



Adaptation Research Alliance (ARA) Regional Policy Workshop and ACTS Pathways Academy (APA) Sustainability Fellowship Graduation



Event Report

6 March 2025

“ ***Sustainability is a daily practice; what we do every day. If you know what you have, you will know when it is depleting. Climate action can't be done in silos.*** ”

*Dr. Bessy Kathambi,
Environmental Management and Governance Consultant*

ACRONYMS

AI	Artificial Intelligence
ARA	Adaptation Research Alliance
APA	ACTS Pathways Academy
ACTS	African Centre for Technology Studies
COP29	29th Conference of the Parties
COP30	30th Conference of the Parties
CRE	Climate Resilient Economies
ESG	Environmental, Social, and Governance
FLLoCA	Financing Locally Led Climate Action
GGA	Global Goal on Adaptation
GSSB	Green, Social and Sustainability Bonds
IPCC	Intergovernmental Panel on Climate Change
NCQG	New Collective Quantified Goal
SPPI	Science-Policy-Practice Interfaces
STI	Science, Technology and Innovation
SDG	Sustainable Development Goal

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Introduction and Background

In 2023, African Centre for Technology Studies (ACTS) instituted a Learning Hub, the ACTS Pathways Academy, aiming to strengthen knowledge and learning systems, providing both synchronous and asynchronous learning content and material. ACTS Pathways Academy (APA) is an exciting professional platform specifically designed to provide access to borderless, flexible, informative training to foster skills, knowledge and collaboration on Science, Technology and Innovation (STI).

Come April 2024, the APA admitted their first cohort for the APA Sustainability Fellowship that attracted fellows across the African continent. This 8-months virtual training served as a platform to inspire continued innovation and collaboration in the field of sustainability.

As part of the Adaptation Research Alliance (ARA), ACTS recognizes the critical role of regional advocacy groups in bridging global policy frameworks with local realities. These groups, often affiliated with ARA, use their networks and regional expertise to facilitate dialogue, foster cooperation, and amplify the voices of local communities. Ensuring inclusive and strategic engagement, they help keep adaptation and finance priorities for vulnerable populations at the forefront of discussions at 30th Conference of the Parties (COP30) and beyond.

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ARA Workshop and APA Graduation Objectives

1. Having successfully completed the APA Sustainability Fellowship, a graduation ceremony to recognize & celebrate the achievements of the fellows.
2. To contribute to sustainability through advocacy during the ARA workshop.
3. Highlight the innovative projects and research outputs developed during the fellowship.
4. Provide a platform for fellows to connect with industry experts, policymakers, and potential collaborators.
5. Reinforce the importance of sustainable practices and the role of STI in achieving them.

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Methodology and Approach

The combined event was directed, facilitated and documented by ACTS, Climate Resilient Economies (CRE) Programme. It had several key sessions namely: a keynote address on having passion for sustainability; group discussions on collective action on climate adaptation & finance; fellows' graduation; graduating fellows' impact stories and research projects presentation; and a podcast episode on sustainability.

An interdisciplinary approach was used to deliver the workshop and graduation which included including pre-event preparations of selecting topics and guiding presenters, setting the tone by ACTS directors at the beginning of the combined event, technical topics presentations, group discussions and trivia. The expert presenters and participants shared their experiences, explored opportunities and formulated country and regional roadmaps in the topics. A virtual component allowed participants who could not attend in-person to participate.

4 Outcomes and Results

Participation

The event, held both in-person and virtually, brought together **40 participants** from **five countries: Uganda, South Africa, Kenya, Benin, and Ethiopia**. A total of **30 fellows successfully graduated**, marking a significant milestone in their journey as climate adaptation and sustainability leaders.

Opening Address

The opening address was given by Dr. Ann Kingiri, the ACTS Director of Research and Innovation. She highlighted ACTS's regional presence in over 25 African countries and its 2022–2026 strategic plan, which focuses on agriculture, climate resilience, digital economy, and inclusive development. She emphasized a system-based approach driven by research, policy engagement, and technology brokerage, stressing the need for collaboration across sectors.

She encouraged an interdisciplinary approach to sustainability, fostering partnerships within the STI ecosystem. She also acknowledged the Adaptation Research Alliance for amplifying local voices. To conclude, she urged participants to engage, learn, and enjoy the event before inviting Dr. Bessy Kathambi, an Environmental Management and Governance Consultant to deliver the keynote speech.

Technical Presentations

Having Passion for Sustainability. - Dr. Bessy Kathambi, an Environmental Management and Governance Consultant

Dr. Bessy emphasized that sustainability is a practice, and it entails what we do every day. She further explained that understanding what resources we have is essential. She stated, “If you know what you have, you will know when its depleting or has been depleted.” In her view, environmental sustainability is a collective effort and not a one-man show. Dr. Bessy strongly believes that there are solutions to sustainability but achieving them requires collaboration across various sectors. She pointed to the role of leadership as a critical factor in these efforts, asserting that leadership is key to successfully addressing sustainability challenges. In this context, she referred to the Science Policy-Practice-Interface (SPPI) as a crucial framework. Dr Bessy explained that the SPPI is designed to guide sustainability efforts stating, its built upon the key 4Cs which are critical thinking, creativity, collaboration and communication. She identified them as tools for navigating the challenges of the 21st century.

Advancing Collective Action on Climate Adaptation & Finance – Dr. Joel Onyango, ACTS’ Director for Monitoring, Evaluation, Learning and Impact

Dr. Joel’s discussion focused on transitioning from research to concrete actions in climate action. He introduced ARA as a coalition dedicated to promoting research driven solutions for resilience, policy integration and community impact. He emphasized that the Global Alliance recognizes the urgency of collaboration to advance a global adaptation agenda and secure sustainable climate finance. The conversation centered on the importance of evidence-based advocacy, ensuring that research findings support specific adaptation goals and facilitate access to climate finance. Additionally, he stressed the need for a unified commitment to sustainability, aligning adaptation actions with the Global Goal on Adaptation (GGA) and New Collective Quantified Goal (NCQG). He reminded attendees that the session’s primary objective was to develop actionable recommendations that contribute to meaningful progress in the climate adaptation efforts.

Climate Finance and Adaptation in Africa: GGA and NCQG - Kelvin Muli, Policy & Advocacy Expert

Kelvin Muli discussed the complexities of climate finance, particularly the NCQG and the Global Goal on Adaptation (GGA). He emphasized that NCQG is centered on financial commitments, while GGA focuses on strengthening the resilience of developing nations against climate change. He said despite ongoing negotiations at COP summits, financial commitments from developed nations often fall short. At COP 29 in Baku, Azerbaijan, countries pledged \$300 billion, which remains significantly lower than the \$1.3 trillion required annually for Africa alone. The African Group of Negotiators continues to push for increased funding to bridge this gap.

Four key aspects of NCQG were highlighted. First, financial targets are set annually, but these commitments often do not meet actual climate adaptation needs. Second, fair distribution is crucial, ensuring that the most vulnerable nations receive greater financial support. Third, there is a need to diversify financial sources beyond public funding, including increased engagement from the private sector and carbon credit markets. Lastly, accountability and transparency remain major concerns. Kelvin also emphasized the importance of Article 6 of the Paris Agreement, which outlines international cooperation in climate finance, particularly through carbon markets and funding mechanisms to support adaptation. He pointed out that the discussion is shifting from mitigation to adaptation, as climate change is already a reality, requiring immediate and sustained action. Challenges in accessing climate finance were also addressed, including bureaucratic barriers, limited technical expertise, mismatched funding allocations, and inadequate private sector participation. FLLoCA (Financing Locally Led Climate Action) was mentioned as a key initiative designed to ensure financial resources reach local communities effectively in Kenya.

In conclusion, Muli stressed the urgent need for increased financial commitments, improved transparency, and easier access to climate finance. He reinforced the importance of aligning these efforts with the objectives of the Paris Agreement to ensure that vulnerable nations receive adequate support for climate adaptation.

Co-creating Climate Action Solutions: Strengthening Regional Advocacy in Africa - Dr. Bessy Kathambi, an Environmental Management and Governance Consultant

Dr. Bessy's talk focused on Africa's approach to adaptation finance, negotiation strategies, and measurable climate solutions ahead of COP30. She highlighted the challenge of securing funding due to a lack of clear, quantifiable data and urged African nations to establish forest reference levels for carbon trading. While Africa is resource-rich, she noted its reliance on external funding and called for innovative financing mechanisms. Dr. Bessy stressed the importance of setting clear targets in climate negotiations and using digital media to amplify Africa's voice. She emphasized the need for well-documented adaptation projects, as many funding applications fail due to unclear impact. She also advocated for youth participation and leveraging AI for climate solutions, while acknowledging digital access challenges. Lastly, she clarified that carbon credits are more suited for mitigation than adaptation funding. To conclude, Dr. Bessy called for stronger negotiation strategies, clear adaptation plans, and digital advocacy to secure funding and shape Africa's climate future.

Group Discussions

Question 1: What roles do national and local governments and organizations play in facilitating access to finance?

National and local governments, along with relevant organizations, play a crucial role in ensuring accessible and effective financing mechanisms. Their key responsibilities include:

- **Taxation exemptions** – Reducing financial burdens to encourage investment in adaptation efforts.
- **Incentive structures** – Establishing frameworks that promote climate resilience investments.
- **Capacity building and strengthening** – Providing training and knowledge dissemination through initiatives such as FLLOCA.
- **Awareness creation** – Informing stakeholders about available financial opportunities and mechanisms.
- **Data consolidation** – Aggregating and disseminating financial data to enhance accessibility.
- **Gatekeeping functions** – Acting as intermediaries to streamline financial access.
- **Advocacy** – Lobbying for policies and reforms to improve financial inclusion.
- **Policy formulation** – Developing regulations that support adaptation financing.
- **Resource mobilization activities** – Securing funds through partnerships and innovative financial strategies.

Question 2: How can we engage the private sector more effectively in adaptation financing?

- **Creating incentives** – Establishing financial benefits to encourage investment in climate adaptation.
- **Nature-based solutions** – Promoting sustainable initiatives such as mangrove restoration for climate resilience.
- **Favorable policies** – Implementing regulations that facilitate private sector investment.
- **Climate risk insurance** – Developing financial instruments to mitigate losses from climate-related risks.
- **Strengthening private sector capacity** – Enhancing resilience and preparedness for climate adaptation financing.
- **Reducing taxation on technology** – Lowering costs to encourage the adoption of climate- smart technologies.
- **Catastrophic bonds** – Introducing financial instruments to manage climate disaster risks.
- **Stakeholder engagement** – Inviting private sector players to contribute at decision-making levels.

Question 3: What roles do national and local governments and organizations play in facilitating access to finance?

Ensuring predictability and accessibility in adaptation finance requires the following measures:

- **Tax policies** – Implementing tax structures that support adaptation financing.
- **Integration of adaptation plans with NEMA** – Aligning national adaptation strategies with regulatory bodies.
- **Transparent financial instruments** – Enhancing visibility and accessibility of financing mechanisms such as MDBs (Multilateral Development Banks).
- **Risk management insurance** – Expanding insurance options to cover climate adaptation risks.
- **Transition from loans to grants** – Reducing financial strain by prioritizing grant-based support over debt financing.
- **Green bonds** – Leveraging sustainable finance tools to mobilize resources for climate adaptation.
- **National Medium-Term Plans** – Integrating climate adaptation financing within national development strategies.
- **Issuance of bonds and treasury bills** – Raising funds for climate adaptation projects through instruments such as green bonds.
- **Adaptation investment roadmap** – Developing a national strategy to unlock climate financing opportunities.
- **Advocacy for financial institutions to offer climate-focused products** – Encouraging banks and insurance providers to introduce instruments like index-linked insurance for communities.
- **Government-led climate finance initiatives** – Strengthening frameworks such as the Eastern Africa Alliance on Carbon Markets and Climate Finance and the Africa Climate Change Fund to enhance accessibility.
- **Policy for incubators and accelerators** – Establishing structured hubs at subnational levels where businesses can submit climate adaptation plans for funding and technical support.

APA Sustainability Fellowship Graduation

Fellows Testimonials

GILLIAN FAITH – 2025 Graduating Fellow, ACTS Pathways Academy

Research Project: AI's Transformative Role in Advancing Agricultural Resilience and Productivity in Africa

Gillian, a participant in the Sustainability Fellows Programme, shared her experience since joining in March of the previous year. Initially facing challenges in qualifying, she persevered and eventually secured a place, which significantly impacted her growth as a researcher. Through the fellowship, she expanded her network, collaborated with experts, and gained knowledge in climate finance and adaptation techniques.

Her presentation focused on Artificial Intelligence (AI) in Transforming Agriculture, addressing key challenges African farmers face, including climate-related disruptions such as floods. She highlighted how AI technologies like predictive analytics, satellite imagery, and precision irrigation can provide solutions by forecasting weather patterns, monitoring crop health, and optimizing water usage. She cited Plant Village, a mobile application that assists farmers in diagnosing crop diseases and providing remedial suggestions.

Gillian emphasized the need for policy development, farmer education, and infrastructure investment to enable AI-driven agricultural transformation. She suggested using drones as a cost-effective alternative to satellite imagery while building capacity for more advanced solutions. She concluded by highlighting AI's potential to minimize agricultural losses, increase food productivity, and contribute to sustainable agricultural practices in Africa.

JERRY OMULO – 2025 Graduating Fellow, ACTS Pathways Academy
Research Project: Weatherman: Kids Climate Game

Jerry shared his positive experiences, highlighting the mentorship and networking opportunities he gained. Through the fellowship, he learned essential skills such as grant writing, which significantly enhanced his professional capabilities. He expressed appreciation for the program's impact and encouraged its continuation.

His presentation focused on Weatherman: Kids Climate Game, a digital initiative aimed at educating children on climate change, climate action, and environmental protection through an engaging mobile application. Inspired by popular children's entertainment, Jerry emphasized the need to introduce climate awareness to younger generations in a simple and enjoyable way.

The game features a character called Weatherman, who uses a magical stick to demonstrate basic weather and climate concepts, such as evaporation, condensation, and rainfall. Additionally, the game teaches children about reforestation and disaster preparedness, showing how planting trees can protect homes from environmental hazards. Jerry highlighted his vision of developing this interactive mobile game and expressed the need for a skilled app developer to bring the idea to life. He humorously mentioned that while he is currently looking for resources, he hopes to turn this project into a successful and profitable venture. His speech underscored the importance of early climate education and the role of digital tools in fostering environmental awareness among children in an engaging and interactive manner.

YVONNE OMONDI – 2025 Graduating Fellow, ACTS Pathways Academy
Research Project: Design and Optimization of Biogas Production from the Co-Digestion of Cactus & Cow Manure

Yvonne Omondi, an MSc. in Renewable Energy Technology holder shared her journey in the APA Sustainability Fellowship and its impact on her professional growth. She gained communication, grant writing, research methodology, and publishing skills, enabling her to translate scientific research into practical community solutions. Her ongoing research focuses on biogas production using a mix of cactus (*Opuntia Suta*) and corn. Inspired by her visit to Dol Dol in Nanyuki, where invasive cacti dominate, she explored converting them into sustainable energy. Through lab experiments, she determined the optimal mix, temperature, and pH levels for efficient biogas production. She then designed a 300-liter pilot project to test energy output. Yvonne concluded by appreciating the program's mentorship and networking opportunities, emphasizing its role in shaping her research and clean energy career.

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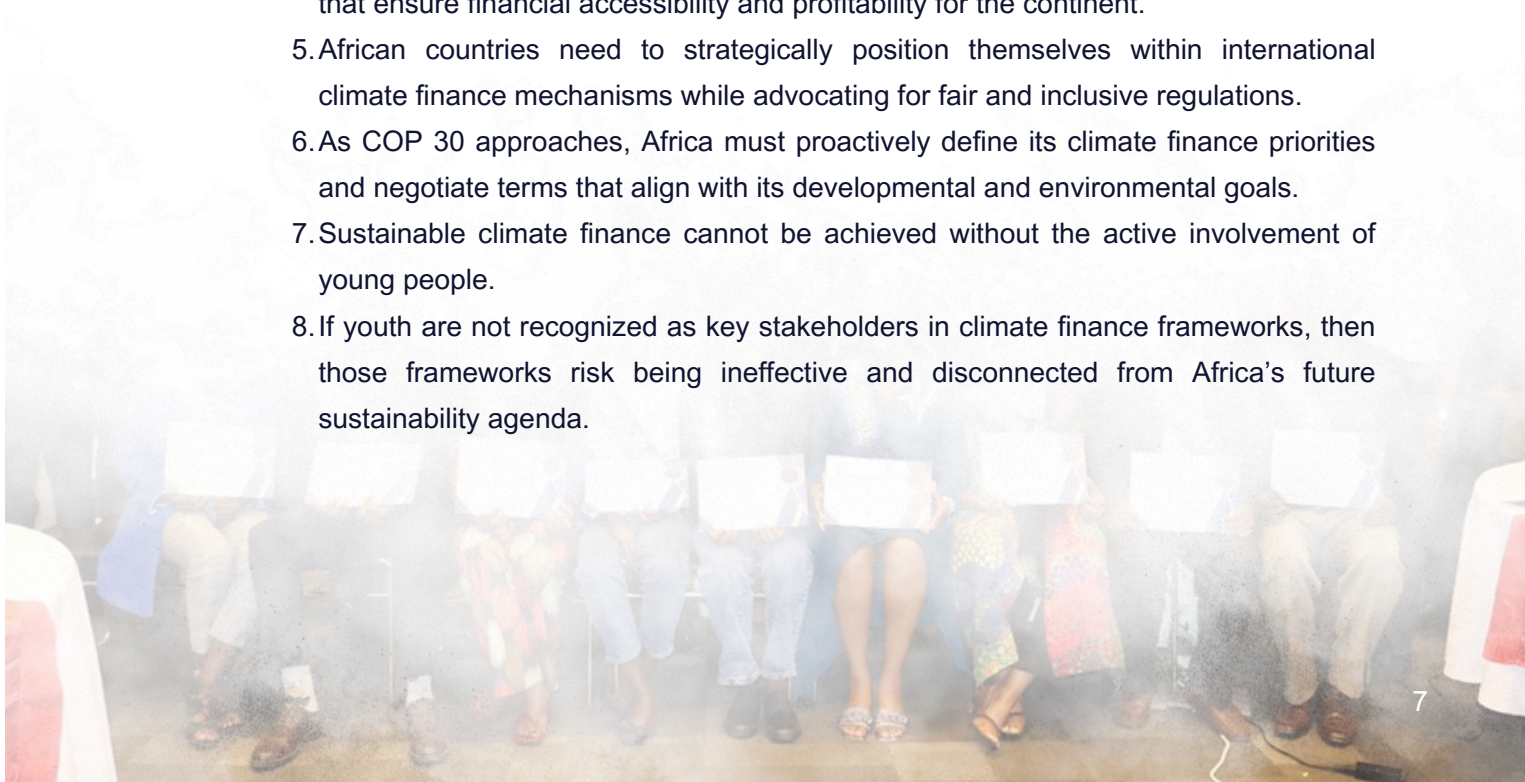
Key Lessons

1. There are solutions to sustainability in Africa but achieving them requires collaboration across various sectors.
2. Critical thinking, Creativity, Collaboration and Communication are the 4Cs tools for navigating the sustainability challenges of the 21st century.
3. Evidence-based Advocacy is critical.
4. Research findings support specific adaptation goals and facilitate access to climate finance.
5. NCQG is centered on financial commitments, while GGA focuses on strengthening the resilience of developing nations against climate change.
6. Youth participation and leveraging AI for climate solutions should be advocated for.
7. Carbon credits are more suited for mitigation than adaptation funding.
8. Stronger negotiation strategies, clear adaptation plans, and digital advocacy are needed to secure funding and shape Africa's climate future.

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Conclusion and Recommendations

1. African nations must establish their own revenue-generating mechanisms rather than relying entirely on external funding sources.
2. Locally financed banking systems, such as FLLOCA (Financing Locally-Led Climate Action), should be strengthened to create sustainable domestic financing structures.
3. A deep understanding of climate finance is essential for Africa to develop regulations and requirements tailored to its unique needs.
4. Instead of passively adopting global financial rules, Africa must create frameworks that ensure financial accessibility and profitability for the continent.
5. African countries need to strategically position themselves within international climate finance mechanisms while advocating for fair and inclusive regulations.
6. As COP 30 approaches, Africa must proactively define its climate finance priorities and negotiate terms that align with its developmental and environmental goals.
7. Sustainable climate finance cannot be achieved without the active involvement of young people.
8. If youth are not recognized as key stakeholders in climate finance frameworks, then those frameworks risk being ineffective and disconnected from Africa's future sustainability agenda.



7 Closing Remarks

Dr. Rutto expressed heartfelt gratitude to the APA Fellowship program for its instrumental role in nurturing the next generation of climate leaders. He acknowledged the significant contributions of the ACTS team, extending special appreciation to Brian, Monroe, and Maureen for their unwavering support and dedication throughout the fellowship journey.

He further commended the fellows for their commitment, resilience, and passion in advancing climate adaptation and sustainability. A special note of appreciation was given to Dr. Joel Onyango for his mentorship and guidance, as well as to the Executive Director, Professor Tom Ogada, for his leadership in shaping the program. Dr. Rutto also recognized Dr. Bessy for her invaluable insights and encouragement.

In his closing remarks, he urged the fellows to continue networking, fostering collaborations, and maintaining the team spirit that has been the foundation of their success.

Dr. Zenebe Mekonnen echoed these sentiments, extending his deep appreciation to all the fellows for their dedication and collaborative efforts. He emphasized that their contributions to climate adaptation and finance will have a lasting impact and encouraged them to sustain the momentum beyond the fellowship.

He expressed hope that the relationships and networks built during the program will continue to thrive, leading to future partnerships and collective action in shaping Africa's climate resilience agenda. Finally, he congratulated the graduates once again, wishing them success in their future endeavors as climate advocates, researchers, and policymakers.



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Photo Gallery

Access the photos here:

[ARA Policy Workshop APA Sustainability Fellowship Workshop](#)

Link to article here: <https://nation.africa/kenya/health/from-dust-to-fuel-how-lecturer-is-turning-charcoal-waste-into-clean-cooking-energy-5031828?s=08>



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