KTA ADVOCATES

CENTRE FOR LAW, POLICY, AND INNOVATION INITIATIVE

Fostering Innovation for Sustainable Development in Uganda's Emerging Economy

White Paper

Table of Contents

List of Acronyms

1. AI – Artificial Intelligence
2. ARIPO – African Regional Intellectual Property Organization
3. BUBU – Buy Uganda, Build Uganda
4. CAD – Computer-Aided Design
5. DARPA – Defence Advanced Research Project s Agency
6. GDP – Gross Domestic Product
7. GII – Global Innovation Index
8. GI – Geographical Indication
9. IP – Intellectual Property
10. ICT – Information and Communication Technology
11. IPAS – Industrial Property Automated System
12. KMC – Kiira Motors Corporation
13. KTA – KTA Annual Symposium
14. NDP – National Development Plan
15. NIPP – National IP Policy
16. R&D – Research and Development
17. STEM – Science, Technology, Engineering, and Mathematics
18. STI – Science, Technology, and Innovation
19. TISC – Technology and Innovation Support Centre
20. UNBS – Uganda National Bureau of Standards
21. UNCDF – United Nations Capital Development Fund
22. URSB – Uganda Registration Services Bureau
23. USD – United States Dollar
24. WIPO – World Intellectual Property Organization

Background

This White Paper has been borne out of the Day 1 of the 7th KTA Annual Symposium whose concept note is relayed herein:

The concept underlying intellectual property (IP) is the protection and commercialization of one's ingenuity. This is premised on the theory that those who innovate and create should be rewarded. In turn, the public benefits from this ingenuity as it lays the building blocks for further innovation and creativity.

Recognizing crucial role IP plays in development, Uganda, a least developed country aiming to transform from peasant to a modern and prosperous country within 30 years adopted the National Intellectual Property Policy in 2019. This policy aims to build a robust IP ecosystem that fuels innovation and creativity, driving sustainable development.

The Policy focuses on creating an IP infrastructure that supports creativity, developing skilled professionals for the IP sector, and encouraging utilization of the IP system. Significant progress has been made in this regard as trademark registrations have steadily increased, from an average of 1,626 in 2019 to 2,186 in 2022.

Despite the progress, the level of innovation and creative outputs in Uganda remains relatively low compared to other developing nations such as Kenya. In the 2023 Global Innovation Index (GII), Kenya ranked 100th out of 132 economies featured in GII 2023, while Uganda stood at 121st, with Uganda performing below the regional average in Creative outputs.

This challenge is not unique to Uganda. Least developed countries (LDCs) contribute a small fraction of global IP applications. A United Nations Conference on Trade and Development (UNCTAD) report suggests that LDCs need to tailor their IP strategies to their specific needs, development stages, and economic structures. The report emphasizes exploring alternative IP rights suited to LDC contexts, such as those related to traditional knowledge and agriculture. Additionally, considering the large informal sector in LDCs, more flexible and less formal IP protection mechanisms could be explored.

This year's symposium will explore how Uganda can strengthen its IP approach by "localizing" it to Uganda's needs and realities, particularly in the digital era. The event will delve into how Uganda's IP strategy can leverage key sectors like art, music, literature, culture, and the informal sector.

A key focus will be on how IP and technology can be harnessed to preserve Uganda's rich cultural heritage. In this vein, the Symposium will host a digital art exhibition which will a digitized version of the the cultural museum (Eriijukiro) found at the Igongo Cultural Center, Mbarara. This will showcase a collection of art, crafts and photos that represent norms, customs, traditions and the history of the people of Southwestern Uganda.

In line with the theme, we will also examine how legal frameworks can be used to facilitate cultural preservation and the how to address the socio-economic complexities that may emanate this.

The three-day symposium is set to take place from the 23rd to the 25th of October and will include roundtable discussions and panel discussions on topics exploring how we can align IP with Uganda's creative and technological fields and adapting IP systems for these sectors.

While the concept of traditional IP might seem distant for many Ugandans, the symposium aims to bridge this gap. Through this Symposium, we seek to create a supportive environment where innovation and creativity can flourish in the digital space.

This would entail:

- Developing IP laws and regulations that are relevant to the Ugandan context, considering factors like traditional knowledge, local creative industries, and the digital landscape.
- Creating awareness and education programs to inform creators and innovators in Uganda about IP rights and how to utilize them effectively in the digital economy.
- Establishing efficient and accessible IP registration systems that cater to the needs of Ugandan creators and businesses.
- Addressing specific challenges faced by Ugandans in protecting and commercializing their intellectual property online.

Objectives:

1. To examine how intellectual property rights can be contextualized for Uganda's realities.
2. To explore how intellectual property and technology can be used as a tool to preserve cultural heritage.
3. To digitize the cultural artifacts housed at the cultural museum (Eriijukiro) found at the Igongo Cultural Center, Mbarara.
4. To lobby for a law to protect and preserve Uganda's cultural heritage. 4. To expound on the challenges faced by creatives in protecting and commercializing their creations and understanding how policy and regulations can address these challenges.
5. To examine Uganda's policy approach towards using intellectual property to support innovation in Uganda and evaluate how effective it has been.
6. To sensitize creators and innovators on how they can protect and commercialize their intellectual property rights in the digital era.

1. Executive Summary

This white paper examines the critical role of innovation in Uganda's economic development, particularly within the framework of the Uganda National Intellectual Property (IP) Policy 2019. It highlights the opportunities and challenges present in the current IP landscape, which is essential for fostering a sustainable innovation ecosystem. The discussions at the KTA Annual Symposium underscored the need for a robust IP framework that aligns with national development goals and addresses existing gaps in awareness, enforcement, and infrastructure.

Key Findings

- **Current State of Innovation:** Uganda ranks 121st out of 131 countries in the Global Innovation Index, reflecting significant barriers to fostering a competitive innovation environment. The informal sector, which contributes 29% to the GDP.[1] It suffers from low levels of IP registration and awareness, limiting its potential for growth and innovation.
- **Implementation of National IP Policy:** The policy aims to integrate IP into national development strategies, yet challenges such as weak enforcement and high costs persist. Recent years have seen an increase in trademark registrations, but other forms of IP protection like patents, Geographical Indications etc. remain underutilised due to a lack of education on their benefits.
- **Sectoral Innovations:** The paper explores innovations across key sectors including pharmaceuticals and manufacturing. For instance, Alfasan Uganda Limited is highlighted as a case study demonstrating local innovation in pharmaceuticals, particularly through vaccine development that addresses local health challenges while promoting indigenous technology.
- **Manufacturing Sector Growth:** The manufacturing industry is crucial to Uganda's economy, accounting for 15.6% of GDP and showing growth potential through initiatives like Kiira Motors Corporation, which focuses on

[1] World Intellectual Property Organisation, 'Global Innovation Index Ranks' (2024) Read More Accessed 27th February, 2025.

1.electric vehicle production. However, infrastructure gaps and high production costs continue to pose challenges.

Recommendations for Policy Change: The white paper calls for actionable solutions including:

- Strengthening infrastructure to support innovation.
- Enhancing education and training on IP rights.
- Developing clear pathways for IP registration that cater to innovators at all stages.
- Promoting collaboration among academia, government, and private sectors to foster a culture of innovation.

Conclusion:

In conclusion, this white paper serves as a strategic guide aimed at informing policymakers about the necessary reforms needed to enhance Uganda's innovation ecosystem. By addressing the identified gaps and implementing the proposed recommendations, Uganda can harness its potential to become a hub of creativity and technological advancement, ultimately driving sustainable economic growth.

2. Introduction

Innovation is a key driver of sustainable development in Uganda's emerging economy, but the current intellectual property (IP) landscape presents both opportunities and challenges. The Uganda National Intellectual Property Policy 2019 aims to foster an innovation-friendly environment by aligning IP with national development goals, addressing gaps in awareness, and promoting research and development (R&D). Despite these efforts, the journey towards an effective IP system is far from over, with challenges like weak enforcement, limited infrastructure, and prohibitive costs still hindering widespread adoption.

This white paper explores the state of innovation in Uganda across various sectors, such as pharmaceuticals, manufacturing, and creative industries, while identifying actionable solutions to bolster the IP ecosystem and drive national growth. The insights presented here stem from extensive discussions during the KTA Annual Symposium 2024 Read More, focusing on creating a sustainable IP framework that can transform Uganda into a hub of creativity and technological advancement.

3. Uganda's National Intellectual Property Policy

3.1 Implementation

Intellectual Property (IP) is the mereological sum of inventions, literary and artistic works, designs and symbols, names and images used in commerce; Intellectual Property is to creations of the mind as technology is to the Fourth Industrial Revolution (4IR).[2]

In May 2019, the Ministry of Justice and Constitutional Affairs, in partnership with the World Intellectual Property Organisation (WIPO), rolled out a national intellectual property policy[3] to direct the process of mainstreaming the integration of IP into priority national development policies, strategies and plans, to accelerate the realisation of national development goals.[4]

This policy was adopted on the back of abysmal levels of IP awareness[5] amongst the informal sector, which accounts for 29%[6] of the Gross Domestic Product of Uganda; limited prioritisation of Research and Development (GERD); Low levels of IP registration; Poor IP enforcement; lack of skills among the Ugandan IP workforce; prohibitive costs associated with acquiring IP rights; and continued failure to establish effective mechanisms and frameworks required for proper and formal facilitation of key functions such as technology transfer and adaptation, technology development and technological business incubation (TBI).

At the symposium, Kenneth Muhangi highlighted the evolution of Uganda's IP policy landscape, emphasising the necessity of integrating IP into national development policies to foster innovation and economic growth. He pointed out the critical gaps in the existing IP policy, such as the limited enforcement and prohibitive costs associated with acquiring IP rights, which hinder broader adoption, particularly within

[2] Kenneth Muhangi, "Achieving Uganda's NDP III Goals: How Intellectual Property, Digital Trade And The 4ir Can Facilitate an Inclusive And Robust Digital Economy" < Read More > Accessed 27th February, 2025.

[3] Uganda Registration Services Bureau, 'National Intellectual Property Policy' (May 2019) Read More Accessed 27th February, 2025.

[4] National Planning Authority, 'Third National Development Plan (NDPIII) 2020/21-2024/25' (July 2020) Read More Accessed 27th February, 2025.

[5] Kenneth Muhangi, 'The Intellectual Property Situation in Uganda' (KTA Advocates. 14th May, 2018) Read More Accessed 27th February, 2025.

[6] Ministry of Finance, Planning and Economic Development, 'Assessment of Informal Business in Uganda' (21st January, 2023 Read More Accessed 27th February, 2025.

the informal sector.[7] This underscores the need for clear, accessible pathways to IP registration that support all stages of innovation, from ideation to commercialisation.

The policy focuses on providing direction on the short, medium and long-term activities and interventions that can be deployed to enable harmonising the efforts of various IP stakeholders towards creating, protecting, and commercially exploiting research results, innovations, new technologies and creative works. This would be attained by anchoring it on the chain and linkages of the creation, protection and utilisation of IP through the strengthening of academia-government-private sector collaboration on the one hand and the enhancement of content and human capital development for poverty and disease eradication on the other hand.

3.2 Progress

In terms of IP registration, the past five years have been relatively successful, with significant growth in the registration of trademarks, patents, copyrights and utility models. However, despite the remarkable successes, there have been fluctuations, making it difficult to easily evaluate the success of the policy. Figure 1 below demonstrates a chart on the numbers of IPs registered as per the data provided by the Uganda Registration Services Bureau (URSB) annual reports[8] from 2019-2023.

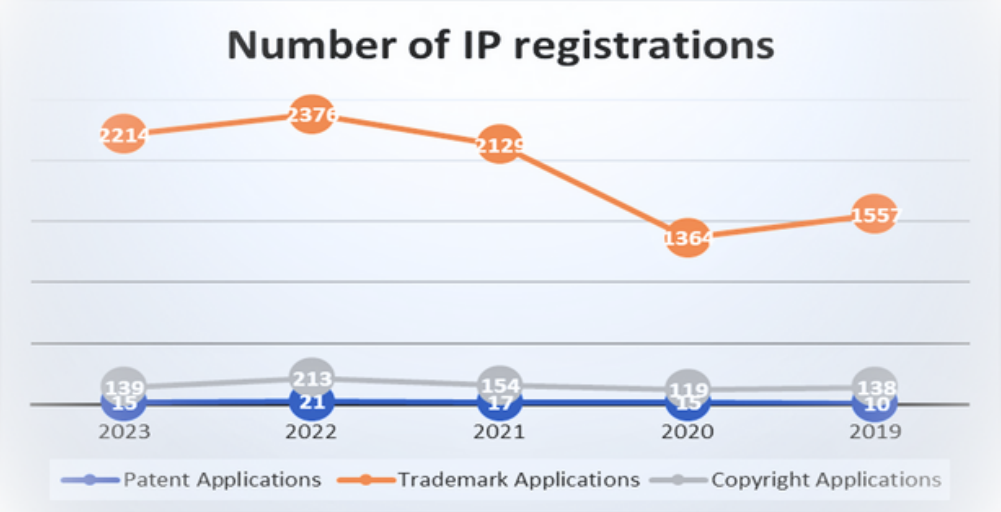

Figure 1: Number of IP registrations in the past five years (2019-2023)

[7] Ibid.
[8] Uganda Registration Services Bureau, 'URSB Annual Reports' (2019-2023) Read More Accessed 27th February, 2025.

In the above figure, trademark applications alone triple the number of applications made for registration of patents and copyrights. This, therefore, means that whereas many innovations are being developed, the need for IP registration has only been necessary at the early or growth stage of the innovation and not at the stage of ideation where the other rights, such as patents and copyrights, would be more ideal. Due to a lack of education and training on the range of benefits of IP registration, innovators are only eager to protect the brand of innovation rather than the knowledge and research being invested in the development phase of the innovation.

The policy set out to achieve three key policy goals: (i) To establish appropriate infrastructure that supports innovation and creativity, (ii) To develop human capital for the IP value chain; and (iii) to enhance the utilisation of the IP system. Each of these policy goals was supported by indicators, which are to be evaluated to demonstrate the levels of successful implementation of the policy statements made. Tables 1, 2, and 3 below analyse each of the three policy goals, highlighting the level of implementation the government of Uganda and various stakeholders have arrived at since their development.

3.3 Evaluation

3.3.1 Policy Goal 1

Policy Goal	Indicators	Levels of Implementation
To establish appropriate infrastructure that supports innovation and creativity	Number of innovation centres established	Moderate - Implemented[9] the WIPO Technology and Innovation Support Centre (TISC) program National ICT Hub in Kampala housing over 29 companies and Regional Hubs[10] in Kabale, Soroti and Muni universities established

[9] Kenneth Kazibwe, 'URSB, WIPO partner to support Ugandan universities with access to innovation ecosystem' (Nile Post, 6th September, 2024) Read More Accessed 27th February, 2025.
[10] Lydia Felly Akullu, 'Government to erect innovation hubs across Uganda' (Daily Monitor, 23rd January, 2024) Read More Accessed 27th February, 2025.

Policy Goal	Indicators	Levels of Implementation
	Number of one-stop-centres for IP registration established	Only one physical one-stop-centre[11] has been established so far under the Uganda Investment Authority and another electronic one-stop-centre[12] for investors to access online
	Number of accessible IP information management systems established	None. However, Uganda currently relies on the WIPO Industrial Property Automated System (IPAS)[13] which can be customised to national law
	Number of IP enforcement systems strengthened	Very weak enforcement systems.[14]

3.3.2 Policy Goal 2

Policy Goal	Indicators	Levels of Implementation
To develop human capital for the IP value chain	Comprehensive human resource IP development strategy in place	No clear actions from the government except for IP trainings only provided to selected sectors. NDP[15] highlights an estimated 5- year gap of over 1500 IP law personnel

[11] Uganda Investment Authority, 'Investor One Stop Centre' Read More Accessed 27th February, 2025.
[12] Ibid.
[13] World Intellectual Property Organisation, 'WIPO Industrial Property Automates System (IPAS)' Read More Accessed 27th February, 2025.
[14] Schneider, Marius, and Vanessa Ferguson, 'Uganda', Enforcement of Intellectual Property Rights in Africa (New York, 2020; online edn, Oxford Academic) Read MoreAccessed 27th February, 2025.
[15] Lydia Felly Akullu (n. 8)

Policy Goal	Indicators	Levels of Implementation
	Number of IP trainings and awareness creation initiatives	Still concentrated around the central business district, isolating other areas of the country
	IP mainstream into all levels of education	IP curriculum still not embedded in elementary and secondary school education.

3.3.3 Policy Goal 3

Policy Goal	Indicators	Levels of Implementation
To enhance utilisation of the IP system To provide incentives for the utilisation of the IP system	Number of national innovation fund beneficiaries	High – a spike in startups[16] and individuals, especially across universities and major cities Medium – Still highly prevalent in tertiary institutions with low acceptance in the public service Very low – metrics show a lack of consistency as shown in Figure 1
	Number of IP assets protected by public funded institutions	
	Number of IP licenses and assignments granted	
	Reduction in cost of IP registration and grants	

[16] WeeTracker & AfriCo, 'The Ugandan Startup Scene' (Ready Guides by WeeTracker, 2015-2020) Read More Accessed 27th February, 2025.

Policy Goal	Indicators	Levels of Implementation
To promote IP-driven indigenous technology development and commercialisation	Number of IP protected indigenous technologies, goods and services	Very low as a result of limited IP education and sensitisation among traditional innovators
To adopt and exploit IP-driven technology transfer and commercialisation	Number of IP technologies transferred and commercialised	Low as per WIPO statistics[17]
	Number of IP protected technology transfer partnerships and collaborations	Slow growth as a result of less confidence in the national IP regime
To ensure effective IP rights enforcement	Number of IP infringement prosecutions	Still very low claims and resolution of infringement disputes before courts

4. Fostering an innovation culture

4.1Global Standing

According to the Global Innovation Index, 2024,[1]Uganda ranks 121st out of 131 countries in the world. This can be attributed to a less progressive policy environment, which stifles the incentive for research and development amongst innovators. Moreover, up until the recently developed National Intellectual Property policy, the majority of the policies[2] regarding intellectual property in Uganda has been championed by private players and donors.

[1] World Intellectual Property Organisation, 'WIPO IP Statistical Country Profile, Uganda' (2023) Read MoreAccessed 27th February, 2025.

[1] World Intellectual Property Organisation, 'Global Innovation Index Ranks' (2024) Read More Accessed 27th February, 2025.

[2] Ronald Kakungulu-Mayambala, 'Examining The Nexus Between Intellectual Property And Human Rights, The Case of Uganda' (Ask Justice Project, 2018) Read More Accessed 27th February, 2025.

This was the focus of day one of the KTA Annual Symposium 2024. The policy discussion was divided into three major industries, including the manufacturing and industry sector, the pharmaceuticals sector, the creative sector and the geographical indications and agriculture sector

From the manufacturing and industry discussion chaired by **Prof. Anthony Conrad K. Kakooza**, in answering the question on how the government can create policies that support the sector reflecting our local setup and values, **Mr. Robert Kirunda** pointed out that the key to fostering a robust innovation culture lies in strengthening infrastructure and local content policies, such as the "**Buy Uganda, Build Uganda**" initiative. He emphasised that creating supportive environments for innovators, particularly through infrastructure investment and promoting local innovations, is crucial for nurturing a sustainable ecosystem. He called for focused efforts to create regional hubs beyond Kampala, encouraging a nationwide embrace of IP and innovation.

4.2 Sectoral Innovations

Uganda's path to sustainable development is increasingly tied to its capacity for innovation across key sectors. This section explores three industries, manufacturing and creative technology, through detailed case studies that highlight both opportunities for innovation and the challenges within Uganda's emerging economy. By examining Alfasan Uganda Limited, Kiira Motors Corporation, and Maisha Film Labs, insights can be drawn into how intellectual property frameworks and indigenous technology development shape Uganda's innovation landscape. These case studies not only underscore the country's progress in fostering sector-specific innovation but also reveal critical gaps in the current IP system that require attention to sustain economic growth.

4.2.1 Pharmaceuticals

One of the most pressing issues facing Uganda's pharmaceutical sector is the limited research and development (R&D) infrastructure and funding. This deficiency constrains the sector's ability to innovate and perpetuates a cycle of dependency on foreign pharmaceutical products. Furthermore, the weak patent protection regime in Uganda further compounds this problem, discouraging foreign investment and potentially local innovation. This situation creates a paradox: while stronger IP protection might encourage innovation and investment, it could also limit access to essential medicines, particularly for vulnerable populations.

Alfasan Uganda Limited exemplifies the potential for innovation in Uganda's pharmaceutical sector, particularly in addressing local challenges through indigenous technology development. Vaccine development stands tall as a significant model for fostering innovation within Uganda's emerging economy. This initiative is particularly vital given that tick-borne diseases result in an estimated $1.1 billion in annual losses to Uganda's livestock industry,[20] which directly impacts agricultural productivity and food security. By focusing on solutions that employ local expertise and traditional knowledge, Alfasan and Makerere University can address a pressing health issue whilst aligning with national objectives aimed at promoting IP-driven indigenous technology development and commercialisation.

At the symposium, Dr. Andrew Kambugu emphasised the importance of a local approach to pharmaceuticals, highlighting how stringent regulatory frameworks often inhibit the growth of indigenous pharmaceutical innovations. He called for more cohesive policies that facilitate access to quality infrastructure, like laboratories and manufacturing plants, and support traditional medicine alongside modern pharmaceuticals. This alignment of infrastructure with cultural values could help bridge gaps between traditional practices and modern healthcare, fostering broader acceptance and innovation in local pharmaceuticals.

However, this collaboration also reveals gaps in Uganda's existing IP framework. The allocation of rights between private companies like Alfasan and public institutions such as Makerere University raises important questions on how these rights are distributed and how they can affect the commercialisation process. The complexities involved in IP management[21] for developing countries like Uganda can significantly influence the overall success of such initiatives, highlighting the need for clearer guidelines that govern IP ownership in public-private research partnerships. Moreover, the intersection of traditional knowledge and modern pharmaceutical development

[1] Kasaija, Paul D et al, 'Cattle ticks and tick-borne diseases: A review of Uganda's situation' Ticks and tick-borne diseases vol. 12,5 (2021): 101756. doi: 10.1016/j.ttbdis.2021.101756 Read More Accessed 27th February, 2025.

[2] Suryansh Mishra, 'Navigating The IP Landscape: Challenges And Solutions For Developing Nations' (IJLLR, Volume VI Issue V | ISSN: 2582-8878, 2024) Read More Accessed 27th February, 2025.

presents unique challenges within the country's IP landscape. The anti-tick vaccine draws on both cutting-edge research and indigenous understanding of livestock management, necessitating enhanced capacity for generating, protecting, and enforcing IP rights related to these innovations.

Alfasan's commitment to local manufacturing, exemplified by upgraded facilities for vaccine production,[22] aligns with national goals to utilise the IP system for economic growth, yet the commercialisation pathway remains complex due to essential IP considerations. While securing patents is crucial, Alfasan may want to also ensure local farmers have affordable access, creating a delicate balance between protecting innovation and community impact. The vaccine's $4(15,000UGX) per dose[23] pricing aims to sustain commercial viability while remaining accessible, reflecting a thoughtful approach to IP-driven commercialisation in developing economies. However, Uganda's low ranking in the 2024 Global Innovation Index highlights ongoing challenges, indicating a need for further innovation efforts to improve its global competitiveness.

Despite this widespread use, the protection of intellectual property (IP) rights for herbal medicines in Uganda remains limited. Under the Industrial Property Act, 2014, herbal formulations typically qualify for utility model protection, which offers a shorter protection period of 10 years and requires a less stringent inventive step compared to patents. This form of protection may not provide sufficient incentives for significant investment in research and development of herbal medicines.

Furthermore, the Uganda Registration Services Bureau (URSB) reported that in 2018, the national IP office received only seven patent applications, compared to 509 applications through the African Regional Intellectual Property Organization (ARIPO) under the Patent Cooperation Treaty (PCT) designations. This disparity suggests that the current IP framework may not be adequately supporting local innovators, particularly in the herbal medicine sector.

Given the cultural significance and extensive use of herbal medicine in Uganda, there is a pressing need to strengthen the legal framework to allow for patentability of herbal-based pharmaceuticals. Such reforms could encourage formal research, attract investment, and facilitate the development of standardized, high-quality herbal medicines, integrating Uganda's rich traditional medicine heritage into the modern pharmaceutical industry.

[22] National Drug Authority, 'New Veterinary Manufacturing Facility Commissioned' (2018) _ Read More Accessed 27th February, 2025.

[23] World Business Journal, 'Tackling Uganda's $1.1. Billion Cattle Tick Emergency with a Novel Vaccine Solution' Read More Accessed 28th February, 2025.

4.2.2 Manufacturing

The manufacturing industry in Uganda contributes significantly to the country's economic growth, accounting for approximately 15.6% of GDP in 2023[24]. The sector's output grew to $7.69 billion that year, reflecting a 3.07% increase from 2022.[25] Manufacturing also dominates energy consumption, using 70% of Uganda's electricity, with consumption rising to 2.6 billion kWh in 2022.

Key sub-industries include pharmaceuticals, automotive, cement, and sugar production. Uganda's pharmaceutical industry is led by Quality Chemical Industries Limited, with annual revenues exceeding $70 million.[26] In the automotive sector, Kiira Motors Corporation has developed electric vehicles such as the Kayoola EVS bus.[27] Cement production remains robust, with Hima Cement Limited as a leading manufacturer, recently acquiring substantial investment.[28] Sugar production, particularly from Atiak Sugar Factory, continues to evolve, with plans for enhanced irrigation and mechanisation to address supply constraints.

Government initiatives aim to boost industrialisation. The National Development Plan III targets increasing industrial contributions to GDP to 31% by 2040,[29] while the Green Manufacturing Strategy promotes environmentally sustainable practices. Challenges like high production costs and infrastructure gaps persist but are being addressed through public and private investments, indicating a promising trajectory for Uganda's manufacturing sector.

[24] Trading Economics, 'Uganda-Manufacturing, value Added (% of GDP)' (2023) Read More Accessed 28th February, 2025.

[25] Macrotrends, 'Uganda Manufacturing output 1969-2025' Read More Accessed 28th February, 2025.

[26] Finshares Investments, 'Uganda drug maker dividend up 120 percent' Read More (May, 2024) Accessed 28th February, 2025.

[27] Kiira Motors Corporation, 'Kayoola EVS Models' Read More Accessed 28th February, 2025.

[28] Patrick Alushula, 'Bamburi Cement completes Sh12bn sale of Uganda subsidiary' (Business Daily, 2024) Read More Accessed 28th February, 2025.

[29] Morrison Rwakakamba, 'Uganda's industrial journey so far: progress, achievements, and prospects' (Uganda Investment Authority, 2022) Read More Accessed 28th February, 2025.

While Alfasan demonstrates the potential for innovation in the pharmaceutical sector, similar challenges and opportunities are evident in Uganda's manufacturing industry, as exemplified by Kiira Motors Corporation (KMC). KMC, established in 2014, illustrates the country's ambition to innovate, particularly in automotive engineering and production. Evolving from a university project at Makerere University in 2007,[30] KMC reflects Uganda's commitment to transforming academic research into practical industrial applications. The company has achieved significant milestones, including the development of Africa's first electric vehicle (Kiira EV) in 2011, the continent's first hybrid vehicle (Kiira EVS) in 2014, and Africa's first solar electric bus (Kayoola Solar Bus) in 2016.[31] These innovations not only demonstrate KMCs technological capacity but position Uganda as a potential player in the global sustainable automotive market.

At the symposium, Professor Kakooza led discussions on strategies to strengthen Uganda's manufacturing sector through better IP policies and infrastructure development. Participants highlighted the need for key infrastructures like energy and transport, particularly mixed energy sources like hydro and solar power. This infrastructure investment could help lower production costs, making Ugandan products more competitive globally while celebrating local craftsmanship.

Kiira Motors Corporation (KMC) has flourished thanks to deliberate government support. With investment from the Office of the President[32] and the Uganda Parliament, KMC is expanding its operations and aims to double its output from 2,500 buses to 5,000 annually. [33] The company's focus on electric and solar-powered vehicles positions Uganda within the growing market for green technologies. Their alignment with global sustainability trends offers KMC a unique value proposition; however, effectively protecting and commercialising these innovations is crucial for their success.

The company projects the creation of over 2,000 direct jobs and approximately 12,000 indirect jobs at full-scale operation, highlighting its potential impact on local employment. [34] Additionally, KMC's commitment to skills development through training programs in collaboration with local universities reflects its dedication to building local capacity in advanced manufacturing skills. However, the National Intellectual Property (IP) Policy may not be doing enough to support KMC's competitive commercialisation efforts, given that it has a much narrower scope.

[30] Tuhirirwe Karane, 'Kiira Motors Corporation— A classroom innovation gone right' (Makerere University Endowment Fund, Read More Accessed 28th February, 2025.
[31] African Leadership Magazine, 'Kiira Motors Corporation: Championing Mission Vehicles Made in Uganda' (2019) Read More Accessed 28th February, 2025.
[32] Office of the President, 'President Museveni Cautions Politicians and Civil Servants Frustrating Investors during the 4th Bi-Annual Presidential CEO forum held at Kiira Vehicle plant in Jinja' (August,2023) Read MoreAccessed 28th February, 2025.
[33] The Independent, 'Kiira Motors Jinja plant due for commissioning' (October, 2024) Read MoreAccessed 28th February, 2025.
[34] Akii A. O. Ibhadode, 'Opportunities for local electric vehicle manufacturing in Africa' PNgAS. Vol 16, No 1s, (2023) Read More Accessed 28th February, 2025.

While the policy recognises the importance of future technologies and outlines plans for an industrialisation fund, the slow implementation of these initiatives could impede KMC's ability to rapidly develop and protect its innovations. Furthermore, the policy lacks a specific focus on emerging technologies like electric vehicles, which could leave gaps in protection and commercialisation strategies tailored to KMC's needs. The insufficient emphasis on sector-specific provisions may hinder KMC's ability to effectively bring its innovations to market while competing with international exporters. Additionally, a disconnect between IP and broader industrial policies may limit KMC's growth potential. As Uganda enters the fourth industrial revolution, KMC is likely to explore digitisation and Artificial Intelligence applications; however, without robust support from the National IP Policy, its competitive pathway could be significantly slowed.

4.2.3 Creative Technology

While manufacturing sectors like automotive production focus on tangible products, Uganda's creative technology industry revolves around intangible assets, intellectual property, and digital innovation. This sector, encompassing fields such as film, digital media, music, fashion, and visual arts, plays a crucial yet often underappreciated role in Uganda's innovation landscape. A prime example is Maisha Film Labs, an initiative that has significantly advanced Uganda's film industry through creative technology.

Maisha Film Labs: A Case Study in Creative Technology

Maisha Film Labs, founded in 2004 by acclaimed filmmaker Mira Nair, is a non-profit training program that equips emerging East African filmmakers with essential skills and digital resources. Through intensive workshops and mentorship, Maisha has awarded over 550 scholarships and supported the creation of more than 50 films, showcasing the potential for creative technology to drive capacity building. Alumni have gained international recognition, with screenings at over 20 international festivals, demonstrating the global relevance of Uganda's creative sector. However, long-term sustainability remains a challenge, along with the broader question of how Uganda's creative economy can scale effectively.

Intellectual Property and Policy Barriers

Challenges faced by Maisha reflect broader issues within Uganda's creative technology sector, particularly concerning intellectual property (IP) rights. The National IP Policy highlights barriers such as limited awareness of IP as a socioeconomic asset, low registration levels, and inadequate enforcement mechanisms. Maisha's case illustrates the delicate balance between IP protection and accessibility to creative content. While the new policy aims to improve IP protection, its effectiveness in simultaneously ensuring protection and accessibility remains to be seen.

To address these concerns, policy reforms are essential. Christine Mawadri from NRG Radio has advocated for a precise legal definition of "creatives," ensuring industry-specific protections. Symposium attendees recommended localizing IP laws to reflect Uganda's unique creative landscape and expanding IP definitions to encompass cultural heritage, positioning it as a valuable asset that creatives can leverage for economic growth.

The Security in Movable Property Act and Financial Barriers

A major roadblock to monetizing Uganda's creative industry is the lack of financial support for IP as collateral. The Security in Movable Property Act, 2019 enacted to facilitate the use of intangible assets as collateral for loans, remains largely unimplemented. Many financial institutions in Uganda still hesitate to recognize IP as a viable form of security, limiting creatives' access to financing.

Despite the promise of digital assets in creative sectors, banks continue to prioritize tangible assets such as land and machinery over intellectual property rights, trademarks, or copyrights. This lack of operationalization restricts creatives from accessing loans and investment opportunities, reinforcing financial exclusion. Symposium participants emphasized the urgent need for regulatory clarity and incentives for banks to embrace IP-backed financing models.

Infrastructure and Market Access

Infrastructure is another critical factor for Uganda's creative technology sector. There is a growing need for digital tools and IP management resources that support IP registration, protection, and market engagement for creatives. Participants recommended the development of national and regional IP databases, as well as physical infrastructure such as innovation hubs equipped with high-speed internet to facilitate collaboration and e-commerce.

Market access remains a persistent challenge, as many creatives struggle to connect with profitable markets. Collaboration between universities, creative hubs, and business experts was proposed as a way to equip creatives with entrepreneurial skills, ensuring sustainable growth. Additionally, diversified financing options, such as value chain financing and public-private partnerships, could help reduce the costs associated with IP registration and protection.

To sustain and scale Uganda's creative technology sector, accessible IP protection, financial support, and clear ownership policies are essential. The Security in Movable Property Act, if fully operationalized, could unlock new financing avenues for creatives, but this requires regulatory action and a shift in financial sector attitudes. By strengthening policy frameworks, infrastructure, and market access, Uganda can position its creative industry as a key driver of economic growth in the digital era.

4.2.4 Geographical Indications and Agriculture

Uganda's creative industries predominantly concentrate on intangible cultural outputs, whereas the agricultural sector grapples with a distinct but equally critical challenge: capitalising on the unique characteristics of its diverse regions through Geographical Indications (GIs).[35] GIs represent a potent mechanism for differentiating and adding value to Ugandan agricultural products by associating their quality and reputation with their geographical origin.[36] The deployment of GIs is vital for fostering agricultural innovation, bolstering rural economies, and safeguarding Uganda's cultural heritage. A pertinent example is the recognition of "Rwenzori Coffee,"[37] which benefits from the region's distinctive altitude and climate, imparting unique flavours that are highly esteemed globally.

Geographical Indications offer a framework through which Ugandan farmers can collectively secure intellectual property rights that enhance the competitiveness of their products. The case of Rwenzori Coffee underscores the transformative role GIs can play in community empowerment. By explicitly linking coffee to the terroir of the Rwenzori Mountains, local farmers obtain a competitive edge in international markets, positioning their product as not merely premium but also culturally authentic. This market positioning enables these farmers to command higher prices, thereby allowing them to invest in sustainable agricultural practices and elevate their socioeconomic status.

Nonetheless, although the National IP Policy acknowledges the potential of GIs, effective implementation necessitates further refinement of regulatory frameworks and the establishment of robust support systems on the ground. Farmers often encounter obstacles such as insufficient awareness of GI benefits and limited access to financial resources required for GI certification. Moreover, deficiencies in critical infrastructure, including quality control laboratories and reliable storage facilities, impede farmers' ability to maintain consistent product quality and traceability, both of which are crucial for achieving GI recognition.

Participants at the KTA symposium advocated for the formulation of clearer, locally adapted guidelines for establishing GIs, as opposed to adopting foreign standards that may be incongruent with Uganda's specific needs. Additionally, the localisation of intellectual property laws to explicitly protect traditional agricultural knowledge, such as indigenous crop varieties, would help secure the cultural heritage that underpins many of these products. Participants further recommended that GIs be utilised as instruments to safeguard traditional farming practices, thereby converting them into viable sources of financial collateral and fostering economic resilience within local communities.

[35] European Union, 'Protecting EU Creations, Inventions and Security: Geographical Indications' Read More Accessed 28th February, 2025.
[36] Monique Bagal, Massimo Vittori and Luis Fernando Samper, 'Manual for Geographical Indications in Africa' (European Union Intellectual Property Office, 2nd Edn April, 2023) Read More Accessed 28th February, 2025.
[37] Rwenzori Mountain Coffee, 'The Rwenzori Coffee Project' (2019) Read More Accessed 28th February, 2025.

A pivotal aspect of GI implementation is the development of digital infrastructure to enhance product traceability.[38] Discussions at the symposium highlighted the need to establish comprehensive databases to track GI products from farm to market, thereby enhancing both market access and consumer trust. Participants also underscored the importance of leveraging existing initiatives, such as Makerere University's Innovation Pod, which could provide technological support to smallholder farmers. Digital tools, in this context, could be transformative by enabling farmers to verify the provenance of their products, thereby enhancing brand value and mitigating risks associated with counterfeiting.

Market access continues to be a formidable barrier for many Ugandan agricultural products. The symposium emphasised the need for more robust branding and narrative development around GI products to enhance their visibility and desirability in international markets. Collaborative efforts between agricultural hubs and business schools were proposed to train farmers on the effective use of GIs, focusing on areas such as marketing strategies, digital engagement, and export logistics. By enriching the narrative surrounding these products, Uganda can more effectively communicate the cultural and historical significance embedded within its agricultural heritage, thereby appealing to consumers who increasingly seek authenticity.

Additionally, public-private partnerships, impact investment funds, and collaborations with international bodies such as the WIPO[39] and the African Regional Intellectual Property Organisation (ARIPO)[40] were identified as potential channels for financing GI projects. Such collaborations could also facilitate capacity building for farmers, ensuring they comprehend and navigate the complexities inherent in the GI certification process. Training initiatives, potentially supported by local universities, were deemed essential for developing the human capital required to sustain a thriving GI ecosystem.

5. National Challenges

Innovations in fintech, AgriTech and digital media are emerging, demonstrating the country's potential in the digital economy. Despite these promising developments, Uganda faces challenges in its IP framework that hinder the full realisation of its innovation potential. The country's limited patent examination capacity often results in delays and reliance on external bodies for technical evaluations, particularly affecting complex innovation in pharmaceuticals and manufacturing. This is evidenced by the National IP Policy (NIPP), which reveals that "approximately 40% of patent applications do not proceed to grant". The policy further notes that patents and utility models "have to be taken to World Intellectual Property Organisation (WIPO) or Africa Intellectual Property Organisation (ARIPO) for examination", highlighting the critical lack of local expertise.

[38] Trace X Technologies, 'GI Tags in Agriculture: Enhancing Quality and Trust Through Traceability' Read More (2024) Accessed 28th February, 2025.
[39] World Intellectual Property Organisation (WIPO) Read More Accessed 28th February, 2025.
[40] African Intellectual Property Organisation (ARIPO) Read More Accessed 28th February, 2025.

The lack of sector-specific IP policies is another gap. Uganda's current IP framework does not adequately address the unique needs of different industries, risking stifling innovation in key sectors. The National IP Policy recognises that "there remains limited appreciation of the potential of IP as a driver of socioeconomic development", suggesting a failure to recognise and address the distinct IP requirements of various industries.

Weak enforcement mechanisms present a crucial issue, especially for the creative technology sector, with issues like software piracy and digital copyright infringement. The Uganda – Protecting Intellectual Property guide, released by the International Trade Administration, illustrates this, stating that "government rarely enforces laws aimed at preventing piracy and the distribution of counterfeit goods".[41] This is compounded by insufficient IP awareness and education among innovators, particularly in small and medium enterprises, leading to underutilisation of the IP system and potential loss of valuable innovations. The NIPP notes "low levels of IP awareness, especially among the informal sector", signalling a barrier to effective IP utilisation and protection.

At the symposium, panellists noted that Uganda faces significant challenges related to the examination and enforcement of patents, which limits innovation potential. It was stressed that Uganda's limited patent examination capacity often leads to reliance on external bodies like WIPO, causing delays. The discussion called for investment in local expertise and infrastructure to reduce dependence on international support, which could expedite patent processing and foster a more supportive innovation environment.

Furthermore, the limited integration of IP in national development strategies and poor support for commercialisation hinders the translation of research outputs into marketable products, a process crucial for economic growth and technological advancement. The National IP policy explicitly notes a "continued failure to establish effective mechanisms and frameworks required for proper and formal facilitation of key functions such as technology transfer and adaptation, technology development and technological business incubation". This systemic inadequacy is detrimental to sectors where the path from innovation to market is complex and resource intensive. The "prohibitive costs" along acquiring IP rights presents another bottleneck impeding the development of a strong innovation pipeline, hampering Uganda's capacity to gain from its intellectual capacity for economic development. The repercussions of these challenges extend beyond individual innovators or specific sectors, possibly compromising Uganda's overall competitiveness in the global knowledge economy.

The case studies of Alfasan Uganda Limited, KMC and Maisha Film Labs illustrate the complex interplay between innovation, intellectual property rights, and sustainable development in Uganda's emerging economy. While each sector presents unique challenges, common themes emerge across all three cases. By addressing these sector-specific challenges and leveraging its unique strengths, Uganda can foster an innovation ecosystem that drives sustainable development and positions the country competitively in the global economy.

[41] International Trade Administration, 'Uganda - Country Commercial Guide, Protecting Intellectual Property' (2023) Read More Accessed 28th February, 2025.

6. IP as a driver of innovation

The utilisation of IP frameworks and patent applications leads to increased levels of innovation due to the guarantee that the inventors can legally attain exclusive rights to the inventions. At the symposium, Robert Kirunda emphasised the role of intellectual property as a catalyst for innovation and economic growth. He highlighted that Uganda needs to align its IP laws with global best practices to create an enabling environment for innovators and creators. This alignment would not only protect local innovations but also facilitate market access, enabling Ugandan innovators to compete on an international stage and leverage IP for socio-economic transformation.

A patent application allows the holder to gain exclusive rights granted for an invention and exclude other inventors from commercially exploiting their creations without their approval. Patents provide the holders with full control over their application and financially benefit[42] from sharing the creation with the public. It provides them with a competitive advantage because a strong parent portfolio assures investors that you're offering the market a new product, hence increasing revenue margins.[43]

Moreover, the parent application process requires a detailed explanation of the invention. Hence, the possession of a patent is indicative of the creator's competitive intelligence.[44] This means that the creator will be more inclined to work on making their innovation more efficient, which could lead to increased productivity rates, dependent on the utilisation of the product. However, the invention must be publicly disclosed in any patent-granting procedure. This informs the public of which creations have exclusivity rights, but it could potentially spark other creators' interests, leading to a Domino effect on the innovation field.

From a macroeconomic perspective, patents incentivise firms to prioritise research and development due to the exclusivity reward they would get from the innovation of an advanced product. Moreover, it also promotes investment by external investors into the research and development (R&D) sector due to the assurance that the results will be patented.[45] Such investments could not only stimulate the growth of new businesses across the sector but also encourage competition amongst existing innovators, boosting economic development.[46]

Additionally, IP frameworks enable the sharing of unique ideas amongst innovators. Lee Greene – the founder of Azin AI – believes that the pooling of innovative resources leads to a bigger creative solution that "might not have been envisioned by a single entity confined to its singular reality".[1]

[42] Cypris, 'How Do Patents Act as an Incentive to Technological Innovation?' (2023) Read More Accessed 28th February, 2025.
[43] World Intellectual Property Organisation, 'Why patents matter to SMEs' Read More Accessed 28th February, 2025.
[44] Ibid.
[45] TTConsultants, 'Unlocking Innovation: How Patents Drive Economic Growth and Benefit Society' (2024) Read More Accessed 28th February, 2025.
[46] Ibid.
[1] Lee Greene, 'How can IP collaboration drive innovation in a mature market?' (Linkedin) Read More Accessed 28th February, 2025.

Overall, the effective utilisation of IP frameworks and patent applications not only drives innovation but also contributes to sustainable development by fostering technological advancements that improve productivity and efficiency. By encouraging research and development through exclusive rights and stimulating competition, these frameworks help build a robust innovation ecosystem. This leads to economic growth, the creation of new industries, and the sharing of ideas that can generate more sustainable solutions to global challenges.

6.1Case Studies

Deliberate policies and legislation play a critical role in fostering innovation within countries by creating a supportive environment that encourages research, development, and the commercialisation of new ideas. In the subsequent section, we investigate three countries which have set the pace in the innovation policy environment.

6.1.1United States

The United States (U.S.) has been recognised as a global leader in the innovation field, primarily due to its forward-thinking policy framework which incentivises innovation. The country has a robust IP framework, including patents, copyrights, and trademarks, administered by the United States Patent and Trademark Office.[48] The Office of International Intellectual Property Enforcement (IPE)[49] works closely with U.S. ambassadors located all around the world to ensure that American interests are represented overseas.

Moreover, the U.S. government provides significant R&D tax incentives to companies investing in new technologies such as the R&D Tax Credit, which is a government-insured benefit that companies earn for engaging in activities related to the research, development, design or improvement of products or software.[50] The benefit is available to industries such as agriculture, engineering, and software development, amongst others. If adopted, this policy would significantly reduce the barriers to entry for innovators and increase participation in intellectual property registrations. Furthermore, public-private partnerships with government entities like the Defence Advanced Research Projects Agency (DARPA)[51] have facilitated collaborations such as the Semiconductor Research Corporation,[52] addressing the current and emerging challenges in the information and communication technologies sector.[53]

[48] United States Patent and Trademark Office, Read More Accessed 28th February, 2025.
[49] United States Intellectual Property Enforcement (IPE) Read More Accessed 28th February, 2025.
[50] KBKG, 'What is the Research and Development (R&D) Tax Credit?' Read More
[51] Defence Advanced Research Projects Agency, 'DARPA Joins Public-Private Partnership to Address Challenges Facing Microelectronics Advancement' (2021) Read More Accessed 28th February, 2025.
[52] Semiconductor Research Corporation, Read MoreAccessed 28th February, 2025.
[53] DARPA (n 51)

As a result of the aforementioned deliberate policy frameworks, the U.S. consistently ranks highly in global innovation indices (GII), currently holding the 3rd position, with areas like Silicon Valley becoming hubs for technological advancements in industries like software, biotech, and clean energy.[54]

6.1.2 South Korea

To complement its strong IP laws, the South Korean government actively invests in R&D, particularly in sectors like semiconductors, telecommunications, and robotics, with its exponential economic growth attributed to deliberate investment in applied industrial technologies. In 2021, South Korea spent approximately $110.15 billion on R&D,[55] maintaining its position as the 5th largest R&D investor globally, after the United States, China, Japan and Germany.[56] The fiscal budget for 2025 is 24.8 trillion won (USD 17.9 billion) to prioritise the next generation of R&D. This is going to be the largest public sector investment in the country's history.[57]

South Korea also places a strong emphasis on education – particularly in the STEM fields, to produce a highly skilled workforce that can engage in cutting-edge research and innovation. This year, the government budget for the education sector is approximately 89.8 trillion won (USD 66.5 billion).[58] The government's future objectives are to ensure that the R&D department is more efficient, hence boosting the innovation levels in the economy. Overall, South Korea has become a global leader in technology, currently ranking 6th among the 133 economies in the GII 2024, indicating a strong culture of innovation.[59]

[54] World Intellectual Property Organisation, 'Global Innovation Index 2024: Switzerland, Sweden, US, Singapore, UK Top Ranking; China, Türkiye, India, Viet Nam, Philippines Among Fastest 10-Year Risers; Dark Clouds for Innovation Investments' (2024) Read More Accessed 28th February, 2025.
[55] OECD, 'Gross domestic spending on R&D' (2021) Read More Accessed 28th February, 2025.
[56] UK Science and innovation landscape, 'South Korea' (2024) Read More Accessed 28th February, 2025.
[57] Ibid.
[58] Statista, 'South Korean local government budget for educational sectors from 2015 to 2024' (2024) Read More Accessed 28th February, 2025.
[59] World Intellectual Property Organisation, 'Republic of Korea ranking in the Global Innovation Index' (2024) Read MoreAccessed 28th February, 2025.

6.1.3 Nigeria

Nigeria, once Africa's largest economy, slips to fourth place,[60] with South Africa, Egypt and Algeria taking the top three positions.[61] Currently ranked 113th in the GII 2024, the country has faced significant challenges in fostering innovation due to the absence of a comprehensive innovation policy.[62]

Nigeria has had the Patents and Designs Act (1971),[63] and it passed its Copyright Act in 2022[64] as the most recent addition to the nation's IP framework. However, innovators are discouraged from investing in new ideas due to the uncertainty of the dependability of the systems in place.

The public and private investment in R&D is relatively low in Nigeria, with very few government incentives or tax credits to encourage innovation in key sectors like technology or agriculture. The Nigerian government prioritises investment in the oil and gas sector, which currently produces over 80% of the government's revenue.[65] However, despite the high returns on investment in this sector, the neglect of the R&D sector leads to a greater lack of innovation within the economy. In 2022, Nigeria's fiscal budget for R&D amounted to USD 1.5 billion,[66] which is a fraction of what countries such as South Korea spent (USD 85.46 billion in 2022).[67] Despite the steady increase in expenditure from the previous year, the lack of allocative efficiency led to a lack of significant progress within the sector.

While Nigeria has a rapidly growing tech sector, with Lagos' startup ecosystem[68] being the country's top startup that aims at "establishing the city as a hub for innovative excellence", the lack of government support for R&D and poor IP enforcement has hindered broader innovation. Companies often struggle to secure funding and scale their innovations regionally or globally.

[60] Bloomberg, 'Nigeria's Economy, Once Africa's Biggest, Slips to Fourth Place' (2024) Read More Accessed 28th February, 2025.
[61] Statista, 'African countries with the highest Gross Domestic Product (GDP)' (2024) Read More Accessed 28th February, 2025.
[62] World Intellectual Property Organisation, 'Nigeria's ranking in the Global Innovation index' (2024) Read More Accessed 28th February, 2025.
[63] World Intellectual Property Organisation, 'Patents and Designs Act (Chapter 344), Nigeria' Read More Accessed 28th February, 2025.
[64] Mondaq, 'Intellectual Property In Nigeria: An Overview Of The Legal Framework For Protection Of Creatives' (2024) Read More Accessed February, 2025.
[65] Consulate of the Federal Republic of Nigeria, 'Nigeria Investment Industries' Read More Accessed February, 2025.
[66] Statista, 'Value of gross domestic expenditure on research and development (GERD) in Nigeria from 2020 to 2022' Read More Accessed 28th February, 2025.
[67] Kotra, 'Private sector accounts for 80% of Korean R&D investment in 2022' (2023) Read More Accessed 28th February, 2025.
[68] Somachi Chris-Asoluka, 'Emerging Startup Ecosystem' (Startup Genome, 2023) Read More Accessed 28th February, 2025.

In conclusion, deliberate policies and legislation have a profound impact on fostering innovation and driving economic growth, as seen in the U.S. and South Korea, where strong intellectual property frameworks fuel cutting-edge advancements in research and development. In contrast, countries like Nigeria, with weaker IP enforcement and limited R&D investment, struggle to achieve the same levels of technological progress and innovation. Linking these dynamics to sustainable development, it is clear that a well-structured innovation ecosystem enhances productivity and competitiveness, contributing to long-term economic sustainability and global resilience.

7. Improving the Global Innovation Index ranking of Uganda

A country needs to improve its Global Innovation Index position to enhance its competitiveness on the global stage, attract foreign investment, and drive economic growth. A higher GII ranking reflects a strong innovation ecosystem, which fosters technological advancements, increases productivity and supports sustainable development. This not only strengthens the country's economy but also positions it as a leader in solving global challenges through innovation.

7.1 Strengthen Intellectual Property (IP) protection

Uganda can enhance its IP framework to protect innovators' rights, encouraging investment in new technologies and creative works. Strong IP laws will give inventors confidence that their innovations are safeguarded from infringement, spurring more innovation. Uganda's National Intellectual Property Policy was implemented in 2019 to create a robust IP value that fosters creativity – a strong pillar for sustainable development. For the government to achieve this, it must ensure that innovation is embedded as a fundamental priority to national development and progress. The establishment of a cross-ministerial body[69] is essential to ensure that IP matters are addressed from an entire governmental approach. Both the public and private sectors should be involved in the consultation to ensure that the objectives of the innovation policy are clear and cut across both fields.

7.2 Increase investment in Research and Development

Uganda needs to allocate more funding to R&D, both from public and private sources. This can be achieved through government incentives like tax breaks for companies that invest in R&D and by supporting collaborations between universities, research institutions, and industries.

Uganda has renewed its commitment to leveraging Science, Technology, and Innovation as key drivers of significant economic and social change. This initiative is reflected in the National Development Plan (NDP III 2020/21 - 2024/25). The objective of this program is to enhance the development, adoption, transfer, and commercialisation of technologies and innovations by establishing a well-coordinated STI ecosystem. One of the key targets has been to boost R&D spending by the business enterprise sector (% of GDP) from 0.01% to 0.21%.[70] This can be achieved through budget reform, which would lead to efficiency in resource allocation.

[69] World Intellectual Property Organisation, (2024) Read More Accessed 28th February, 2025.
[70] Ministry of Finance, Planning and Economic Development, ' Science and Technology' (2024) Read More. Accessed 28th February, 2025.

7.3 Enhance education and skills development

Prioritising education, particularly in STEM (Science, Technology, Engineering, and Mathematics) fields, will create a skilled workforce capable of engaging in cutting-edge research and innovation. Strengthening vocational training and innovation-focused programs can also nurture the young population and give them opportunities to explore their creativity.

The total government budget for the fiscal year 2024/25 is Ugx 72.1 trillion (USD 1.96 billion), with 8% of the budget – Ugx 5.85 trillion (USD 1.59 billion) - allocated towards the education sector. The fiscal budget increased by 5.2% from last year, which highlights the government's commitment to growth within the education sector.[71] The budget should be allocated to increasing the literacy levels of the youth from an academic and AI perspective. Moreover, the budget should also be allocated effectively across all schools, ensuring that each school gets a sustainable amount given the resources they have. Prioritising skills and equipment would significantly increase productivity – and consequently growth – of the economy.

Improving Uganda's Global Innovation Index (GII) position is essential for fostering a competitive economy that attracts foreign investment and promotes sustainable development. These initiatives not only drive economic growth but also empower the country to address global challenges, ensuring that innovation becomes a cornerstone of Uganda's national development strategy. Ultimately, a strong GII ranking will enable Uganda to contribute more effectively to sustainable development goals, creating a brighter future for its citizens.

7.4 Digital innovation adoption in Uganda

Digital innovation adoption will benefit Uganda's development because it enhances productivity, drives economic growth, and improves access to essential services. By embracing digital technologies, Uganda can streamline processes in sectors such as agriculture, healthcare, and education, making them more efficient and accessible. This transformation can lead to increased competitiveness in the global market, attract foreign investment, and create job opportunities for the youth. Furthermore, digital innovation can empower local entrepreneurs, facilitate knowledge sharing, and promote sustainable practices, ultimately contributing to a more resilient and inclusive economy.

At the symposium, participants discussed the impact of digital innovation on Uganda's economic growth. The emphasis was placed on building infrastructure to support digital adoption and closing the digital literacy gap. Luis Kironde from Makerere University's Innovation Pod described the dynamic innovation hubs that support innovators with resources like Computer-Aided Design (CAD) facilities and 3D printers. These hubs aim to empower Ugandan innovators to develop market-ready solutions and contribute to the digital economy.

[71] Michael Tumwesigye, 'Can Uganda's Future be Secure with the 2024/25 Education Budget Allocation' (Leadership Magazine, 2024) Read More Accessed 28th February, 2025.

7.5 Infrastructure

Inadequate internet connectivity and unreliable power supply continue to limit access to digital technologies, particularly in rural areas. Additionally, deteriorating roads and insufficient investment in road maintenance are hampering mobility, with traffic congestion, especially in Kampala, highlighting the pressing need for improved transportation infrastructure. A reliable and stable electricity supply is also crucial for accelerating economic growth. Uganda's current peak demand for electricity is around 800 MW,[72] a figure expected to double within the next decade due to the rapid increase in energy demand due to urbanisation across the East African Community region. However, Uganda's urban development remains largely uncoordinated and unregulated. With a 5.2% annual urban growth rate, one of the highest in the world, integrated urban planning and development is critical to managing this rapid urbanisation effectively.[73]

To overcome these challenges, the government and private sector can collaborate to invest in expanding these critical infrastructures. Public-private partnerships can play a key role in developing telecom towers and extending internet coverage, particularly in underserved rural areas.[74] Additionally, investing in solar-powered solutions can provide reliable electricity to regions with unstable power grids. By expanding access to both the internet and electricity, these initiatives will enable broader digital adoption, promote economic growth, and create opportunities for innovation across the country.

7.6 Digital Literacy Gap

A significant portion of the population faces a digital literacy gap, which hinders their ability to effectively use new technologies. This lack of skills affects not only individuals but also businesses and public services, limiting the country's potential to fully embrace digital innovation. Many people, particularly in rural areas, have limited exposure to basic computer and internet use, which restricts their ability to participate in the digital economy. A study carried out in the remote areas of Uganda's West Nile sub regions showed that 60% of respondents lacked basic mobile phone operational skills and the knowledge to complete mobile digital transactions independently.[75] Additionally, the digital divide prevents entrepreneurs and workers from leveraging modern tools to improve productivity, competitiveness, and access to information, further widening the socio-economic gap in the country.

[72] Japan International Cooperation Agency, 'Activities in Uganda, Economic Infrastructure Development' Read More Accessed 28th February, 2025.
[73] Japan International Cooperation Agency (n. 72)
[74] Alliance for Affordable Internet (A4AI), 'Meaningful Connectivity for Rural Communities: Geographic Barriers & Policy Strategies for Digital Inclusion' (2022) Read More Accessed 28th February, 2025.
[75] Alon B. Muhame, 'Using a Digital Literacy Toolkit to Narrow the Digital Skills Gap for Women and Smallholder Farmers in Uganda' (2023) Read More Accessed February, 2025.

To address Uganda's digital literacy gap, the prioritisation of implementing comprehensive digital literacy programs in schools and communities is essential. These programs should focus on equipping students and citizens with the necessary skills to use digital technologies effectively. Projects such as the UNCDF's two-year digital literacy skilling project - aimed at training women, youth and refugees in digital literacy - are in the process of initiation, however, digital literacy should be made an even bigger priority across all education levels.[76] Additionally, collaborating with tech companies to offer training workshops, boot camps, and accessible online courses can further empower individuals to gain practical skills in using digital tools. This approach will not only bridge the digital skills gap but also enhance opportunities for innovation, entrepreneurship, and participation in the growing digital economy, fostering long-term economic growth and development.

7.7 Financing and related costs

The high cost of acquiring digital tools and technologies poses a significant barrier, particularly for small businesses and individuals looking to adopt or implement innovative solutions. Many businesses cannot afford essential technologies such as software, hardware, and internet services, limiting their ability to compete in a digital economy. This challenge is compounded by a lack of access to affordable financing options for innovators and startups.[77] Without sufficient funding, many entrepreneurs struggle to develop or scale their digital solutions, slowing down the pace of innovation. Majority of Uganda's population is financially illiterate and excluded, with 48% of SME's[78] claiming that access to finance is one of the main obstacles they face. The limited availability of venture capital, grants, and government-backed innovation funds further exacerbates this issue, leaving many promising ideas undeveloped or uncommercialised.

To tackle this problem, the government can implement targeted subsidies or tax incentives to reduce the expense of purchasing digital tools, making them more affordable for businesses and individuals. Uganda currently has a "tax holidays for exporters" incentive, where firms that export at least 80% of their produce – subject to certain conditions – get a tax holiday of ten years. While this incentive might be beneficial to large corporations, SMEs do not stand to benefit from it, hence it might not be as incentivised.[79] Establishing dedicated innovation funds or grants aimed specifically at digital startups can provide much-needed financial support for entrepreneurs. Additionally, organising networking events and startup forums to attract venture capitalists and angel investors will open new funding opportunities, helping digital innovators scale their solutions and drive Uganda's digital transformation.

[76] Alon B. Muhame (n. 75)
[77] Norfund, 'DFCU Bank: Increasing Access to Finance in Uganda' (2004) Read More Accessed 28th February, 2025.
[78] Ibid.
[79] PWC, 'Corporate - Tax credits and incentives' (2025) Read More Accessed 28th February, 2025.

7.8 Policy Frameworks

In Uganda, the absence of a comprehensive policy framework for digital innovation creates significant challenges for the growth of the technology sector.[1] Without clear regulations and guidelines, businesses and investors face uncertainty about the legal environment, which can hinder long-term investments in digital infrastructure and technology startups. This lack of direction also affects coordination between key sectors like education, industry, and finance, slowing the pace of digital adoption. Moreover, the absence of supportive policies for data protection, e-commerce, and cybersecurity further discourages innovation, as innovators and consumers alike are left vulnerable.

To unlock its digital potential, Uganda needs a well-defined, supportive policy framework that encourages innovation, protects stakeholders, and promotes investment in emerging technologies. The development of a comprehensive national digital strategy that outlines goals, regulations, and incentives can provide a clear roadmap for stakeholders. Involving various sectors in the policy-making process can ensure a balanced and effective approach.

Overall, by integrating digital technologies, countries can foster more inclusive economic opportunities, streamline processes, and optimise resource use. Furthermore, digital innovation plays a crucial role in achieving sustainable development goals by promoting efficient solutions for challenges such as climate change, education, and healthcare. As nations invest in digital transformation, they not only position themselves for economic advancement but also contribute to a more sustainable and resilient future for all.

8 Policy & Legal Recommendations from the 2024 Symposium

We hereby suggest the following actionable legal and policy recommendations.

8.1 Pharmaceuticals, Therapeutics, and Traditional Medicine

We suggest that the government ought to;

- Rectify regulatory bureaucracy involved in obtaining patent protection and regulatory approval of local herbal medicines. This involves the review and amendment of the Uganda National Bureau of Standards Act Cap. 210 & Regulations, National Drug Policy and Authority Act Cap. 198 & the Industrial Property Act Cap. 224.
- Localise regulatory and policy practices, as opposed to mirroring western policies and laws.
- Establish a supportive institutional framework that encourages research and development (R&D) in local pharmaceuticals, including facilitating easier access to regulatory approvals and procurement processes.
- Enhance efforts to encourage the sharing local/herbal medicines across cultures and tribes. Researching them deeply to accommodate taboos, allergies and practices specific to tribes and cultures.

[1] Julius Ecuru & Dick Kawooya, 'Effective Innovation Policies for Development: Uganda' (University of South Carolina University of South Carolina, 2015) Read More Accessed 28th February, 2025.

- Ensure mindset change to communicate effectively that these herbal medicines are not witchcraft or are not a representation of bad omen.
- Developing policies that provide incentives for both local and foreign investors to support Uganda's pharmaceutical sector.
- Encourage Doctors and accredited pharmacists to prescribe local herbs and quality herbal medicines.
- Conduct a review and amendment of the Science, Technology and Innovation Policy 2009 Policy to fit our unique context, to recognise and safeguard the rich heritage and creativity in Uganda.
- It ought to emphasise the promotion & preservation of Cultural Heritage, including digging up, and patenting local & cultural innovations and preservation of indigenous wisdom.

8.2 Manufacturing and Industry

We suggest that the government ought to:

- Establish a prioritisation framework to address issues in the manufacturing industry.
- Further reduce the cost of Hydro Electric Power. This translates to adjusting the tax levied on each unit of electricity.
- Take care of workers; this translates to promulgating a minimum wage act, and improving the compliance to laws on working conditions. (The Employment Act Cap 226 & The Occupational Health and Safety Act Cap 231).
- Boost local production and eliminate a reliance on imports. Initiatives such as BUBU should receive continuous support. No compromise on quality and standard of goods.
- Review & amend the Industrial Property Act Cap. 224, the Copyright and Neighbouring Rights Act Cap. 222 & the Trade Marks Act Cap. 225 to provide for sections that delineate provisions to deal with counterfeit goods and services, designate an Implementor/ enforcer and clarify a court procedure on seizure of goods, disposal and the consequences to be faced by those liable.
- Increase sensitisation and awareness of the Plant Variety Protection Act Cap 40 and the Seed and Plant Act Cap 41 and their relationship to Geographical Indications and product quality.

8.3 Geographical Indications and Agriculture

We suggest that the government ought to:

- Integrate Geographical Indications, and local farming practices in the school curricula.
- Leverage blockchain technologies to improve traceability of Geographical Indications.
- Promote synergies between capital providers like Emata & UDB to fund Geographical Indications production and sustenance to solve the issue of affordable capital.

8.4 Creative (Innovative) Technology

We suggest that the government ought to:

- Develop a comprehensive policy and regulatory framework that clearly defines the concept of a "creative." This framework should serve to identify and recognise individuals and entities engaged in various creative endeavours, thereby fostering a sense of belonging and community within the creative sector.
- Establishment of a seamless Borderless Protection Policy for Intellectual Property (IP)at least for all East African Countries. (This is possible through ARIPO in some consenting signatories but more needs to be done to eliminate certain barriers).
- Ensure an updated and refined database of IP filings, with a feature that effectively tracks their usage.
- Digitisation of the National Gazette to ease access to information.
- Operationalise the Security in Moveable Property's Act, 2019 and work with banks and other credit agencies to develop a framework for taking intangible assets as security.

9. Conclusion

The path towards fostering innovation in Uganda requires a multifaceted approach involving government, private sector, and community stakeholders. While significant progress has been made since the implementation of the Uganda National Intellectual Property Policy, 2019, there are still many areas needing improvement, particularly in infrastructure development, legal reforms, and awareness initiatives. Addressing these gaps through targeted policies and investments will enable Uganda to fully harness its innovative potential.

By fostering an inclusive innovation culture, empowering sectors like pharmaceuticals, manufacturing, and creative industries, and aligning IP laws with global standards, Uganda can build a resilient ecosystem that supports economic growth and sustainable development. The insights and recommendations from the KTA Annual Symposium provide a roadmap for achieving these goals, positioning Uganda to compete effectively on a global scale while preserving its cultural heritage and supporting indigenous creativity.

Bibliography

African Intellectual Property Organisation (ARIPO) Read More Accessed 28th February, 2025.

African Leadership Magazine, 'Kiira Motors Corporation: Championing Mission Vehicles Made in Uganda' (2019) Read More Accessed 28th February, 2025.

Akii A. O. Ibhadode, 'Opportunities for local electric vehicle manufacturing in Africa' PNgAS. Vol 16, No 1s, (2023) Read More Accessed 28th February, 2025.

Alliance for Affordable Internet (A4AI), 'Meaningful Connectivity for Rural Communities: Geographic Barriers & Policy Strategies for Digital Inclusion' (2022) Read More Accessed 28th February, 2025.

Alon B. Muhame, 'Using a Digital Literacy Toolkit to Narrow the Digital Skills Gap for Women and Smallholder Farmers in Uganda' (2023) Read More Accessed February, 2025.

Bloomberg, 'Nigeria's Economy, Once Africa's Biggest, Slips to Fourth Place' (2024) Read More Accessed 28th February, 2025.

Consulate of the Federal Republic of Nigeria, 'Nigeria Investment Industries' Read More Accessed February, 2025.

Cypris, 'How Do Patents Act as an Incentive to Technological Innovation?' (2023) Read More Accessed 28th February, 2025.

Defence Advanced Research Projects Agency, 'DARPA Joins Public-Private Partnership to Address Challenges Facing Microelectronics Advancement' (2021) Read More Accessed 28th February, 2025.

European Union, 'Protecting EU Creations, Inventions and Security: Geographical Indications' Read More Accessed 28th February, 2025.

Finshares Investments, 'Uganda drug maker dividend up 120 percent' (May, 2024) Read More Accessed 28th February, 2025.

International Trade Administration, 'Uganda - Country Commercial Guide, Protecting Intellectual Property' (2023) Read More Accessed 28th February, 2025.

Japan International Cooperation Agency, 'Activities in Uganda, Economic Infrastructure Development' Read More Accessed 28th February, 2025.

Julius Ecuru & Dick Kawooya, 'Effective Innovation Policies for Development: Uganda' (University of South Carolina University of South Carolina, 2015) Read MoreAccessed 28th February, 2025.

Kasaija, Paul D et al, 'Cattle ticks and tick-borne diseases: A review of Uganda's situation' Ticks and tick-borne diseases vol. 12,5 (2021): 101756. doi: 10.1016/j.ttbdis.2021.101756 Read More Accessed 27th February, 2025.

KBKG, 'What is the Research and Development (R&D) Tax Credit?' Read More Accessed 28th February, 2025.

Kenneth Kazibwe, 'URSB, WIPO partner to support Ugandan universities with access to innovation ecosystem' (Nile Post, 6th September, 2024) Read More Accessed 27th February, 2025.

Kenneth Muhangi, 'The Intellectual Property Situation in Uganda' (KTA Advocates. 14th May, 2018) Read More Accessed 27th February, 2025.

Kiira Motors Corporation, 'Kayoola EVS Models' Read More Accessed 28th February, 2025.

Kotra, 'Private sector accounts for 80% of Korean R&D investment in 2022' (2023) Read More Accessed 28th February, 2025.

Lee Greene, 'How can IP collaboration drive innovation in a mature market?' (Linkedin) Read More Accessed 28th February, 2025.

Lydia Felly Akullu, 'Government to erect innovation hubs across Uganda' (Daily Monitor, 23rd January, 2024) Read More Accessed 27th February, 2025.

Macrotrends, 'Uganda Manufacturing output 1969-2025' Read More Accessed 28th February, 2025.

Michael Tumwesigye, 'Can Uganda's Future be Secure with the 2024/25 Education Budget Allocation' (Leadership Magazine, 2024) Read More Accessed 28th February, 2025.

Ministry of Finance, Planning and Economic Development, ' Science and Technology' (2024) Read More Accessed 28th February, 2025.

Ministry of Finance, Planning and Economic Development, 'Assessment of Informal Business in Uganda' (21st January, 2023) Read More Accessed 27th February, 2025.\

Mondaq, 'Intellectual Property In Nigeria: An Overview Of The Legal Framework For Protection Of Creatives' (2024) Read More Accessed February, 2025.

Monique Bagal, Massimo Vittori and Luis Fernando Samper, 'Manual for Geographical Indications in Africa' (European Union Intellectual Property Office, 2nd Edn April, 2023) Read More Accessed 28th February, 2025.

Morrison Rwakakamba, 'Uganda's industrial journey so far: progress, achievements, and prospects' (Uganda Investment Authority, 2022) Read More Accessed 28th February, 2025.

National Drug Authority, 'New Veterinary Manufacturing Facility Commissioned' (2018) Read More Accessed 27th February, 2025.

National Planning Authority, 'Third National Development Plan (NDPIII) 2020/21-2024/25' (July 2020) Read More Accessed 27th February, 2025.

Norfund, 'DFCU Bank: Increasing Access to Finance in Uganda' (2004) Read More Accessed 28th February, 2025.

OECD, 'Gross domestic spending on R&D' (2021) Read More Accessed 28th February, 2025.

Office of the President, 'President Museveni Cautions Politicians and Civil Servants Frustrating Investors during the 4th Bi-Annual Presidential CEO forum held at Kiira Vehicle plant in Jinja' (August,2023) Read More Accessed 28th February, 2025.

Patrick Alushula, 'Bamburi Cement completes Sh12bn sale of Uganda subsidiary' (Business Daily, 2024) Read More Accessed 28th February, 2025.

PWC, 'Corporate - Tax credits and incentives' (2025) Read More Accessed 28th February, 2025.

Ronald Kakungulu-Mayambala, 'Examining The Nexus Between Intellectual Property And Human Rights, The Case of Uganda' (Ask Justice Project, 2018) Read More Accessed 27th February, 2025.
Rwenzori Mountain Coffee, 'The Rwenzori Coffee Project' (2019) Read More Accessed 28th February, 2025.

Schneider, Marius, and Vanessa Ferguson, 'Uganda', Enforcement of Intellectual Property Rights in Africa (New York, 2020; online edn, Oxford Academic) Read More Accessed 27th February, 2025.

Semiconductor Research Corporation, Read More Accessed 28th February, 2025.

Somachi Chris-Asoluka, 'Emerging Startup Ecosystem' (Startup Genome, 2023) Read More Accessed 28th February, 2025.

Statista, 'African countries with the highest Gross Domestic Product (GDP)' (2024) Read More Accessed 28th February, 2025.

Statista, 'South Korean local government budget for educational sectors from 2015 to 2024' (2024) Read More Accessed 28th February, 2025.

Statista, 'Value of gross domestic expenditure on research and development (GERD) in Nigeria from 2020 to 2022' Read More Accessed 28th February, 2025.

Suryansh Mishra, 'Navigating The IP Landscape: Challenges And Solutions For Developing Nations' (IJLLR, Volume VI Issue V | ISSN: 2582-8878, 2024) Read More Accessed 27th February, 2025.

The Independent, 'Kiira Motors Jinja plant due for commissioning' (October, 2024) Read More Accessed 28th February, 2025.

Trace X Technologies, 'GI Tags in Agriculture: Enhancing Quality and Trust Through Traceability' (2024) Read More Accessed 28th February, 2025.

Trading Economics, 'Uganda-Manufacturing, value Added (% of GDP)' (2023) Read More Accessed 28th February, 2025.

TTConsultants, 'Unlocking Innovation: How Patents Drive Economic Growth and Benefit Society' (2024) Read More Accessed 28th February, 2025.

Tuhirirwe Karane, 'Kiira Motors Corporation — A classroom innovation gone right' (Makerere University Endowment Fund, Read More Accessed 28th February, 2025.

Uganda Investment Authority, 'Investor One Stop Centre' Read More Accessed 27th February, 2025.

Uganda Registration Services Bureau, 'National Intellectual Property Policy' (May 2019) Read More Accessed 27th February, 2025.

Uganda Registration Services Bureau, 'URSB Annual Reports' (2019-2023) Read More Accessed 27th February, 2025.

UK Science and innovation landscape, 'South Korea' (2024) Read More Accessed 28th February, 2025.

United States Intellectual Property Enforcement (IPE) Read More Accessed 28th February, 2025.

United States Patent and Trademark Office, Read More Accessed 28th February, 2025.
WeeTracker & AfriCo, 'The Ugandan Startup Scene' (Ready Guides by WeeTracker, 2015-2020) Read More Accessed 27th February, 2025.

World Business Journal, 'Tackling Uganda's $1.1. Billion Cattle Tick Emergency with a Novel Vaccine Solution' Read More Accessed 28th February, 2025.

World Intellectual Property Organisation (WIPO) Read More Accessed 28th February, 2025.

World Intellectual Property Organisation, (2024) Read More Accessed 28th February, 2025.

World Intellectual Property Organisation, 'Global Innovation Index Ranks' (2024) Read More Accessed 27th February, 2025.

World Intellectual Property Organisation, 'Global Innovation Index Ranks' (2024) Read More Accessed 27th February, 2025.

World Intellectual Property Organisation, 'Global Innovation Index 2024: Switzerland, Sweden, US, Singapore, UK Top Ranking; China, Türkiye, India, Viet Nam, Philippines Among Fastest 10-Year Risers; Dark Clouds for Innovation Investments' (2024) Read More Accessed 28th February, 2025.

World Intellectual Property Organisation, 'Nigeria's ranking in the Global Innovation index' (2024) Read More Accessed 28th February, 2025.

World Intellectual Property Organisation, 'Patents and Designs Act (Chapter 344), Nigeria' Read More Accessed 28th February, 2025.

World Intellectual Property Organisation, 'Republic of Korea ranking in the Global Innovation Index' (2024) Read More Accessed 28th February, 2025.

World Intellectual Property Organisation, 'Why patents matter to SMEs' Read More Accessed 28th February, 2025.

World Intellectual Property Organisation, 'WIPO Industrial Property Automates System (IPAS)' Read More Accessed 27th February, 2025.

World Intellectual Property Organisation, 'WIPO IP Statistical Country Profile, Uganda' (2023) Read More Accessed 27th February, 2025.

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