



Summary of Session: Artificial Intelligence for Climate Change in Africa

Organised by Digital Coalition

On Thursday, 16th March at 16:00 CET

Session page link: <https://www.itu.int/net4/wsis/forum/2023/Agenda/Session/338>

Leveraging AI to tackle the challenges of climate change in Africa

Africa is one of the most vulnerable continents in the world to climate change, according to the Intergovernmental Panel on Climate Change (IPCC). In 2022, every part of the continent was affected by extreme weather events, ranging from wildfires in Algeria to catastrophic flooding in South Africa. In addition the the human lifes lost during flood, cyclone,,..., it is also increase extreme poverty.

The vast majority of the continent's populations living in the rural areas also lives in extreme poverty. The enhancement of sustainable agricultural and rural development is therefore fundamental to the attainment of the Millennium Development Goals (MDGs) in Africa, particularly the eradication of hunger and poverty.

Thus a lot of african depend on agriculture and the climate change effect has a strong negative impact in their lives. The purpose is to use AI to address some of the critical issues of climate change affecting population and agriculture and to showcase initiatives or solutions that are tackling those challenges.

Key issues discussed:

On Thursday 16th March 2023, Digital Coalition (Mrs Reine Essobmadje, Pr Alain Kiyindou) runs a workshop on the theme Artificial Intelligence for Climate Change in Africa. The main points were:

- ✓ Africa is the least contributing to the greenhouse effect while having the lowest carbon print and yet it is the most affected by Climate Change
- ✓ Thanks to AI, it is possible to significantly impact the SDGs with the ability to predict and anticipate events
- ✓ Computational thinking and Machine Learning offered by AI promotes sequential and orderly problem solving. These mechanisms can be used to address the Climate Change issues in Africa
- ✓ African youth must be made aware of the challenges of AI and digital tools
- ✓ Climate Change has an impact on the entire population in various areas, from food security to agriculture, health etc
- ✓ The use of AI could improve production conditions: finding the least polluting materials, ensure that IA technologies developed are designed for Africa, making supply chains less polluting.

→ Towards WSIS+20 and WSIS beyond 2025, please share your views on the emerging trends, challenges, achievements, and opportunities in the implementation of the WSIS Action Lines to date

- ✓ Rise of AI and how it is disrupting the workplace
- ✓ Need to have a strong AI policy to foster Equity, keep Diversity and inclusion in the Work environment
- ✓ Africa is the least contributing to the greenhouse effect while having the lowest carbon print and yet it is the most affected by Climate Change. Thanks to AI, it is possible to significantly impact the SDGs with the ability to predict and anticipate events. Computational thinking and Machine Learning offered by AI promotes sequential and orderly problem solving. These mechanisms can be used to address the Climate Change issues in Africa. Climate Change has an impact on the entire population in various areas, from food security to agriculture, health etc
- ✓ The use of AI could improve production conditions: finding the least polluting materials, ensure that IA technologies developed are designed for Africa, making supply chains less polluting. African youth must be made aware of the challenges of AI and digital tools

The WSIS +20 and WSIS beyond 2025 offer the opportunity to contribute to the achievement of the SDGs.

→ **Tangible outcomes (such as key achievements, announcements, launches, agreements, and commitments (3-5 bullet points :**

- ✓ **ACHIEVEMENT:** Many actions have been carried out in close connection with this workshop theme. Indeed, a competition "IA Challenges" was launched across 13 African countries. The objective was to present the state of AI in each country through a video made by students. The videos are available on Youtube via the link: <https://youtu.be/W810z3mdLCI>
- ✓ **AGREEMENT:** Digital Coalition will support the African Telecommunications Union in the definition of African Public Policy on AI issues
- ✓ **ANNOUNCEMENT:** Digital Coalition will work on building the AI system for Climate change through a database of African indigenous Knowledge. In addition, AI (AI as a new economy) a process for simulating human intelligence will be incorporated into our various programs.

→ **Actionable plan (2-5 points)**

It will be necessary to see to what extent traditional African knowledge and data collected by AI can be combined to create a global system for the most accurate predictions.

- ✓ It is essential to use Machine Learning to enhance technical systems
- ✓ An OpenAI Database for Climate change will be built as a free resource across the continent

→ **Suggestions for thematic aspects that might be included in the WSIS Forum 2024 (WSIS+20 Forum High-Level Event) (one paragraph)**

The WSIS Forum 2024 should include topics related to green technologies and **highlighting the indigenous knowledge in Africa and other regions**. Responding to environmental challenges is becoming increasingly crucial. In addition, it is critical to advocate for the reduction of toxic waste in Africa.