



Interview with Dr. Mitslal Kifleyesus-Matschie

Theme: *Science, Art, and the Nile's Future: Connecting Dots Beyond Politics*

Interviewer: Journalist from Ecopia Group

Introductory Note

This interview highlights perspectives on science, art, and innovation along the Nile Basin. The views expressed focus on collaboration, shared heritage, and technological solutions to common challenges. They do not represent official government positions of any country in the Nile Basin, and the content has been framed to foster dialogue, understanding, and constructive cooperation among all nations.

1. The Vision for Children of the Nile

Q: You've emphasized that science, technology, and art—not only politics—should lead the Nile dialogue. Why is this approach critical today?

A: Dr. Mitslal Kifleyesus-Matschie:
"Because the Nile is not just a river of politics—it is a river of life. Its challenges today are deeply scientific and human at their core: climate change, food insecurity, migration,

unemployment. Politics alone cannot irrigate a field or prevent a flood. But science can model equitable water flows, technology can provide real-time data for farmers, and art can remind us of our shared history and humanity.

When dialogue begins with knowledge and creativity, politicians inherit solutions, not disputes. Take the GERD, for example—it is an engineering achievement. Framed through data and innovation, it can become the backbone of a regional green energy grid. Framed only politically, it becomes a zero-sum game. Science, technology, and art build bridges where politics builds walls."

2. Climate Change Mitigation

Q: How are universities and research institutions in Nile Basin nations leveraging technology to address their challenges? Are there any good ongoing cooperations between universities of the Nile?

A: Dr. Mitslal Kifleyesus-Matschie:
"Egyptian universities, such as Cairo University, are deeply engaged in Nile-related science and regional conferences on water and energy. Egypt contributes significantly through **ENRUC**, an academic network uniting Egypt, Ethiopia, Sudan, and South Sudan, developing AI-powered hydrological tools and open geodata portals for shared water governance.

In Kenya and Tanzania, universities participate in **NBCBN-led student exchange programs**, enabling master's fellows to collaborate on water governance projects across Ethiopia, Egypt, Uganda, and Sudan. Makerere University in Uganda pilots **citizen-science water data models** with the Nile Basin Discourse, supported by the World Bank. Back in Ethiopia, **Jimma University researchers** use GIS and hydraulic modeling to predict and manage floods, showing how local technology-driven research addresses regional challenges."

Selected Initiatives:

- **ENRUC (Eastern Nile Research Universities and Centres):** Promotes AI-based hydrological modeling, open-source geodata, and nature-based climate adaptation strategies.
- **NBCBN–IHE Delft–Wageningen Partnership:** Academic exchange program for MSc students and staff focused on transboundary water management.
- **Nile Student Exchange for Sustainable Water Governance:** Supports mobility and collaborative research on ecosystems, climate, agriculture, and water quality.
- **Makerere University & Nile Basin Discourse:** Employs citizen science to improve transboundary water governance.
- **Nile Project University Program:** Brings students from across the Nile Basin to co-create sustainable solutions.
- **Jimma University – Flood Prediction Research:** Integrates GIS, hydrological software, and rainfall data for local flood prediction.

Q: What could Artificial Intelligence bring to Nile Basin cooperation and the mitigation of shared challenges?

A: Dr. Mitslal Kifleyesus-Matschie:
"AI can be the bridge we have long needed in Nile cooperation. First, it creates a shared evidence base: models integrating rainfall, soil, and satellite data can predict floods, droughts, or sediment flows that all countries can trust. Instead of debating whose data is correct, AI produces **common-ground knowledge**.

Second, AI can optimize resource sharing. Imagine an AI-driven platform balancing Ethiopia's hydropower, Sudan's irrigation schedules, and Egypt's water demand in real time.

Third, AI enables citizen participation: farmers from Uganda to Ethiopia could input soil and crop data into a shared platform, receiving localized guidance in return. Cooperation becomes a **people's process**, not just a governmental one.

The main challenge is trust. Who owns the data? Who designs the algorithms? If developed externally without regional ownership, AI could reinforce dependency or bias. Nile Basin universities and research centers must **co-develop AI tools locally**, ensuring transparency and accountability. AI is not just a technology—it is a **language of trust**, capable of dissolving zero-sum politics and fostering cooperative resilience."

3. Art as a Diplomatic Tool

Q: The Nile Memory Project collects oral histories. How does storytelling dissolve borders better than treaties?

A: Dr. Mitslal Kifleyesus-Matschie:
"Projects like *EverydayNile* demonstrate how storytelling can transcend political fractures. When photographers share experiences—such as an Ethiopian's account of soil erosion near the GERD, or a Sudanese villager's memories of floods—it connects people emotionally. These narratives bypass elite channels and diplomacy, revealing a **shared humanity rooted in the Nile's rhythms**. Art and memory, more than treaties, foster empathy, awareness, and cooperation."

Follow-up Q: The story of Muse, rescued in the Nile and raised in Egypt, is a powerful metaphor. How do such ancient stories of survival and interdependence guide modern cooperation?

A: Dr. Mitslal Kifleyesus-Matschie:
"Ancient tales speak to our **collective psyche**, beyond politics. Consider Nubian lullabies preserved after the Aswan Dam—they carry memories of home, resilience, and shared identity across borders. A grandmother's song or a child's drawing connects people across

time and space. Modern Nile cooperation can draw on this collective memory to remind us we are not negotiating over water—we are **co-stewards of a shared legacy.**"

Real-World Example: *EverydayNile* invites communities from Egypt, Ethiopia, Sudan, Uganda, DRC, Tanzania, Kenya, Burundi, and South Sudan to share stories and photographs. Exhibitions have highlighted floods in Sudan, soil degradation near the GERD in Ethiopia, and everyday river-life across Uganda and Tanzania, emphasizing the Nile as a **living custodian of shared dreams.**

4. Shared Heritage and History

Q: The Nile has shaped civilizations for millennia. How do stories of the past and present—the Children of the Nile—illustrate our shared heritage and guide modern cooperation?

A: Dr. Mitslal Kifleyesus-Matschie:
"Historically, the Nile connected civilizations: Kushite and Nubian pharaohs in Egypt, Ethiopian monasteries along Lake Tana preserving knowledge, and communities along Aswan and Sudan building shared economic and cultural networks. These stories show the Nile as a **connector of people, ideas, and livelihoods.**

Today, the modern 'Children of the Nile' continue this tradition. Youth in Uganda develop water-quality apps, Ethiopian engineers build AI flood-prediction tools, and Egyptian students design solar-powered water solutions. Families in South Sudan displaced by floods rely on early-warning data shared by researchers across Ethiopia and Uganda. Artists and storytellers in Rwanda, Kenya, and Sudan exchange murals, songs, and oral histories celebrating the river as a **shared cultural artery.**

These narratives—from ancient pharaohs to contemporary innovators—remind us that the Nile is not merely a resource to be divided, but a **living archive of resilience, creativity, and**

interdependence. Honoring these stories transforms the Nile into a platform for collaboration, cultural connection, and collective problem-solving."

5. Youth and Technology

Q: You are planning to launch a 'Nile Innovation Challenge.' What is its purpose, and how will it engage youth across the Basin?

A: Dr. Mitslal Kifleyesus-Matschie:
"The Challenge brings youth from all Nile Basin countries to **co-create solutions** for water, climate, and energy challenges. We see the Nile not as a line dividing nations, but as a **living repository of opportunity.** Teams of students, young engineers, and creatives will develop practical innovations—apps for water-quality monitoring, solar-powered irrigation systems, or AI tools for flood prediction.

Winners will present directly to policymakers, incubators, and universities, ensuring their solutions **inform real decisions.** By connecting youth, academia, and government, the Nile Innovation Challenge transforms ideas into action, giving the next generation **voice and influence** in shaping the river's future."

Q: How do you ensure young innovators are integrated into policymaking?

A: Dr. Mitslal Kifleyesus-Matschie:
"Integration requires structured platforms and institutional support. Winners are paired with **policy labs and government advisory councils,** and universities act as **bridges,** documenting pilots, providing reports, and facilitating workshops. This creates **feedback loops,** so youth ideas evolve alongside policy, not remain on the sidelines."

6. Risks of Political Short-Termism

Q: You've advised governments on disarmament. How does Nile cooperation prevent resource conflicts?

A: Dr. Mitslal Kifleyesus-Matschie:

"My experience with the OPCW taught me that verification regimes succeed only when stakeholders **genuinely own the process**. Applied to the Nile, this means a '**Nile Tech Accord**', where countries openly share hydrological data, patents, green energy innovations, and climate information.

Such a mechanism functions like a chemical weapons treaty—it's not just rules on paper, but **trust, transparency, and mutual accountability**. Leaders must depoliticize water, prioritizing long-term cooperation over short-term gains. Done right, these agreements reduce tensions, prevent conflicts, and unlock joint opportunities for energy, agriculture, and climate resilience."

7. Arts, Science, and Healing Divides

Q: You are planning, with Artist Desaalge, a pan-Nile festival blending science fairs, art exhibitions, and indigenous storytelling. Could such a festival become a new diplomatic platform beyond summits?

A: Dr. Mitslal Kifleyesus-Matschie:

"Absolutely. Traditional diplomacy often focuses on negotiation tables and treaties. A pan-Nile festival creates a shared **cultural and scientific space** where creativity and knowledge intersect. Imagine youth presenting AI water solutions alongside murals inspired by the river, or scientists explaining flood predictions while elders share oral histories.

This festival can **heal divides** by connecting emotions and intellect. Art and storytelling bypass nationalist narratives, science creates a common language, and shared cultural experiences foster empathy. People-to-people diplomacy reshapes perceptions and builds trust, preparing communities and policymakers to **co-create solutions for the Nile Basin's future**."

8. Gender and Inclusion

Q: Women have been the Nile's traditional custodians—fetching water, tending farms, carrying memory through songs. How do you envision women shaping the next phase of Nile cooperation?

A: Dr. Mitslal Kifleyesus-Matschie:

"Women have always been keepers of the Nile's knowledge—from the songs that teach children about the river to the daily practices of farming, fishing, and water management. Their perspective is holistic, blending care for the ecosystem, community, and culture.

Consider the story of Moses, rescued in the Nile and raised across cultures: it is a metaphor for life, compassion, and protection flowing across borders. Just as Moses' survival depended on both Egyptian and Hebrew communities, women in the Nile Basin connect communities, preserve heritage, and sustain resilience.

Women can lead in community-based water management, climate adaptation, and knowledge preservation, ensuring technical solutions are people-centered. Including women in policy design, tech innovation, and cross-border dialogues creates **equitable, inclusive, and resilient Nile governance**."

9. Call to Action

Q: What is your message to Nile Basin leaders?

A: Dr. Mitslal Kifleyesus-Matschie:

"Stop weaponizing ignorance. The Nile's challenges are lived experiences: floods, droughts, energy shortages, and ecological degradation. The tools to address them already exist—from AI-driven water management and agroecology to art and storytelling uniting communities.

Leaders should **prototype cooperation at a human scale**: one village collaborating on shared irrigation, one startup developing cross-border water solutions, one mural telling

a story of resilience. These small initiatives build trust, demonstrate feasibility, and inspire broader collaboration. The Children of the Nile are watching, and they will inherit the consequences of our choices. Let's ensure they inherit **connection, creativity, and shared prosperity**, not conflict and mistrust."

10. The GERD as a Catalyst

Q: You hold a bond in the Grand Ethiopian Renaissance Dam (GERD). How do you see the GERD contributing to your concept of shared Nile cooperation and innovation?

A: Dr. Mitslal Kifleyesus-Matschie:
"Holding a GERD bond is not just a financial investment—it symbolizes a commitment to the shared future of the Nile Basin. The GERD is more than a dam; it is a **catalyst for regional cooperation, sustainable development, and technological innovation**.

It can generate surplus electricity for Ethiopia and neighboring countries, creating cross-border energy partnerships. Managed collaboratively, it ensures water security, mitigates droughts, and boosts agriculture downstream in Sudan and Egypt.

For the Children of the Nile concept, the GERD becomes a **living laboratory**: youth design AI water monitoring systems, universities study hydropower optimization, and cultural initiatives—like the pan-Nile festival—use the dam as a symbol of unity and shared heritage. Investing in the GERD aligns perfectly with my vision: turning a potentially contested resource into a platform for **innovation, diplomacy, and collective prosperity**."

Closing Note for Publication

The ideas and stories shared in this interview are intended to inspire cooperation, innovation, and cultural exchange across the Nile Basin. They highlight the potential for youth engagement, scientific collaboration, and artistic diplomacy as tools for regional development. The publication respects the sovereignty of all countries and emphasizes shared benefits rather than political disputes.

