Keynote Address by AUDA-NEPAD Chief Executive Officer, H.E. Ms. Nardos Bekele-Thomas, on "AI for Good in Africa"

Africa Digital Policy Summit: Shaping Africa's AI Future

(Addis Ababa; 21 August 2024)

His Excellency Dr. Belete Molla, Minister of Innovation and Technology of Ethiopia;

Her Excellency Mrs. Amani Abou-Zeid, Commissioner for Infrastructure and Energy of the African Union Commission;

Excellencies, Ladies and Gentlemen, distinguished guests, and esteemed stakeholders gathered here today…

Before I start, I want to reassure you that my speech was not written using A.I.!!!

- Ladies and gentlemen, I want you to all imagine an Africa where a unified digital infrastructure supports the seamless flow of information, innovation, and ideas across borders.

- An Africa where AI-driven solutions are improving healthcare outcomes, increasing agricultural productivity, enhancing educational access, and fostering transparent governance.

- An Africa where cities are hubs of innovation, and rural areas are connected to the digital economy, with AI-enabled services improving livelihoods and creating new opportunities.

- An Africa where governments are more responsive and transparent, using AI to engage with citizens and deliver public services more efficiently; and education is tailored and accessible, ensuring that every child has the opportunity to learn and succeed.

1

- An Africa where innovation and technology bridge the gaps of inequality, ensuring that the gender digital divide is closed and that every individual, regardless of their background and socio-economic status, can thrive and contribute meaningfully to their society.

- This Africa is not a dream.

- It is the Africa we can build together.

- An Africa where technology is a force for good, driving sustainable development and empowering every individual to reach their full potential.

- But this future will not come to pass on its own. It requires commitment, collaboration, and, most importantly, unity.

Distinguished guests,

- Decades ago, the visionary pan-Africanist Julius Nyerere, declared: "We must run while others walk. If we wait until all conditions are perfect before we act, we will never achieve anything. Technology is a vehicle for us to leap forward."

- His words still ring true today, and encapsulate the essence of what we are here to discuss—how technology, particularly Artificial Intelligence (AI), can unify and uplift entire societies for good, despite the accompanying challenges.

Ladies and gentlemen,

- Africa stands at the cusp of a technological revolution, marked by the Fourth Industrial Revolution, holding the promise of transforming the continent in ways unimaginable before.

- Just as the mobile phone leapfrogged traditional landline infrastructure and connected millions across Africa, AI is poised to propel our societies into a brighter future where technology works for the common good.

- Artificial Intelligence is no longer a concept confined to science fiction; it is a reality that is reshaping industries worldwide.

Fellow Africans,

AI holds the potential to accelerate the realisation of our Agenda 2063, and make our moonshots more attainable. Here are a few significant examples.

In Health:

- Africa faces major healthcare challenges, with the continent shouldering 24% of the global disease burden but accounting for only 1% of government health spending. Access to quality healthcare remains a major issue, particularly in rural areas.

- To address these challenges, AI-driven diagnostics are already showing promise in bridging the gap between patients and specialists.

- A member of our African Union High Level Panel on Emerging Technologies (APET), Dr William Wasswa, is utilising AI in detection of cervical cancer in women in Uganda.

- A start-up in Kenya has recently launched an AI powered virtual clinic application to respond to patients' queries and provide accurate diagnoses and treatments.

- In countries like Egypt, South Africa, Ghana and Nigeria, AI-powered telehealth platforms are enabling remote consultations, ensuring that even those in the most remote areas have access to medical expertise.

In Agriculture:

- Agriculture remains the backbone of Africa's economy, contributing nearly 35%to the continent's GDP and employing about 60% of the labour force.

- However, traditional farming practices are increasingly under pressure from climate change, land degradation, and rapid population growth. AI offers innovative solutions to these challenges, transforming agriculture into a more efficient and sustainable sector.

- Precision farming, powered by AI, is revolutionizing how crops are grown.

- In South Africa, AI-driven systems are being used to monitor soil conditions, predict weather patterns, detect crop diseases early and optimize irrigation, resulting in higher crop yields and reduced resource use.

- In Kenya, AI is enabling the collection and processing of environmental data to help grassroot communities and companies make informed decisions about their land resource use, assessment of climate risk and supply chain management.

- Isn't this admirable?

In Education:

- Education is both a challenge and an opportunity in Africa, with approximately 33 million children out of school and literacy rates lagging behind global averages.

- This is why for 2024, we are celebrating the Year of Education.

- AI has the potential to revolutionize education by providing personalized learning experiences tailored to the needs of each student.

- Several African countries have launched AI-specific education, and research initiatives to advance knowledge and innovation in the field.

- Notable examples include Egypt's first AI faculty at Kafr El Sheikh University, South Africa's Centre for AI Research across five universities, and Rwanda's graduate programs in Machine Intelligence supported by Google.

- Additionally, countries like Morocco, Senegal, and Ethiopia have established AI centres and programs, further solidifying Africa's commitment to AI-driven development.

Let me give you another example of how AI is applied for social good in the continent:

- As you would expect, the world is not mapped equitably.

- For decades, humanitarian organisations did not have a reliable source of geospatial data for Africa. As such, they struggled to identify communities in need and their limited resources were not being leveraged optimally.

- However, with the support of global partner organisations, they turned to AI to generate a comprehensive and accurate map of every building and road in Africa.

- It would have taken thousands of years to manually digitize the more than 410 million buildings and 17 million kilometres of roads in the region, yet AI has rendered this monumental task achievable in a fraction of the time. This technological advancement is significantly enhancing planning, development, and connectivity across the region!

Ladies and Gentlemen, with opportunities, come challenges…

- One of the most significant barriers to AI adoption in Africa is the fragmented state of digital infrastructure.

- According to recent data, internet penetration in Africa stands at just over 40%, with wide disparities between urban and rural areas.

- Mobile connectivity, while improving, remains inconsistent, and digital literacy rates are still low, with many populations lacking the basic skills needed to engage with digital technologies.

- This digital divide hinders the deployment and scalability of AI solutions, particularly in sectors that could benefit the most, such as healthcare and education.

- The lack of harmonized AI policy frameworks across Africa presents another major challenge.

- While some countries have made strides in developing national AI strategies, many others have yet to establish clear guidelines or regulatory frameworks for AI deployment.

- Without a cohesive approach to AI policy, Africa risks falling behind in the global AI race, unable to fully capitalize on the technology's potential for social good.

- Additionally, as we navigate these challenges, it is crucial to address ethical concerns. In a continent with diverse cultures and languages, AI systems that are not properly localized or inclusive can exacerbate existing inequalities.

- The risk of algorithmic bias, where AI systems, trained on biased datasets, could reinforce harmful stereotypes or make decisions that disproportionately impact vulnerable groups.

- The issue of data privacy is also paramount, particularly in countries where legal frameworks for data protection are still underdeveloped. Ensuring that AI is used ethically and responsibly is critical to its acceptance and success in Africa.

This landscape of opportunities and challenges I have presented today sets the stage for why a unified approach to AI policy and digital infrastructure is not just desirable, but essential, for Africa to fully realize the benefits of AI for social good.

Ladies and Gentlemen…there's good news…

- As we look across the continent, it's clear that the momentum for AI adoption is building, with several African nations taking the lead in developing policies and frameworks to harness AI for social good.

- Countries like Mauritius, Egypt, Zambia, Tunisia, and Botswana, have recognized the potential of AI to boost GDP and create competitive advantages. In recent years, they have initiated national AI strategies to drive investment, talent development, and economic growth.

- Other African countries, such as Ghana, Sierra Leone, South Africa, Zimbabwe, Senegal, Tunisia, and Nigeria, are beginning to regulate AI within their territories. These efforts include national laws such as Senegal's AI-inclusive Start-up Act and data protection laws in Kenya, South Africa, and Nigeria.

- African countries are also increasingly using AI to reform public sector operations. Rwanda uses anti-epidemic robots, while Tunisia integrates AI in public finance management for fraud detection and analytics. In policing, South Africa and Uganda use AI for gunshot detection, while Tanzania deploy drones for medical supply delivery.

- However, these examples are still the exception rather than the rule. Many more African countries are yet to develop comprehensive AI policies.

- Recognizing the need for a unified approach, the African Union and AUDA-NEPAD, the continent's premier development agency, are spearheading efforts to create frameworks that will guide the responsible adoption and use of AI across the continent so that AI is deployed in a manner that is ethical, inclusive, and aligned with Africa's development goals.

- One such initiative is the African Union's Digital Transformation Strategy for Africa (2020-2030), which lays the groundwork for

the integration of AI and other emerging technologies into the continent's development agenda.

- This strategy emphasizes the importance of building a robust digital infrastructure, fostering digital skills, and creating regulatory environments that support innovation while safeguarding against risks. Another is the recently launched continental strategy on AI, framing our continental vision of AI for good.

To capitalize on the opportunities that AI presents, it is imperative that African nations come together under a unified framework. This is where the **U-NITE** framework comes into play as a strategic roadmap for aligning AI and digital policies across Africa to create a cohesive environment for AI development and investment. Under the U-NITE framework:

- **U**nified policies will eliminate the barriers that currently hinder cross-border collaborations and hinder the flow of investment into our digital infrastructure.

- **N**ational investments, guided by a shared vision, will build the robust foundations needed for AI to flourish.

- **I**nclusive growth will ensure that the benefits of AI are felt by all, especially those in marginalized communities.

- **T**echnological empowerment will provide African nations with the tools and knowledge necessary to lead in AI innovation.

- **E**conomic advancement will position Africa as a global leader in the digital economy, driving growth, creating jobs, and enhancing the quality of life for millions.

By adopting the U-NITE framework, Africa can transform its fragmented digital landscape into a unified powerhouse, capable of harnessing AI for the greater good of all its people.

Distinguished guests,

- At the heart of Africa's development efforts lies the African Union Development Agency, AUDA-NEPAD, the continent's premier development agency tasked with driving economic growth and sustainable development.

- AUDA-NEPAD is uniquely positioned to spearhead the adoption of Artificial Intelligence (AI) for social good.

- Our mandate extends beyond traditional development; it encompasses fostering innovation, building capacity, and ensuring that Africa is not just a participant in the global AI landscape but a leader in shaping how AI can responsibly and inclusively serve humanity.

- AUDA-NEPAD is committed to using AI as a tool to address Africa's most pressing challenges. By leveraging AI, we aim to accelerate progress towards the African Union's Agenda 2063,.

- AUDA-NEPAD, through the African Union High-Level Panel on Emerging Technologies (APET) and African experts of the AI for Development network, released early drafts of a continental white paper on AI, providing detailed information on 6 strategic pillars of AI worth prioritising.

- This white paper was spearheaded by African youth experts and disseminated for stakeholder inputs, ensuring the collective reflection of African voices in our agenda. Moving forward, we aim to launch the white paper and roadmap as a reflection of collective thinking of African voices passionate about AI for good.

- In collaboration with Elevate-AI, the Government of Tanzania, under the auspices of H.E. Dr. Samia Suluhu Hassan, the President of the Republic of Tanzania, the Arab Bank for Economic Development in Africa, and other partners, AUDA-NEPAD launched the inaugural "African Youth in Artificial

Intelligence and Robotics Competition" to honour and support young innovators who have developed transformative AI and robotics-based solutions.

- These solutions would have the potential to uplift African communities. We received more than 1000 applications from young African innovators, with an award ceremony planned in October, which will include a special presidential award to be given by H.E Dr. Samia Suluhu Hassan.

- In infrastructure, the achievements of our Programme for Infrastructure Development in Africa (PIDA) are a testament to the dedication, collaboration and effective partnership among AUDA-NEPAD, the African Union Commission , the African Development Bank and the United Nations Economic Commission for Africa .

- Most of our PIDA PAP1 ICT projects are being implemented, and 17 countries have achieved digital connectivity via optical fibre cables. ICT capacity is currently in the region of 9 Terabits against a target of 6 Terabits by 2020. Our recently launched PIDA First 10-Year Implementation Report indicates that ICT broadband penetration has now surpassed 25%, significantly exceeding the 10% target set for 2040.

- As we look to the future, AUDA-NEPAD's strategic vision for AI governance in Africa is ambitious. One of our key initiatives is the development of a **Continental Mechanism on AI Governance**.

- This Mechanism will be a one-stop resource for AI-related policies, legal instruments, and best practices across Africa. It will provide policymakers, regulators, and stakeholders with the tools needed to navigate the complexities of AI governance. The Mechanism will cover a wide range of topics, including data privacy, ethical AI, regulatory frameworks, and AI's role in sustainable development.

- Alongside the Mechanism, AUDA-NEPAD is also developing a **Digital Readiness Index**. This index will assess the readiness of African countries for AI adoption, considering various factors including digital infrastructure, regulatory environment, human capital, and innovation ecosystems. It will guide national governments in prioritizing investments and policy reforms that are crucial for AI adoption.

- These tools will be vital in ensuring that African countries are not only ready to adopt AI but are also prepared to do so responsibly and effectively.

- AUDA-NEPAD, in collaboration with the Government of Egypt, Moharram & Partners, Africa CDC, and African universities and research centres working in digital health and AI, are working towards hosting the first continental AI in Healthcare Conference in Africa, scheduled for June 2025.

- A major deliverable from this conference would be the development of guidelines for AI in health. We would further aim to foster transparency and accountability by establishing oversight and redress mechanisms for AI development and deployment in these sectors.

- Furthermore, we will support the implementation of the AU Data Governance Framework, ensuring that AI practices across the continent are aligned with principles of responsible data use.

Today, I urge all stakeholders—governments, private sector leaders, academics, civil society, and international partners—to embrace the strategies we have outlined and work together to make AI for social good a reality across Africa.

Let us be united by our common vision for a better, brighter future for Africa.

A future where AI is not just a technology, but a tool for empowerment, and a driver of economic growth.

As we move forward, let us remember that the power of AI lies not just in the technology itself, but in how we choose to use it.

Nelson Mandela, who fiercely believed in the power of education and technology as tools to overcome adversity, famously said that "It is through education that the daughter of a peasant can become a doctor, that the son of a mineworker can become the head of the mine, and that a child of farm workers can become the president of a great nation. It is what we make out of what we have, not what we are given, that separates one person from another."

With unity, empowerment, and a shared vision, Africa can lead the world in demonstrating how AI can be harnessed to improve lives, create opportunities, and build a more just and equitable society.

This is our moment. This is our opportunity.

Let us seize it together, and make Africa the leader in AI innovation, driven by the values of unity, empowerment, and a commitment to the common good.

I thank you.