ministry of Finance, Planning and Economic Development (MoFPED), the Ministry of Education and Sports (MoES), and the Secretariat of Science and Innovation. There are existing guidelines, such as the Data Protection and Privacy Act (2019), implemented by the Personal Data Protection Office (PDPO). In addition, the Computer Misuse (Amendment) Act, 2022, which was nullified in 2026 (MoICT&NG 2011a), promoted safety and security in an increasingly digitised environment, including by preventing unlawful access, abuse, or misuse of information systems, such as computers, and by securing the conduct of electronic transactions. Other relevant legislation includes the 2011 Electronic Transactions Act (GoU 2011b) and Electronic Signatures Act (GoU 2011a). These laws, implemented by NITA-U, establish the legal framework for digital signatures, granting electronic records and signatures the same legal equivalence as paper-based counterparts. They facilitate secure electronic communications, regulate certification service providers, and ensure data integrity in digital transactions. Although not created to govern AI development, there is a need to adapt existing acts and laws rather than developing new, AI-specific instruments to cover AI as software. NITA-U is the national body responsible for overseeing information and communication technology (ICT) in Uganda.

Public sector procurement laws and guidelines for AI systems

Uganda's public-sector ICT procurement is governed principally by the Public Procurement and Disposal of Public Assets (PPDA) Act 2003 (amended in 2011 and 2021) (PPDA 2003), and the National Public Sector Procurement Policy (2019) (MoFPED 2019) implemented by the Ministry of Finance and Economic Development. The Guidelines and Standards for Acquisition of Information Technology Hardware and Software for Government Ministries, Departments and Agencies issued by NITA-U (NITA-U 2013) provide the minimum specifications to be used in the procurement of IT Products including hardware and software that can be used in basic office automation. The guidelines are scoped to conventional IT products. The guidelines define minimum requirements for procuring different types of software, such as application software, application development software, and commercial off-the-shelf software.

AI systems, by contrast, are data-dependent, and also subject to change after deployment through retraining and updates. The properties that most determine whether the performance of an AI system is acceptable and fair and the contextual use of the AI models fall outside these guidelines whose quality of software is fixed at the point of delivery. This mismatch is evident across the core provisions in these guidelines. The guidelines state that the verification at delivery should rely on a supplier's "certificate of testing" as "proof of functional capability of item supplied" (NITA-U 2013), a standard suited to hardware with fixed, testable functions but inadequate for AI models whose performance is statistical, varies by input, and can degrade as operating data diverges from training data. The framework contains no requirement for accuracy thresholds, validation on representative national data, or evaluation for bias. The security provisions are similarly conventional, requiring that each networked workstation maintain "a host antivirus and firewall active at all times" (NITA-U, 2013), while making no provision for AI-specific threats such as data poisoning, adversarial inputs, or the leakage of training data. The guideline further on states that specifications should be objective and avoid subjective terms such as "high quality" or "easy to us", although this works for hardware it does not provide an assessment of key AI ethical aspects such as fairness across population groups, explainability of automated decisions, and human oversight. Even the requirement to confirm that no equivalent system already exists before procuring software (NITA-U 2013) raises questions about whether AI systems are best suited to work in a given domain and about their impact on key persons across different domains. The underlying limitation is that the framework treats a procured system as static, with its quality verifiable at delivery against a given specification. These existing NITA-U guidelines need to be revised to incorporate AI-specific provisions. These should include requirements for understanding the training data; pre-deployment testing for accuracy; evaluation of contextual bias and fairness; post-deployment monitoring; and the need for human oversight during AI decision-making.

Sectoral Guidelines for AI in Health: The Digital Health Guidelines Compendium

Beyond the government procurement regulations, Uganda's health sector has developed a relatively mature body of digital health governance, consolidated in the Compendium of National Digital Health Guidelines (MoH 2024). The compendium brings together the Digital Health Enterprise Architecture, Standards and Knowledge guidelines; the Guidelines for the Introduction of Digital Health Solutions and Innovations the Health Data Access, Sharing and Use guidelines; and implementation guidelines for the national Electronic Medical Records system and the Electronic Community Health Information System. Collectively, these instruments govern how any new health technology enters and operates in the health sector in Uganda, including the pathway every digital solution must pass before it can be piloted, procured, scaled, or formally adopted. The framework is well developed for conventional digital health software, with no focus on the sector's adoption of artificial intelligence and emerging technologies in the health sector, such as neurotechnology as referenced in the recent UNESCO Recommendation on the Ethics of Neurotechnology (2025) (UNESCO 2025a). These guidelines do not address the risks of AI systems as used in clinical and public health settings.

The compendium acknowledges AI only as a category of permissible technology, not as a distinct and defined technology. The architecture standards list "Artificial Intelligence (AI)" among ICT technologies alongside Internet of Things, big data, and blockchain, noting generally that the Ministry maintains criteria for evaluating such implementations (MoH 2024). The guidelines do not provide any criteria for AI-specific systems. This absence is significant because the guideline for new technologies is the Digital Health Systems Assessment Criteria (DHSAC), adapted from the United Kingdom's NHS Digital Technology Assessment Criteria which assesses four domains: data protection, technical security, interoperability, and key principles covering usability, cost, and sustainability. However, none of these domains evaluates the properties that determine whether an AI system is safe and effective when used as a point-of-care in clinical and public health settings.

The approval process contains no requirement for clinical validation or for evidence of diagnostic or predictive accuracy. The data-protection criteria address where data is stored and whether it is processed in compliance with the Data Protection and Privacy Act (2019) but say nothing about the data on which a model was trained such as its quality, or representativeness of the Ugandan patient populations. This could imply that an AI model trained on non-representative data may be approved while performing poorly or unsafely on local patients. Although equity is a stated guiding principle in these guidelines, there is no assessment for algorithmic bias or for performance across population groups. There is no provision in the guidelines for human oversight, and the guidelines do not specify how the output of the AI models should be explainable to clinicians and patients. For procurement specifically, the compendium defers to the PPDA Act (2003) and the NITA-U acquisition guidelines and states that "Preference in the procurement of IT hardware and software for image data management shall be from an authorised dealer licensed and accredited by NITA-U or on the PPDA Register of Providers and comply with DCOM/PACS Standards." These guidelines are limited to medical imaging devices within the healthcare domain and make no mention of image-based or computer vision models.

The compendium, like the broader procurement framework, treats a health technology as a static product whose safety is established primarily through data protection compliance and security testing. Closing this gap does not require a new framework, but it requires extending the existing DHSAC with AI-specific assessment clauses. The amendments should also include post-deployment requirements that are aligned with the AI safety, transparency, and accountability provisions of the UNESCO Recommendation on AI Ethics.

Government should mandate inclusive procurement for all AI systems used in public service delivery. This requires all procured systems to comply with international accessibility standards (e.g., Web Content Accessibility Guidelines (WCAG)), ensuring inclusion of persons with visual, hearing, or cognitive disabilities. Public-facing AI services should also support voice-based interaction in local languages to address literacy barriers and improve access for rural and underserved communities.

Does your country have guidelines for assessing the potential ethical impacts or risks of AI systems, before or after they are deployed?

Yes / In Progress

Uganda leverages existing regulations to assess the potential ethical impacts of ICT systems before, during, or after deployment. Some of these guidelines, such as the National Information Security Framework (NISF), are being revised by the National Information Technology Authority of Uganda to address AI-specific risks. The MoICT&NG has provided guidelines on Developing a Framework for Ethical AI (June 2022), which sets out a foundational implementation framework for AI Ethics in Uganda. The National Information Security Strategy (2011) by the MoICT&NG (MoICT&NG 2011b) and the NISF by NITA-U are other guidelines specifically developed to guide information security activities. The revision of these guidelines to incorporate AI systems and assess their impacts is an important step in assessing the risks of AI systems. However, there is a need to provide sector-specific guidelines to assess the potential ethical impacts and risks of AI systems across government domains, especially in high-risk domains such as health. Moreover, the national AI strategy should

codify the right to human intervention. In all high-risk government decision-making sectors (e.g., social welfare, education assessment, health diagnostics), citizens should have the explicit right to appeal any automated decision to a human official. This would ensure that algorithmic systems remain tools that support public service delivery, rather than autonomous arbiters of rights.

Does Your Country Have An AI Governance Structure Within Government (E.g., Coordinating Body, Inter-Ministerial Committee, Or Dedicated Agency)?

Yes / In Progress

Uganda is in the process of establishing a formal AI governance structure. It currently utilizes a combination of ministry-led initiatives, an AI task force, and existing technology authorities to manage AI development and regulation across different sectors. The key components of Uganda's AI governance structure include:

- The MoICT&NG, which leads the national AI policy, oversees strategic direction and legislation. It has also set up the National AI task force to guide the development of the Emerging Technologies/AI Strategy.
- The National Information Technology Authority (NITA-U) is responsible for technical standards, digital infrastructure, cybersecurity, and data governance.
- The Uganda Communications Commission (UCC) oversees digital services, telecommunications, and digital-service compliance.
- The Office of the Data Protection Commissioner enforces the Data Protection & Privacy Act (DPPA) to ensure privacy safeguards that can apply in AI deployment.

Does Your Country Have Independent Bodies That Provides Oversight, Ethical Guidance, Or Policy Advice On AI Governance (E.g., Ethics Councils Or Commissions, Expert Groups, Observatories, Among Others)?

Yes / In Progress

Uganda does not have dedicated, independent and statutory bodies that provide oversight, ethical guidance or policy advice on AI governance. However, Uganda is rapidly building framework capacity through the MoICT&NG, with support from UNESCO and the International Telecommunication Union (ITU), to provide oversight, ethical guidance, and policy advice on AI governance. For example, the Uganda Communications Commission has developed its AI strategies to oversee the use of AI in the telecommunications sector. Current research indicates that while data protection laws exist, specific ethical guidelines or an independent national AI ethics council are still under development. Non-governmental organisations like CIPESA are actively involved in policy alternatives and research on AI regulation, filling gaps in formal regulatory oversight. While formal independent AI oversight bodies are pending, current efforts by the MoICT&NG could strengthen and formalise existing governance structures, for example expanding the mandate of the current National AI Task Force. The strengthened body could be reconstituted as an AI and Data Governance Council with clearly defined terms of reference, institutional responsibilities, and accountability mechanisms. The Council should bring together representatives from sector-specific government entities (such as UNCST, MOH) academia, civil society, the private sector, legal experts, and technical practitioners to ensure inclusive and multidisciplinary governance. Its mandate should include coordinating national AI and data governance efforts, developing implementation guidelines, monitoring compliance with ethical and regulatory standards, and holding public institutions accountable for the responsible use of AI and data systems.

Does your country have a national cybersecurity strategy or equivalent policy?

Yes / In Progress

Through the MoICT&NG, with support from NITA-U, Uganda is implementing the National Cyber Security Strategy 2022-2026 (GoU 2022a). The strategy establishes a framework to protect critical information infrastructure, foster a trusted digital economy, and strengthen national cybersecurity readiness. It focuses on enhancing policy frameworks, promoting public-private partnerships, and building a robust, secure digital environment. The key pillars and focus areas include: protection of critical infrastructure such as safeguarding essential services (telecoms, finance, government systems) against threats; threat preparedness and response through the establishment of a national emergency response framework and intrusion detection systems, including Computer Emergency Response Team/Coordination Center; capacity building and research by enhancing cybersecurity expertise within government and private sectors; legal and regulatory framework by aligning cybersecurity laws with international good practices.

Uganda has recently strengthened a set of strategies and policies to improve digital and AI-related skills in the public sector, as mandated under the Digital Transformation Roadmap (2023/24–2027/28) and Uganda Vision 2040. The MoICT&NG is implementing that. The Digital Transformation Roadmap outlines Uganda's strategy to accelerate digital transformation across sectors of the economy by improving digital infrastructure and connectivity, services, and skills, and fostering innovation. The roadmap is intended to support efficient public service delivery and Uganda's socioeconomic transformation over the next five years. Digital skills development for public servants alongside infrastructure and e-services is one of the roadmap's five pillars.

In 2025, the MoICT&NG, together with ITU, commissioned a Digital skills capacity-building needs assessment for priority sectors in Uganda (MoICT and NG & ITU 2025a). The report assessed the state of digital skills across the private and public sectors in the priority sectors of education, health and agriculture. The assessment identified differences in digital skills deficiencies and requirements across sectors. A key finding in the report was that AI and machine learning are among the most critical skills needed over the next 3-5 years, and participants indicated the need to incorporate them into workforce planning.

NITA-U carried out numerous trainings, for example, under the UDAP-GovNet initiative and in partnership with the e-Governance Academy, NITA-U hosted a high-level strategic workshop that brought together representatives from government Ministries, Departments, and Agencies (MDAs) to further Uganda's digital transformation agenda. Emerging technologies, such as AI, were also discussed during the training. Uganda currently has no standardised AI competency requirements for public servants, no mandatory AI literacy programme for government officials, and no AI procurement governance training. To close these gaps efficiently, Uganda could adopt UNESCO's Digital Transformation and AI Competency Framework for Civil Servants as a standard defining AI competencies across the public service. These could be contextualised to Uganda's institutional structures. This programme also offers Member States assessments and tailored training directly aligned with the UNESCO Recommendation on the Ethics of AI.

Uganda lacks established foresight and horizon-scanning processes specifically designed to anticipate and address ethical challenges posed by AI and other emerging technologies. The governance landscape includes several partial and recently initiated mechanisms, including the RAM 2.0 process, the National AI/Emerging Technologies Task Force, and civil society monitoring by organisations such as CIPESA and Pollicy (Pollicy 2026). Uganda is currently building its AI governance framework to ensure that emerging technologies such as generative AI, AI agents, autonomous systems, and brain-computer interfaces are anticipated and that the ethical challenges arising from these models are addressed.



POLICY AREA 3

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UGANDA

Artificial Intelligence
Readiness Assessment Report

DATA

Overview

The data policy area evaluates Member States' readiness with data governance strategies and ensures that high-quality, robust datasets are used to train, develop, and deploy AI systems. This policy also assesses the need for training data to comply with appropriate safeguards, especially regarding individuals' rights to privacy during data collection. Uganda's strength is the Data Protection and Privacy Act (2019), enforced by the Personal Data Protection Office (operational since 2021), regulates public and private data collectors and processors, mandates registration and annual compliance reporting, and protects sensitive personal data. Government data exchange is supported by the e-Government Interoperability Framework and the UGhub integration platform, which now connects over 146 public and private institutions, while UBOS portals and the SDG Open Data Portal (tracking over 169 targets and 232 indicators) provide the most structured public data publication mechanisms. The gaps are equally clear. None of the existing frameworks explicitly addresses AI and the report provides recommendations to address these existing gaps.

Does Your Country Have A Data Protection Law Or Equivalent Regulation?

Yes / In Progress

Uganda has a strong legal framework to regulate the use of ICTs, including the Computer Misuse (Amendment) Act, 2022, the Electronic Transactions Act (2011) (GoU 2011b), the Electronic Transactions Regulations (2013) (Government of Uganda, 2013a), and the National Information Technology Authority Uganda (e-Government) Regulations (2014) (GoU 2014). However, none of these frameworks explicitly reference AI or AI-specific use cases that are growing across sectors such as health and agriculture.

The main data protection guidelines in Uganda are the Data Protection and Privacy Act, which was adopted in 2019 and under the authority of the Personal Data Protection Office (PDPO 2026). The Personal Data Protection Office (PDPO) is the dedicated data protection authority in Uganda. The Data Protection and Privacy Act was passed in 2019, but the PDPO was officially operationalised in August 2021. The PDPO serves as an independent office under NITA-U, and it reports directly to it as it carries out its statutory functions. The legal basis for the PDPO is the Data Protection and Privacy Act, No. 9 of 2019 (Cap 97) and the Data Protection and Privacy Regulations, 2021. The core mandate and responsibilities for the PDPO are to regulate the collection, processing, use, and disclosure of personal data. Its core responsibilities include:

- Enforcement: Overseeing the implementation and enforcement of the Act.
- Registration: Establishing and maintaining a Data Protection Register of all data collectors, controllers, and processors.
- Complaints & Investigations: Receiving and investigating complaints regarding the infringement of data subject rights.
- Supervision: Monitoring, investigating, and reporting on the observance of the right to privacy.
- Guidance & Awareness: Providing guidance to organisations and individuals, raising public awareness, and conducting audits.

The Act provides guidance to individuals, institutions, or public bodies on the collection, processing, retention, or use of personal data within and outside Uganda, and on who collects, processes, retains, or uses personal data of Ugandan citizens. The main objective of the Act is to protect the privacy of the individual and of personal data by regulating the collection and processing of personal information, to safeguard the rights of the persons whose data is collected, to uphold the obligations of data collectors, data processors and data controllers, and to regulate the use or disclosure of personal information; and for related matters.

The PDPO regulates both public and private entities ("data collectors, data controllers, and data processors") that collect or process personal data within Uganda, or outside Uganda if processing data of Ugandan citizens.

The operational aspects of the PDPO include:

- Registration: Every data controller, processor, or collector must register with the PDPO. Registration is valid for one year and is renewable.
- Compliance Reports: Registered organisations must submit an annual Data Protection and Privacy Compliance Report to the PDPO within 90 days after the end of the financial year.
- Decision-making: The Office is headed by a National Personal Data Protection Director and supported by various departments (e.g., Compliance and Investigations).

The Data Protection and Privacy Act makes provision for the protection of personal data including the nationality, age or marital status of the person; their educational level, or occupation; their identification number, symbol or other particulars assigned them; identity data; or other information, which is in the possession of, or is likely to come into the possession of the data controller and includes an expression of opinion about the individual. The processing activities covered by this Act include the collection, processing, and holding of data. The individual rights under the Act describe the rights of data subjects, the right to access personal information, the right to prevent processing of personal data, the right to prevent processing of personal data for direct marketing, the rights in relation to automated decision-taking and the rectification, blocking, erasure and destruction of personal data.

The Act also outlines principles of data protection and transparency requirements set out in Part II, which includes definitions of what a data collector, data processor, or data controller is, and of any person who collects, processes, holds, or uses personal data. It further ensures that such people are accountable to the data subject for data collected, processed held or used; collect and process data fairly and lawfully; collect, process, use or hold adequate, relevant and not excessive or unnecessary personal data; retain personal data for the period authorised by law or for which the data is required; ensure quality of information collected, processed, used or held; ensure transparency and participation of the data subject in the collection, processing, use and holding of the personal data; and observe security safeguards in respect of the data. The main safeguards provided in the Act include: the processing of sensitive information, described under "Prohibition on collection and processing of special personal data and the collection of sensitive data" (which relates to the religious or philosophical beliefs, political opinion, sexual life, financial information, health status or medical records of an individual).

Does your country have mechanisms for data exchange within government (e.G., Data-sharing frameworks)?

Yes / In Progress

The Government of Uganda has the Uganda e-Government Interoperability Framework (e-GIF), which was developed in 2021 and is operated by NITA-U as the responsible authority (NITA-U 2021). The objective of the GIF is to outline the main principles and general guidelines enabling the development and implementation of shared electronic services for citizens, businesses, Ministries, Departments and Agencies (MDAs) and Local Governments (LGs). The National ICT Governance Framework aims to continuously improve the efficiency of and access to government information and services to meet citizens' expectations. The e-GIF's scope covers three types of interactions:

- A2A (MDA/LG to MDA/LG), which refers to interactions between MDA/LGs.
- A2B (MDA/LG to business), which refers to interactions between MDA/LGs and businesses.
- A2C (MDA/LG to citizen), which refers to interactions between MDA/LGs and citizens.

The e-GIF provides safeguards for privacy and security by following privacy-by-design and security-by-design approaches, including information security management, ensuring services are not exposed to threats, compliance with the Data Protection and Privacy Act, compliance with the use of electronic communications and transactions, and compliance with the data protection legislation. The e-GIF implements a model which includes four layers of interoperability: legal, organisational, semantic, and technical. A cross-cutting component of the four layers is the integrated public service governance and a background layer for interoperability governance.

The framework is implemented by the PDPO established in 2019 and operating under NITA-U. Its mandate is to oversee the implementation of and be responsible for the enforcement of the Data Protection and Privacy Act; promote the protection and observance of the right to the privacy of a person and of personal data; monitor, investigate and report on the observance of the right to privacy and of personal data; formulate, implement and oversee programmes intended to raise public awareness about the Data Protection and Privacy Act; receive and investigate complaints relating to infringement of the rights of the data subject under the Act; and establish and maintain a data protection and privacy register. The legal or policy basis is the establishment of the Data Protection Office described in Part II.4 of the Data Protection and Privacy Act.

Does your country have mechanisms for data exchange within government (e.G., Data-sharing frameworks)?

Yes / In Progress

Uganda has mechanisms for public availability of government data, though a coherent open government data framework with binding publication obligations and high-quality datasets remains incomplete. Uganda has been developing a dedicated Open Government Data (OGD) policy for over a decade. The MoICT& NG in Uganda has been developing an open data policy and put out a call for public comments on the draft policy, a process documented as far back as 2018 and still not concluded as a binding policy instrument. The absence of an open data policy means Uganda lacks a national framework mandating data publication standards, machine-readable formats, open licences, and minimum dataset release schedules. The MoICT&NG, together with the World Bank, commissioned an Open Data Readiness Assessment (ODRA). The result of this assessment was that Uganda was in a good position to achieve open data access, with benefits for improved government service delivery (World Bank 2026a).

NITA-U is implementing UgHub, a Data Integration Platform that connects disparate government systems across government MDAs. The UGhub Systems Integration Platform enables data sharing across government systems in a rational, secure, efficient, and sustainable manner, aimed at improving service delivery and supporting citizens as well as reporting, planning, and decision-making across government and private entities. The platform is vendor-neutral and hosted within the Government of Uganda Data Centre and provides capabilities to consume services from other entities as well as avail services to others. Over 146 institutions, including 68 public and 78 private entities, have been connected to UGhub.

Separately, NITA-U confirms that 23 MDAs are fully integrated with additional entities for onboarding. UGhub is primarily a government-to-government and government-to-business data-sharing infrastructure that enables inter-agency data flows (NITA-U 2026). It provides the technical foundation for open data publication. UBOS maintains multiple data portals that provide access to Uganda's key statistical datasets. These include ArcGIS Online spatial data (UBOS 2026c); UBOS Microdata Archive (UBOS 2026b); Data Visualisation tools; and the SDG Open Data Portal (OPM & UBOS 2025). These portals provide public access to census data, household survey microdata, economic statistics, and SDG indicator tracking.

The SDG portal currently tracks over 169 targets and 232 indicators for 2025, reflecting efforts by the Government of Uganda through UBOS, the SDG Secretariat, and partner MDAs to collect, compile, and validate data across all goals. The SDG Open Data Portal is Uganda's most structured open data publication mechanism with clear indicators, regular updates, and public accessibility, though data gaps and quality challenges remain. Moreover, other sector- specific open data publications augment the general UBOS reporting such as the Uganda Revenue Authority (URA) that publishes annual revenue performance reports, tax statistics, and customs data; UNMA that publishes weather forecasting data, climate advisories, and environmental monitoring data; Ministry of Health that publishes health management information system (HMIS) data through the DHIS2 platform providing district-level health service data. All of these datasets are relevant to building AI applications.

Does your country have a freedom of information law or equivalent regulation?

Yes / In Progress

Uganda has a freedom of information law provided through the Access to Information Act of 2005 (and its 2011 Regulations) (GoU 2005) that was enacted to operationalise Article 41 of Uganda's (URSB 2026). Article 41 provides citizens with freedom of expression and speech, and the right of access to state information. The Act applies to all information and records of government ministries, departments, local governments, statutory corporations and bodies, commissions, and other government organs and agencies, unless specifically exempted. It does not apply to Cabinet records and those of its committees, or to records of court proceedings before a case is concluded. Key details of the Ugandan freedom of information framework include:

a) Constitutional Right: Article 41 of the Constitution grants citizens the right to access information, subject only to limitations that protect national security or privacy.

b) The Act aims to promote transparency, accountability, and public participation in government decisions.

c) Scope: It covers ministries, departments, local governments, statutory corporations, and other government agencies.

d) Exemptions: Key exemptions include Cabinet records, court proceedings before a case concludes, and information that would violate personal privacy or harm state security.

e) Procedure: A citizen can request information from a designated information officer at a public body.

The Act's purposes include promoting transparency and accountability, protecting whistleblowers, providing timely and accurate information, and empowering public scrutiny and participation in government decisions. The Access to Information Act (2005) and its Regulations (2011) elaborate on how this constitutional right should be exercised, specifying the types of information citizens can request and the exemptions that apply. The Act contains no specific provisions relating to artificial intelligence or algorithmic systems. However, the broad definition of "record" (any recorded information in any format in the possession or control of a public body) means that records about how AI systems are procured, configured, or used in government functions are potentially within the scope of the Act as long as a public body holds them and they do not fall within an exemption in the law. Uganda's current policy and legal framework on AI is fragmented; while the Data Protection and Privacy Act, 2019, is directly relevant to AI technologies through the lens of data protection, the overall framework was not drafted with AI in mind and provides only a starting point for enacting comprehensive, AI-specific legislation.

There is currently no statutory right to be informed that a public sector decision affecting an individual was made using an AI system, and no specific obligation to disclose AI model documentation or the results of AI model decisions that should be made public to citizens. A 2019 report from the Africa Freedom of Information Centre revealed that only 9% of 4,059 known information requests from the government of Uganda were partially successful, with 81% still awaiting responses beyond the 21-day statutory limit (AFIC 2019). The lack of a specific AI transparency or algorithmic accountability framework means citizens have no clear right to know when and how AI systems are used in decisions that affect them.



POLICY AREA 4

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UGANDA

Artificial Intelligence
Readiness Assessment Report

DEVELOPMENT AND INTERNATIONAL COLLABORATION

Overview

The development and international collaboration policy area assesses Member States' capacity to participate in relevant international, intergovernmental, and multi-stakeholder fora where they can prioritise discussions of AI-related ethical issues. Uganda holds its most significant formal representation in global AI governance through the UN Independent International Scientific Panel on AI, whose 40 members include a Ugandan representative. Uganda participates in the ISO/IEC JTC 1/SC 42 technical committee on AI, was elected to the ISO Council for 2026 - 2028 and is a candidate for re-election to the ITU Council in November 2026. Regionally, Uganda is committed to the African Union's Continental AI Strategy, signed the 2025 Africa Declaration on AI, is a Smart Africa member, and is actively shaping the EAC Regional AI Strategy through EASTECO. Uganda's onboarding to the UNESCO RAM 2.0 anchors these international engagements domestically.

Does your country have strategies or policies for international cooperation on AI (bilateral, regional, or multilateral)?

Yes / In Progress

Uganda is active in several development and international cooperation bodies, for example, the United Nations (UN) and its specialised agencies, the World Trade Organization (WTO), the World Bank, and the Commonwealth of Nations. Uganda is a party to key human rights instruments and has strong national institutions to support democracy, the rule of law, and human rights and fundamental freedoms, with limits on respect for human dignity and the right to privacy, as set out in Uganda's Constitution of 1995. Uganda is making deliberate efforts to align the SDGs and its NDPIV, specifically through the Office of the Prime Minister (OPM) (OPM 2021). This has been since January 2016 and will continue until December 2030. This vision is also aligned with Digital Uganda Vision, the Uganda National 4IR and other national policies and strategies. In addition, between 2021 and 2024, the MoICT&NG and the ITU jointly developed a National ICT and AI development strategy, including a comprehensive AI landscape assessment. However, there are ongoing strategies and policies aligned with AI for international cooperation. For example, at the regional level, Uganda is part of the African Union (AU)'s 2024 Continental AI Strategy, which aims to leverage AI to drive economic growth, innovation, and improved public services (such as health, agriculture, education, and finance). Secondly, the EAC AI Alliance and its inaugural flagship initiative, the Regional Network on Artificial Intelligence in Education and Research, were launched on 30 March 2026, during the 4th East African Community Regional Science, Technology and Innovation (STI) Conference. Internationally, Uganda, through the MoICT&NG, has a strategic partnership with the UN Health Industry Foundation and the Prince Kimbugwe Foundation to accelerate AI adoption, youth skills development, and smart agriculture (ATC 2026).

Beyond this readiness assessment, has your country taken or planned additional steps to implement the unesco recommendation on the ethics of AI or institutionalise it in its national policies, institutions, or cooperation frameworks?

Yes / In Progress

Uganda is among the 193-Member States of UNESCO that adopted the 2021 Recommendation on the Ethics of AI, with commitment taken to operationalise the actionable tools of this Recommendation, including the UNESCO Readiness Assessment Methodology, spearheading this process. Foundational to Uganda's enrolment for the RAM exercise, Uganda participated in the Eastern Africa sub-Regional Forum on Artificial Intelligence (EARFAI), convened by UNESCO and the Government of Kenya from 24 to 26 June 2024, in Nairobi, Kenya. High-level representation by Honourable Chris Baryomunsi the outgoing Minister of ICT and National Guidance. Uganda also engaged actively in deliberations around the Theme: "Harnessing Artificial Intelligence for sustainable development in Eastern Africa: Governance, Ethics, Capacities, and Partnerships", and also participated in the issuance of the "Nairobi Statement on Artificial Intelligence and Emerging Technologies in Eastern Africa."

Uganda also participated in the UNESCO Global and Regional Fora on the Ethics of AI, including the previous forum, held in Bangkok, Thailand (24-27 June 2025). Uganda reaffirmed its global commitment to ethical AI and was onboarded, through the project on "Supporting Countries in Building Effective AI Governance", funded by Japan, to implement the Artificial Intelligence Readiness Assessment Methodology (RAM), a tool to evaluate national preparedness for the deployment of ethical, inclusive, and accountable AI. The findings and recommendations from the UNESCO AI Readiness Assessment Methodology (RAM) for Uganda will feed into the work of the National AI strategy. Uganda is also actively participating in the formulation of the EAC AI strategy.

Is your country a member of international or regional AI-related technical and ethical forums or standards bodies?

Yes / In Progress

Uganda is actively involved in several international and regional AI forums and standard bodies. Uganda's international AI engagements span UN agencies such as United Nations Educational, Scientific and Cultural Organization (UNESCO), International Telecommunication Union (ITU), United Nations Development Programme (UNDP) and Global Pulse, continental bodies such as African Union, Smart Africa, Africa AI Council, and standards bodies such as International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC). The significant bodies are highlighted here.

a) UN Independent International Scientific Panel on AI: This is Uganda's most significant formal representation in global AI governance. Established by UN General Assembly Resolution A/RES/79/325 on 26 August 2025, the Independent International Scientific Panel on AI is the first global scientific body on AI. This 40-member global panel was established to provide independent, evidence-based assessments of AI's risks and benefits (UN 2025a). Uganda's representative is Dr Joyce Nakatumba-Nabende, a Senior Lecturer in the Department of Computer Science who heads the Centre for Artificial Intelligence at Makerere University (UN 2025b). The 40 panel members were selected from over 2,600 applicants, appointed by the UN General Assembly. Members serve in their personal capacity, independent of any government or

institution. The Panel is mandated to produce an annual evidence-based report on AI's opportunities, risks, and impacts for presentation at the UN Global Dialogue on AI Governance and may also issue thematic briefs and update the General Assembly up to twice a year.

b) UNESCO Global Forum on the Ethics of AI and Readiness Assessment: Uganda participated in the 3rd UNESCO Global Forum on the Ethics of Artificial Intelligence (GFEAI), held in Bangkok, where it delivered a ministerial keynote that positioned the country as a continental leader in inclusive and rights-based AI development. A key milestone was UNESCO's designation of Uganda for the next phase of the AI Readiness Assessment Methodology (RAM). The evaluation of the RAM builds on the 2024 "Uganda National AI Landscape Assessment" report conducted in collaboration with the ITU (MoICT and NG & ITU 2025b).

c) Global Network on AI Supervision: Uganda is a member of the Global Network on AI Supervision (GNAIS), a UNESCO-convened forum of competent supervisory authorities. The network was officially launched at the 3rd Global Forum in the Ethics of AI, held in Bangkok, Thailand on June 26, 2025 (UNESCO 2025b). The network aims to strengthen international cooperation, capacity building and advance dialogues on AI governance.

d) ITU AI: Uganda has confirmed its active role in the ITU's AI for Good initiative, which brings together governments, industry, and civil society to advance trustworthy AI applications aligned with the Sustainable Development Goals. In July 2024, the ITU hosted its annual Global Symposium for Regulators (GSR-24) in Kampala, Uganda, where ICT regulators from around the world endorsed a set of considerations to balance innovation with regulation for AI and other emerging technologies (ITU 2024b). Hosting this event reflects Uganda's standing as a regional convening presence and affirms its position in international collaborations. Uganda has also declared its candidacy for re-election to the ITU Council, with voting to take place at the ITU Plenipotentiary Conference in Doha in November 2026. ITU Council membership gives countries a direct voice in setting strategic priorities for global AI and digital standards over the four-year cycle (UCC 2026).

e) ISO Global AI Standards Development Process: Uganda has confirmed its engagement in the International Organization for Standardization (ISO) led Global AI Standards Development Process. Uganda is part of the technical committee of ISO/IEC JTC 1/SC 42 Artificial Intelligence (ISO 2026) and is at active Participating (P-member) and engagement at this committee. ISO, together with IEC and ITU through the World Standards Cooperation framework, is the primary international body that develops voluntary technical standards for AI systems, covering risk management, bias, transparency, and robustness. Uganda has been an active member of the International Organization for Standardization (ISO) since 1990, represented by the Uganda National Bureau of Standards (UNBS) (UNBS 2026) and contributes to development and facilitation of international standards and specifications within AI fields. Uganda is part of the ISO Council Leadership, represented by UNBS and was elected to the ISO Council for the 2026–2028 term (UNBS 2025).

To build national capacity for the implementation of AI management standards, the Government of Uganda has supported ten (10) officials from key Ministries, Departments and Agencies to qualify as certified Lead Implementers of the ISO/IEC 42001 Artificial Intelligence Management System (AIMS)[1] standard. The course offers a framework for responsible development, deployment and governance of AI systems.

f) AU's Continental AI Strategy: In 2024, the AU adopted its Continental AI Strategy, providing a unified framework for using AI to drive digital transformation and socio-economic development across Africa (AU 2024). As an AU member state, Uganda is bound by the political commitments set out in this strategy. The strategy includes a phased implementation plan from 2025 to 2030, with Phase I (2025-2026) focused on establishing national governance frameworks, mobilising resources, and building capacity.

1 https://www.iso.org/home/insights-news/resources/iso-42001-explained-what-it-is.html

g) Africa Declaration on AI and Africa AI Council: The inaugural Global AI Summit on Africa, held in Kigali in April 2025, led to the Africa Declaration on Artificial Intelligence, which was signed by ministers and officials from 49 African countries, including Uganda. The Declaration aligns with the AU Continental AI Strategy, Smart Africa's AI for Africa Blueprint, the AU Data Policy Framework, the AU Convention on Cybersecurity and Personal Data Protection, and the UN Global Digital Compact (C4IR 2025).

h) Smart Africa Alliance: Uganda is a member of the Smart Africa Alliance, the continent's digital transformation initiative. Smart Africa's AI for Africa Blueprint is referenced in the Africa Declaration on AI. This provides a regional governance framework that member states, including Uganda, are expected to align with at a national level.

i) UN Global Pulse Uganda: Uganda hosts the UN Global Pulse Labs in Africa (UNGP 2026). The UN Global Pulse participated in the development of a report on guidelines on "Developing a Framework for Ethical AI", developed in collaboration with the MoICT&NG, which aims to formulate ethical guidelines addressing fairness, transparency, and privacy.

Uganda can also benefit from lessons emerging from African countries such as Rwanda, Kenya, South Africa, Ghana, and Egypt, which are advancing complementary approaches to AI governance, digital infrastructure, research ecosystems, innovation, and regulatory frameworks. Strengthening regional knowledge exchange and South–South cooperation through the African Union, the East African Community, UNESCO, and other international partnerships can accelerate implementation, promote harmonized approaches to ethical AI governance, and reduce duplication of effort while fostering contextually relevant solutions for Africa.



POLICY AREA 5

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UGANDA

Artificial Intelligence
Readiness Assessment Report

ENVIRONMENT AND ECOSYSTEMS

Overview

Environmental and ecosystem flourishing is recognised as a necessity for humanity and other living beings to benefit from advances in AI. AI environment and ecosystem policies involve frameworks and strategic directives that address how artificial intelligence systems affect biodiversity, natural resources, climate systems, and environmental sustainability. This policy area assesses whether AI development and deployment are aligned with environmental sustainability, covering energy use, e-waste, data centre footprints, and the participation of affected communities. Uganda's environmental legal framework through the National Environment Act (2019), the Renewable Energy Policy (2007), and the Waste Management Regulations (2020) performs well within their original scope but do not access environmental impact of AI systems such as explicit provision for data centres, AI-related energy demand, or AI-system waste. The most significant AI-specific development is the Uganda National Green Data Centre Strategy and Guidelines (2025), developed with the ITU, which mandate energy-efficiency benchmarks (a PUE below 1.3), renewable-powered facilities, and ESG-based sustainability reporting, positioning Uganda as a prospective regional leader in green digital infrastructure though implementation has yet to begin. However, two structural gaps stand out: Uganda has no operational mechanism linking AI policy to its climate and biodiversity agendas, and no framework guaranteeing that climate-vulnerable or local communities participate in designing or overseeing AI systems.

Does your country have strategies or policies that address the positive or negative environmental and climate-related impacts of AI systems?

Yes / In Progress

Uganda has several strategies in place to measure the environmental impact of ICT systems.

- The National Environment Act (NEMA 2019) was designed to provide a comprehensive legal framework for environmental management, including environmental impact assessments, conservation, and sustainable use of natural resources. The framework has been largely effective in strengthening oversight and enforcement through institutions like the National Environment Management Authority (NEMA).
- Renewable Energy Policy (REP) (2007) (MoE&MD 2007) which was intended to promote the development and use of renewable energy sources to increase energy access and reduce reliance on biomass. It has been effective in guiding investments in hydropower and solar energy, contributing to gradual improvements in Uganda's energy mix.
- The National Environment (Waste Management) Regulations, 2020, (NEMA 2020b) which was established to regulate the collection, transportation, and disposal of waste, including electronic waste. This has mainly improved waste governance, particularly in urban areas.

However, while each framework performs reasonably well within its original scope, they were not designed with emerging digital systems, such as AI, in mind. For example, the NEA does not provide explicit guidelines on energy infrastructure for AI systems and the systems that support them, particularly data centres. The REP does not guide systems that support the development and deployment of AI models. The WMR does not explicitly capture the management of waste produced by AI systems and data centres.

The MoICT&NG, supported by the International Telecommunication Union (ITU), developed the "Uganda National Green Data Center Strategy and Guidelines, 2025" (MoICT and NG & ITU 2025c), providing a means to address environmental concerns while enhancing its economic and technological competitiveness, especially in the age of AI. The Strategy provides guidelines that aim to build energy-efficient, low-carbon, and sustainable digital infrastructure. It addresses high energy demand by promoting green technologies aligned

with Uganda's Vision 2040 and the NDPIV, positioning the country as a sustainable technology hub in East Africa. The Strategy addresses three key important challenges for digital infrastructure that Uganda is exposed to: (a) Environmental concerns as data centres remain energy-intensive facilities and reports have shown that they contribute significantly to greenhouse gas emissions, hence the need to migrate to low-carbon infrastructure to meet climate commitments; (b) regional competition since several African countries such as Kenya and South Africa have made significant efforts to attract innovative technologies and yet Uganda has the opportunity to establish itself as the market leader and example for green digital technologies in East Africa (c) Socio-economic concerns where digital transition offers a unique opportunity to integrate communities by promoting green jobs and equitable economic benefits.

This strategy and guidelines focus on reducing emissions from energy-intensive facilities, fostering regional competitiveness, and ensuring green, inclusive, and sustainable digital transformation. The Strategy and guidelines contribute to SDG 8: Decent Work and Economic Growth, SDG 9: Industry, Innovation, and Infrastructure, SDG 10: Reduced Inequalities, and SDG 13: Climate Action as part of their framework for sustainable digital transformation. The strategy, as shown in Figure 1, provides guidelines for measuring, managing, and mitigating the environmental footprint of AI systems throughout their lifecycle. An example is addressing the transition to green data centres, which offer significant economic, environmental, and operational advantages, particularly as energy demand from AI and cloud computing continues to rise.



Figure 1: Uganda National Green Data Center Strategy and Guidelines. (Source: International Telecommunication Union[2])

The NEA, 2019, provides for environmental management, including environmental impact assessments, which are regulated by NEMA, especially for programs more likely to have significant environmental impacts. The National Environment (Environmental and Social Assessment) Regulations of 2020 (GoU 2020), supported by the 1995 Constitution, provide detailed procedures for assessing, mitigating, and monitoring environmental and social impacts, including public participation, sustainable development, and the mitigation of negative system impacts. These policies are not specific to AI use, but there is potential to address some of these emerging aspects brought about by AI and AI-related infrastructure, such as data centres and high-performance computing facilities, to allow the assessment of energy use, e-waste, and other environmental impacts, for example, the environmental impact assessments for the establishment of data centres.

However, Uganda lacks a formally established, operational national institutional mechanism that explicitly links AI policy to its climate and biodiversity agendas. The NEA 2019 and its implementing framework (ESIA), which are supported by objectives XXVI and XXVII of the Constitution of Uganda on accountability and environmental protection, position NEMA as a central coordinating and regulatory institution for environmental management, including oversight through impact assessments. This provides a potential institutional entry point for integrating AI-related environmental considerations.

2 https://www.itu.int/hub/publication/d-uga-nagrdg2-2025/

Existing policies do not explicitly protect the rights of underrepresented groups and do not include a section on the involvement of local and climate-vulnerable communities. The government of Uganda, through the Ministry of Justice and Constitutional Affairs, signed the World Intellectual Property Organization (WIPO) Treaty on Intellectual Property (IP), Genetic Resources, and Associated Traditional Knowledge on December 4, 2024 (MoFA 2024). The treaty establishes a global framework to protect and promote the intellectual property rights of nations, particularly those related to their genetic resources and traditional knowledge. The treaty also seeks to ensure the fair and equitable sharing of benefits derived from the use of these valuable assets, thereby protecting its cultural heritage and natural resources, with an emphasis on strengthening Uganda's capacity to protect its indigenous knowledge systems and support its sustainable development. It is reported that this treaty is a significant step towards safeguarding cultural and natural assets and ensuring that local communities are fairly compensated for the use of their traditional knowledge and resources. Although the WIPO Treaty does not specifically address AI, its provisions are highly relevant to AI, particularly for projects that leverage genetic resources, traditional knowledge, or locally generated environmental data.

Community Participation in AI-Related Environmental Governance

Uganda has no legal, policy, or institutional framework that specifically guarantees the involvement of climate-vulnerable or local communities in the design, implementation, or oversight of AI systems used for environmental management, land governance, or natural resource monitoring. There is evidence of work that shows that AI tools are actively deployed in agriculture, including satellite-based forest monitoring by the National Forestry Authority under the UN-REDD Programme (UN-REDD 2020) and agricultural AI systems developed by the Makerere University Center for AI targeting smallholder farmers exposed to climate variability. Where community participation exists, such as under Uganda's REDD+ Readiness Preparation Proposal, which envisions communities contributing to forest Measurement, Reporting and Verification, it operates through the existing environmental governance architecture and does not extend to any role in the design or oversight of the AI and remote-sensing systems that inform enforcement decisions affecting those communities (EGAP 2018). The legal framework governing AI use in environmental management remains underdeveloped, lacking a specific regulatory instrument that bridges environmental law, data protection law, and AI governance. This shows a governance gap that Uganda's national AI policy and emerging regulatory processes should address.

Environmental Footprint Monitoring of AI Infrastructure

The Constitution of Uganda, particularly objective XXVII, obligates the state to promote sustainable development and public awareness of environmental issues (GoU 1995). This has paved the way for subsequent initiatives and frameworks. For example, in 2025, the UCC, the MoICT&NG, and NEMA piloted ICT e-waste collection systems to address rising waste from digital devices, informed by policies and aligned with circular-economy goals. However, the systems do not directly track national indicators for AI infrastructure; rather, they focus on end-of-life device waste (UCC 2025). Additionally, the Uganda National Green Data Centre Strategy and Guidelines, 2025 (MoICT and NG & ITU 2025c), provide international standards and guidelines for implementing green data centres through Global Pressure and ESG (Environmental, Social, and Governance) impact reporting criteria, but these have yet to be implemented.

Data Centre Sustainability Reporting and Standards

Uganda is actively developing and implementing regulations that require data centres to report on energy, water, and sustainability standards, primarily through the recently developed Uganda National Green Data Center Strategy and Guidelines, 2025. While mandatory reporting is becoming more common, data centres in Uganda are adopting international sustainability standards, including:

a) PUE (Power Usage Effectiveness): The guidelines push for a low PUE (ideally below 1.3) to enhance energy efficiency.

b) Renewable Energy: Due to power reliability concerns and government policy, many new data centres (e.g., Raxio, Cente-Tech) are prioritising solar and hydro power sources to power their data centres.

These metrics are all mandated in these guidelines, aiming to make Uganda a regional model for sustainable digital transition. The guidelines are designed to align with Uganda's Digital Transformation Roadmap, with a focus on migrating to low-carbon infrastructure to meet national climate commitments. Other key sustainability regulations and guidelines in Uganda include:

- NEMA Regulations through its National Environment (Audit) Regulations (2020) (NEMA 2020c) and National Environment (Standards for Discharge of Effluent into Water or Land) Regulations (2020) (NEMA 2020a), requiring environmental compliance reporting.
- Energy Efficiency Focus: Regulations and policies, including those from the Electricity Regulatory Authority (ERA), promote the integration of renewable energy (hydro/solar) and encourage the adoption of energy-efficient technologies.
- Data Protection: Uganda's Data Protection and Privacy Act mandates local processing/storage of citizen data, driving the creation of new, modern data centres built to higher, more environmentally friendly standards.

The government, through NEMA, is tightening oversight, including mandatory environmental impact assessments (ESIA) for new projects and audits for existing ones as mandated by NEMA. The strategy aims to ensure that, as Uganda expands its digital infrastructure, it avoids high energy consumption and environmental damage.



POLICY AREA 6

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Artificial Intelligence
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GENDER

Overview

The integration of gender equality principles into the design, governance, and deployment of AI systems helps to ensure that AI advances social justice and shared prosperity rather than reinforcing structural disparities. It recognises that AI technologies can both reduce and reinforce existing gender inequalities, depending on how they are developed and applied. This policy area assesses whether gender equality principles are integrated into AI governance so that AI reduces rather than reinforces structural disparities. Uganda ranks 80th of 148 countries on the 2025 WEF Global Gender Gap Index (score 0.707; 16th in sub-Saharan Africa), yet it has no strategy or policy addressing the impacts of AI on gender equality. The enabling environment exists with the National Gender Policy (2007), the National ICT Policy (2014) which commitments to women, youth, and persons with disabilities, and the Equal Opportunities Commission's broad anti-discrimination mandate but none of it has been applied specifically to AI. The 2024 national census confirms that women remain less likely to use the internet and to be digitally literate, with consequences for their participation in the AI workforce. Uganda has no systematic mechanisms to monitor gender disparities in AI education or employment, and no mechanisms to identify or redress AI-related gender harms, including AI-amplified technology facilitated gender-based violence.

Does your country have strategies or policies that address the impacts of AI on gender equality?

In Progress

Uganda ranks 80th (out of 148 countries) globally on the World Economic Forum Global Gender Gap Edition 2025, with a score of 0.707 and ranks 16th in sub-Saharan Africa (WEF 2025). Figure 2 below shows Uganda's gender gap index scorecard on economic participation and opportunities, education attainment, health and survival and political empowerment.

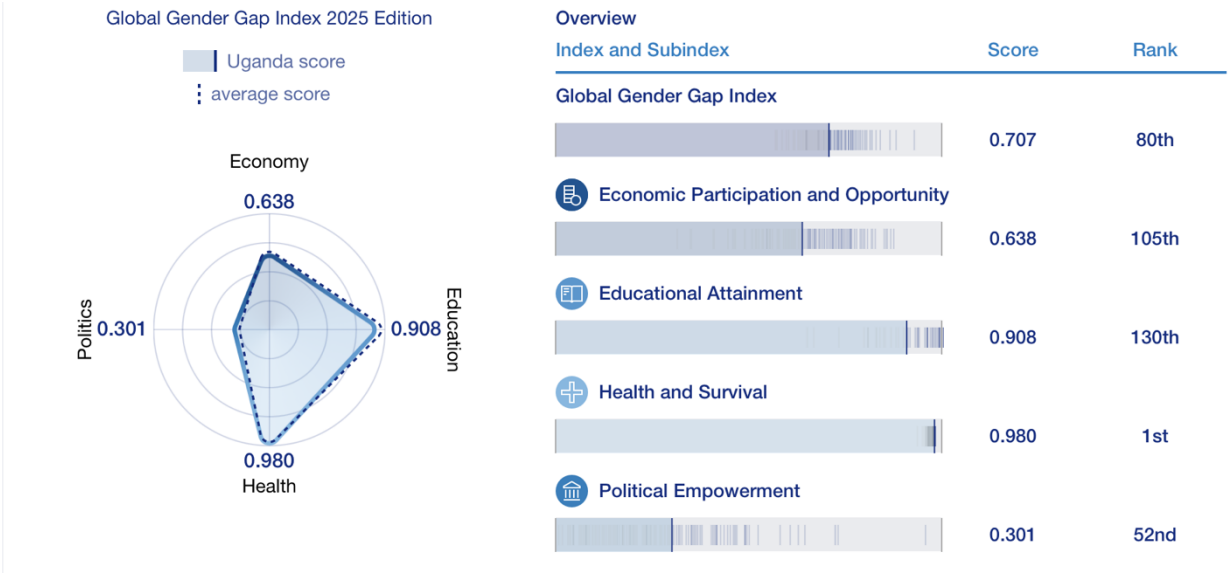


Figure 2: Global Gender Gap Index 2025 Edition for Uganda. (Source: World Economic Forum[3])

3 https://www.weforum.org/publications/global-gender-gap-report-2025/

Although Uganda ranks highly in the Global Gender Gap Index, it lacks strategies or policies to address the impacts of AI on gender equality. Several programmes and initiatives by government and non-government organisations aim to reduce the digital gender gap and support women's participation in technology, which indirectly contributes to gender-responsive AI outcomes.

The Ministry of ICT and National Guidance, in partnership with UN Women, the Ministry of Gender, Labour and Social Development, and the MoES have supported the African Girls Can Code Initiative (AGCCI) initiative, a programme that aimed at equipping young women with digital and coding skills to prepare them for careers in ICT and STEM fields. The UNDP Skills for Digital Jobs of the Future Initiative, implemented by UNDP Uganda and Refractory Academy Limited, aimed to address Uganda's high youth unemployment by equipping women and youth with advanced digital competencies (UNDP 2025). The initiative provided participants with skills in areas such as: Data Science, Machine Learning, Artificial Intelligence, Cybersecurity, Software Engineering, Cloud Computing, Blockchain Development, and Product Design, thus reducing the gender gap and promoting women's participation in technology, which indirectly contributes to gender-responsive AI outcomes. Other development partners such as Enabel are also actively involved in digital skills across domains such as health and education (Enabel 2026).

Civil society organisations like WOUGNET and Gender Tech Initiative Uganda (GTIU 2026) advocate for gender equality in ICT access and governance through building capacity for women in technology and contributing to the broader policy dialogue on inclusive digital ecosystems. These initiatives show that the impact of AI on gender equality is considered a national priority; however, the absence of legal frameworks and limited political commitment may hinder progress (MoICT&NG 2025b). Uganda has also established the Equal Opportunities Commission (EOC) which is a constitutional body established under the Equal Opportunities Commission Act of 2007 (EOC 2007) to fulfil Articles 32(3) and 32(4) of the Ugandan Constitution. Its specific mandate is to eliminate discrimination, ensure equal access to services, and enforce affirmative action for historically marginalised groups across the country. The EOC does not have an explicit mandate solely written for artificial intelligence or technology. Instead, the EOC applies its broad constitutional mandate under Section 14 of the EOC Act to monitor, evaluate and ensure that policies, laws, plans, programs, activities, practices, traditions, cultures, and usages do not perpetuate gender discrimination or marginalise vulnerable groups.

Does your country have mechanisms to identify/monitor or mitigate/redress gender disparities related to access to digital technologies (inequitable access to internet, devices, and digital skills)?

Yes / In Progress

The National Information and Communications Technology policy, 2014 (MoICT&NG 2014) commits to universal access and inclusion of marginalised groups, including women. This policy aims to a) promote ICT as an alternative career for women, youth and Persons With Disabilities (PWDs) in the informal and formal educational system; b) encourage creativity and innovation around ICTs among women, youth and PWDs leading to entrepreneurship development; c) enable full and equal participation of women, youth and PWDs in creating the Information society; d) implement special ICT training programs for women, youth and PWDs; e) facilitate and encourage the development of electronic networks and systems for associations and organisations engaged in the advancement of women, youth and PWDs issues in Uganda.

Secondly, the National Gender Policy, 2007 (MoGL&SD 2007) provides a comprehensive framework for promoting gender equality across all sectors, including ICT. It mandates integrating gender considerations into policy design, planning, and implementation to ensure that both women and men benefit equitably from development initiatives. Within the ICT sector, the policy supports efforts to reduce gender disparities in access to digital tools, infrastructure, and skills by addressing structural barriers, including education gaps, poverty, and cultural norms. Although developed before the rapid expansion of digital technologies, it remains a foundational guide for advancing inclusive digital transformation and empowering women's participation in Uganda's digital economy.

Existing mechanisms to identify, monitor, mitigate and redress gender disparities related to access to digital technologies include: the Uganda Digital Acceleration Project conducted by the Eight Tech Consultants, NITA-U, the Office of the Prime Minister, and the World Bank, which produced a situation analysis report on the state of digital access enablers in January 2025 (EightTech 2025). This report identified significant gender gaps in digital literacy and access to digital services and recommended targeted programmes to empower women and girls, shape training approaches, and design inclusive outreach. However, the project focused on Refugee-Hosting Districts.

- This project conducted 2,494 surveys of youth and adults to gather data on access to digital services, device ownership, connectivity, and service usage. 110 key informant interviews were conducted with key stakeholders, such as government officials, NGO representatives, service providers, and leaders from the stakeholder matrix. 75 Focus groups (450 individuals) were held with refugees and host community groups such as youth, women's groups and persons with disabilities, discussing challenges and opportunities in digital service delivery and infrastructure.
- The key gaps reported included low digital literacy and skills among stakeholders and vulnerable populations, a lack of specialised digital services, and limited awareness of existing digital services for refugees, which contributes to low access to digital services. In addition, limited stakeholder involvement in policy development and digital infrastructure.
- The results from the Uganda digital acceleration project inform policy by calling upon the Ministry of Education, NGOs, Development Partners, and Community Centres to focus on essential skills for economic participation, such as online business management and digital marketing for women and youth and offer inclusive training programs that also address the unique needs of women, PWDs, and youths with interactive learning methods.

Does your country have mechanisms to identify/monitor or mitigate/redress gender disparities related to participation in the AI workforce?

Yes / In Progress

Uganda has mechanisms to identify/monitor or mitigate/redress gender disparities related to participation in the AI workforce. The 2024 Uganda Bureau of Statistics national population census reports that women are underrepresented in the technology professions and have fewer digital skills, which also impacts their participation in AI-related jobs (Ntambi 2025). According to this report, women are less likely than men to use the internet and to be digitally literate, which may help explain their underrepresentation in tech roles. The key barriers reported include limited access to digital devices, a shortage of accessible training centres, and overwhelming household responsibilities. The monitoring of gender disparities is mainly led by civil society organisations, e.g., WOUGNET, WITU (WITU 2026), and Pollicy, that document the gap, advocate for policy change, and deliver digital and technology skills programmes for women and girls. International development partners (GIZ through FAIR Forward, UNDP, EU Digital for Girls) fund the most operationally active gender-AI programmes, with government endorsement but not government leadership or financing. The constitutional guarantee of equality, affirmative action, and the National Gender Policy provide an enabling framework that has not been applied specifically to Uganda's AI workforce.

Does your country have mechanisms to identify/monitor or mitigate/redress gender disparities in access to and participation in ai education and skills training?

In Progress

Uganda does not have dedicated mechanisms to identify, monitor, mitigate and redress gender disparities in access to and participation in AI education and skills training. However, some insights may be indirectly

captured through broader digital skills initiatives and project-based interventions that include monitoring components. For example, work investigated the digital competence of students in higher education in Uganda, utilising the Dig-Comp 2.1 framework (Abubakari et al. 2023). The study examined potential gender disparities in students' digital competence levels, aiming to identify areas for improvement for educational institutions and policymakers. The research utilised a quantitative approach, incorporating online surveys to collect data from a diverse sample of university students. The findings found slight but statistically insignificant differences between the male and female students.

Another project by the World Bank (Mboob et al. 2022), shows that Uganda has emerging, project-based mechanisms to address gender disparities in digital skills through pilot training programs and case studies. These initiatives include monitoring and evaluation components that track women's participation and outcomes. However, the report highlights that such mechanisms are not institutionalised at the national level and primarily focus on general digital literacy rather than AI-specific education. As a result, while Uganda demonstrates practical approaches to mitigation and learning, it lacks systematic, nationwide systems to consistently identify, monitor, and redress gender gaps in AI education and skills training.

The ITU and Uganda's Ministry of ICT developed the Digital Skills Capacity Building Needs Assessment for Priority Sectors in Uganda in 2024 using surveys, key informant interviews, and sectoral analysis. Findings demonstrated that Uganda has emerging mechanisms for identifying and assessing digital skills gaps. However, these mechanisms focus on the broad supply and demand of digital skills rather than on AI-specific training. While some data (such as respondent demographics) can reveal gender disparities, the report does not establish systematic monitoring or targeted redress frameworks for women's participation in AI education, highlighting a gap in specialised, gender-responsive tracking systems.

Does your country have mechanisms to identify/monitor or mitigate/redress AI gender-related harms?

In Progress

Uganda lacks mechanisms to identify/monitor or mitigate/redress AI gender-related disparities in access to and participation in AI education and skills training. However, the Uganda Data Protection and Privacy Act (2019) provide general protections for personal data but does not specifically address AI or gender-specific harms from automated systems. The only active monitoring of these harms is conducted by civil society primarily through organisations such as: WOUGNET and Policy without government mandate, funding, or enforcement authority. Legal redress is available in principle through the Computer Misuse Act and the DPPA but was not designed for AI-specific harms, especially in a context where Technology Facilitated Gender-Based Violence (TF-GBV), further amplified using AI-powered tools, is trending. This reinforces the need for prioritising the establishment of mechanisms to mitigate and redress gender-related harms caused by AI including TF-GBV.

Government-supported, gender-sensitive digital, media, and information literacy (MIL) programmes should be developed and adopted. These programmes should specifically equip women and girls with the technical and psychosocial tools to identify, document, and report AI-facilitated online gender-based violence, including deepfakes, to relevant authorities and regulators. AI policies should adopt an intersectional approach that recognizes the diverse experiences of women and girls, including rural women, women with disabilities, Indigenous women, refugees, and other marginalized populations. Such an approach will help ensure that AI systems neither reinforce existing inequalities nor create new forms of exclusion, while promoting equitable access to AI education, employment, innovation opportunities, digital infrastructure, and decision-making processes.



POLICY AREA 7

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Artificial Intelligence
Readiness Assessment Report

CULTURE

Overview

Today, culture is increasingly being shaped by AI, affecting how societies create, communicate, and make decisions. AI systems are trained on data that reflects social norms, languages, beliefs, and historical patterns, which can lead to cultural biases or the exclusion of marginalised groups. In multilingual and culturally diverse societies such as Uganda, AI systems may struggle to effectively represent local languages, dialects, cultural expressions and contextual meanings, thus potentially marginalising certain communities. Cultural values also influence how AI is perceived. Addressing the intersection of AI and culture necessitates inclusive dataset production, culturally sensitive design, community participation, and policies that safeguard linguistic and cultural diversity. The UNESCO MONDIACULT Conference 2025 offered a unique space to unpack and further explore this reality, with the release of the Report (UNESCO 2025c) of the Independent Expert Group on Artificial Intelligence and Culture (CULTAI), convened by UNESCO, which examined how AI is reshaping creativity, heritage and cultural ecosystems worldwide. Uganda has no standalone strategy or policy on AI in the cultural sector, and its principal instruments the National Culture Policy (2006, reviewed 2019) and the ratified 2005 UNESCO Convention on the Diversity of Cultural Expressions but do not address AI. The gap is most visible in intellectual property: the Copyright and Neighbouring Rights (Amendment) Act, passed in March 2026, deliberately excluded AI provisions despite explicit parliamentary advocacy, leaving authorship confined to natural persons and AI-generated works unaddressed. The report recommends institutionalising national AI language datasets, especially for at-risk languages, as protected, open-access national digital assets.

Does your country have strategies or policies on the use of AI and its impacts in the cultural sector?

No / Not Available

Uganda has no standalone strategy, policy, or regulatory instrument specifically addressing the use of AI in the cultural sector or its impacts on cultural workers, heritage, creative expression, or cultural rights. Neither the existing AI ethics from the MoICT&NG nor the existing sectoral frameworks for the creative industries address the intersection of AI and culture in any structured way. However, these strategies are considered a national priority as reflected by the Minister of State for Gender and Culture (DWO 2014). The minister has urged the need to regulate digital platforms to protect cultural diversity, safeguard artists' intellectual property, and ensure fair access to content. Digital platforms have been identified as a major driver of cultural content distribution, posing challenges for artists in protecting their intellectual property and securing fair compensation for their work.

The mandate to oversee the development of the creative sector lies with the Ministry of Gender, Labour and Social Development. Uganda's National Culture Policy (created in 2006, reviewed in 2019) is a framework designed to preserve, promote, and protect cultural heritage while enhancing its contribution to community empowerment and national development (MoGL&SD 2006). A key challenge for the Ministry is inadequate awareness of the cultural and creative industries' role in development. The Uganda Parliamentary Forum for Creative Industries implemented a project to enhance cultural preservation and inclusivity and to address policy gaps in Uganda's creative landscape. The project contributed to improving the business environment in Uganda by identifying and addressing key policy gaps that have limited the growth and sustainability of the cultural and creative industries (ICR 2024). Uganda ratified the UNESCO 2005 Convention on the Protection and Promotion of the Diversity of Cultural Expressions in 2015 and is a party to the East African Community Culture and Creative Industries Bill, 2015, which seeks to stimulate creativity and innovation in the sector. Neither instrument addresses AI specifically, though the UNESCO Convention provides a normative basis for protecting cultural diversity in the digital space.

Authorship and Intellectual Property Rights of AI-Generated Content

Uganda does not have a dedicated strategy or policy addressing issues of authorship and intellectual property rights of AI-generated content. Uganda's primary intellectual property instrument is the Copyright and Neighbouring Rights Act, Cap. 222, 2006 (Parliament of Uganda 2006), administered by the Uganda Registration Services Bureau (URSB) (URSB 2026). Under this law, copyright protects original literary, artistic, and scientific works, and authorship is limited to humans or natural persons. There is no provision recognising AI systems as authors or co-authors, and no mechanism for assigning copyright to works autonomously generated by machines without human creative input. Uganda's current copyright law limits authorship to natural persons, excluding AI-generated works. The most significant recent legislative action is the Uganda Copyright and Neighbouring Rights (Amendment) Bill, 2025, passed by Parliament in March 2026 and signed into law by President Museveni in April 2026 (Parliament of Uganda 2025), which aims to curb piracy and boost creators' earnings, specifically targeting online content infringement. However, this law deliberately excluded AI provisions despite explicit parliamentary advocacy for their inclusion.

The Parliamentary Committee on Legal and Parliamentary Affairs recommended amending IP laws to address AI. The January 2025 ICT Intellectual Property Guidelines issued by the Ministry of ICT and National Guidance, while the first instrument of their kind in Uganda, are administrative guidelines with a narrow scope focusing on governing IP ownership in government-contracted and government-funded ICT system procurement. Whereas the Uganda ICT Intellectual Property Guidelines (2025) primarily focus on protecting innovation, managing ownership of ICT-related intellectual property, and promoting commercialisation of locally developed technologies, the available information does not explicitly include provisions that specifically address persons with disabilities, indigenous peoples, women, or other underrepresented groups in the field of AI or ICT innovation. Uganda is also a member of WIPO(WIPO 2025), which has been conducting ongoing policy discussions on AI and IP since 2019 through its Conversation on Intellectual Property and Artificial Intelligence.

Artificial Intelligence and Indigenous Knowledge Systems

Uganda possesses rich Indigenous Knowledge systems relating to agriculture, biodiversity conservation, natural resource management, traditional medicine, weather forecasting, conflict resolution, and cultural heritage (NEMA 2019; UNESCO 2021). As AI systems increasingly utilise local data and knowledge resources, appropriate governance mechanisms should ensure the recognition, protection, equitable benefit-sharing, and Free, Prior and Informed Consent (FPIC) of Indigenous Peoples and local communities where Indigenous Knowledge contributes to AI training datasets, algorithms, or digital products (UNESCO 2022; United Nations 2007b; Convention on Biological Diversity 2011). Policies should also promote the documentation, digitisation, preservation, and responsible use of Indigenous languages and knowledge systems while respecting customary governance structures, collective rights, intellectual property, and cultural heritage (WIPO 2025; UNESCO 2005). Strengthening collaboration between Indigenous Knowledge holders, researchers, policymakers, and AI developers will help ensure that AI contributes to safeguarding cultural diversity while fostering inclusive and ethical innovation (UNESCO 2022).

Does your country have strategies or policies that support cultural and linguistic diversity, including the promotion of diverse cultural expressions and the protection, development, or integration of the country's official, indigenous, or minority languages within digital and AI ecosystems?

Yes / In Progress

Uganda is one of Africa's most linguistically diverse countries. It is home to over 41 indigenous and 4 non-indigenous living languages across a population of over 45 million people. Uganda is highly multicultural, with 65 ethnic groups, each speaking a distinct language. English is the official language, and Luganda is the most extensively spoken language in the country. However, Uganda lacks specific initiatives to promote the inclusion of minority languages in the digital and AI ecosystem. Some strategies and policies support cultural and linguistic diversity. The Constitution (1995) protects cultural rights and recognises Uganda's multicultural identity, providing a foundational basis for cultural expression and linguistic diversity. Article 6 of the Constitution (Amendment) Act, 2005, now also recognises Swahili as the second official language in Uganda (GoU 1995). Uganda ratified the 2005 UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions (UNESCO 2005) in 2015 (UNESCO 2015). The 2019 review of the National Culture Policy was informed by this Convention and incorporated the promotion of creative industries as an important category within the cultural sector. This policy defines culture as the combination of how a society preserves, identifies, organises, sustains and expresses itself, and aims at promoting culture and enhancing its contribution to community empowerment through cultural industries, research and development, performing arts, indigenous knowledge, language and literary art, cultural beliefs, traditions and values, and cultural sites and monuments. In the education space, policies support mother-tongue instruction at the early primary levels.

To bridge the digital divide and preserve linguistic heritage, there have been efforts to enhance language technology through the development of text and speech resources for Ugandan languages and with a focus on several under-resourced languages such as Amba, Bukusu, Rukiga, Nubi, Konzo, Lendu, Kenyi, Rutoro, Thur, Ruuli, Kuku, Chiga, Konzo (Diack et al. 2026; Katumba, Kagumire, et al. 2025; Nahabwe et al. 2025; Nakatumba-Nabende et al. 2024). The development of text and speech resources for Ugandan languages has opened up the potential to build AI models, specifically Large Language Models (LLMs) and smaller, more specialised Small Language Models (SLMs), to preserve Ugandan languages. Sunbird AI launched the Sunflower model, a multilingual large language model that can understand and communicate in over 31 Ugandan languages, enabling translation, summarisation, question answering, speech-to-text and text-to-speech for Ugandan languages (Akera et al. 2025). Makerere University Centre for AI has made an effort to develop datasets for Uganda's informal speech, such as proverbs, idioms, and slang. The creation of these datasets and models is important to power AI models such as machine translation, speech-to-text, and text-to-speech models, which can help to not only preserve these languages but also ensure that Ugandan populations are not excluded in the digital and AI age.

In the cultural and creative section, there are efforts to preserve the cultural and creative sectors through leveraging digital technologies and building digital platforms to boost, for example, the distribution of local films in Uganda and beyond, such as Kibanda Xpress and Pearlwood. Moreover, AI technologies offer solutions for the physical protection and digital reconstruction of Uganda's three UNESCO World Heritage Sites: the cultural one, the Tombs of Buganda Kings at Kasubi; and the two natural ones: the Rwenzori Mountains National Park and the Bwindi Impenetrable National Park. Across all these efforts, several structural challenges are:

a) Funding dependency. The most substantive language AI work in Uganda, from the public and private sectors, is sustained by international research grants rather than domestic budget appropriations. This creates fragility: when grants end, the work usually comes to an end.

b) Policy fragmentation. The cultural policy, the ICT policy (MoICT&NG 2014), data protection, and AI governance operate in separate institutional homes with limited cross-referencing. No single instrument integrates all these dimensions for indigenous and minority languages. Moreover, none of these existing commitments has yet been translated into a dedicated national digital language strategy, binding regulatory requirements on AI developers, or a sustainably funded institutional framework.

Safeguards that ensure Free, Prior, and Informed Consent (FPIC) of indigenous peoples for the collection, use, or sharing of their linguistic or cultural data.

Uganda does not have a comprehensive, legally binding, or regulatory framework that specifically mandates Free, Prior, and Informed Consent (FPIC) for the collection, use, or sharing of indigenous peoples' linguistic or cultural data for AI. While the 1995 Ugandan Constitution includes a clause on the right to culture, there is a significant gap in the enforcement of FPIC as a legal requirement for cultural and intellectual property matters. The Data Protection and Privacy Act, 2019 provides individual consent rights only and it does not accommodate the collective nature of indigenous cultural and linguistic heritage, does not treat cultural or linguistic data as a specially protected category, and makes no mention of the protection of linguistic data used that can be used for training AI models. Uganda has not ratified ILO Convention 169 (C169), adopted in 1989, which is the binding international treaty protecting the rights of indigenous and tribal peoples (ILO 1989), or adopted the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) (United Nations 2007a) which are two international instruments that would create binding FPIC obligations even in the absence of specific domestic legislation. Uganda has no AI-specific policy or regulation addressing data sovereignty and community consent requirements for language technology development.

The government should institutionalise national AI language datasets across all Ugandan languages especially those that are at risk of extinction (e.g., Ik, Ruuli, Nyala) as National Digital Assets. This would require the Ministry of ICT to secure dedicated budget allocations for maintaining and updating these datasets. These datasets should be preserved as open-access, vendor-neutral, and legally protected public goods to support local innovation and prevent the monopolisation or enclosure of linguistic data by private global entities.

Does your country have any national or local initiatives that support the use of AI by public cultural institutions (e.g., Museums, archives, libraries) to enhance public access, inclusion, or engagement?

No / Not Available

Uganda has no dedicated national or local initiative specifically supporting the use of AI by public cultural institutions such as museums, archives, or libraries to enhance public access, inclusion, or engagement. The country's principal cultural institutions, including the Uganda Museums, which are under the Ministry of Tourism, Wildlife and Antiquities and the National Records Centre and Archives under the Ministry of Public Service, are at the early stages of basic digitisation and electronic records management, with no published AI strategy, implementation programme, or AI-enhanced public access tool deployed at any national cultural institution. The use of AI by public cultural institutions to enhance public access, inclusion, or engagement is not currently prioritised in Uganda's national agenda.



POLICY AREA 8

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UGANDA

Artificial Intelligence
Readiness Assessment Report

EDUCATION AND RESEARCH

Overview

Education and research play a central role in shaping societies capable of developing and governing AI responsibly. This policy area examines how education systems and research ecosystems equip learners, educators, and researchers to develop and govern AI responsibly. Uganda's education-technology policy base is strengthening with the Education Digital Agenda Strategy 2025–2032 and the newly validated National Policy on ICT in Education and Sports. There is no national strategy for integrating AI into curricula; existing efforts are institution-specific, and only some individual universities have adopted policies on the use of Generative AI in teaching and research. The education foundations are also weak: Uganda does not participate in PISA, and national assessments show fewer than half of children demonstrating basic arithmetic competency at age ten. The research picture is more encouraging. Around ten universities offer accredited AI-relevant master's and doctoral programmes; the higher education system produces roughly 7,000 ICT graduates annually; the UNCST has adopted a National Open Science Policy (2025) and research guidelines that explicitly address consent, fairness, and bias in AI research involving human participants; and a dense community anchored by the Makerere Centre for AI, Sunbird AI, and networks such as Data Science Africa and IndabaX sustains internationally recognised work. Constraints remain structural: gross expenditure on R&D is just 0.31% of GDP, and Uganda's AI publication volume is low, though with disproportionately high citation impact. By evaluating education and research through this lens, the policy area determines whether national systems are equipping learners, educators, and researchers with the knowledge, skills, and safeguards needed to ensure that AI advances human development, inclusion, scientific integrity, and long-term societal benefit.

Does your country have strategies or policies on the use of AI and digital technologies for teaching, teacher training, e-learning and educational administration?

Yes / In Progress

Uganda has recently strengthened its policy framework for digital technology in education through its Education Digital Agenda Strategy, 2025-2032 and supported it with a comprehensive 2025-2026 nationwide school-level assessment (UNICEF 2026). The framework covers teaching, teacher training, e-learning, and educational administration, and is aligned with NDPIV and its core objective to embed ICT more deeply across the education system to enhance overall quality. This builds on the previous Uganda Education Digital Agenda Strategy 2021-2025 (MoES 2021), which is the primary framework governing the use of digital technologies in Education. The strategy applies across pre-primary, primary, secondary, Technical and Vocational Education and Training (TVET), tertiary institutions, teacher training colleges, and non-formal learning contexts. It provides a sector-wide strategy for integrating digital technologies into teaching, training, e-learning, research, and educational administration. The strategy was adopted in 2021 and implemented by the Ministry of Education and Sports.

The strategy objective is to expand ICT infrastructure and connectivity, strengthen e-learning platforms, improve the Education Management Information System (EMIS) that enhances digital content development, and build digital competencies among teachers and administrators. The strategy emphasises inclusion through rural connectivity expansion, gender equity in digital access, and alignment with inclusive education policies for learners with disabilities, though AI-targeted inclusion measures remain limited. Implemented between 2021 and 2025, it is monitored through sector performance reviews and ICT indicators in the EMIS and is funded through national budgets and development partner support. Key challenges in implementing the strategy include infrastructure gaps, uneven connectivity, limited teacher capacity, funding constraints, and the absence of dedicated AI governance frameworks for education.

MoES, in partnership with UNESCO, has recently validated the National Policy on ICT in Education and Sports. This policy marks a strategic shift from fragmented digital initiatives to a unified, pedagogical-led framework designed to prepare over 15 million learners for the 4IR, including AI technologies (UNESCO 2026a). However, AI is not yet specifically addressed in any binding education policy instrument, yet its use is spreading rapidly in the education sector through informal student adoption of tools like ChatGPT, Claude, Gemini, CoPilot, and DeepSeek without institutional governance, ethical guidance, or curriculum integration.

Does your country have strategies or policies to integrate AI into the curriculum across education levels?

No

Uganda lacks explicit strategies or policies to integrate AI into the curriculum across educational levels. However, the President of Uganda, while speaking at the National celebrations of the International Day of Education (Ninsiima 2025) which were themed around "AI and Education: Preserving Human Agency in a World of Automation" emphasised prioritising science, technology and AI in Education as a key to socioeconomic transformation. The existing digital divide is one of the main barriers. For example, in the TVET sector, where a minority of teachers meet the recommended digital skills profile for effective and sustained use of AI, most teachers risk being left behind (UNESCO 2026b). Nevertheless, fragmented efforts to integrate AI into the curriculum across educational levels are underway. For example, at the institutional level, the National Council for Higher Education (NCHE) (NCHE 2026) mandates that higher learning institutions revise their curriculum, which provides an avenue for the inclusion of AI in programmes such as Computer Science and Software Engineering. Some institutions have independently introduced AI and machine learning courses; these are currently institution-specific rather than nationally mandated. The Research and Education Network for Uganda(RENU) (RENU 2026) is integrating AI into its strategic framework to transform education and research through infrastructure development, talent nurturing, and local innovation. RENU supports research and education institutions in Uganda through connectivity and collaboration, providing high-speed Internet and other affordable solutions to overcome barriers to information and knowledge exchange. Additionally, AI is being integrated into TVET and skilling programs, with efforts to train educators and scale AI competencies nationally. Some of these efforts align with Uganda's Digital Transformation Roadmap and the UNESCO AI Competency Framework for Teachers (UNESCO 2024).

Does your country have education, training, or certification programmes in ethics of science and technology, and more specifically in AI ethics?

Yes / In Progress

Uganda has no government-mandated, nationally accredited programme or certification specifically in the ethics of Science and Technology. AI ethics education in Uganda currently occurs mainly through institutional initiatives, including public and private universities at the undergraduate and postgraduate levels, as well as AI-specific projects across research institutions. For example, some private universities offer postgraduate certificates (UTAMU 2026), or modules on AI governance, ethics, and responsible AI use (TU 2026). This includes courses offered by universities like Makerere University (Nakatumba-Nabende et al. 2023), Uganda Technology and Management University (UTAMU) and private organisations like Technological University, Otic Foundation, National ICT Innovation Hub and Refactory. The country is in the early stages of integrating AI ethics into formal education, with room to expand through coordinated national programmes and curriculum revisions. Table 2 summarises the universities that offer education, training or certification programmes in the ethics of AI.

Table 2: Ugandan Institutions that offer courses in Ethics of AI.

Responsible institution	Target Group	Type of programme	AI Competencies	Delivery arrangements	Scale, reach policy relevance of the programme
Makerere University	Undergraduate and Postgraduate	Degree	Responsible AI Topics: Ethics, Bias, Accountability, Fairness, Explainability	Theoretical and practical exercises	Equip bachelors, masters and PhD students with practical ethical AI skills.
UTAMU	Postgraduate	Certificate	AI Governance, Ethics, and Regulation. Topics: accountability, bias mitigation, confidentiality, regulatory adherence	Theoretical and practical exercises	Equip professionals with the knowledge and tools to ensure responsible, ethical, and legally compliant AI adoption in law firms and practice.
Cavendish University Uganda	Undergraduate	Bachelor degree	Ethical and responsible data practices	Theoretical coursework and hands-on projects.	Equip students with the knowledge and skills required to thrive in today's dynamic and data-driven world
Tech School of Artificial Intelligence Uganda	Postgraduate students	Certificate	Identification and Ethical Treatment of Sensitive Data in the Educational Context. Topics: Social impacts of AI in education, AI governance	Theoretical and practical exercises Use of case studies developed by experts in AI in education.	Create awareness of the social and cultural impact of Machine Learning in the education sector

National ICT Innovation hub	Tech practitioners, product leads, policymakers, and AI researchers	Certificate	Algorithmic bias, privacy, and accountability.	Theoretical frameworks and case study-driven sessions	Create awareness on responsible AI deployment, policy, and ethical frameworks to support local innovation and digital transformation
Refactory/GIZ	Professionals with both technical and nontechnical backgrounds	Certificate	Bias in AI, Data Feminism, Privacy concerns, Regulatory frameworks, Ethical considerations of deploying AI systems	Practical, hands-on experience	Focuses on practical AI tools, foundational knowledge, and responsible AI
SEETA university	UACE and beginners	Certificate	Responsible AI concepts	Practical, hands-on experience	Focuses on practical AI tools, foundational knowledge, and responsible AI
BDO Uganda/ GIZ	GIZ AI Bootcamp for Women in Uganda	Certificate	Bias in AI, Data Feminism, Privacy concerns, Regulatory frameworks, Ethical considerations of deploying AI systems	Practical, hands-on experience	Increase the number of Ugandan women capacitated in AI and Data Science with emphasis on ethical and responsible AI technologies.

Does your country have binding instruments for the ethical development, deployment and use of AI in education?

No / Not Available

Uganda has no binding instruments such as laws, regulations, or legally enforceable standards specifically governing the ethical use of AI in education. What exists instead are general legal frameworks and sector policies that address foundational issues relevant to ethical AI (such as data protection and the use of digital technologies), but none are expressly designed or exclusively to regulate AI ethics across education systems. However, individual institutions of higher learning, such as Makerere University (Mak et al. 2025) and Islamic University in Uganda (IUIU) (Alli et al. 2025) have developed AI policies and frameworks that guide the use and governance of (generative) AI technologies in higher education and research. The guidelines in this policy feed directly into the Academic Integrity Policy, which covers, among other things, plagiarism and honesty in education and research (MaK 2026).

Does your country monitor the impacts of AI use in education (e.g., On student wellbeing, learning outcomes, equity, teacher workload)?

No / Not Available

Uganda does not have policies or strategies to monitor the impact of AI use in education, for example, on student wellbeing, learning outcomes, equity, and teacher workload. Educational institutions primarily focus on plagiarism detection rather than on a broader assessment of the impact of AI technologies on education. There are no comprehensive, evidence-based monitoring tools that assess student learning outcomes, teacher workload, student wellbeing, equity, and access. This lack of monitoring on the impacts of AI could be attributed to low AI literacy among teachers and administrators, the prevailing perception that AI is largely negative, that there is a trust deficit within the education system, or that there is increasing difficulty in detecting AI-generated content due to improved human-like outputs and the absence of national monitoring frameworks.

Mathematics and Science Attainment Among 15-Year-Olds

Mathematics is an important foundation to building AI talent. It was observed that there are no internationally standardised Programme for International Student Assessment (PISA) scores that exist for Uganda. PISA is the OECD's Programme for International Student Assessment (OECD 2026), which measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges. The available national evidence on mathematics and science attainment through the Uwezo 2024 national learning assessment indicates that mathematics and science attainment at age 15 is significantly below both regional comparators and international benchmarks. Fewer than half of primary school children demonstrate basic arithmetic competency at age 10, providing a weak foundation for secondary mathematics and science.

AI-Relevant Graduates Across Educational Levels

Makerere University College of Computing and Information Sciences (CoCIS) reported that 514 graduates graduated at the recent February 2026 graduation. CoCIS awarded degrees to 514 ICT and computing graduates at the diploma, bachelor's, master's, and PhD levels (CoCIS 2026). Many of these graduates are relevant to the AI and data science pathway. The Uganda Institute of Information and Communication Technology (UICT) awarded diplomas and certificates to more than 600 graduates in ICT and related fields in 2025 (MoICT&NG 2025c). Sector assessments estimate that Uganda's higher education system produces

approximately 7,000 ICT professionals annually at the certificate, diploma, bachelor's, and postgraduate levels, covering key areas such as computer science, information technology, software engineering, and information systems, which provide foundational skills for AI development and deployment (NITA-U 2023).

Does your country have strategies or policies on AI research and development?

Yes / In Progress

The MoICT&NG is leading the development of the national AI strategy; stakeholder consultations are already underway, and an AI National Task Force has been established to steer its development. Currently, AI research and innovation are supported indirectly through the country's digital transformation frameworks. The Digital Transformation Roadmap 2023/24-2027/2028 positions AI as a key enabler of national development priorities such as improving public services, health diagnostics, agricultural productivity, education outcomes, and economic growth, which aligns with the NDPIV and Vision 2040 goals that emphasise science, technology, engineering, innovation and digital skills development. The roadmap also enables the development of a national AI strategy that will guide on the social value, societal unity and social impact arising from the use of AI.

Recently, Uganda launched an ABQ cloud platform (Nile Post 2026), a locally hosted platform designed to serve startups. Government institutions, innovators, and enterprises are using cloud infrastructure at lower costs. The domestic ecosystem has been established to secure national data and stabilise costs for local startups, mainly. This transition to a sovereign cloud also provides the technical framework for advanced Artificial Intelligence applications.

Gross Expenditure on Research and Development

The reported Gross Expenditure on Research and Development (GERD) as of 2023 is 0.31% of Uganda's GDP (StatBase 2026) as depicted in Figure 3. To strengthen national AI research capacity and reduce reliance on external funding, Uganda should establish competitive national AI research funding mechanisms that support interdisciplinary research integrating computer science, social sciences, humanities, law, ethics, public policy, environmental sciences, and Indigenous Knowledge systems. Such investments would foster responsible and contextually relevant AI innovation, promote collaboration across disciplines and institutions, and generate evidence-based solutions to address complex societal, environmental, and development challenge.

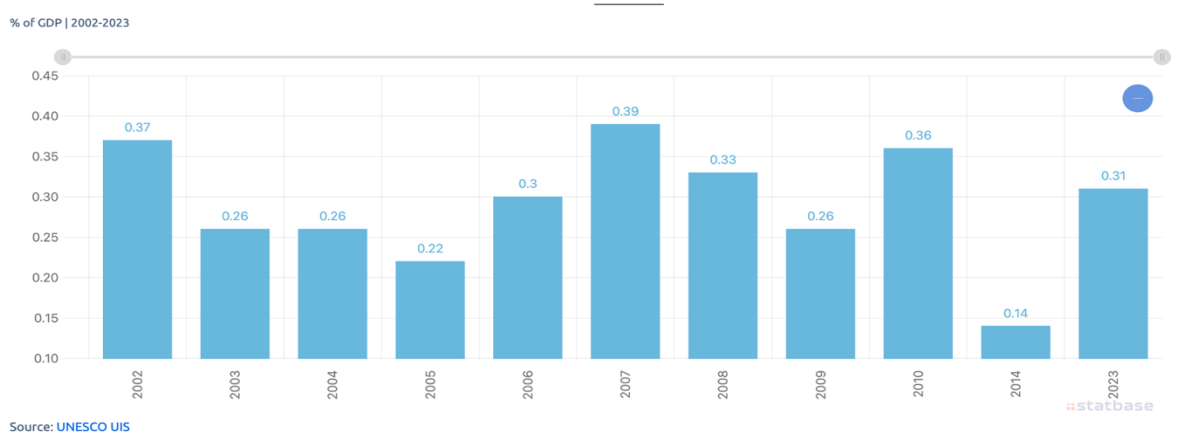


Figure 3: Uganda's Research and Development Expenditure. (Source: UNESCO Institute of Statistics[4])

4 https://statbase.org/data/uga-research-and-development-expenditure/

Interdisciplinary Collaboration, Open Science and Ethical AI in Research

Uganda has various initiatives that promote interdisciplinary collaboration, open science practices, and the ethical use of AI in scientific research. The Uganda National Council for Science and Technology (UNCST) has adopted the National Open Science Policy, 2025 (UNCST 2025b), which aims to promote open access to research data and publications. The policy aligns with Uganda's Vision 2040 and aims to enhance transparency, reproducibility, and the global impact of Ugandan research.

The policy has five main intervention areas:

- Establish and maintain robust digital and physical infrastructure to support open access to scientific data, research outputs, and collaborative platforms.
- Foster a dynamic and inclusive ecosystem that encourages collaboration between academia, industry, government, and the public.
- Develop and enhance the skills and competencies of researchers, scientists, and support personnel in open science practices.
- Create a comprehensive policy framework that encourages and enforces Open Science practices.
- Secure consistent financial support and investment to sustain Open Science initiatives.

UNCST has also launched the National Guidelines for Research Involving Humans as Research Participants, 2025 (UNCST 2025a). The guidelines are administered by UNCST, which is Uganda's national body for research governance. The core function of the guidelines is to make sure that scientific research, including AI research involving human participants, is conducted ethically and in compliance with national and international standards. When research involves using AI with human participants, the guidelines highlight the main ethical issues that the research protocol must address. These include ethical AI aspects such as: Informed consent to use data, Safety and transparency, Algorithmic fairness and biases, Data integrity, Data privacy, and Data ownership.

Other initiatives that promote interdisciplinary collaboration and open science practices include:

- National Science Week, an annual event organised by the Science, Technology and Innovation Secretariat (STI 2026), which serves as a platform for showcasing local scientific cross-disciplinary research and technological innovations, including those which are AI-related.
- Institutional Innovation Labs, Hubs and Startups such as the Makerere Center for Artificial Intelligence (MakAI 2026); Makerere University AI Health Lab; AirQo project (AirQo 2026), among others and startups like Sunbird AI which focus on the use and development of AI technologies to address societal challenges across different disciplines or domains.
- Innovation ecosystem support
    - Community-based learning initiatives for example, Data Science Africa (DSA) (DSA 2026)which also established a Uganda chapter, Deep Learning IndabaX Uganda (IndabaX, 2026), Women in Machine Learning Uganda (WiML 2026), PyLadies (PyLadies 2026), that organise workshops and hackathons that facilitate multidisciplinary AI research spanning health, language, agriculture, and environment.
    - Innovation Village, Outbox, and Hive Colab provide coworking environments and host hackathons and workshops.

Accredited Master's and Doctoral Programmes in AI

Table 3 provides a list of the universities with nationally accredited master's and doctoral programs in AI. Some universities offer full MSc in AI programs, while others offer AI courses within their MSc and PhD programs.

Table 3: Ugandan universities with accredited master's and doctoral programs in AI.

University	Course	Accreditation Status	Status
Makerere University	Master of Science in Computer Science (with AI and Data Science Specialisation) PhD in Computer Science, Information Technology and Information Sciences (with AI and Data Science Specialisation)	Accredited	Public
Mbarara University of Science and Technology	Master of Science in Computer Science PhD in Computer Science, IT, and Biomedical Engineering	Accredited	Public
Kabale University	Master of Computer Science	Accredited	Public
Muni University	Master of Science in Artificial Intelligence	Accredited	Public
Busitema University	Master of Science in Artificial Intelligence	Accredited	Public
Uganda Christian University	MSc in Data Science & Analytics	Accredited	Private
Kampala International University	Master of Science in Artificial Intelligence	Accredited	Private
Universal Technology and Management University	Master of Artificial Intelligence and Data Science	Accredited	Private
International Business, Science, and Technology University	PhD in Information and Communication Technology	Accredited	Private
Victoria University	Master of Science in Big Data Analytics	Accredited	Private

Size and Composition of AI Research Community

Currently, there's no official national database that provides information on the size and composition of Uganda's AI research community. The AI research community is mainly driven by Makerere University, located at the Makerere University Centre for AI, Marconi Lab (Marconi Lab 2026), and Makerere AI Health Lab (MakAI Health 2026). There are research organisations at University that host the Busitema AI and Interdisciplinary Research Group (BUAIR 2026), Mbarara University of Science and Technology, and private organisations such as Sunbird AI (Sunbird AI 2026) and the Uganda DeepTech Center. The research community is connected regionally through regional organisations such as DSA Uganda Chapter (DSA-U Chapter 2026), IndabaX Uganda (IndabaX Uganda 2026), Masakhane (Masakhane 2026), and Africa Europe Cluster of Research Excellence (CORE-AI 2026).

AI-Related Publications

The per-million publication count ranks low. According to the OECD AI Policy Observatory, the number of AI-related publications has been below 1% over time, as shown in Figure 4.

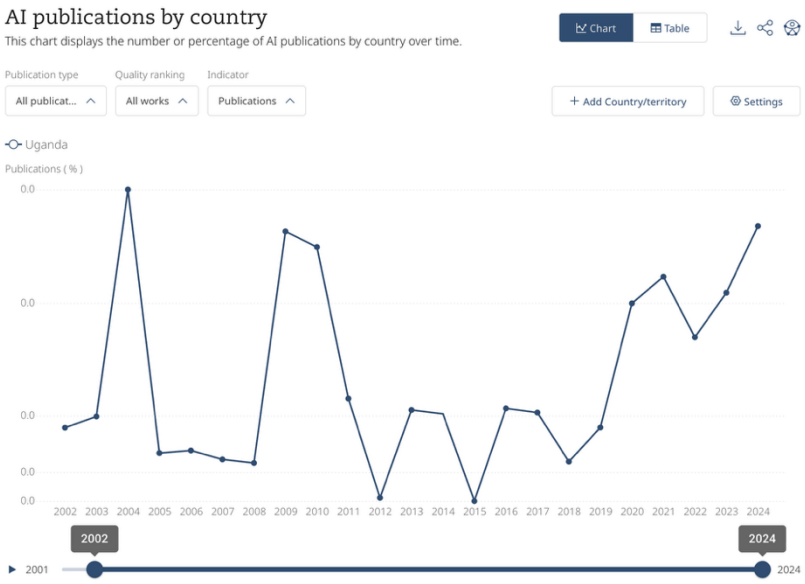


Figure 4: Number of AI-research publications in Uganda. (Source: Organisation for Economic Co-operation and Development (OECD)[5])

This low per-capita figure coexists with a disproportionately high citation impact for the research that is produced, reflecting the publication from Uganda's top AI researchers across public and private universities and research organisations. Our World in Data (OWID 2026) also provides statistics about annual scholarly publications on Artificial Intelligence and it indicates that Uganda has 139 publications on AI in 2024. This trend indicates a focus on publishing in high-quality international venues.

5 https://oecd.ai/en/data?selectedArea=ai-research&visualizationFiltersHash=eyJlbnRpdGllcyI6eyJjb3VudHJ5IjpbIlVHQSJdfX0%3D



POLICY AREA 9

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UGANDA

Artificial Intelligence
Readiness Assessment Report

COMMUNICATIONS AND INFORMATION

Overview

The information policy dimension examines how national policies and regulatory frameworks support the responsible use of artificial intelligence to strengthen access to information, knowledge creation, and freedom of expression. Uganda has no binding instruments addressing AI-driven misinformation, disinformation, or synthetic media. Online harms are managed through pre-AI legislation which criminalise malicious digital content but do not address deepfakes, automated disinformation campaigns, the traceability of AI-generated content, or the responsibilities of platforms whose recommendation algorithms amplify harm. There is no legal requirement that individuals be informed when interacting with an AI system or when a decision affecting them is automated; the Data Protection and Privacy Act operate at the level of consent for data collection and the transparency principles outlined in the 2022 Framework for Ethical AI remain non-binding. Monitoring of disinformation and online harms is carried out entirely by civil society. On the positive side, Uganda's e-government development index (0.4464) exceeds the African average, and AI literacy activity is growing especially in the public sector.

Does your country have binding instruments to ensure information integrity and mitigate AI-driven misinformation, disinformation and online harms?

No / Not Available

Uganda lacks specific, comprehensive legislation dedicated to mitigation of AI-driven misinformation but relies on existing legal instruments to manage online harms. The key laws used to regulate digital content and combat misinformation include the Computer Misuse (Amendment) Act, 2022 (MoICT&NG 2011a), the Penal Code Act (1950), the Regulation of Interception of Communications Regulations (2023) (UCC 2023) and the Uganda Communications Act, 2013 (GoU 2013). For example, the Computer Misuse (Amendment) Act of 2022 criminalises the transmission of malevolent information about another individual through digital platforms, as well as online hate speech that encourages hostility, division, or discrimination. Furthermore, the Act establishes penalties for the dissemination of prohibited content under false or disguised identities. These provisions aim to safeguard social cohesion, democracy, and mitigate algorithmically amplified harms, such as targeted harassment and polarisation, given the potential for AI systems to generate or amplify harmful narratives. Crucially, while these laws provide a baseline for digital conduct, they do not address the technical nuances of (Generative) AI, such as synthetic media (deepfakes) or automated disinformation campaigns. There is an urgent need for regulatory updates to specifically address the traceability of AI-generated content and the accountability of those deploying deceptive synthetic identities.

Public Trust in Official Online Information and Digital Public Services

In terms of level of public trust in official online information and digital public services provided by public authorities, Uganda is measured using the UN Online Services Index (OSI) and E-Participation Index (EPI) metrics, These are key components of the UN E-Government Survey (2024), that measure how different UN countries use digital technology and online tools to promote interaction between the government and its people for public service delivery and citizen engagement. The 2024 EPI results for Uganda indicate that Uganda ranks 150, with an average E-government Development Index (EDGI) score of 0.4464, higher than Africa's average of 0.4247 and the world's average of 0.6382 (United Nations 2024). The MoICT&NG has introduced the Client Charter (2025/2026–2029/2030) (MoICT&NG 2025a) which sets out the service standards and commitments to deliver continuous service improvement that clients and stakeholders should expect of the Ministry. There is currently limited empirical evidence specifically measuring public trust in AI systems and services in Uganda.

However, sector-specific research, particularly within the healthcare sector on trust in AI systems, has been conducted. A recent study report on healthcare leaders' perspectives acknowledged the potential of AI to improve diagnostic accuracy, service delivery, and healthcare efficiency (Kyambade and Namatovu 2025). However, it also highlighted that resistance to adoption is associated with concerns about data security, privacy, accountability, transparency, insufficient institutional readiness for AI deployment, and the impact of AI on job roles.

Disclosure Requirements for AI System Interactions

Uganda does not have a specific, standalone, binding law mandating that individuals be informed when interacting with an AI system. The Data Protection and Privacy Act, 2019, requires informed consent for processing personal data, provides data subjects with the right to know whether their data is being processed, and grants the right of access to information about automated processing and decision-making. However, it lacks specific provisions for algorithmic transparency or the right to know when a decision is made by an AI system rather than a human. The consent framework operates at the level of data collection, not disclosure, when interacting with an AI system. The guidelines on Developing a Framework for Ethical AI (June 2022) recommend transparency as a core principle, including that "AI systems should provide sufficient information to allow individuals to understand and challenge AI-driven decisions." The implementation of an ethical AI framework would help raise the necessary awareness among the community as they interact and work with AI systems. However, the provided guidelines are not binding instruments and have not been translated into enforceable legal obligations that would ensure that users can distinguish between human and AI-generated interactions.

Online Intermediary Responsibilities for Information Integrity and Online Harms

Uganda has no normative instruments that coherently define the responsibilities of online intermediaries for online harms and information integrity in a rights-respecting manner. The Uganda Communications Act, 2013; the Computer Misuse (Amendment) Act, 2022; the Electronic Transactions Act, 2011; and the Data Protection and Privacy Act, 2019 are the existing laws that Uganda has in place, however, these were not designed for platform governance in the age of AI. These laws mandate that intermediaries, including Internet Service Providers and platforms, must prevent misuse of information systems, manage illegal content, and protect user data. Moving forward, a rights-based regulatory approach is required to hold intermediaries accountable for systemic risks posed by their recommendation algorithms, particularly regarding the amplification of harmful content, without infringing on the fundamental human rights to freedom of expression and access to information. Drawing on UNESCO's normative Guidelines for the Governance of Digital Platforms, Uganda should establish inclusive, multi-stakeholder governance frameworks for platform governance and information integrity. These frameworks should clearly define rightsrespecting responsibilities for online intermediaries, ensuring that algorithmic decision-making and content moderation processes are transparent, accountable, and aligned with the protection of freedom of expression and access to information.

Monitoring Systems for AI-Driven Disinformation and Online Harms

Uganda has ongoing public initiatives aimed at building AI literacy, strengthening AI capacity, and raising awareness about the opportunities and risks associated with AI. Uganda currently lacks specific, comprehensive legal frameworks or tailored redress mechanisms to address harms caused by AI-driven disinformation and Online Harms. While general laws such as the Computer Misuse (Amendment) Act, 2022 exist, they often lack sufficient, specific accountability measures for AI-driven harms. Victims of online harms, including disinformation, struggle with unclear accountability. Civil Society Organisations (CSOs) such as CIPESA, Unwanted Witness and WOUGNET work to document AI abuses, provide digital security training to activists and journalists, and advocate for transparency in algorithmic decision-making.

Public AI Literacy and Risk Awareness Initiatives

One of the major public initiatives has been the Ministry's partnership with the Otic Foundation (Otic Foundation 2025) which focuses on AI capacity building and digital skills development. Through this collaboration, AI skilling and awareness sessions have been conducted at the National ICT Innovation Hub in Kampala and across the ministry's regional innovation hubs. Similar training and awareness activities have been organised in Soroti in Eastern Uganda and Kabale in Southwestern Uganda as part of efforts to extend opportunities available at the National ICT Innovation Hub to regional innovation ecosystems throughout the country. Further efforts to institutionalise AI education are also emerging within higher education institutions. UICT has developed a full curriculum leading to certificate and diploma qualifications in AI and data management, which is expected to commence implementation during the current academic year.

In addition to technical skilling initiatives, the Ministry has undertaken awareness-raising activities on AI risks and opportunities including policy briefs and guidelines on AI use. Public awareness efforts have also included radio talk shows and public discussions that address AI-related risks and opportunities in the technology space. However, Uganda does not yet have a fully developed or coordinated national AI literacy programme. Current initiatives remain largely fragmented. To be effective, Uganda must transition from these opportunity-driven initiatives to a comprehensive, National AI literacy strategy that integrates AI awareness and competencies into the formal education system, and provides targeted upskilling for vulnerable demographics, journalists, and public servants.

Public Trust in AI Systems and Services

Uganda has no monitoring system, observatory, or indicator framework specifically designed to detect and track AI-driven disinformation, misinformation, or online harms. The monitoring landscape consists entirely of civil society organisations such as:

- CIPESA, which regularly monitors and reports on digital rights violations, online expression restrictions, internet shutdowns, and surveillance in Uganda.
- Pollicy is a feminist technology organisation based in Kampala. Pollicy has produced research on gendered online violence and disinformation in Ugandan elections.
- Africa Check operates fact-checking services across Africa, including Uganda. It verifies information across social media platforms to tackle online disinformation.
- WOUGNET monitors and documents online violence against women and girls in Uganda.

These systems effectively document disinformation incidents and internet shutdowns but are not designed for AI-specific threat detection and operate without government cooperation.

POLICY AREA 10

unesco

UGANDA

Artificial Intelligence
Readiness Assessment Report

ECONOMY AND LABOUR

Overview

AI is transforming economies and reshaping labour markets, creating new opportunities for productivity, innovation, and growth, while also posing risks of job displacement and widening inequality. Governments are encouraged to anticipate these shifts rather than respond after disruptions occur. This policy area examines how governments prepare their economies and workforces for AI-driven change. Uganda's strategic architecture is well developed with Vision 2040, the Digital Transformation Roadmap 2023/24–2027/28, and NDP IV which position digital technologies as drivers of productivity and socio-economic transformation. However, Uganda ranks 124th of 139 economies on the 2025 Global Innovation Index, has no dedicated AI budget line, and no AI economic impact measurement framework. AI adoption and use in the private-sector AI is at early stage, with startups spanning language technologies, agriculture, health diagnostics, legal, and fintech. The ecosystem's most meaningful innovation output is open source rather than patents with developer activity growing to over 309,000 GitHub pushes in Q1 2026. Public-sector AI deployments exist across government agencies but are undocumented and uncoordinated. Critically, Uganda has no policy addressing AI's impact on the labour market, and talent retention is constrained by uncompetitive salaries and a domestic AI industry still too small to offer career progression for advanced AI practitioners.

Does your country have strategies or policies that promote AI use to enhance productivity, competitiveness, or economic development?

Yes / In Progress

Uganda has developed a set of strategies and policies that position AI and digital technologies as instruments of economic transformation, productivity, and competitiveness, but implementation gaps remain.

- Uganda Vision 2040 is the overarching long-term economic transformation blueprint within which all AI and digital technology policies sit. The Uganda Vision emphasizes the importance of Science, Technology, Engineering and Innovation (STEI) as critical drivers of economic growth and social transformation. It aims to help Uganda transition from a low-income, predominantly agricultural economy to an upper-middle-income country by 2040. The Science, Technology and Innovation (STI) Secretariat Office of the President (STI) (STI 2026) has spearheaded the position of leveraging AI and digital technologies as the primary enabling mechanisms for achieving the goals under Vision 2040.
- Digital Transformation Roadmap 2023/24-2027/28, through the National Planning Authority, identifies AI as a key enabler for enhancing productivity and economic development. This also aligns with the NDPIV and Vision 2040 goals that emphasize science, technology, engineering, innovation and digital skills development. The Digital Transformation Roadmap positions AI and related data-driven technologies as critical enablers of productivity and economic development by embedding them across key pillars of the digital economy. The roadmap emphasizes the use of data analytics, big data, and AI to drive innovation, improve decision-making, and create new industries and services. By promoting the adoption of emerging technologies, the strategy enables more efficient production processes, supports the development of digital services, and enhances research and innovation ecosystems. This roadmap has five key objectives, including;
    - Development of digital and electronic services across the key priority sectors in Government to support the delivery of services to citizens and residents of Uganda.
    - Investing in the development of robust and reliable digital infrastructure, including high-speed broadband networks, data centres, and cloud computing capabilities. This will ensure widespread access to digital services and enable seamless connectivity across urban and rural areas.

- Creating a conducive environment for innovation and entrepreneurship, promoting research and development, startup incubation, and collaboration between academia, industry, and the Government. By nurturing a thriving digital ecosystem, Uganda can drive technological breakthroughs and fuel economic growth.

- Establishing a robust framework for digital governance, ensuring data privacy, cybersecurity, and protection of intellectual property. By fostering trust in digital systems and implementing transparent regulations, a safe and secure digital environment for citizens and businesses can be built.

- Recognising the importance of digital skills in the digital age, with a focus on equipping citizens with the necessary knowledge and capabilities, prioritising digital literacy programs, up-skilling and re-skilling initiatives, and promoting STEM education to bridge the digital divide and ensure equal opportunities for all.

With emphasis on AI usage to enhance productivity, competitiveness, or economic development, the roadmap establishes a connection between economic transformation and AI by emphasising the development of digital skills, entrepreneurship, and innovation. The fifth objective of investing in AI literacy, research, and innovation hubs is to cultivate a skilled workforce that can create and implement AI solutions. This, in turn, promotes the development of startups, the creation of job opportunities for all, and the transition from a consumption-based to a production-oriented digital economy. It is anticipated that AI-enabled applications, such as intelligent public service systems or mobile advisory tools in agriculture, will enhance efficiency, reduce costs, and broaden market access, thereby directly contributing to increased productivity. The National Development Plan (NDPIV, 2025/26–2029/30) (NPA 2025), through the National Planning Authority, aims to "achieve higher household incomes, full monetisation of the economy, and employment for sustainable socio-economic transformation". NDP has two important pillars:

- Digital Transformation Programme that aims to increase ICT penetration and the use of ICT services to achieve efficiency gains and job creation.

- The Innovation, Technology Development and Transfer Programme aims to increase the commercialisation of STI products and services.

NDP IV is expected to double Uganda's GDP in five years. The government will aggressively invest in improving the country's competitiveness to drive innovation and job creation by prioritising a rapid uptake of Science, Technology and Innovation (STI) in seven identified high-impact growth areas: full monetisation of the economy; value addition and industrialisation; agriculture; tourism; mineral-based industrial development; finance and STI, including ICTs.

With all these policies and strategies in place, Uganda ranks low on the 2025 Global Innovation Index and is in 124th place of 139 economies, as shown in Figure 5 (WIPO 2025). The low GII scores reflect challenges in the country's innovation ecosystem and highlight global innovation trends as reflected in investment patterns, technological progress, adoption rates, and socioeconomic impacts.

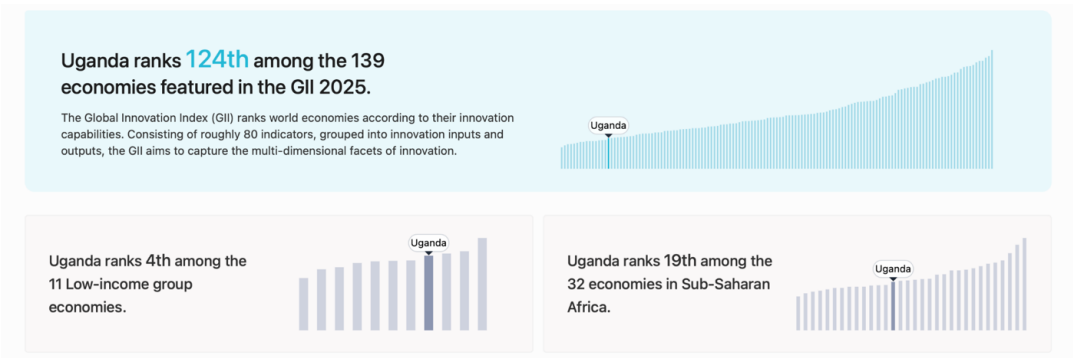


Figure 5: Uganda's ranking on the Global Innovation Index. (Source: World Intellectual Property Organization[6])

6 https://www.wipo.int/gii-ranking/en/uganda

These structural economic weaknesses constrain the AI-for-productivity agenda regardless of policy ambition. Moreover, Uganda has no AI economic impact measurement framework, no dedicated AI budget line beyond the general ICT and STI appropriations, and no sector-specific AI adoption targets within the budget.

AI Development and Adoption in the Private Sector

The current level of AI development and adoption in Uganda's private sector is in its early stages but rapidly emerging. There are several technology startups and AI companies in Uganda that focus on building AI models across domains such as Fintech, Agriculture, Health, E-commerce, language technologies, and environmental monitoring.

Table 4: Summary of AI startups, focus areas and AI projects developed.

Focus Area	Startup	Projects	Website
Language Technologies	Sunbird AI	Sunflower Language and Speech Models COVID-19 Social Media Analysis	https://sunbird.ai/
	AI Studio Uganda	Uganda Open Data Portal Crane Language Models	https://aistudio.ug/
	Crane AI Labs	Crane Language Models Ugandan Cultural Context Benchmark Wild Jailbreak Africa Dataset Pedagogy Benchmark Multilingual Dataset	https://www.craneailabs.com/
AI in Agriculture	M-Omulimisa (MOS, 2026)	AI-powered extension and advisory services and AI-credit scoring services	https://m-omulimisa.com
	Highland Innovation Hub	Agri-challenge accelerator	https://www.highlandhub.vc
Environmental Monitoring	Sunbird AI	AI-Environmental sensing Green Electrification planning using AI	https://sunbird.ai/

AI, Robotics, Drone Technology	Uganda Flying Labs	Improving livelihoods by deploying location intelligence and robotics technology	https://flyinglabs.org
Health	EmergentAI	AI-Powered Medical Imaging Screening AI-Powered tools for monitoring and predicting multidrug-resistant tuberculosis Cervisight for AI-enabled cervical cancer screening Ventrascan for AI-enabled TB screening	https://emergentai.ug/
	Wekebere	AI for Women's Health Monitoring	https://wekebere.com/
	Chil AI	Telehealth services	https://chilailab.com
	Africa Centre for Applied Digital Health	AI Health Solutions	https://cadh.africa
Women and Girls Empowerment	WOUGNET	AI chatbot for online gender-based violence AI Policy and Ethics Advocacy	https://wougnet.org/
Legal	Barefoot Law	AI for Legal Advisory	https://barefootlaw.org
AI Research and Education	Vision Africa AI	AI adoption in the finance sector	https://www.visionafricaai.com
	Octic Foundation (Octic, 2026)	AI Skilling and Training	https://oticfoundation.org

Business Expenditure on AI-Related Research and Development

Uganda does not have any published official estimates on the contribution of AI to the national economy, either from the Uganda Bureau of Statistics, the National Planning Authority, the Ministry of Finance, Planning and Economic Development, the MoICT&NG, or any other government body on AI's current or projected contribution to GDP, either as a monetary value or as a share of national output. This gap exists because Uganda's national accounts do not disaggregate the ICT sector's contribution in a way that would isolate AI-generated value from broader digital economy activity and contribution. The Uganda Bureau of Statistics GDP reporting follows standard sector classifications. For example, the current quarterly gross domestic product for Q2 2025/26 disaggregates reporting across three pillars: agriculture, forestry and fisheries; and industry and services, without an ICT/AI or emerging technology sub-category (UBOS 2026a). The country also lacks a national AI observatory, an AI economic monitor, or an equivalent mechanism to generate the data on which such estimates could be built.

AI's Estimated Contribution to the National Economy

As of 2026, high-technology and AI-relevant imported goods constitute a relatively small yet growing share of Uganda's total trade, which is heavily dominated by gold and agricultural exports. According to a World Bank report, ICT accounted for 0.1% of Uganda's total exports in 2020 (World Bank 2024a). This figure has grown to 2.72% in 2024, representing the share of ICT goods in total imports, according to the UNCTAD Trade and Development Report (UNCTAD 2024).

AI-Related Innovation Output

Uganda's overall patent filing activity is extremely limited, and there is no publicly available count of AI patents. The URSB handles national patent registrations under the Patents Act (Cap. 216), and Uganda also participates in the African Regional Intellectual Property Organisation (ARIPO) Harare Protocol system for regional patent protection. The URSB reports patents but not disaggregated by field. The more relevant innovation output measure for Uganda's AI ecosystem is open-source code rather than patents. The dominant institutions are Makerere University Centre for AI, Marconi Lab, and Sunbird AI, which have adopted and work with an open-source strategy for AI datasets and models. For example, the Sunflower multilingual model from Sunbird AI is released under the Apache 2.0 licence, one of the most permissive open-source licences, and its model weights, training data, and code are publicly available on Hugging Face. The Makerere University Centre for AI also openly releases its datasets and models, as shown in Table 5.

Table 5: A collection of Ugandan AI datasets across different domains.

Domain	Dataset
Language Technology	▪ Makerere University NLP datasets (MakNLP 2023) consist of: ▸ Uganda languages - Lumasaba, Acoli, Luganda ▸ Sentiment Tagged Parallel Corpus for Luganda and Swahili ▸ Multilingual Parallel Text Corpora for Luganda, Lugbara, Runyakitara, Acholi, Ateso. ▪ English-Luganda Parallel Corpus (Mukiibi et al. 2021) ▪ Machine Translation Benchmark Dataset for 31 Ugandan languages (Nsumba, Akera, et al. 2026) ▪ A crowdsourced dataset of Luganda and Swahili for text-to-speech synthesis (Katumba, Kagumire, et al. 2025) ▪ Luganda radio corpus for automatic speech recognition (Mukiibi et al. 2022)
Health	▪ Lung Ultrasound image dataset (Katumba, Murindanyi, et al. 2025) ▪ Blood slide image dataset for AI-based malaria diagnosis (Nakasi et al. 2025)
Agriculture	▪ A dataset of cassava whitefly count images (Nakatumba-Nabende et al. 2022) ▪ Beans image dataset (Mugalu et al. 2022) ▪ Coffee and Cashew nut image dataset (Sanya et al. 2024) ▪ Necrotized cassava root cross-section images dataset (Nakatumba-Nabende et al. 2020) ▪ Spectral image dataset for cassava disease occurrences using virus titre determination protocol (Owomugisha et al. 2023)
Environmental Monitoring	▪ AirQo Hyperlocal air quality dataset (Sserunjogi et al. 2022) ▪ Noise mapping and ambient sound recording dataset (Nsumba, Muhanguzi, et al. 2026)

The datasets represent a meaningful and internationally recognised body of open-source AI contributions, particularly in African language NLP, where Uganda's contributions are among the most substantial on the continent. Furthermore, according to GitHub's Innovation Graph, which tracks developer activity by country, Uganda's developer community is growing year over year. For example, the results for Q1 2026 show over 309k GitHub pushes, though the absolute numbers remain small relative to global AI hubs (Graph 2026) as shown in Figure 6.

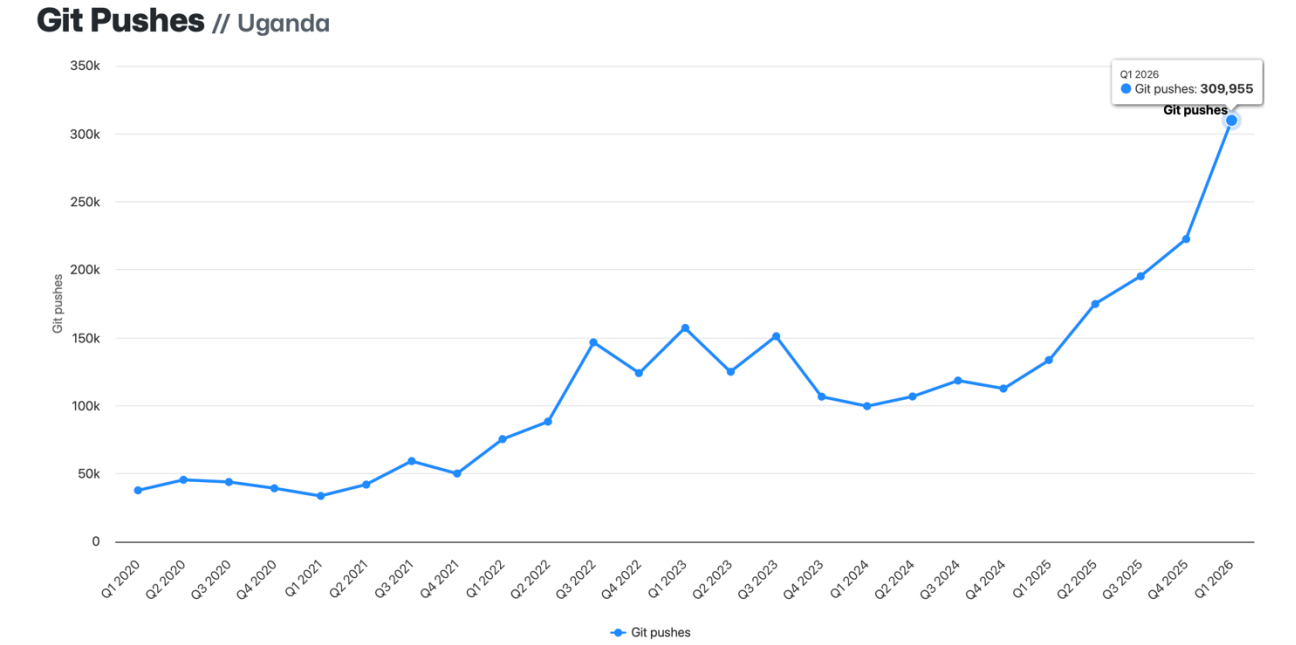


Figure 6: Number of Git Pushes from Uganda. (Source: GitHub[7])

AI Development and Adoption in the Public Sector

Uganda's public sector AI development and adoption are in their early stages and vary across different ministries, departments, and agencies (MDAs). There are existing AI deployments in the public sector, but not well documented and not well coordinated. A recent paper by (Nalubega and Uwizeyimana 2024) describes that AI innovations are being used in several Ugandan MDAs, for example: Uganda Investment Authority (UIA), URA, Uganda National Meteorological Authority (UNMA), Uganda Electricity Transmission Company Limited (UETCL), Uganda Electricity Distribution Company Limited (UEDCL), and Kampala Capital City Authority (KCCA). The Office of the Prime Minister (OPM) is using AI to strengthen Uganda's preparedness for largescale refugee inflows by predicting the number of forced-displacement movements from the Democratic Republic of the Congo (DRC) and South Sudan into Uganda (World Bank 2025).

Public Investment in AI

Public investment in AI in Uganda is currently in an early, foundational stage, focusing on policy formulation, infrastructure development, and integration into the Digital Transformation Roadmap Uganda Vision 2040, and NDPIV. The investment in AI is not measured separately and remains structurally insufficient relative to the scale of its digital transformation vision and mission. The investment in AI is made indirectly through the budget under the enabling environment for ICT technologies, including ICT infrastructure projects, Digital Transformation programs, Cybersecurity and data protection, the National Backbone Infrastructure, and e-government systems, under the MOICT&NG and the STI secretariat.

7 https://innovationgraph.github.com/economies/ug

Does your country have strategies or policies that address the impact of AI on the labour market?

No / Not Available

Uganda has no references that provide information on strategies and policies to address the impact of AI on the labour market. No dedicated policy or strategy is addressing the impact of AI on the labour market. There is a government skills development agenda that treats AI as an employment opportunity for youth, given Uganda's youthful population. Uganda has a rapidly growing population of nearly 46 million, with youth aged 18 to 30 comprising 22% of this total. This is through initiatives such as Makerere University Innovation Pod (UniPod), Kiira Motors Corporation (KMC) and Lwera Electronics and Semiconductors Limited. With support from UNDP, the Industry 4.0 Enterprise Development Programme, an initiative designed to empower young people to build a dynamic ecosystem for electronics manufacturing, additive manufacturing, and innovation-driven entrepreneurship within and beyond Makerere University, has been introduced.

Uganda has no reference that provides information on the ability to develop, attract and retain AI-related talent in the labour market. If available, the information is fragmented across different government agencies and private-sector actors. Many of the graduates with AI skills work at research labs across domains in the public and private sectors, within organisations that have embedded AI into their workflows. The fundamental constraint on Uganda's ability to develop and retain AI talent is economic. Uganda cannot currently offer competitive salaries with international technology companies and markets for AI capabilities. Moreover, the domestic AI industry is too small and in its early stages to offer career progression opportunities for advanced AI engineers and data scientists.



POLICY AREA 11

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UGANDA

Artificial Intelligence
Readiness Assessment Report

HEALTH AND SOCIAL WELL-BEING

Overview

This policy area assesses the governance and use of AI to improve health and social well-being in Uganda. Uganda has no AI-specific health policy, strategy or binding instrument: the Health Information and Digital Health Strategic Plan (2020/21–2024/25) and the 2024 Compendium of National Digital Health Guidelines provide a digital health governance framework, but neither addresses the risks of AI in clinical and public health use such as the clinical validation, training-data representativeness for Ugandan patients, algorithmic bias, explainability, or human oversight. At the same time, Uganda has a growing list of AI health innovations, led by Makerere University, the Infectious Diseases Institute, Mbarara University of Science and Technology, and the clinical partners. Research on the mental health and psychosocial impacts of AI use remains minimal in Uganda. The policy area recommends extending the Digital Health Systems Assessment Criteria with AI-specific assessment and post-deployment monitoring of AI models in health and aligned with the UNESCO AI Ethics Recommendation.

DOES YOUR COUNTRY HAVE STRATEGIES OR POLICIES ON THE USE OF AI IN HEALTH SERVICES?

No / Not Available

Uganda has no standalone AI-specific policy or regulatory framework in health policy or strategy. Still, it has an active, increasingly digital health governance framework in which AI applications are emerging. The Ministry of Health has not published guidelines, standards, or a strategy specifically governing the use, procurement, or oversight of AI systems in clinical or public health contexts. The most relevant instruments are the Ministry of Health's digital health policies, which provide a partial enabling framework but were not designed with AI in mind. The National Health Information and Digital Health Strategic (HIDH) Plan (2020/21–2024/25). The plan provides the main policy framework guiding digital technologies in the health sector. This strategic plan promotes the use of electronic health records, interoperable health information systems, and digital tools for data collection and analysis to improve healthcare delivery, surveillance, and decision-making. Although this strategy does not explicitly focus on AI, it creates the infrastructure and data governance systems necessary for AI-enabled health innovations, such as patient-level digital systems and integrated health information exchanges.

a) Ensure secure, timely, and accessible quality-assured health data.

b) Ensure effective statistical, analytical and data visualisation support for all functions at the national and sub-national levels.

c) Institutionalise within the health sector the use of patient-level digital systems at the point of care.

d) Equip both public and private health centre facilities with appropriate infrastructure to implement an EMRS.

e) Strengthen the enabling environment in Uganda's health sector to implement HIDH initiatives.

f) Develop a functional collaborative mechanism in the health sector to support HIDH implementation, research, and innovation.

The strategic plan's measure is a broader health innovation framework encompassing electronic medical record systems, health information, and digital health initiatives. The specific priority areas covered in this strategic plan include health information, digital health, governance, resources and capacity building, research and innovation. This strategy does not explicitly mention AI systems and measures in place to account for

persons with disabilities, indigenous peoples, women, or other underrepresented groups. Complementing the strategic plan, the Ministry of Health released a comprehensive Compendium of National Digital Health Guidelines in September 2024. These guidelines aim to standardise data management practices across the health sector, establishing common technical frameworks including data standards, messaging protocols, and privacy safeguards to ensure that diverse digital health projects can interoperate effectively. These guidelines include Health Data Protection, Privacy and Confidentiality Guidelines, Health Data Access, Sharing and Use Guidelines, Electronic Medical Records System implementation guidelines, and electronic Community Health Information System implementation guidelines that are all aligned with the Data Protection and Privacy Act 2019. However, AI is not specifically addressed as a major digital technology for clinical and public health care.

Initiatives using AI to enhance the quality of life, wellbeing or social inclusion

Uganda has several initiatives led by academic institutions, research and innovation labs, and development partners, particularly in health care and underserved communities, as shown in Table 6.

Table 6: Initiatives using AI to enhance quality of life, wellbeing or social inclusion.

Focus Area	Institution	Project and Initiative
Diagnostics	Makerere University, Ministry of Health, Uganda Cancer Institute (UCI)	**Cervical Cancer screening (Cervisight)[8]** An AI-enabled project designed to provide decision support and enhance the consistency and quality of cervical cancer screening within routine healthcare delivery in Uganda. Cervical cancer is highly preventable, and the project addresses high mortality rates driven by factors such as high HIV co-infection, especially in rural areas, late-stage presentation at health facilities, and low HPV vaccine uptake. Systemic gaps exist where services are heavily concentrated in urban, high-level health centres, forcing women to face severe transportation costs. Additionally, the project addresses the inherent subjectivity of Visual Inspection with Acetic Acid (VIA). **Objectives**: 1) Conduct cervical cancer screenings in different facilities and to collect high-quality datasets (VIA images and biometric data) 2) Implement the Cervisight mobile application, integrating AI models for image quality assessment, cervix location, cervix type classification, and cervical cancer classification. 3) Map real-world patient and clinician journeys during screening camps to create requirement checklists and standard operating procedures. 4) Facilitate multiple cervical cancer screening workflows, including VIA, Pap smear, and HPV testing. Target groups are Women of screening age, community health workers, midwives, nurses, and healthcare providers operating in rural and peri-urban communities. Geographical location: The project is centered in Uganda, with initial pilot activities in the Mbarara District across five facilities: Bwizibwera HCIV, Rubaya HCIII, Kagongi HCIII, Rubindi HCIII, and Kashare HCIII. **AI Applications and Services** ▪ Cervisight Mobile Application: A tool for patient registration, clinical clerking, and real-time AI-assisted screening support. ▪ AI Models: Deployed models for image quality classification, cervix type classification (Type 1, 2, 3, and OOD), and cervical cancer classification using EfficientNet B7 architecture. ▪ Cervix Locator XModel: A YOLO-based model designed to identify and localize cervical lesion sites during VIA screening. ▪ HPV Risk Score Prediction: A diagnostic pipeline using LightGBM architecture to

8 https://emergentai.ug/

Diagnostics	Makerere University, Ministry of Health, Uganda Cancer Institute (UCI)	**Service Areas:** Cervical and reproductive health, VIA-based screening, digital health innovation, clinical decision support, and healthcare workforce training. The initiative collaborates with the Uganda Cancer Institute and local health centres to ensure AI tools are operational for the Ugandan context, which is characterized by high HIV prevalence and high rates of STDs. **Safeguards and Ethics** ▪ Regulatory Oversight: Ethical approval from institutional research ethics committees ▪ Clinical Safety Net: A predefined protocol for secondary review and colposcopy-directed biopsy in cases of clinical discordance between VIA and AI results. ▪ Informed Consent: Mandatory procedures for participant enrolment and specific consent for capturing VIA images. ▪ Privacy and Governance: Data management practices emphasizing that data remains within Uganda, with controls to prevent unauthorized access. **Inclusion Considerations** ▪ Contextual Calibration: Validates AI performance against local factors like chronic cervicitis and recurrent STIs. ▪ Capacity Building: Focuses on training local clinicians (SCOs and midwives) to use digital tools effectively within their existing workflows ▪ Prioritizes underserved rural and low-resource communities. ▪ Design technologies suitable for intermittent internet connectivity and resource-constrained environments. ▪ Encourages participation of local healthcare workers and community stakeholders throughout system development.

Diagnostics	Makerere University, Ministry of Health, Uganda Cancer Institute (UCI)	**Current Status** The initiative has completed initial pilot phases, including deploying Samsung Galaxy devices with the Cervisight mobile application and training clinicians in the Mbarara district. Key activities currently include mass data ingestion of retrospective datasets from previous projects such as PRESCRIP-TEC, collected using tools like REDCap, among others; development of the cancer registry dashboards and user roles; and machine learning models for longitudinal patient follow-up and tracking. Key Challenges ▪ **Data Subjectivity:** Addressing high inter-observer variability and low agreement between human labelers on VIA results. ▪ **Infrastructure Constraints:** Mitigating poor internet connectivity in rural areas and the need for redundant power supplies to ensure system uptime. ▪ **Clinical Adoption:** Building clinician trust and ensuring AI tools support, rather than disrupt, established patient workflows. ▪ **Technical Integration:** Aligning mobile application features with field screening practicalities, such as submitting partial results while awaiting laboratory confirmation. ▪ **Sustainability:** Ensuring long-term maintenance of deployed AI systems and building community acceptance.

Diagnostics	Makerere University, Ministry of Health, Uganda Cancer Institute (UCI)	**AI-Enabled Tuberculosis Screening (VentraScan)[9]** The project was initiated to address the critical shortage of radiological capacity for tuberculosis screening in Uganda, where fewer than 100 radiologists serve over 48 million people. Fragmented, paper-based screening workflows and the absence of digital decision support tools result in delayed diagnoses, continued TB transmission, and preventable deaths. **Objectives** 1) Create an open, labelled, and inclusive dataset of chest X-ray images, clinical information, and laboratory data collected from the Ugandan population. 2) Develop machine learning models for automatic recognition of TB features in chest X-ray images. 3) Integrate the developed models into a decision support web application for point-of-care TB screening. 4) Calibrate and validate the developed platform within Ugandan clinical settings. Target groups are patients attending TB screening camps, radiologists, radiographers, doctors, clinical officers, nurses, and healthcare administrators operating across public health facilities in Uganda. Geographical Location: The project focuses on Uganda, with pilot implementation and data collection activities at health facilities in Kampala and surrounding regions, including Mulago National Referral Hospital, Mildmay Uganda, Ernest Cook University (ECUREI), and Luwero Regional Referral Hospital. **AI Applications and Services** ▪ Deep learning models for automated TB detection and chest X-ray triage, trained and validated on locally sourced Ugandan clinical data. ▪ Vision-language models for structured radiology report generation. ▪ Image segmentation models for visual overlay highlighting of areas of concern to support clinical interpretation.

9 https://emergentai.ug/

Diagnostics	Makerere University, Ministry of Health, Uganda Cancer Institute (UCI)	▪ AI-assisted prioritization of high-risk cases to optimize radiologist workflow and reduce reporting delays. Service Areas: Tuberculosis screening and diagnosis, Chest X-ray interpretation, Radiology workflow support, Community and mobile health screening, Health information and reporting, Digital health innovation, and Healthcare workforce support. **Safeguards and Ethics** ▪ Ethical approval and oversight through Mengo Hospital Research Ethics Committee and the Uganda National Council for Science and Technology (UNCST). ▪ Informed consent procedures for all data collection and clinical validation activities, including consent for open sharing of de-identified image data. ▪ Human-in-the-loop design where all AI outputs require radiologist review and approval before clinical use. ▪ Low-confidence AI predictions are suppressed and routed directly to radiologists to prevent unreliable outputs from influencing clinical decisions. ▪ Privacy-preserving data practices where all patient data remains within each facility's network, and data used for model development is fully de-identified. ▪ Bias assessment and mitigation through training on locally sourced Ugandan datasets with multi-radiologist label agreement, and continuous performance monitoring across demographic subgroups. ▪ Medical device certification pursued through Uganda's National Drug Authority to ensure regulatory compliance prior to broad deployment. ▪ Compliance with responsible AI and healthcare research principles.

Diagnostics	Makerere University, Ministry of Health, Uganda Cancer Institute (UCI)	**Safeguards and Ethics** ▪ Ethical approval and oversight through Mengo Hospital Research Ethics Committee and the Uganda National Council for Science and Technology (UNCST). ▪ Informed consent procedures for all data collection and clinical validation activities, including consent for open sharing of de-identified image data. ▪ Human-in-the-loop design where all AI outputs require radiologist review and approval before clinical use. ▪ Low-confidence AI predictions are suppressed and routed directly to radiologists to prevent unreliable outputs from influencing clinical decisions. ▪ Privacy-preserving data practices where all patient data remains within each facility's network, and data used for model development is fully de-identified. ▪ Bias assessment and mitigation through training on locally sourced Ugandan datasets with multi-radiologist label agreement, and continuous performance monitoring across demographic subgroups. ▪ Medical device certification pursued through Uganda's National Drug Authority to ensure regulatory compliance prior to broad deployment. ▪ Compliance with responsible AI and healthcare research principles. **Inclusion Considerations** ▪ Prioritizes underserved rural and peri-urban communities where radiological services are most limited. ▪ Designed for deployment in low-connectivity and low-infrastructure environments, with full offline-first capability. ▪ Supports mobile and community-based screening camps to extend specialist reach beyond urban hospitals.

Diagnostics	Makerere University, Ministry of Health, Uganda Cancer Institute (UCI)	▪ User interfaces designed for clinical staff at all levels, including radiographers and data clerks with varying levels of digital literacy. ▪ Encourages participation of the radiologists, radiographers, and clinical staff throughout system development, calibration, and validation. **Current Status** The VentraScan platform has been fully developed and has undergone alpha testing with clinicians at Mildmay Uganda. A calibration and validation study of the AI models has been completed. The team is currently pursuing medical device certification from Uganda's National Drug Authority and is planning the first pilot screening camp at Mildmay Uganda as the next step toward deployment. **Key Challenges** ▪ Variability in chest X-ray image quality across partner facilities with different equipment, addressed through input validation and quality-control flags. ▪ Risk of model performance degradation due to differences in patient population characteristics and X-ray equipment across deployment sites not represented in the training data. ▪ Infrastructure constraints, including compute, inconsistent power supply and internet connectivity at rural and peri-urban sites. ▪ Building trust and adoption among clinical staff accustomed to their existing workflows

Environmental Monitoring and Public Health Environmental Monitoring and Public Health	Makerere University	**Air Quality Monitoring Network (AirQo) was launched in 2015.**[10] **The main objectives are:** **a)** Improve air quality monitoring in African cities **b)** Provide real-time pollution information to citizens and stakeholders **c)** Increase environmental awareness among vulnerable urban populations. Target groups are urban populations, especially communities exposed to pollution. Geographical location - The initial focus was on Kampala, but it has now expanded to other Ugandan and African cities. **AI applications and services** ▪ Machine learning models for air quality forecasting. ▪ AI-enhanced calibration of low-cost air-quality sensors. ▪ Predictive analytics for pollution trends. ▪ Mobile and web applications providing public alerts. Service areas are: Environmental health, public health surveillance, Climate resilience, Urban planning

10 https://airqo.net/home

		The initiative supports community awareness campaigns and works with schools and local governments to interpret pollution information for citizens. **Safeguards and Ethics** ▪ Open-access environmental data principles. ▪ Community engagement and citizen science approaches. ▪ Local calibration to reduce bias in imported environmental models. ▪ Human interpretation by environmental experts and public-health practitioners. ▪ Inclusion considerations ▪ Targets underserved urban communities disproportionately affected by pollution. ▪ Includes educational outreach for schools and youth. ▪ Focuses on affordable, locally deployable technologies suitable for low-resource settings. **Current status:** The AirQo network is operational and expanding across Africa, with deployed sensor networks, forecasting platforms and policy partnerships. Key Challenges include: sustainability of sensor infrastructure, limited funding, data gaps, dependence on donor-supported infrastructure
Maternal, Sexual and Reproductive Health	Infectious Disease Institute (IDI), Makerere University Centre for AI and Sunbird AI	**Hub for Artificial Intelligence in Maternal, Sexual and Reproductive Health (MSRH) in Sub-Saharan Africa (HASH project)** Launched in 2021 **Objectives** ▪ Promote the development of sustainable homegrown AI solutions for challenges in Maternal, Sexual and Reproductive Health in Sub-Saharan Africa. ▪ Promote the significance of a responsible approach to AI development in MSRH, particularly regarding gender, inclusion and ethics.

The initiative is based in Uganda but operates across Sub-Saharan Africa through partnerships and subgrantee programs involving innovators from multiple African countries. Phase I of the project supported innovators from seven African countries, while Phase II aims to scale AI solutions in at least five African countries.

Sectoral focus areas are MSRH and Telehealth

AI applications

- **a)** AI chatbots for MSRH counselling and self-care
- **b)** Multilingual conversational assistants

Target groups include: women and girls, adolescents, rural and underserved communities, healthcare workers, AI innovators, researchers, and health policymakers.

HASH emphasises that AI should augment rather than replace human healthcare systems. Human care relationships remain central, especially for counselling, maternal monitoring, referrals, and community trust-building. The project also stresses co-learning and collaboration with African innovators and affected communities rather than importing external AI systems.

Ethical safeguards and Responsible AI measures include: Ethics and inclusion requirements, Human oversight, Community-centered design, Local-language adaptation Co-governance models, Bias reduction through localized datasets, and Protection of human rights and equity.

Current status and outputs: HASH Phase I was completed around 2025, while HASH Phase II is currently active and focused on scaling promising AI-health solutions.

Key implementation challenges: Limited AI infrastructure in the implementation countries, Shortage of localized health datasets, Digital literacy gaps, Ethical and regulatory concerns, Sustainability after donor funding

Maternal, Sexual and Reproductive Health	Infectious Disease Institute (IDI), Makerere University Centre for AI and Sunbird AI	**Hub for Artificial Intelligence in Maternal, Sexual and Reproductive Health (MSRH) in Sub-Saharan Africa (HASH project) was launched in 2021**[11] Objectives 1) Promote the development of sustainable homegrown AI solutions for challenges in Maternal, Sexual and Reproductive Health in Sub-Saharan Africa. 2) Promote the significance of a responsible approach to AI development in MSRH, particularly regarding gender, inclusion and ethics. The initiative is based in Uganda but operates across Sub-Saharan Africa through partnerships and subgrantee programs involving innovators from multiple African countries. Phase I of the project supported innovators from seven African countries, while Phase II aimed to scale AI solutions in at least five African countries. Sectoral focus areas are MSRH and Telehealth AI applications **a)** AI chatbots for MSRH counselling and self-care **b)** Multilingual conversational assistants Target groups include women and girls, adolescents, rural and underserved communities, healthcare workers, AI innovators, researchers, and health policymakers. HASH emphasises that AI should augment rather than replace human healthcare systems. Human care relationships remain central, especially for counselling, maternal monitoring, referrals, and community trust-building. The project also stresses co-learning and collaboration with African innovators and affected communities rather than importing external AI systems.

11 https://hash.theacademy.co.ug/about-hash/

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- Ethics and inclusion requirements,
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- Community-centered design
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Current status and outputs: HASH Phase I was completed around 2025, while HASH Phase II is currently active and focused on scaling promising AI-health solutions.

Key implementation challenges: Limited AI infrastructure in the implementation countries, Shortage of localised health datasets, Digital literacy gaps, Ethical and regulatory concerns, Sustainability after donor funding

Diagnostics	Makerere University	**Ocular Project**[12] **Objectives** 1) Improve diagnosis of malaria, tuberculosis and cervical cancer. 2) Reduce diagnostic delays in low-resource settings 3) Increase access to affordable diagnostics in rural and underserved areas. Target groups include: rural and underserved communities, health workers, patients lacking access to laboratory specialists. AI applications include: AI-assisted microscopy, Computer vision for disease detection, Mobile-phone-based diagnostic systems and AI-driven clinical decision-support systems. Service areas include: Telehealth, Laboratory diagnostics, and Cancer screening. The Ocular project is intended to support clinicians and laboratory personnel rather than replace them. AI assists health workers by speeding up slide interpretation and screening workflows. Community health systems remain central to: sample collection, patient counselling, treatment decisions and follow-up care. **Safeguards and ethics:** ▪ Human oversight by trained clinicians ▪ Validation of AI outputs before clinical decisions, ▪ Ethical approvals through institutional review systems ▪ Ongoing model evaluation and quality assurance. Current status and outputs: Prototype and research deployments have demonstrated the feasibility of AI-assisted diagnosis using low-cost equipment. **Key challenges:** ▪ Limited diagnostic dataset ▪ Need for large-scale validation.

12 https://www.ocular-project.com

Maternal Health and New born & child health,	Mbarara University of Science and Technology (MUST) and Makerere University	**Maternal Understanding through Language-Aware Multimodal AI in Uganda (MULAMU) project** Launched to address maternal health information gaps among women in low-resource and linguistically diverse communities in Uganda. **Objectives:** ▪ Develop multilingual and multimodal maternal health datasets in Ugandan languages with a primary focus on Luganda, Runyankore and Swahili ▪ Design and evaluate culturally appropriate AI systems for maternal health education, counselling, and decision support. ▪ Improve access to reliable maternal health information for underserved populations through locally adapted digital technologies. ▪ Advance responsible AI research for healthcare in low-resource settings. Target groups are expectant mothers, postpartum mothers, community health workers, midwives, nurses, and healthcare providers operating in rural and peri-urban communities. Geographical location; The project focuses on Uganda, with pilot implementation and data collection activities in the western, central, and border regions, including Mbarara, Masaka, and Kasese districts. **AI Applications and Services** ▪ Fine-tuned Large Language Models (LLMs) for maternal health question answering. ▪ Multilingual machine translation systems for English, Runyankore-Rukiga, Luganda, and Swahili. ▪ Speech and audio processing technologies for voice-based maternal health information delivery. ▪ AI-assisted generation of culturally adapted maternal health educational content.

Maternal Health and New born & child health,	Mbarara University of Science and Technology (MUST) and Makerere University	**Service Areas:** Maternal and reproductive health, Antenatal care, Postnatal care, Community health education, Health information access, Digital health innovation and Healthcare workforce support. The initiative works closely with hospitals, health centres, healthcare professionals, researchers, and local communities to co-create maternal health resources that reflect local languages, cultural contexts, and healthcare realities. The project also supports capacity building in AI and digital health research within Ugandan institutions. **Safeguards and Ethics** ▪ Ethical approval and oversight through institutional research ethics committees. ▪ Informed consent procedures for all data collection activities. ▪ Human validation of AI-generated health information by qualified clinicians and maternal health specialists. ▪ Privacy-preserving data collection and storage practices. ▪ Bias assessment and mitigation across languages and demographic groups. ▪ Compliance with responsible AI and healthcare research principles. **Inclusion Considerations** ▪ Prioritizes underserved rural and low-resource communities. ▪ Supports multiple local languages often excluded from mainstream AI systems. ▪ Addresses literacy barriers through multimodal (text and audio) interfaces. ▪ Designs technologies suitable for intermittent internet connectivity and resource-constrained environments. ▪ Promotes equitable access to maternal health information regardless of language, education level, or geographical location. ▪ Encourages participation of local healthcare workers and community stakeholders throughout system development.

	Mbarara University of Science and Technology (MUST) and Makerere University	**Current Status** The initiative is currently progressing through dataset development, multilingual model adaptation, and prototype system development. Initial work has focused on building maternal health corpora, machine translation resources, and fine-tuning open-source language models for maternal health applications in Ugandan languages. Pilot evaluations with healthcare professionals and target users are planned to assess usability, safety, and effectiveness. Key Challenges ▪ Limited availability of high-quality maternal health datasets in local languages. ▪ Scarcity of digital health resources for under-resourced African languages. ▪ Ensuring clinical accuracy and safety of AI-generated responses. ▪ Infrastructure constraints, including internet connectivity and computing resources. ▪ Long-term sustainability and maintenance of deployed AI systems. ▪ Building trust and acceptance among healthcare workers and communities. ▪ Addressing linguistic diversity and dialectal variation across Uganda.

Does your country have binding instruments for the ethical development, deployment, and use of AI in health services?

Yes / In Progress

Uganda currently lacks binding legal instruments that specifically regulate the ethical development, deployment, and use of AI in health services. However, several existing laws, policies, and regulatory frameworks indirectly govern aspects of AI use in healthcare. These may include: the Data Protection and Privacy Act, which regulates the collection, processing, storage, and sharing of personal data, including health data, which may be utilized in developing AI models for health. UNCST implements policies and strategies for integrating Science and Technology into national development policies. UNCST also provides ethical oversight to research in the country, specifically health-related research.

Does your country monitor or research the mental health and psychosocial impacts of AI use, including those related to anthropomorphic or affective technologies?

No / Not Available

Uganda has limited research data on the mental health and psychosocial impacts of AI use. Most existing work focuses on developing AI tools for mental health support rather than studying the psychological effects on users. For example, the collaborations between researchers from Makerere University College of Computing and Information Sciences and Butabika National Referral Mental Hospital are exploring AI-based systems that analyse helpline data and power a call centre capable of identifying signs of depression or psychological distress in Ugandan-accented English and Luganda (Butabika Hospital 2025). These initiatives aim to expand access to mental health services in settings with severe shortages of mental health professionals. Uganda is actively addressing the ethical implications of AI through initiatives like the guidelines on Developing a Framework for Ethical AI (June 2022) developed by UN Global Pulse Kampala and the MoICT&NG. While specific neurotechnology regulation is in its infancy in academic discussion, this framework aims to address AI-driven risks such as algorithmic bias and data misuse and to create an ecosystem for emerging technologies.



TECHNICAL INFRASTRUCTURE SNAPSHOT

unesco

UGANDA

Artificial Intelligence
Readiness Assessment Report

Overview

The Technical Infrastructure snapshot policy area reflects the idea that without the relevant infrastructure, AI development and the deployment and scaling of AI systems and solutions cannot be achieved effectively. This policy area assesses Uganda's technical and infrastructure foundations with a focus on key aspects such as access to electricity, internet connectivity, mobile phone ownership, availability of data centres, and cloud computing capabilities. Uganda's most fundamental constraint is energy: with only 51.5% of the population has access to electricity. Connectivity is still mobile with 4G coverage reaches 82% of the population, but active mobile broadband subscriptions stand near 39.8%, and fixed broadband with just over 100,000 subscriptions, under 0.2% of the population. The main constraint is affordability rather with a basic mobile broadband basket costing 7.95% of monthly GNI per capita. The compute capacity is also very limited with the Tier III Raxio data centre but also there is growing research infrastructure including the National AI Research Cloud commissioned in March 2026 and the ACE bioinformatics high performance computing infrastructure. Uganda sits in Tier 3 (Establishing) of the ITU Global Cybersecurity Index, scores 72 on the World Bank's Statistical Performance Indicators, and only 38% of schools have internet connectivity with structural gaps that impend AI and its adoption.

What share of the population has access to electricity?

Energy access is the most fundamental infrastructure barrier to AI development in Uganda. Despite Uganda's robust policy framework for electricity, including Uganda's NDPIV, Uganda Vision 2040, the 2007 Renewable Energy Policy, and the 2023 National Energy Policy, Uganda's population with access to electricity is an average of 51.5% nationwide (World Bank 2023), 76.4% of the population in urban areas have access to electricity; however, this percentage drops to 42.4% in rural parts of Uganda. Uganda's electricity generation capacity has nonetheless grown substantially. The country's installed electricity capacity increased from 609.4 MW in 2012 to 2,048.1 MW by the end of 2024 (Murungi et al. 2025). Uganda's energy is predominantly renewable, dominated by hydropower, complemented by solar and biomass. The 600 MW Karuma Hydropower Plant is now operational and is being considered a potential source of large-scale compute infrastructure. Figure 7 shows an overview of access to electricity in Uganda.



Figure 7: Statistics on the overview of access to electricity in Uganda. (Source: World Bank[13])

13. https://data.worldbank.org/indicator/EG.ELC.ACCS UR.ZS?contextual=default&end=2023&locations=UG&start=1991&view=chart

How reliable is the electricity supply in terms of continuity and outrages?

Uganda's electricity supply is characterised as unreliable, with outages reported in research by the World Bank (World Bank 2024c). Although Uganda generates a surplus of over 2,048 MW from various households, commercial consumers and industries have to endure hours of outages, and even when electricity is available, blackouts occur. The reliability crisis deepened significantly in 2025 following the rushed transition from the private distributor Umeme Ltd to the state-run Uganda Electricity Distribution Company Ltd (UEGCL 2024). This implies that an unreliable electricity supply negatively affects the incentivisation of potential entrepreneurs to establish businesses, thereby hindering economic development. Privately owned data centre operators such as Raxio have tried to engineer around this constraint by investing in dedicated medium-voltage power lines direct from substations. However, this solution is available only to private facilities, leaving the broader ecosystem of public institutions, businesses, and individual users vulnerable to power interruptions. That remains a foundational barrier to AI deployment and the delivery of AI-enabled public services across Uganda.

What percentage of electricity generation comes from renewable sources?

Uganda's electricity generation is highly dependent on renewable sources. By June 2025, renewable energy sources accounted for approximately 87.3% of total generation capacity, comprising hydropower at 87%, bagasse (sugar cane biomass) at 9%, and solar at 2%, with the remaining 2% from thermal sources, as shown in Figure 8 (ERA 2025).

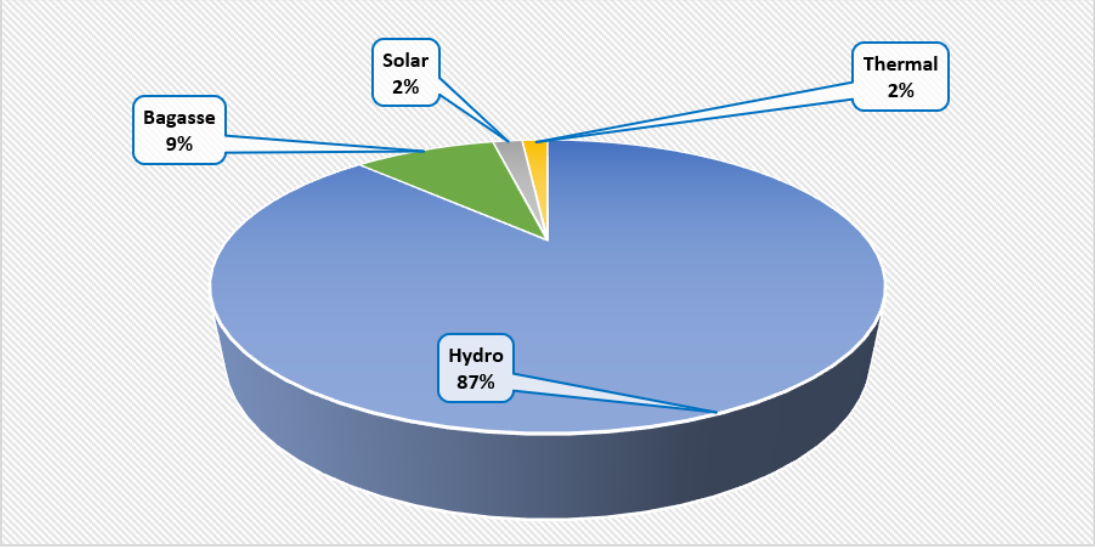


Figure 8: Overview of energy sources in Uganda. (Source: Electricity Regulatory Authority[14])

The IEA's Uganda Energy Transition Plan confirms that the grid is already 99% renewable in terms of actual generation (IEA 2023). Hydropower is the dominant source, drawing primarily on the River Nile and Lake Victoria. Uganda aims to increase its non-hydro renewable generating capacity, particularly from solar, given the country's solar resource. The 600 MW Karuma Hydroelectric Power Station was commercially commissioned in September 2024, bringing total installed capacity to approximately 2,098.6 MW. This renewable dominance

14 https://www.era.go.ug/energy-generated-to-the-national-grid/

is an important asset in the context of AI infrastructure. This renewable-dominated mix positions Uganda among countries with low-carbon electricity systems and provides a strong foundation for climate-friendly usage. It is one reason the proposed Aeonian data and AI computing centre is designed to run on surplus hydropower from Karuma which is a green compute proposition (iAfrica.com 2025).

What is the country's total international bandwith and what share of the population uses internet?

According to the UCC Market Performance Report Q4 2025 (UCC 2026), there are a total of 57.3 million mobile registered subscriptions in Uganda, with this figure equivalent to 76.2% of the total population (ITU 2025b). There is a total of 47.1 million mobile subscriptions. The internet traffic was 332.4 M internet traffic in GBs as shown in Figure 9.

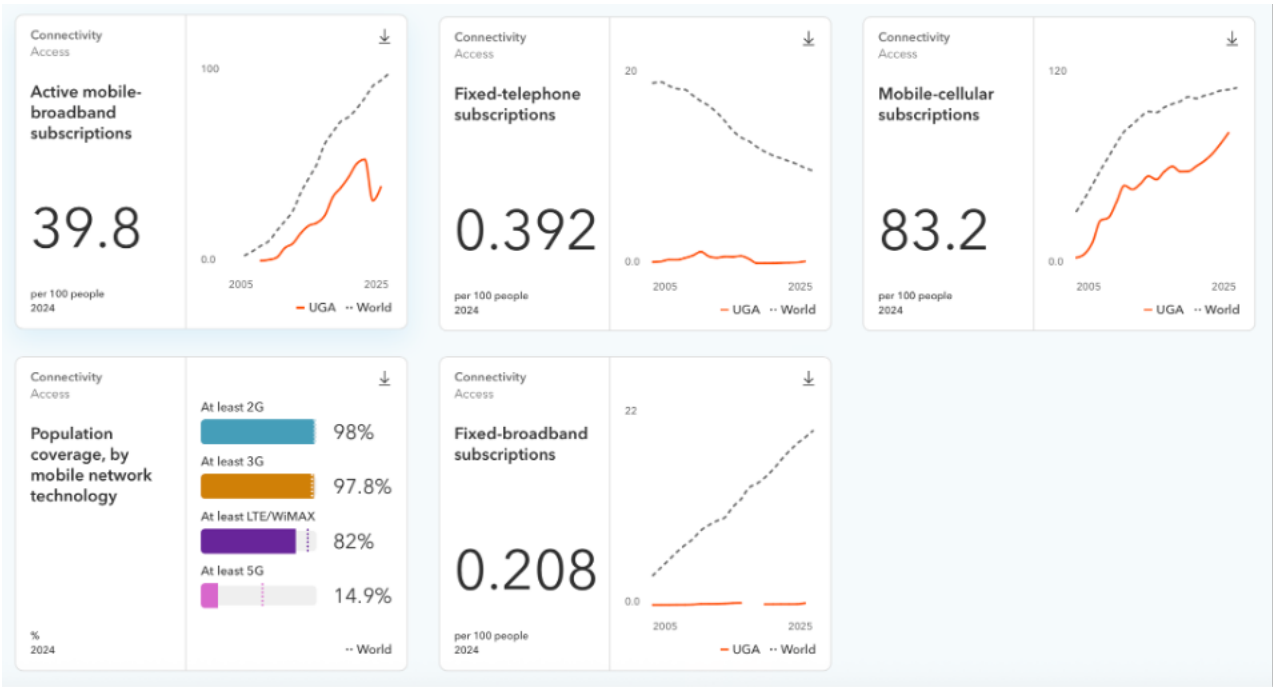


Figure 9: Statistics on Internet connectivity in Uganda. (Source: Uganda Communications Commission[15])

What share of households have fixed broadband subscriptions?

The UCC Market Performance Report Q4 2025 reports 18.5 million mobile internet subscriptions. Uganda's connectivity landscape is defined by a dominance of mobile broadband and fewer connections of fixed broadband infrastructure. By the end of 2024, mobile subscriptions surpassed 40 million. 4G mobile internet coverage reached 82% of the population in 2024, and 5G coverage extended to 14.9% of inhabitants, while mobile download speeds averaged 32.11 Mbps which is faster than fixed-line broadband, which averaged only 13.08 Mbps. The World Bank report indicates that there are only 103,838 fixed broadband subscriptions in Uganda as of 2024, which is below 0.2% of a population of over 50 million and much lower than what is in the region (compared to 1,717,721 in Kenya) (World Bank 2024c). This places Uganda among the countries with the lowest fixed broadband penetration rates in the world. This implies that for AI applications, there is reliance on mobile connectivity which has direct implications for AI deployment.

15 https://www.ucc.co.ug/wp-content/uploads/2026/02/UCC-Market-Report-for-Q4-2025-Dec-2025.pdf

What share of households has active mobile broadband subscriptions?

According to the UCC Market Performance Report Q4 2025, 39.8% of the population has active mobile broadband subscriptions. The quality or speed of the broadband access in each country is provided by Ookla's Speed Test Global Index. In January 2026, Uganda was ranked in the 132nd position for fixed broadband with a median download speed of 28.66 Mbps, an upload speed of 19.58 Mbps and a latency of 6 Ms (Ookla 2026a). Uganda ranks higher compared to other regional countries, such as Kenya (#147 at 15.92 Mbps), but lags compared to South Africa (#111 at 48.39 Mbps).

What are the average fixed broadband download speed and latency?

According to the Ookla Speedtest Global Index based on measurements taken in March 2026, Uganda's average fixed broadband download speed was 30.25 Mbps which placed it 134th out of 156 countries in international comparison. The average upload speed was 20.17 Mbps with a latency of 8ms (Ookla 2026b). The download, upload and latency figures nonetheless exceed the 4 Mbps minimum floor prescribed by Uganda's National Broadband Policy (2018) (MoICT and NG & ITU 2018). However, the speeds fall well short of what is needed for reliable AI application use, cloud computing, or large-scale data processing, which require at least 50-100 Mbps depending on query complexity.

How affordable are broadband services, measured as the cost of a basic broadband package relative to average income?

Broadband services in Uganda remain relatively expensive for the majority of the population. According to ITU DataHub data for 2025, broadband services in Uganda remain unaffordable compared to the average income of a Ugandan. The mobile broadband high-consumption basket, which comprises 140 minutes of voice calls, 20 SMS, and 5 GB of data per month, which represents a basic but realistic connectivity package, costs 7.95% of the monthly GNI per capita (ITU 2025a). These figures explain why, despite mobile network coverage reaching 82% of the population at 4G standard, active mobile broadband subscriptions stand at only approximately 36% of the population. The connectivity gap in Uganda is not primarily a coverage problem but an affordability problem. For the bottom 40% of earners, the majority of Uganda's predominantly rural, low-income population, the real cost burden is approximately double the national average, meaning meaningful broadband access consumes a great amount of household income. This affordability constraint is as fundamental a barrier to AI participation, digital public services, and inclusive digital development as gaps in electricity access or physical infrastructure.

How many certified data centres exist in your country?

Uganda has made progress in developing a hardware ecosystem; however, critical infrastructure gaps remain. Different organisations are making an effort to set up data centres across private and public institutions. For example, Centenary Group in Uganda is set to open a state-of-the-art Tier 3 Green Data Centre in Masaka, with operations set to commence in Q3 2025 (Cente-Tech Group 2025).. Addressing the growing need for data centres in Uganda is essential in providing the computational backbone required to support the AI initiatives. The already established data centres in Uganda include:

- NITA-U oversees and manages public data centres, which are essential for housing government data across its MDAs. The data centre was established with a view to centralising government data centres and minimizing the cost of building various data centres in MDAs. NITA-U's current infrastructure is optimized for standard IT services required by the MDAs rather than the high-computer demands of AI systems. To bridge this gap, strategic investments in specialized high-performance computing (HPC) to manage the intensive demands of training and deploying AI models.

- Uganda also has commercial data centres such as Raxio Uganda Data Centre (Raxio Group 2026). This is an enterprise-grade data centre located in Namanve, Uganda, and it delivers secure, high-performance infrastructure needed to power AI cloud compute and storage. It was opened in 2021 and is the country's first Tier III-certified carrier- and cloud-neutral data centre.

4) There are other data centres provided by telecom service providers, such as MTN Uganda, which is the largest telecommunications provider in Uganda. MTN uses its data centres for its own services and those of external clients, particularly in the telecommunications and cloud industries. The table below summarises the data centres in Uganda and details their capacity, specifically the DC, rack capacity, and PUE.

Table 7: Summary of data centres in Uganda with specifications on their capacity.

Data Center	Amount of DC	Amount of Rack	Power Usage Effectiveness
NITA-U	2	~300	>2.5
Raxio Uganda	1	400	1.6 - 1.8
MTN Uganda	6	-	>2.5

What is the estimated national compute capacity available domestically?

Uganda's compute infrastructure is shifting from private ownership to include public and research-based organisations. The key projects include:

National AI Research Cloud: Makerere University and RENU, supported by the Science, Technology and Innovation Secretariat, commissioned the National AI Research Cloud in March 2026 to provide high-performance computing (HPC) for research and AI innovation (CEDAT 2026). The cluster currently has two HPE ProLiant DL380 Gen10 servers, each with 64 GB of RAM. Both are currently equipped with NVIDIA Quadro RTX A2000 GPUs with 12 GB VRAM. There is also a dedicated network-attached storage unit with approximately 29.2 TB of capacity, primarily used for dataset storage.

Crane Cloud and AHUMAIN Cloud Cluster: Makerere University Department of Computer Science has set up a Crane cloud with an AHUMAIN GPU cluster that is a Virtualised GPU server on Crane Cloud with an NVIDIA T4 GPU, 128 CPU cores and 256GB RAM (AHUMAIN 2026).

The African Centre of Excellence in Bioinformatics (ACE) has set up an HPC at the Infectious Diseases Institute (IDI) in Makerere. This upgraded facility boasts over 3,800 compute cores and 5 terabytes of RAM. It supports large-scale genomics and health data analysis (ACE 2025).

There are commercial data centres such as the Raxio Data Centre in Namanve, which remains a key player with a Tier III-certified, carrier-neutral facility featuring a 1.5MW IT load and capacity for 400 racks.

What is the national ipv6 adoption rate?

As of March 2026, Uganda's IPV6 adoption is at 2.23% according to Google's IPv6 statistics (Google 2026) shown in Figure 10.

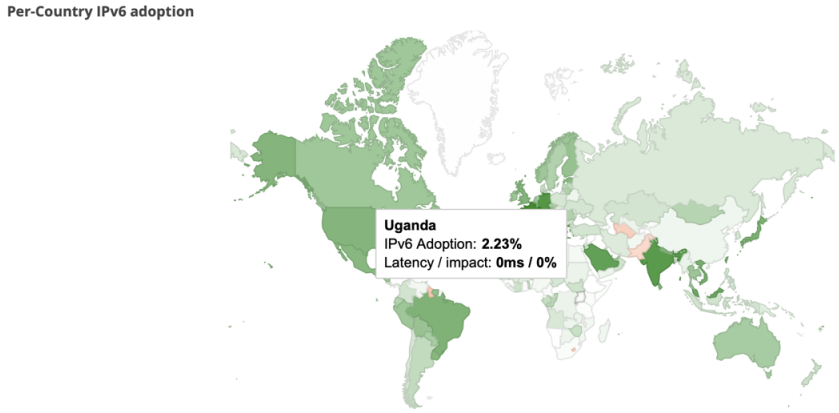


Figure 10: IPv6 Adoption Rate in Uganda. (Source: Google[16])

What are your country's scores on recognised indices related to cybersecurity capacities?

According to the Global Cyber Security Index, 2024 by ITU Uganda, was ranked as Tier 3 (Establishing) with a score between 55–85 (ITU 2024a). The Establishing category represents countries that obtained an overall score of at least 55/100 by demonstrating a basic cybersecurity commitment through government-driven actions that include evaluating, establishing, or implementing generally accepted cybersecurity measures across a moderate number of pillars or indicators. These indicators are shown in Figure11.

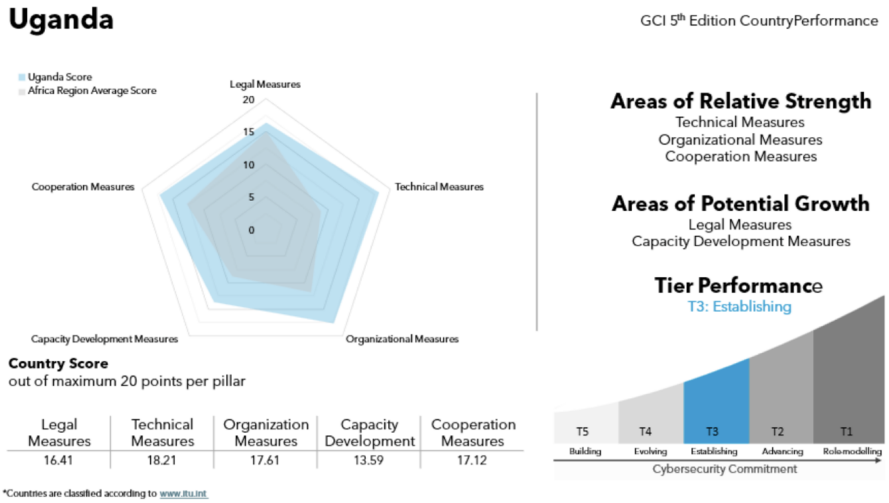


Figure 11: Cybersecurity Assessment for Uganda. (Source: International Telecommunication Union[17])

16 https://www.google.com/intl/en/ipv6/statistics.html#tab=per-country-ipv6-adoption

17 https://www.itu.int/epublications/publication/global-cybersecurity-index-2024

What Are Your Country's Scores On Recognised Indices Related To Data Management And Data Openness?

The World Bank defines the Statistical Performance Indicators (SPI) as a framework with five pillars: data use, data services, data products, data sources, and data infrastructure and 22 dimensions for assessing the maturity of national statistical systems that manage data across countries. Uganda has an overall score of 72, and the score is within the 3rd Quintile (World Bank 2026b). Another metric that falls under this category is the Open Data Inventory (ODIN) by the Open Data Watch. The ODIN measures how complete a country's statistical data are and whether its data meet international standards of openness. Uganda ranks 87th in the Open Data Inventory 2024 with an overall score of 59. The overall score is a combination of a data coverage sub-score of 53 and a data openness sub-score of 64 as shown in Figure 12.

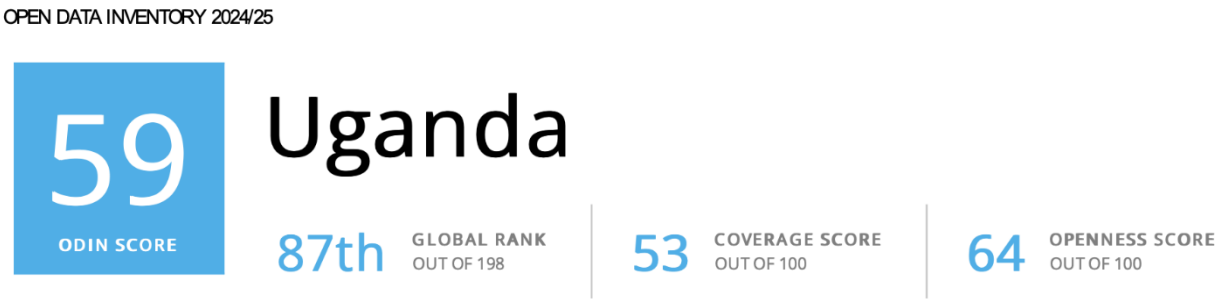


Figure 12: Uganda's ranking against the Open Data Inventory. (Source: WorldBank[18])

What percentage of schools have internet for pedagogical purposes?

Currently, there are no statistics showing the percentage of schools that have the internet specifically for pedagogical purposes. However, a 2025 survey conducted by the Internet Society Uganda Chapter across 42 schools in the Kampala Metropolitan Area found that 81% of these schools had internet access. The study shows that 87.5% of secondary schools, 72.2% of primary schools, and 100% of international curriculum schools in Kampala had access to the internet. Many of the schools used the internet connectivity for tasks such as teaching, administration, and e-learning. However, affordability, poor service quality, limited devices, and power outages remain major challenges to internet availability and use, particularly for teaching and learning.

The Ministry of Education and Sports (MoES), with support from the World Bank, conducted the EdTech Readiness Index, a tool used to assess readiness to use technology in primary and secondary schools. The results show that overall, 38% of schools in Uganda have internet connectivity (World Bank 2024b). However, the percentage of schools with internet access is not disaggregated by region and school type. According to the EdTech Readiness Index, 56% of schools had digital devices, such as computers. However, only 27% of devices were allocated for student learning, and only 11% of the schools have devices adapted for students with disabilities. Besides, the percentage of schools with computers is not disaggregated by region or school type.

18 https://www.worldbank.org/en/programs/statistical-performance-indicators/Framework?wcmmode=disabled#SPI-Research

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Are there any identified gaps reflecting broader structural or infrastructure constraints (e.g., Connectivity, digital infrastructure, education or public-sector capacity) that pre-date ai adoption or development?

Several structural constraints pre-date AI development and continue to shape the pace and scale of AI adoption in Uganda. A key gap is the limited investment in digital infrastructure for research and development, reflecting constrained public funding and competing national priorities in Uganda. The high cost of connectivity and computing devices further restricts access for schools, universities, startups, and public institutions. In addition, energy reliability remains a challenge, as an intermittent power supply affects the ability to operate and maintain the computational systems required for computing devices, specifically AI systems. Another key gap is the existing digital and infrastructural divide between urban and rural areas, which is even highlighted in Uganda's NDPIV. Internet usage is significantly lower in rural communities (ILO 2024). While urban centres like Kampala have better internet, electricity, and ICT infrastructure, rural areas face limited broadband coverage and weak connectivity (MoICT and NG & ITU 2018). NDPIV also highlights low digital literacy levels in rural populations, which constrain effective use of digital services.

Uganda also faces limited availability of specialised computational infrastructure, such as high-performance computing resources and modern laboratories, which constrains experimentation and AI model training. Beyond physical infrastructure, there are capacity limitations within the public sector, where shortages of technical expertise hinder the design, regulation, and scaling of AI systems. These constraints are compounded by weak data governance, including AI policies across different government domains. Finally, cultural and cognitive barriers, including low trust in emerging technologies and limited awareness of AI applications, affect broader societal adoption. These gaps highlight that many of the challenges affecting AI development in Uganda stem from longstanding limitations in digital infrastructure, institutional capacity, and data ecosystems rather than from AI-specific policy issues alone.

DEVELOPING A NATIONAL AI MULTI-STAKEHOLDER ROADMAP

1. Overview Of The Stakeholder Engagement Process

Throughout Uganda's RAM 2.0 process, two consultative workshops were held on the development of the UNESCO AI Readiness Assessment Methodology 2.0 for Uganda: a kick-off workshop on February 19, 2026, and a national stakeholder workshop on 26 May 2026. The meeting was held in partnership with the Ministry of ICT and National Guidance, the Uganda National UNESCO Regional Office for Eastern Africa, and the UNESCO Uganda Antenna Office. The consultations brought together over 35 stakeholders from diverse sectors, including government institutions, academia, technology innovators, human rights activists, researchers, civil society, and the private sector. These workshops aimed to gather diverse perspectives and insights on the current state of AI in Uganda across various sectors, and to provide input on the preliminary findings from the document review, including gaps and opportunities across the UNESCO RAM 2.0 strategic areas.

The kick-off workshop began with a review of the UNESCO Recommendation on the Ethics of AI and the UNESCO RAM 2.0 process, including its deployment across multiple countries, followed by a presentation by the Uganda Lead National RAM Expert on the preliminary diagnosis, based on a desk review and data collection on Uganda's AI landscape. Feedback and insights were collected from the AI Task Force and other stakeholders to support the development of the initial diagnostic report on Uganda's AI landscape. The feedback and insights were based on the 11 policy areas of the RAM 2.0: including: Ethical Governance, Stewardship and Impact Assessment; Data; Development and International Collaboration; Environment and Ecosystems; Gender; Culture; Education and Research; Communications and Information; Economy and Labour; Health and Social Well-being; and Technical Infrastructure.

Preliminary findings from the kick-off meeting were compiled into an Inception Report, which was then presented to the National AI Task Force established by the Ministry of ICT and National Guidance and designated as the overseeing body for the RAM 2.0 process. In this regard, feedback from the Task Force Members was sought and received during an online session held on 17 April 2026.

The National stakeholders' consultation meeting, held on 26 May 2026, provided a platform for further engagement with the RAM 2.0 Report presented by the Lead National Expert. Additional insights were sought through both breakout sessions and plenary deliberations that fed into the Uganda Artificial Intelligence Readiness Assessment Final Report, particularly timely to inform the development of the National AI and Emerging Technology Strategy for Uganda. The main recommendations of the RAM 2.0 were discussed during the national stakeholder consultation meeting. The feedback was used to prioritise the main recommendations from RAM 2.0 that would also inform the National AI strategy.

2. Main Challenges And Opportunities Identified Through Previous Consultations

Key Findings from Stakeholder Engagement

From the Inception meeting

Stakeholder consultations show that Uganda has several foundational legal and regulatory instruments relevant to AI governance, including the Data Protection and Privacy Act, the Computer Misuse (Amendment) Act, 2022, Electronic Transactions Act, and Electronic Signatures Act. In addition, sector-specific regulations exist across areas such as ICT, health, finance, education, agriculture, security, and science and innovation.

However, these frameworks are not specifically designed to regulate AI systems, and there are no dedicated national guidelines for AI procurement, ethical impact assessment, or systematic monitoring of AI deployment. Existing ICT procurement standards and national digital guidelines could potentially be adapted to incorporate AI governance considerations.

The consultations also highlighted limited institutional capacity and awareness regarding AI technologies across sectors. AI literacy among public sector actors, educators, and the general public remains relatively low, and there are currently no national initiatives focused specifically on public AI literacy or awareness of AI risks and opportunities. In the education sector, monitoring of AI use and its impacts on learning outcomes, equity, and teacher workload remains limited and largely reactive, often focusing primarily on plagiarism detection rather than broader educational impacts of AI.

Stakeholders further identified structural constraints affecting AI development and adoption in Uganda. These include limited funding for research and development, high costs of digital infrastructure and connectivity, unreliable energy supply, and insufficient computational infrastructure. Weak data governance practices and limited public sector expertise were also noted. Additionally, concerns were raised that AI adoption could exacerbate existing digital divides, including disparities in access to digital technologies, skills, and participation in AI education and innovation.

From the national consultation meeting

The stakeholder consultation highlighted limited national initiatives focused on awareness and understanding of AI, its capabilities, and its potential applications within the culture sector. The low level of AI literacy was identified as a major barrier to the adoption and effective use of AI within the culture sector, including leveraging of AI for the development of culturally relevant digital content, particularly in the context of Uganda's rich linguistic diversity. The inadequate understanding of AI may hinder efforts to develop AI systems that support local languages, document indigenous knowledge, and create authentic cultural content. Furthermore, many AI tools and digital platforms are primarily designed in foreign languages, particularly English, creating significant accessibility challenges for individuals with low literacy levels and those who communicate in local languages, widening digital inequalities and underscoring the need for inclusive AI policies.

The stakeholders mentioned the unequal access to and participation in AI technologies among vulnerable and marginalised groups, particularly women, persons with disabilities, and older persons. Women often face structural barriers, including caregiving and reproductive responsibilities, which limit their opportunities to pursue education, employment, and long-term engagement in the technology sector. In addition, persons with disabilities often lack access to affordable and appropriate assistive technologies necessary to engage with AI-enabled platforms and services. The high cost and limited availability of assistive devices further exacerbate digital exclusion and reduce opportunities for meaningful participation.

The stakeholders also identified the absence of policies and strategies specific to AI in the health sector. This poses a significant risk profile since AI systems used in healthcare often process highly sensitive personal information, including medical records, diagnostic data, treatment histories, and other confidential health-related information. As a result, concerns were raised about the ethical use of AI, particularly regarding privacy, confidentiality, informed consent, and data protection. Stakeholders expressed fear that AI-enabled health systems could be vulnerable to cyberattacks, unauthorised access, data breaches, and hacking, potentially exposing sensitive patient information and undermining public trust in digital health technologies.

Lastly, stakeholders identified several international forums that Uganda subscribes to and participates in for example the African Union 2024 continental AI strategy. However, participants highlighted the absence of national laws guiding the development and deployment of AI in Uganda. While international collaboration may provide valuable opportunities for knowledge sharing, capacity building, and technology transfer, imported AI laws and governance models may not be relevant and effective in the Ugandan context. Thereby, limiting AI's contribution to national development.

3. Conclusion

Participants recommended the development of a comprehensive national AI governance framework, including a coordinated "AI governance stack" consisting of strategy, policy, guidelines, and legislation to guide responsible AI development and deployment in Uganda. Stakeholders emphasised the need to introduce AI-specific procurement guidelines, AI-specific health and well-being strategies, and ethical impact assessment mechanisms for public and health-sector AI systems, drawing on existing national standards and international best practices, such as UNESCO's ethical AI guidance. Stakeholders also underscored the need to prioritise the domestication of global AI policies, frameworks, and regulatory approaches to ensure their relevance and to address Uganda's unique social, cultural, economic, and institutional realities.

Another key participant's recommendation was to strengthen capacity building and AI literacy across government institutions, academia, and the general public. This includes integrating AI-related skills into technical and vocational education and training (TVET) programs, providing targeted training for public-sector officials, including cultural leaders, and promoting interdisciplinary research collaborations among technologists, educators, psychologists, and public health researchers. Stakeholders also highlighted the importance of establishing national monitoring frameworks to assess the societal impacts of AI in areas such as education, health, and labour markets.

Furthermore, participants recommended establishing and strengthening mentorship programs for women and young girls across various educational and professional levels to encourage their participation in ICT, AI, and other emerging technologies. Such initiatives would provide guidance, skills development opportunities, and career support, helping to address gender disparities in technology-related fields.

Finally, participants recommended increasing investment in digital infrastructure, research capacity, and inclusive innovation ecosystems to support AI development in Uganda. This includes improving connectivity, strengthening data governance and data-sharing frameworks, supporting research on the impacts of AI, and ensuring that policies promote equitable access to digital technologies and AI skills. Efforts should also prioritize gender inclusion and community participation to ensure that AI adoption contributes to inclusive and sustainable development.

TOWARDS A NATIONAL AI STRATEGY: HIGH LEVEL RECOMMENDATIONS

Based on the assessment of Uganda's AI readiness and insights from stakeholder consultations, the following recommendations are proposed to strengthen the country's AI ecosystem. The recommendations are structured around the RAM 2.0 across the different policy areas and across the three cross-cutting dimensions: regulation, institutional frameworks and capacity building.

1. ETHICAL GOVERNANCE, STEWARDSHIP AND IMPACT ASSESSMENT POLICY

1.1 Finalise and Adopt the National AI and Emerging Technologies Strategy

Rationale	Uganda is currently developing its National AI and Emerging Technologies Strategy through the Ministry of ICT and National Guidance, supported by an 11-member National AI Task Force. At the time of this report, a Zero Draft was under preparation, with a validation workshop planned for May 2026. The strategy must go beyond a high-level vision document to include enforceable obligations, sector-specific implementation roadmaps, and clear accountability mechanisms. It should adopt a risk-based governance approach that is adapted to Uganda's development context. The nine foundational principles articulated in the 2022 Ethical AI Framework (human-centeredness, transparency, safety, robustness, fairness, accountability, adaptive governance, literacy, and sustainability) should be operationalised as binding policy requirements. The strategy must explicitly address generative AI, AI agents, and other emerging technologies given that Uganda's governance framework is being built at a moment when AI technologies are already in use in Uganda.
Timeline	2026 - 2027
Responsible Actor	Ministry of ICT and National Guidance (lead); Ministry of Justice and Constitutional Affairs
Priority	**Very High**

1.2 Establish an AI and Data Governance Council under the Ministry of ICT and National Guidance

Rationale	Uganda currently lacks a coordinated institutional mechanism with a clear mandate to oversee AI and data governance across government entities. Responsibilities related to AI, digital governance, data protection, and emerging technologies remain fragmented across multiple institutions, including the Commission, and the Personal Data Protection Office. This fragmentation limits coordination, accountability, and consistent oversight of AI systems and data-driven technologies. Rather than creating an entirely new standalone institution, Uganda could strengthen and formalise existing governance structures, for example expanding the mandate of the current National AI Task Force and establishing a dedicated secretariat under the Ministry of ICT and National Guidance. The strengthened body could be reconstituted as an AI and Data Governance Council with clearly defined terms of reference, institutional responsibilities, and accountability mechanisms. The Council should bring together representatives from government, academia, civil society, the private sector, legal experts, and technical practitioners to ensure inclusive and multidisciplinary governance. Its mandate should include coordinating national AI governance efforts, developing implementation guidelines, monitoring compliance with ethical and regulatory standards, and holding public institutions accountable for the responsible use of AI and data systems. It should also support inter-agency coordination, advise on emerging risks, and guide implementation of the National AI and Emerging Technologies Strategy.
Timeline	2026 - 2027
Responsible Actor	Ministry of ICT and National Guidance (lead); Parliament of Uganda; NITA-U; Personal Data Protection Office; Uganda Communications Commission
Priority	**Very High**

1.3 Develop, Adopt and Amend Ethical Impact Assessment Guidelines

Rationale	Uganda has no requirement to assess the ethical impacts of AI systems before they are procured or deployed in public services. AI systems are currently in use across different government organisations without any systematic prior assessment of their risks to privacy, fairness, accountability, or the rights of affected citizens. High-risk domains including health, and education, require mandatory impact assessments before AI systems are deployed. The UNESCO Ethical Impact Assessment (EIA) tool provides a structured methodology that can be adapted to Uganda's regulatory context for AI systems in the public sector. Impact assessment results should be publicly disclosed to enable citizen oversight.
Timeline	2026 - 2027
Responsible Actor	Ministry of ICT and National Guidance (lead); NITA-U; Personal Data Protection Office; sector ministries (Health, Education, Finance, Gender, Justice)
Priority	**Very High**

1.4 Amend PPDA and NITA-U ICT Procurement Guidelines to Embed AI-specific Requirements	
Rationale	Uganda's current public procurement framework that is governed by the PPDA Act (2003, amended 2011 and 2021) and the National Public Sector Procurement Policy (2019) contains no AI-specific provisions. Government agencies are procuring AI-powered systems without baseline standards for algorithmic transparency, model documentation, bias testing, data governance, or post-deployment audits. NITA-U's existing Guidelines and Standards for the Acquisition of Information Technology Hardware & Software for Government MDAs (2013) provide a starting point that can be adapted to require AI-specific technical documentation, third-party conformity assessment for high-risk systems, mandatory human oversight provisions, and vendor obligations to provide explainability of the output of AI models. Government should mandate inclusive procurement for all AI systems used in public service delivery. All procured systems should comply with international accessibility standards ensuring inclusion of persons with visual, hearing, or cognitive disabilities.
Timeline	2026 - 2028
Responsible Actor	PPDA Authority (lead); Ministry of Finance, Planning and Economic Development; NITA-U; Ministry of ICT and National Guidance
Priority	**High**

2. DATA POLICY

2.1 Amend the Data Protection and Privacy Act (2019) to Address AI-specific Gaps	
Rationale	The Data Protection and Privacy Act (2019) was enacted before the widespread deployment of AI systems and contains no AI-specific provisions. It does not establish a right not to be subject to solely automated decisions with significant legal or personal effects, no obligation for data controllers to explain AI-generated decisions on request, no standards governing the use of personal data as AI training data, and no requirement for AI-specific Data Protection Impact Assessments. Given the pace of technological change, amendments to the Act should adopt a forward-looking and technology-neutral approach that remains adaptable to future AI developments.
Timeline	2026 - 2028
Responsible Actor	Personal Data Protection Office (lead); Ministry of ICT and National Guidance; Parliament of Uganda
Priority	**Very High**

2.2 Establish a National AI-ready Data Governance Framework

Rationale	Uganda's data governance infrastructure is advancing over 146 institutions connected to the UGhub integration platform, and the SDG Open Data Portal now tracks over 169 targets and 232 indicators, but the country lacks a coherent national framework that specifically enables AI development. The Open Government Data policy has been in draft for over a decade without adoption, datasets are rarely published with explicit open licences (Creative Commons or equivalent). A national AI-ready data governance framework should mandate machine-readable open publication of priority government datasets (health, agriculture, education), establish metadata and interoperability standards aligned with the e-Government Interoperability Framework, and create a secure data access environment for these datasets for AI research and development. Uganda Bureau of Statistics should lead the development of sectoral data quality standards to ensure AI models trained on government data reflect Uganda's population.
Timeline	2026 - 2028
Responsible Actor	NITA-U (lead); Uganda Bureau of Statistics; Personal Data Protection Office; Office of the Prime Minister; sector Ministries, Departments and Agencies
Priority	**High**

2.3 Review and Reform National Intellectual Property Laws to Accommodate AI Technologies

Rationale	Uganda's current intellectual property laws including copyright, patents, trademarks, and related rights were developed before the widespread use of AI technologies and do not adequately address emerging legal and ethical questions arising from AI-generated and AI-assisted works. Existing laws provide limited clarity on issues such as ownership of AI-generated content, copyright protection for AI-assisted creative works, the use of copyrighted materials in AI training datasets, liability for AI-generated infringements, and the protection of indigenous knowledge and cultural expressions from unauthorised AI exploitation. This legal uncertainty may discourage innovation, weaken protection for creators, and create disputes involving developers, users, artists, researchers, and technology companies. A comprehensive review and reform of the national intellectual property framework should be undertaken to ensure it remains responsive to AI-driven innovation. The review should clarify rights and responsibilities relating to AI-generated, AI-assisted, and AI-enhanced content, while establishing fair and transparent rules governing the use of copyrighted datasets for AI training and development.
Timeline	2026 - 2028
Responsible Actor	Uganda Registration Services Bureau (lead); Ministry of Justice and Constitutional Affairs; Ministry of ICT and National Guidance; Uganda National Council for Science and Technology; Parliament of Uganda.
Priority	**High**

3. INTERNATIONAL DEVELOPMENT AND COOPERATION POLICY

3.1 Align Uganda's National AI and Emerging Technologies Strategy with Existing International Strategies

Rationale	Uganda is actively engaged in multiple international and regional AI governance frameworks including the AU Continental AI Strategy (2024), the Africa Declaration on AI (Kigali, 2025), the EAC AI Strategy, UNESCO's Recommendation on the Ethics of AI, and ISO/IEC JTC 1/SC 42 on AI Standards. However, these international commitments have not been mandated into binding national obligations. The national AI strategy currently under development provides the primary vehicle for this alignment. Formal alignment should include: mapping of the UNESCO Recommendation's 11 policy areas against Uganda's existing instruments, identification of gaps requiring legislative action, and a reporting mechanism to UNESCO and the AU on implementation progress.
Timeline	2026 - 2028
Responsible Actor	Ministry of ICT and National Guidance (lead); Ministry of Foreign Affairs; East African Science and Technology Commission (EASTECO)
Priority	**High**

3.2 Establish a National Algorithmic Media Observatory

Rationale	Given the above issues, it is proposed that Uganda establish a National Algorithmic Media Observatory. This mechanism can task an independent national body or civil society coalition with monitoring AI-driven content curation and moderation practices on major digital platforms in Uganda. This would support evidence-based reporting on how algorithmic systems shape democratic processes and information integrity, and enable timely, data-driven regulatory responses. The Observatory's mandate could include requiring platforms operating in Uganda to undertake Human Rights Impact Assessments (HRIAs), in line with UNESCO's Guidance on Digital Platforms, to strengthen accountability and safeguard fundamental rights.
Timeline	2027 - 2029
Responsible Actor	Uganda Communications Commission (lead); Ministry of ICT and National Guidance; Civil Society
Priority	**High**

3.3 Domestication and Alignment of International AI Legal and Ethical Frameworks for Uganda	
Rationale	Uganda is actively engaging with international and regional AI governance frameworks, including United Nations guidelines and African Union instruments such as the Malabo Convention. However, the implementation of these frameworks remains limited due to weak domestication into national laws, policies, and sectoral practices. As a result, there is a gap between Uganda's international commitments and practical application at the domestic level. There is a need for a coordinated mechanism to translate international AI legal and ethical frameworks into context-specific national policies and implementation guidelines.
Timeline	2026 - 2028
Responsible Actor	Ministry of ICT and National Guidance (lead); Ministry of Foreign Affairs; Ministry of Finance, Planning and Economic Development
Priority	**High**

4. ENVIRONMENT AND ECOSYSTEMS POLICY

4.1 Integrate AI and Data Centre Sustainability Requirements into Environmental Regulation	
Rationale	Uganda's National Green Data Centre Strategy and Guidelines (2025), developed with ITU support, is a significant step towards establishing Power Usage Effectiveness targets, renewable energy commitments, and sustainability reporting frameworks. However, mandatory implementation has not yet been achieved. The National Environment Act (2019) and the National Environment (Environmental and Social Assessment) Regulations of 2020 provide legal avenues by which NEMA can require environmental impact assessments for major data centre projects, but these have not been applied to AI infrastructure. Environmental compliance reporting must be established before rather than after deployment of any new AI data center projects. All data centres above a defined threshold should be required to submit annual sustainability reports to NEMA covering energy consumption, PUE ratios, renewable energy share and water usage.
Timeline	2028 - 2030
Responsible Actor	National Environment Management Authority (lead); Electricity Regulatory Authority; Ministry of ICT and National Guidance; NITA-U
Priority	**High**

4.2 Operationalise the Uganda National Green Data Centre Strategy and Guidelines	
Rationale	The Uganda National Green Data Centre Strategy and Guidelines (2025) currently represent aspirational guidance rather than binding regulation. Its key provisions include PUE targets of below 1.3, renewable energy integration requirements, and ESG impact reporting criteria. However, these have not been enacted as legally enforceable obligations. Existing data centers should be required to report against the provided targets. Operationalisation of the Uganda National Green Data Centre requires ministerial designation of the Strategy as binding guidance under the National Environment Act that requires NEMA and ERA as joint enforcement authorities.
Timeline	2027 - 2030
Responsible Actor	Ministry of ICT and National Guidance (lead); NITA-U; National Environment Management Authority; Electricity Regulatory Authority
Priority	**High**

5. GENDER POLICY

5.1 Require Mandatory Impact Analysis of all AI policies, AI systems, and Datasets before Deployment	
Rationale	Uganda ranks 80th globally on the World Economic Forum Global Gender Gap Edition 2025 with a score of 0.707, but this aggregate measure conceals severe disparities in AI-specific domains. Only 19% of rural women use AI-based digital tools compared to 41% of men; women are significantly underrepresented in Uganda's AI workforce and research community; and Uganda has no dedicated mechanisms to monitor or redress AI-specific gender-related harms, including AI-generated deepfakes targeting women in public life. The Equal Opportunities Commission has a constitutional mandate to eliminate discrimination across all sectors and can apply this mandate to AI systems under its existing powers. A mandatory gender impact analysis framework developed jointly with the PDPO would ensure that gender and inclusion considerations are built into AI systems that will be used by government or public sector from design through deployment. Sector-specific assessments should be undertaken by the relevant implementing ministries and agencies to ensure that AI applications in areas such as health, education, agriculture, labour, finance, and social services adequately address the needs and circumstances of affected populations. This should ensure assessments are done across AI systems against gender, disability, youth, and vulnerable groups.
Timeline	2027 - 2029
Responsible Actor	Equal Opportunities Commission (lead); Ministry of Gender, Labour and Social Development; Personal Data Protection Office
Priority	**High**

5.2 Provide Targeted AI skills Programmes for Women and Girls	
Rationale	The most substantive AI gender inclusion work in Uganda is delivered by WOUGNET, WITU, the Gender Tech Initiative Uganda, Pollicy, and international partners such as GIZ and UNDP. This is funded by international donors and civil society, without government mandate or sustainable domestic financing. Uganda's constitutional guarantee of equality and the National Gender Policy, 2007 provide the legal basis for affirmative government investment in AI gender inclusion. Government co-financing through the Ministry of Gender's budget and the proposed national AI research fund should be combined with binding participation targets: at minimum 50% of national AI literacy programme beneficiaries should be women; 30% should be from rural areas; and 10% should be persons with disabilities. There should be a proposed Women in AI track that should include mentorship, research fellowships, entrepreneurship support, and pathways into AI governance roles targeting women.
Timeline	2028 - 2030
Responsible Actor	Ministry of Gender, Labour and Social Development (lead); Ministry of ICT and National Guidance; Ministry of Education and Sports; innovation hubs; civil society organisations
Priority	**High**

5.3 Integrate Gender Equality and Social Inclusion into National AI Policy and Governance	
Rationale	While AI has the potential to drive economic empowerment and social inclusion, it can also reinforce existing inequalities if gender, disability, and human rights considerations are not integrated into its design and governance. Biases in data and algorithms may lead to discriminatory outcomes that disproportionately affect women, persons with disabilities, and other marginalized groups. To address these risks, AI policies, strategies, and regulations should be developed through inclusive consultation processes involving institutions such as the Uganda Human Rights Commission, the Equal Opportunities Commission, relevant disability affairs departments, the National Union of Disabled Persons of Uganda (NUDIPU), civil society, academia, and the private sector. Integrating gender equality and social inclusion into AI governance will help promote accessible and equitable AI systems, expand participation in the digital economy, and ensure that AI contributes to Uganda's broader social development and equality objectives.
Timeline	2028 - 2030
Responsible Actor	Ministry of ICT and National Guidance (lead); Ministry of Gender, Labour and Social Development; Uganda Human Rights Commission; Equal Opportunities Commission; National Union of Disabled Persons of Uganda
Priority	**High**

6. CULTURE POLICY

6.1 Develop a National Digital Language and Cultural AI Strategy

Rationale	Uganda's language AI ecosystem led by Sunbird AI and Makerere University Center for AI represents a globally recognised contribution to inclusive AI. However, this work is sustained entirely by international research grants rather than domestic public financing. There is a need to develop a National Digital Language and Cultural AI Strategy, housed in the Ministry of Gender, Labour and Social Development in partnership with the Ministry of ICT. This should be established with a dedicated domestic funding stream and with set targets for dataset development covering all 65 Ugandan ethnic groups and languages. These should require that AI systems deployed in public services support Uganda's major languages; and establish community consent and benefit-sharing requirements for indigenous language data. Uganda's current digitisation of cultural heritage should provide a foundation for AI cultural preservation that the strategy should develop.
Timeline	2028 - 2030
Responsible Actor	Ministry of Gender, Labour and Social Development (lead); Ministry of ICT and National Guidance; Sunbird AI; Makerere University AI Lab; Uganda National Commission for UNESCO
Priority	**Medium-High**

6.2 Enact Regulations on the Ethical use of Cultural Data and Indigenous Knowledge in AI Development

Rationale	Uganda's Copyright and Neighbouring Rights (Amendment) Act, signed into law in April 2026, deliberately excluded AI provisions despite explicit advocacy by the Parliamentary Committee on Legal and Parliamentary Affairs for their inclusion. This leaves gaps unaddressed: there is no legal basis for community FPIC over the use of indigenous linguistic and cultural data in AI training, despite Uganda having 65 ethnic groups whose languages are already being used in model development and there is no "human-in-the-loop" authorship standard to protect AI-assisted creative works, leaving ambiguity over ownership of AI-generated music or written content.
Timeline	2028 - 2030
Responsible Actor	Uganda Registration Services Bureau (lead); Ministry of Justice and Constitutional Affairs; Parliament of Uganda; Ministry of Gender, Labour and Social Development; Ministry of ICT and National Guidance
Priority	**Medium**

6.3 Engage and Strengthen the Promotion of Initiatives for the Creation of Local Cultural Content Using AI	
Rationale	Uganda's cultural and linguistic diversity remains underrepresented in digital and AI systems despite the country's many indigenous languages and rich cultural heritage. As AI increasingly shapes communication, education, media, and innovation, limited local cultural and language content risks excluding communities and marginalising indigenous knowledge. Strengthening initiatives that promote the creation of local cultural content using AI can support the preservation and revitalisation of Ugandan languages and traditions, improve representation of low-resource languages in AI systems, and enhance the relevance of AI technologies to local contexts. It can also stimulate growth in the creative and digital economy by supporting local artists, innovators, and cultural institutions while ensuring cultural authenticity and protection of indigenous knowledge rights.
Timeline	2027 - 2030
Responsible Actor	Ministry of ICT and National Guidance (lead); Ministry of Gender, Labour and Social Development, Uganda Communications Commission, National Cultural Centre, National Curriculum Development Centre
Priority	**Medium-High**

7. EDUCATION AND RESEARCH POLICY

7.1 Develop a National AI Literacy and Competency Framework for Educational Institutions	
Rationale	Uganda's Education Digital Agenda Strategy 2025–2032 and the recently validated National Policy on ICT in Education provide a strengthened framework for digital technology in education. Still, AI is not specifically addressed in any binding education policy instrument. (Generative) AI tools are spreading rapidly through informal student adoption without institutional governance, ethical guidance, or curriculum integration. This creates emerging risks related not only to academic integrity and misinformation, but also to cognitive development, critical thinking, learner agency, creativity, problem-solving capacity, and overdependence on AI systems. Recent studies on AI integration in TVET highlight growing concerns that excessive reliance on AI may weaken foundational human capabilities if AI systems replace rather than support reflective learning, practical reasoning, and hands-on skills development. There is a need to establish a national AI literacy framework with minimum AI competency standards by education level; integrate AI ethics as a mandatory curriculum component; and require teacher training in AI while safeguarding cognitive and social development. The framework can draw on UNESCO's AI Competency Framework for Teachers and be adapted to Uganda's multilingual, low-connectivity context, including offline-capable AI literacy tools in Luganda and other major Ugandan languages.

Timeline	2026 - 2028
Responsible Actor	Ministry of Education and Sports (lead); National Curriculum Development Centre; National Council for Higher Education; Ministry of ICT and National Guidance; Uganda Institute of Information and Communications Technology
Priority	**Very High**

7.2 Establish a National AI Research and Innovation Funding Programme

Rationale	Uganda's Gross Expenditure on Research and Development stands at 0.31% of GDP, which is well below its own NDP III target of 1% and the African Union's recommended threshold. AI research at Makerere University AI Centre, the Makerere AI Health Lab, Busitema University, Mbarara University of Science and Technology, and Sunbird AI, among the most internationally cited AI research programmes in sub-Saharan Africa, is almost entirely sustained by international grants rather than domestic public investment. When grants end, research innovations are not sustained, datasets are not maintained, and talent moves abroad. There is a need to establish a national AI research fund providing rolling grants for interdisciplinary AI research to address Uganda's development priorities holistically. The programme should also promote responsible and human-centred AI innovation by requiring publicly funded AI projects to incorporate ethical considerations, social impact assessments, inclusion measures, and community engagement components throughout the research lifecycle. There is a need to establish AI cloud infrastructure, and this should expand to all Ugandan universities through RENU. There should be funding to build AI capacity, for example through PhD and postgraduate training, with a minimum of 40% reserved for women to support early-career retention.
Timeline	2027 - 2030
Responsible Actor	Uganda National Council for Science and Technology (lead); STI Secretariat; Ministry of Finance, Planning and Economic Development; Makerere University; RENU
Priority	**High**

8. COMMUNICATIONS AND INFORMATION POLICY

8.1 Establish AI Transparency and Disclosure Regulations

Rationale	Uganda currently lacks a comprehensive legal and regulatory framework requiring transparency in the creation, modification, dissemination, and operation of Artificial Intelligence (AI) systems and AI-generated content. There are no binding obligations requiring individuals, media organisations, companies, public institutions, or digital platforms to disclose when content has been fully generated by AI, translated using AI tools, or substantially edited, enhanced, or manipulated through AI systems. Similarly, there are no sector-specific guidelines governing the responsible use of AI in sensitive domains such as journalism, education, healthcare, advertising, finance, and public administration. This creates risks of deception, misinformation, manipulation, plagiarism, loss of public trust, and reduced accountability in digital communication and decision-making processes. For example, fabricated videos falsely claiming major political leaders in Uganda have been documented without any legal mechanism to require takedown, correction, or disclosure. Uganda should develop a national media and information literacy framework which should be positioned as an important strategy to empower citizens to assess AI-generated or AI-enhanced content and mitigate the risks of AI-driven disinformation and other harmful online content. Beyond content disclosure, the framework should also promote transparency and explainability in the operation of AI algorithms themselves.
Timeline	2027 - 2029
Responsible Actor	Uganda Communications Commission (lead); Ministry of ICT and National Guidance; Uganda National Bureau of Standards
Priority	**High**

8.2 Raise Public Awareness and Digital Literacy on AI

Rationale	The rapid spread of AI-driven information systems, including generative AI, algorithmic recommendation systems, and automated content creation tools, have significantly changed how citizens access and interpret information. However, public understanding of how AI systems operate, influence online content, and shape public opinion remains limited. This increases vulnerability to misinformation, disinformation, manipulated media, online scams, and hate speech. Raising awareness and strengthening digital, media, and information literacy will enable citizens to critically evaluate AI-generated content, understand the risks and opportunities associated with AI technologies, and participate responsibly in digital spaces. Public awareness initiatives should also promote understanding of ethical AI use, data privacy, online safety, and citizens' rights in AI-mediated environments.
Timeline	2027 - 2029
Responsible Actor	Ministry of ICT and National Guidance (lead); Uganda Communications Commission; National Curriculum Development Centre; Ministry of Education and Sports; Civil Society Organisations
Priority	**High**

8.3 Establish Regulatory Sanctions for Harmful and Malicious Use of AI Systems	
Rationale	AI Technologies can be exploited to generate and spread harmful content, including deepfakes, disinformation, hate speech, identity impersonation, fraudulent communications, and manipulative political content. Uganda's existing legal and regulatory frameworks do not adequately address AI-enabled harms or provide clear accountability mechanisms for malicious deployment of AI systems. There is need to establish sanctions, and enforcement mechanisms that will deter the intentional misuse of AI technologies while promoting responsible innovation and platform accountability. Such measures should include obligations for transparency in AI-generated content, penalties for malicious or deceptive AI use, and mechanisms for reporting, investigation, and redress within Uganda's existing laws such as the Data Privacy and Protection Act and sector-specific regulations. Safeguards should also ensure that enforcement measures remain consistent with constitutional protections for freedom of expression, access to information, and human rights.
Timeline	2027 - 2030
Responsible Actor	Parliament of Uganda(lead), Ministry of ICT and National Guidance; Uganda Communications Commission; Personal Data Protection Office, Uganda Law Reform Commission
Priority	**High**

9. ECONOMY AND LABOUR POLICY

9.1 Develop an AI and Future of Work Policy Framework	
Rationale	Uganda has no policy or strategy addressing AI's impact on the labour market. Several digital labour platforms operate in Uganda without legal frameworks. The Employment Act (2006) was designed for a factory-based economy and contains no provisions on digital or ICT platform work. With Uganda's national unemployment rate at 12.6% and 50.9% of youth aged 18-30 neither employed nor in education, the stakes of getting AI and labour policy right are high
Timeline	2027 - 2028
Responsible Actor	Ministry of Gender, Labour and Social Development (lead); Ministry of ICT and National Guidance; National Planning Authority; National Organisation of Trade Unions; Federation of Uganda Employers
Priority	**High**

9.2 Establish National AI Skilling, Reskilling and Upskilling Programmes

Rationale	The successful integration of AI into the economy and labour market requires coordinated action across multiple sectors. In Uganda, collaboration between government, industry, academia, and civil society remains fragmented, limiting the country's ability to align education, research, innovation, labour market needs, and public policy. As AI technologies continue to reshape employment patterns and business models, stronger partnerships are needed to ensure that workforce development initiatives, industrial strategies, and innovation ecosystems respond effectively to emerging economic realities. The government should therefore establish structured platforms such as public-private research partnerships, sector skills councils, and multi-stakeholder forums that facilitate continuous dialogue, coordination, and joint implementation of AI-related initiatives. These mechanisms should support knowledge sharing, local innovation, ethical AI adoption, labour market forecasting, and the co-creation of policies that promote inclusive economic growth.
Timeline	2026 - 2030
Responsible Actor	Ministry of ICT and National Guidance (lead); Ministry of Gender, Labour and Social Development; Private Sector Foundation Uganda; Uganda Institute of Information and Communications Technology; Refactory Uganda
Priority	**High**

9.3 Strengthen Multi-stakeholder Collaboration for AI

Rationale	The adoption of AI technologies in Uganda is growing across sectors such as finance, telecommunications, health, education, agriculture, security, and public administration. However, there is currently no coordinated national mechanism to routinely assess how AI systems are being deployed, whether they comply with national laws and ethical standards, or how they affect workers, citizens, businesses, and public service delivery. The absence of systematic monitoring limits government oversight and reduces the country's ability to identify risks such as discrimination, exclusion, misinformation, unsafe automation practices, labour displacement, privacy violations, and misuse of personal data. A national monitoring and evaluation framework would enable the government to generate evidence on the opportunities and challenges associated with AI adoption while strengthening transparency, accountability, and public trust. The framework should also help assess whether AI adoption is creating meaningful local value.
Timeline	2026 - 2028
Responsible Actor	Ministry of ICT and National Guidance (lead); NITA-U; Uganda Communications Commission; Private Sector Foundation Uganda
Priority	**High**

9.4 Establish a National Framework for Routine Monitoring and Evaluation of AI Use in Public and Private Sectors

Rationale	The adoption of AI technologies in Uganda is growing across sectors such as finance, telecommunications, health, education, agriculture, security, and public administration. However, there is currently no coordinated national mechanism to routinely assess how AI systems are being deployed, whether they comply with national laws and ethical standards, or how they affect workers, citizens, businesses, and public service delivery. The absence of systematic monitoring limits government oversight and reduces the country's ability to identify risks such as discrimination, exclusion, misinformation, unsafe automation practices, labour displacement, privacy violations, and misuse of personal data. A national monitoring and evaluation framework would enable the government to generate evidence on the opportunities and challenges associated with AI adoption while strengthening transparency, accountability, and public trust. The framework should also help assess whether AI adoption is creating meaningful local value.
Timeline	2026 - 2028
Responsible Actor	Ministry of ICT and National Guidance (lead); NITA-U; Uganda Communications Commission; Private Sector Foundation Uganda
Priority	**High**

9.5 Support Private Sector Adoption of AI for Inclusive Economic Growth

Rationale	Artificial intelligence is becoming an important driver of productivity, innovation, competitiveness, and job creation across multiple sectors of the economy. However, many businesses in Uganda, particularly micro, small and medium enterprises (MSMEs), startups, cooperatives, and enterprises operating in the informal sector, face significant barriers to adopting AI technologies. These challenges include limited access to financing, inadequate digital infrastructure, shortages of AI-related skills, lack of technical expertise, and the high cost of acquiring and deploying AI solutions. Without targeted support, the benefits of AI are likely to be concentrated among larger organisations with greater resources, potentially widening economic disparities and limiting the contribution of AI to national development. The government should therefore establish programmes that support AI adoption within the private sector through innovation grants, affordable digital infrastructure, access to computing resources, business incubation services, and workforce development initiatives.
Timeline	2026 - 2028
Responsible Actor	Ministry of ICT and National Guidance (lead); Ministry of Finance, Planning and Economic Development; NITA-U; Ministry of Trade, Industry and Cooperatives; Private Sector Foundation Uganda
Priority	**High**

10. HEALTH AND SOCIAL WELL-BEING POLICY

10.1 Develop Sector Specific AI Governance Guidelines for Healthcare Domain

Rationale	Uganda's health sector hosts some of its most impactful AI deployments and yet none of these deployments is governed by AI-specific binding instruments. The Ministry of Health's Compendium of National Digital Health Guidelines (2024) does not address AI procurement standards, mandatory clinical validation, or patient disclosure rights. Health AI guidelines should require: clinical validation using Ugandan patient data as a condition of deployment; mandatory bias testing disaggregated by gender, age, region, and ethnicity; patient notification when AI systems contribute to diagnostic or treatment recommendations affecting their care; and post-market evaluation of AI systems in clinical use.
Timeline	2026 - 2028
Responsible Actor	Ministry of Health (lead); National Drug Authority; Uganda National Council for Science and Technology; Personal Data Protection Office
Priority	**Very High**

10.2 Establish a Health AI Oversight Framework

Rationale	Uganda currently has no pre-market assessment process for AI-based medical tools and devices. The National Drug Authority regulates medical devices, but AI-specific software systems including AI algorithms for diagnosis, clinical decision support tools, or AI-powered health chatbots fall into a regulatory gap between the NDA's existing device framework and the PDPO's data protection mandate. There is need to establish a Health AI Oversight Framework jointly convened by the Ministry of Health, NDA and UNCST that should provide: a risk classification framework for health AI system (high, medium, and low risk); an AI system pre-deployment review process requiring clinical evidence of evaluation of the AI systems in target populations, safety and effectiveness for high-risk AI; post-deployment performance evaluation and monitoring in clinical and public health settings.
Timeline	2026 - 2028
Responsible Actor	Ministry of Health (lead); Uganda National Council for Science and Technology; National Drug Authority
Priority	**Very High**

10.3 Strengthen Cybersecurity, Ethical Governance, and Research Oversight for AI Systems in Healthcare	
Rationale	Uganda is increasingly adopting AI technologies in healthcare to support disease diagnosis, clinical decision-making, health surveillance, research, and service delivery. While these technologies offer significant opportunities to improve health outcomes and access to care, they also introduce risks relating to cybersecurity, privacy, data protection, and the ethical use of sensitive health information. Without adequate safeguards, AI systems may expose patients to data breaches, misuse of personal information, and potentially harmful or biased decision-making. There is a need to establish robust cybersecurity standards, ethical guidelines, and oversight mechanisms for AI systems used in healthcare and health research. The Uganda National Council for Science and Technology and accredited Research Ethics Committees should play a central role in reviewing and overseeing AI-related health research and applications.
Timeline	2026 - 2028
Responsible Actor	Ministry of Health (lead); Ministry of ICT and National Guidance; Uganda National Council for Science and Technology; Personal Data Protection Office; National Information Technology Authority-Uganda; Research Ethics Committees
Priority	**High**

11. TECHNICAL INFRASTRUCTURE

11.1 Create a National AI Infrastructure Plan	
Rationale	Uganda's technical infrastructure presents a mixed picture. On the positive side: 87% of electricity generation comes from renewable sources; there are ongoing initiatives such as the National AI Research Cloud was commissioned at Makerere University in March 2026; the Raxio Data Centre provides Tier III-certified colocation; and 4G coverage reaches 82% of the population. However, only 39.8% of the population has active mobile broadband subscriptions; the basic mobile broadband basket costs 7.95% of monthly GNI per capita (nearly four times the UN affordability benchmark); fixed broadband penetration stands at only 103,838 subscriptions nationwide is insufficient for large-scale AI model training and inference. There is a need to develop a comprehensive national AI infrastructure plan that covers domestic compute capacity, broadband connectivity expansion, cybersecurity standards for AI systems, research networking through RENU, and AI regulatory sandboxes for innovation.
Timeline	2026 - 2028
Responsible Actor	Ministry of ICT and National Guidance (lead); NITA-U; Research and Education Network for Uganda; National Planning Authority; Ministry of Finance, Planning and Economic Development.
Priority	**Very High**

11.2 Develop and Implement a National AI Literacy, Education, and Public Sector Competency Framework	
Rationale	Uganda's public sector is deploying AI systems without a fully trained workforce to manage, audit, or govern them. NITA-U, under the Digital Transformation Roadmap, has conducted training through the UDAP-GovNet initiative and in partnership with the e-Governance Academy, but no standardised ethical AI competency requirements exist for public servants. There is a need to develop a comprehensive National AI Literacy, Education, and Public Sector Competency Framework to guide responsible, inclusive, and human-centred AI adoption across the education sector, public service, and broader society. This should include a structured national awareness training for all public and civil servants; practitioner AI training for CIOs and digital teams in MDAs; and specialist training for AI governance, audit, and procurement roles. A guide would be to leverage existing training programs for example the adaptation of UNESCO's Digital Transformation and AI Competency Framework for Civil Servants.
Timeline	2026 - 2028
Responsible Actor	NITA-U (lead); Ministry of ICT and National Guidance; Uganda Management Institute; Ministry of Public Service; Makerere University
Priority	**Very High**

11.3 Review and Update the National Broadband Policy for AI Readiness	
Rationale	Uganda's current broadband and digital infrastructure policies were not designed with the computational and connectivity demands of AI systems in mind. AI technologies increasingly depend on high-speed broadband, cloud computing infrastructure, secure data centres, edge computing systems, reliable electricity, cybersecurity safeguards, and resilient digital public infrastructure. There is therefore a need to review and update the National Broadband Policy to incorporate AI readiness objectives and support the country's long-term digital transformation agenda. The revised policy should prioritise universal, affordable, and high-quality broadband access for educational institutions, research centres, public agencies, innovation ecosystems, and underserved communities. It should support investments in national cloud and compute infrastructure, energy-resilient digital systems, local data hosting capacity, secure internet exchange infrastructure, and research connectivity through the Research and Education Network for Uganda (RENU).
Timeline	2026 - 2028
Responsible Actor	Ministry of ICT and National Guidance(lead); Uganda Communications Commission; NITA-U; RENU
Priority	**Very High**

Figure 13: Summary of the list of recommendations from RAM 2.0 for Uganda.

POLICY AREA	NO.	RECOMMENDA-TION	TIME-LINE	RESPONSI-BLE ACTOR	PRIOR-ITY
Ethical Governance, Stewardship and Impact Assessment	1.1	Finalise and Adopt the National AI and Emerging Technologies Strategy	1-2 years	MoICT & NG; MoJCA	Very High
	1.2	Establish an AI and Data Governance Council under the MoICT & NG	1-2 years	MoICT &NG; Parliament of Uganda; NITA-U; PDPO; UCC	Very High
	1.3	Develop, Adopt and Amend Ethical Impact Assessment Guidelines	1-2 years	MoICT & NG; NITA-U; PDPO; sector ministries	Very High
	1.4	Amend PPDA and NITA-U ICT Procurement Guidelines to Embed AI-specific Requirements	1-3 years	PPDA; MoFPED; NITA-U; MoICT & NG	High

Data Policy	2.1	Amend the Data Protection and Privacy Act (2019) to Address AI-specific Gaps	1-3 years	PDPO; MoICT & NG; Parliament of Uganda	Very High
	2.2	Establish a National AI-ready Data Governance Framework	1-3 years	NITA-U; UBOS;PDPO; Office of the Prime Minister; sector MDAs	High
	2.3	Review and Reform National Intellectual Property Laws to Accommodate AI Technologies	1-3 years	URSB); MoJCA; MoICT & NG;UNCST; Parliament of Uganda.	High
International Development and Cooperation	3.1	Align Uganda's National AI and Emerging Technologies Strategy with Existing International Strategies	1-3 years	MoICT & NG; MoFA; EASTECO	High
	3.2	Establish a National Algorithmic Media Observatory	1-2 years	UCC; MoICT & NG; Civil society	High
	3.3	Domestication and Alignment of International AI Legal and Ethical Frameworks for Uganda	1-3 years	MoICT & NG; MoFA; MoFPED	High

Environment and Ecosystems	4.1	Integrate AI and Data Centre Sustainability Requirements into Environmental Regulation	1-3 years	NEMA; ERA; MoICT & NG; NITA-U	High
	4.2	Operationalise the Uganda National Green Data Centre Strategy and Guidelines	1-3 years	MoICT & NG; NITA-U; NEMA; ERA	High
Gender	5.1	Require Mandatory Impact analysis of all AI policies, AI systems, and Datasets before Deployment	1-3 years	EOC; MGLSD; PDPO	High
	5.2	Provide Targeted AI skills Programmes for Women and Girls	1-3 years	MGLSD; MoICT & NG; MoES; innovation hubs; CSOs	High
	5.3	Integrate Gender Equality and Social Inclusion into National AI Policy and Governance	1-3 years	MoICT & NG; MGLSD; UHRC; EOC; NUDPU	High

Culture	6.1	Develop a National Digital Language and Cultural AI Strategy	1-3 years	MGLSD; MoICT & NG; Sunbird AI; Makerere University AI Lab; Uganda National Commission for UNESCO	Medium-High
	6.2	Enact Regulations on the Ethical use of Cultural Data and Indigenous Knowledge in AI Development	1-3 years	URSB; MoJCA; Parliament of Uganda; MGLSD; MoICT & NG	Medium
	6.3	Engage and Strengthen the Promotion of Initiatives for the Creation of Local Cultural Content Using AI	1-3 years	MoICT & NG; MGLSD; UCC; National Culture Centre; NCDC	Medium - High
Education and Research	7.1	Develop a National AI Literacy and Competency Framework for Educational Institutions	1-3 years	MoES; NCDC; NCHE; MoICT & NG; UIICT	Very High
	7.2	Establish a National AI Research and Innovation Funding Programme	1-3 years	UNCST; STI Secretariat; MoFPED; Makerere University; RENU	High

Communications and Information	8.1	Establish AI Transparency and Disclosure Regulations	1-3 years	UCC; MoICT & NG; UNBS	High
	8.2	Raise Public Awareness and Digital Literacy on AI	1-3 years	MoICT & NG; UCC; NCDC; MoES; CSOs	High
	8.3	Establish Regulatory Sanctions for Harmful and Malicious Use of AI Systems	1-3 years	Parliament of Uganda; MoICT & NG; UCC; PDPO; ULRC	High

Economy and Labour	9.1	Develop an AI and Future of Work Policy Framework	1-2 years	MGLSD; MoICT & NG; NPA; National Organisation of Trade Unions; Federation of Uganda Employers	High
	9.2	Establish National AI Skilling, Reskilling and Upskilling Programmes	1-5 years	MoICT & NG; MGLSD; PSFU; UIICT; Refactory Uganda	High
	9.3	Strengthen Multi-stakeholder Collaboration for AI	1-3 years	MoICT & NG; MGLSD; PSFU; CSO	High
	9.4	Establish a National Framework for Routine Monitoring and Evaluation of AI Use in Public and Private Sectors	1-3 years	MoICT & NG; NITA-U; UCC; PSFU	High
	9.5	Support Private Sector Adoption of AI for Inclusive Economic Growth	1-3 years	MoICT & NG; MoFPED; NITA-U; PSFU; Ministry of Trade, Industry and Cooperatives	High

Health and Social Well-being	10.1	Develop Sector Specific AI Governance Guidelines for Healthcare Domain	1-3 years	MoH; NDA; UNCST; PDPO	Very High
	10.2	Establish a Health AI Oversight Framework	1-3 years	MoH; UNCST; NDA	Very High
	10.3	Strengthen Cybersecurity, Ethical Governance, and Research Oversight for AI Systems in Healthcare	1-3 years	MoH; MoICT & NG; UNCST; NITA-U; PDPO; Research Ethics Committees	High
Technical Infrastructure	11.1	Create a National AI Infrastructure Plan	1-3 years	MoICT & NG; NITA-U; RENU; NPA; MoFPED	Very High
	11.2	Develop and Implement a National AI Literacy, Education, and Public Sector Competency Framework	1-3 years	NITA-U; MoICT & NG; UMI; Makerere University; Ministry of Public Service	Very High
	11.3	Review and Update the National Broadband Policy for AI Readiness	1-3 years	MoICT & NG; UCC; NITA-U; RENU	Very High

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Appendix One

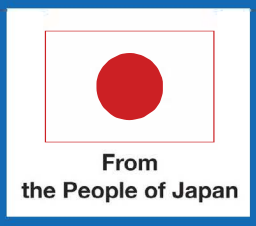
List Of Stakeholders Engaged Throughout The National Consultations On Unesco AI Readiness Assessment Methodology (RAM) For Uganda

No	Name of Representative	Institution
1	David Gonahasa	Science, Technology and Innovation Secretariat
2	Dr. Teddy Nalubega	Knowledge Consulting Limited
3	Ambrose Ruyooka	Ministry of ICT & National Guidance
4	Amos Mpungu	Ministry of ICT & National Guidance
5	Joshua Muhumuza	Makerere University
6	Humphrey Mukooyo	Ministry of Education and Sports
7	Godfrey Kivunike	Office of the President
8	Baker Birikujja	Personal Data Protection Office (PDPO)
9	Gloria Katuuku	National Information Technology Authority (NITA-U)
10	Dr. Martin Mubangizi	United Nations Development Programme (UNDP)
11	Ivan Mukiibi	GIZ
12	Beth Mutumba	Uganda National Council for Science and Technology (UNCST)
13	Alban Manishimwe	Uganda Bureau of Statistics (UBOS)
14	Bridgette Kyalimpa Babigumira	African Feminist Research Initiative for Advocacy and Development (AFRAD)
15	Simon Eroku	Organization of Persons with Disabilities
16	Dr. Okori Washington	Digital Skilling Consultant

17	Carol Kamasaka	Ministry of Defense
18	Dr. Irene Mutuzo	Makerere University
19	Charles Draecabo	UNESCO Uganda Antenna Office
20	Vincent Ogal	UNESCO Uganda Antenna Office
21	Brenda Maniraguha	National Information Technology Authority (NITA-U)
22	Isaac Niwamanya	Ministry of Gender, Labor and Social Development
23	Brian Byaruhanga	Collaboration on International ICT Policy for East and Southern Africa
24	Joshua Mpairwe	Internet Society Uganda Chapter (ISoC Uganda)
25	Joy Amanda	Internet Society Uganda Chapter (ISoC Uganda)
26	Samuel Walusimbi	Ministry of East African Community Affairs
27	Mary Nakaggwa	Ministry of East African Community Affairs
28	Eddie Tamale	Ministry of East African Community Affairs
29	Andrew Jjungo	Partners of community health and development
30	Winnie Treasure Bujjingo	Science, Technology and Innovation Secretariat
31	Joy Amanda	Internet Society Uganda Chapter (ISoC Uganda)
32	Ambrose Mwine	United Nations Educational, Scientific and Cultural Organization
33	Amon Nyesigye	Ridelink Limited
34	Harriet Aoilli	Ministry of ICT & National Guidance
35	Brian Masiga	Research and Education Network for Uganda

36	Vincent Ogal	UNESCO Uganda Antenna Office
37	Alwero Monica	Ministry of ICT & National Guidance
38	Richard Kaleebi	RCRA
39	Joseph Kiggundu	Prime Informatics Limited
40	Brenda Nakiryowa	Open signs Uganda
41	Dr. Ernest Mwebaze	Sunbird AI
42	Hope Bagota	Uganda Human Rights Commission
43	Brandy Azeirwe	Ministry of ICT & National Guidance
44	Shirley Gladys Nakyejwe	Ministry of ICT & National Guidance
45	Demeera Beatrice	Teens Life Transformation Uganda
46	Shem Nnaggenda Nsubuga	Business Times Uganda
47	Kisembo Rhitah	Ministry of ICT & National Guidance
48	Rukia Adam	Uganda Investment Authority
49	Irene Karungi Sekitoleko	Ministry of ICT & National Guidance
50	Dr. Meddy Rutayisire	Ministry of Health
51	Dr Rose Nakasi	Makerere University
52	Dr. Abudu Sallam Waiswa	Uganda communication commission
53	Rebecca Nantale	National Media Group
54	Dr. Dominic V. Mundrugo-Ogo Lali	Uganda National Commission for UNESCO





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