



ABBC 2025 SYMPOSIUM REPORT

AUGUST 26-28, 2025



THE AFRICA BIENNIAL BIOSCIENCES COMMUNICATION SYMPOSIUM (ABBC 2025)

Lusaka, Zambia

THEME:

The War on Science: *How Can We Overcome the Burden of Misinformation and Disinformation?*

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Principal Convenor: Margaret Karembu, PhD., MBS - Director, ISAAA AfriCenter

TABLE OF CONTENTS

Abbreviations	III
Message from the Convenor	1
Symposium Overview	3
Official Opening	5
Goodwill Messages	6
High-Level Panel Discussion: Scientific Advancements in Africa	8
Testimonials on Adoption of Advanced Agricultural Technologies and the Impact – Crops and Livestock	12
Panel Discussion: How Have the Health and Environment Sectors Addressed Misinformation and Disinformation? Challenges and Successes Stories	15
Bus Stop and Idea Exchange: Lessons from Case Studies of Disinformation and Misinformation	18
Case Study Presentations	24
Policy Roundtable Discussion	27
Fireside Chat: Re-Imagining The Future: Staying Ahead of Misinformation and Disinformation	29
Pitching Session: Role of AI in Addressing Misinformation	32
AI Pitching Session: Key Areas for Support	34
One Health Leadership Training: Introduction to Decolonization in One Health	35
Bus Stop And Idea Exchange	37
Side Event 1: ABBC 2025 Reception	39
Side Event 2: A Study Visit to a Maize Seed Facility In Central Zambia	40
ABBC 2025 Draws to a Close	41
ABBC 2025 Resolutions	44
Beyond the Horizon – Imagining ABBC 2027!	46

ABBREVIATIONS

AATF	-	African Agricultural Technology Foundation
ABBC	-	Africa Biennial Biosciences Communication
ACTESA	-	Alliance for Commodity Trade in Eastern and Southern Africa
CIRAD	-	French Agricultural Research Centre for International Development
COMBIP	-	COMESA Biotechnology Implementation Plan
COMESA	-	Common Market for Eastern and Southern Africa
FMD	-	Foot-and-Mouth Disease
ILRI	-	International Livestock Research Institute
ISAAA	-	International Service for the Acquisition of Agri-biotech Applications
MoU	-	Memorandum of Understanding
MUZARDI	-	Mukono Zonal Agricultural Research and Development Institute
NARO	-	National Agricultural Research Organization, Uganda

MESSAGE FROM THE CONVENOR

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The symposium provided a platform to share knowledge, build new networks and strengthen existing collaborations.

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Margaret Karembu, PhD., MBS  
Director, ISAAA AfriCenter and Principal  
Convenor, ABBC 2025



**O**n behalf of the Organizing Committee of the Africa Biennial Biosciences Communication Symposium (ABBC 2025), I convey my deepest gratitude to all the delegates for making the 6th edition of ABBC, held in Lusaka, Zambia from August 26-28, 2025, a resounding success. Your active participation was a clear demonstration of your commitment to advancing biosciences' communication as a driver of Africa's sustainable future.

This year's symposium was a historic milestone as it marked the 10th anniversary of ABBC. Since its inception in 2015, ABBC has evolved into one of Africa's most vibrant and influential platforms for science communication. The 2025 symposium, convened under the theme 'The War on Science: How Can We Overcome the Burden of Misinformation and Disinformation?', confronted one of the most pressing challenges to the uptake of biosciences across the continent – misinformation and disinformation.

Over the three days of the symposium, we engaged in rich conversations through keynote addresses, panel discussions, practical case studies, and the highly interactive 'bus-stop' idea exchange sessions. These engagements highlighted both the urgency and the shared determination within our community to counter misinformation and disinformation around agricultural, environmental and One Health innovations. Delegates reaffirmed their conviction that no amount of falsehoods should hinder science-driven solutions that Africa needs to improve her food and nutrition security, strengthen public health, safeguard ecosystems, and promote sustainable livelihoods.

ABBC 2025 brought together diverse delegates, a true strength of this symposium. From agricultural and livestock researchers to environmental scientists, from public health professionals to communicators, media practitioners, policymakers, legislators, private sector leaders, regional economic blocs, and grassroots community representatives, the symposium drew together voices from every corner of our biosciences ecosystem. This diversity of perspectives enriched our discussions and broadened the scope of possible solutions.

The symposium provided a platform to share knowledge, build new networks and strengthen existing collaborations. These connections will undoubtedly grow into impactful partnerships for advancing Africa's biosciences agenda.

The symposium culminated in a set of practical recommendations and a collective call to action to address the pervasive challenge of misinformation and disinformation. The Organizing Committee is fully committed to ensuring that this call is translated into tangible initiatives and effective strategies for communicating bioscience innovations in agriculture, environmental sustainability and One Health.

It is, therefore, my honor on behalf of the Organizing Committee to present the ABBC 2025 Report. This document provides a comprehensive account of the symposium's insights, lessons, outcomes, recommendations and defining moments. We trust that it will serve as a reference material - guiding action, shaping policy and strengthening collaborative efforts across the continent to elevate the voice of science for the benefit of Africa and the wider global community.

**Margaret Karembu, PhD., MBS**

Director, ISAAA AfriCenter and Principal Convenor, ABBC 2025

# SYMPOSIUM OVERVIEW

This year's Africa Biennial Biosciences Communication Symposium (ABBC 2025) was the 6th edition in the series of ABBC symposia whose inaugural edition was in 2015. The ABBC symposium is an African-led, Africa-based platform enabling the exchange of experiences, knowledge, and solutions to advance effective communication on bio-innovations across the continent and globally.

Held in Lusaka, Zambia, ABBC 2025 was themed 'The War on Science: How Can We Overcome the Burden of Misinformation and Disinformation?' The theme speaks to one of the greatest barriers of our time – misinformation and disinformation. In fact, the World Economic Forum has ranked misinformation and disinformation among the top global risks. For Africa, this challenge threatens our ability to strengthen food systems, improve health, and build climate resilience.

The delegates engaged in a rich program comprising keynote addresses, dynamic panel discussions, case study presentations, co-creation sessions, a pitching competition, and a vibrant innovation marketplace. A key insight that emerged was that Africa's progress in climate-smart agriculture, livestock improvement, pandemic prevention and response, and One Health interventions is at risk if the spread of misinformation and disinformation remains unchecked. Delegates emphasized that scientific facts alone are insufficient to shift perceptions.

Instead, they called for a more proactive approach that leverages culturally sensitive messaging and platforms, and anchors science within lived experiences through storytelling.

The symposium reaffirmed the media as a critical partner in countering misinformation, strengthening public trust, and enhancing acceptance of innovations shaping agriculture, environmental sustainability, and human health.

Among the resolutions of ABBC 2025 symposium was the need to strengthen African-led engagement initiatives and dialogue platforms to expand science outreach, build trust in science, technology and innovation (ST&I), and adopt more robust approaches to addressing entrenched misinformation within communities. Another overarching resolution was the proposal to develop communication toolkits for detecting and addressing misinformation, integrating storytelling, visuals, and culturally relevant messaging to make science more relatable and actionable.

The symposium brought together 150 delegates from 21 countries. The delegates came from diverse sectors - crops and livestock research, environment and ecosystem health, public health, One Health, communication, media, information technology, academia, policy and legislation, regional economic blocs, the private sector and grassroots communities. They forged meaningful networks key towards stronger partnerships and collaboration.

**150**  
DELEGATES

**21**  
COUNTRIES

Botswana, Cameroon, Canada, Ethiopia, France, Ghana, Italy, Kenya, Malawi, Mozambique, Namibia, Nigeria, Rwanda, Somalia, South Africa, Tanzania, Uganda, the United Kingdom, the United States of America, Zimbabwe, and Zambia (host)

# OBJECTIVES

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1.

Identify drivers of misinformation and disinformation on scientific innovations and their impact;

2.

Critically examine the opportunity costs from underutilizing advanced innovative technologies in agriculture, health and for environmental protection and sustainability;

3.

Co-create practical interventions to combat misinformation and disinformation in science.



*ABBC 2025 delegates*

# OFFICIAL OPENING

The 6th Africa Biennial Biosciences Communication Symposium – ABBC 2025 – was officially opened by Dr. John Mukuka, Chief Executive Officer of the Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA), a specialised agency of the Common Market for Eastern and Southern Africa (COMESA). He welcomed participants on behalf of COMESA/ACTESA, underscoring the significance of hosting the event in Zambia, the home of COMESA Secretariat. COMESA is a regional economic bloc of 21 member states.

Dr. Mukuka highlighted that several countries, including Kenya, Malawi, Eswatini, Ethiopia, and Sudan, have already commercialized biotech crops, while others such as Rwanda, Uganda, and Egypt are advancing research. Zambia, like a few others, is refining its regulatory framework to enable safe trade and cultivation. He emphasized that with sound science, robust biosafety systems, and effective communication, biotechnology can transform agriculture, strengthen climate resilience, and enhance regional trade. This vision is being advanced through the COMESA Biotechnology and Biosafety Implementation Programme (COMBIP).

He also announced the establishment of the first COMESA Panel of Experts (PoE) on Biotechnology and Biosafety, mandated to provide evidence-based guidance and counter misinformation. He acknowledged the critical support of ISAAA AfriCenter and the Program for Biosafety Systems in preparing the Panel for its mandate. Dr. Mukuka commended the organizers for convening a diverse community and urged participants to share knowledge, build alliances, and ensure biotechnology delivers inclusive growth for Africa.



*In an era where misinformation and disinformation can undermine public confidence, the COMESA's Panel of Experts will anchor decisions in facts rather than fear. By delivering credible, peer-reviewed, regionally harmonized opinions, it will counter misinformation and help policymakers, media, and the public engage with biotechnology.*

**Dr. John Mukuka,**  
Chief Executive Officer,  
COMESA/ACTESA



# GOODWILL MESSAGES

## Dr. Robert Karanja, Board Chairperson, ISAAA AfriCenter

Delivering a goodwill message on behalf of the ISAAA AfriCenter Board and staff, Dr. Robert Karanja, the Board Chair, welcomed participants to ABBC 2025 in Lusaka and thanked them for prioritizing the symposium.

Explaining ISAAA AfriCenter's mandate in promoting ethical and appropriate bio-innovations that foster food security and health in Africa, Dr. Karanja observed that this mandate aligns closely with the symposium theme, 'The War on Science: How Can We Overcome the Burden of Misinformation and Disinformation?' He underscored the gravity of misinformation and disinformation in undermining innovations, fueling vaccine hesitancy, and delaying climate action, with significant costs to Africa's growth and well-being.

He stressed that it was a collective responsibility – of governments, academia, industry, media and civil society – to confront this challenge. He thanked sponsors, partners, the Government of Zambia, and the ISAAA AfriCenter team, reaffirming the Board's commitment to championing science, technology, and innovation for sustainable development.



*We are deeply grateful to the Government and people of Zambia for their generous hospitality. To the Organizing Committee and the local Zambian organizing team, we extend our heartfelt appreciation for your tireless efforts.*

Dr. Robert Karanja,  
Board Chairperson,  
ISAAA AfriCenter



**Dr. Ndashe Kapula, Director, Zambia Agriculture Research Institute**

Speaking on behalf of Hon. Reuben Phiri Mtolo, Minister of Agriculture, Dr. Ndashe Kapula, Director of the Zambia Agriculture Research Institute, highlighted how misinformation about science has emerged as a major threat to public health, innovation, and sustainable development.

Dr. Kapula observed that Africa faces a convergence of food insecurity, high disease burden, and environmental pressures. Dysfunctional food systems, climate change, deforestation and urban expansion have worsened the spread of infectious diseases and degraded natural resources critical for food production. He emphasized the urgent need for a holistic One Health approach to transform food systems, reduce disease risks, and build resilience.

He further noted that Zambia, where agriculture supports over 70% of the population, has also experienced the effects of misinformation. However, the government continues to invest in science and innovation, achieving progress in drought- and pest-tolerant maize, climate-smart crops such as sorghum and cassava, and enhanced pest and disease surveillance.

Dr. Kapula cautioned that such gains risk being undermined if misinformation persists. He affirmed ABBC 2025 as a vital platform to bridge science and society through evidence-based communication, sound policy, and collaboration.



*If we fail to communicate science, we will be like that bad tree which fell in the forest but no one heard its fall in the city.*

**Dr. Ndashe Kapula,**  
Director, Zambia  
Agriculture Research  
Institute



# High-Level Panel Discussion:

## Scientific Advancements In Africa



FROM LEFT: Dr. Barbara Zawedde engages AATF's Dr. Canisius Kanangire, ILRI's Dr. Shirley Tarawali and Dr. Moses Alobo of Science for Africa Foundation.

*(Moderated by Dr. Barbara Zawedde, Director of Research, MUZARDI, NARO, Uganda)*

The panel discussion highlighted how building scientific capacity in Africa goes far beyond training researchers; it encompasses empowering policymakers, regulators, farmers, youth, media and communities to engage with science meaningfully. Speakers emphasized that African-led innovation is key to trust and acceptance, as externally driven solutions often face skepticism. Strong examples were shared, from the African Agricultural Technology Foundation's (AATF's) work in localizing technologies for smallholder farmers, to International Livestock Research Institute's (ILRI's) long-standing training of fellows and leadership in One Health, and the Science for Africa Foundation's broad capacity-building programs across health, agriculture, and climate.

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**Testimonials reinforced that science in Africa is moving “from publication to impact,” with COVID-19 genomic surveillance and vaccine research serving as proof that the continent’s scientific contributions are not only locally transformative but globally significant.**

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A recurring theme was that communication is as vital as research itself, as poorly framed messages can fuel misinformation, while clear, context-specific communication fosters understanding and adoption.

**Dr. Canisius Kanangire, Executive Director, AATF**

Dr. Kanangire reflected on his personal journey of more than 22 years in teaching and outreach while emphasizing the broader impact of AATF. He explained that AATF plays a pivotal role in identifying royalty-free technologies and transferring them to address pressing challenges faced by smallholder farmers, including drought, pests and crop diseases. Beyond the laboratory, the organization works hand-in-hand with national institutions such as KALRO and NARO to localize technologies and ensure their sustainability.

He stressed that capacity building extends beyond scientists – it must include farmers, policymakers, youth, faith leaders, and especially the media, who translate complex science into accessible messages for society. His central message was that science should not displace tradition, but rather enhance it, making innovation a practical tool for improving livelihoods. Dr. Kanangire emphasized the importance of media partnerships and the use of trusted local scientists to shape public perceptions of science.



*Misinformation often thrives in the absence of credible voices that communities recognize and trust. We need to conduct demos that show people what new scientific innovations are about. People need to touch the science in the language they understand.*

**Dr. Canisius Kanangire,**  
Executive Director,  
African Agricultural Technology  
Foundation



**Dr. Shirley Tarawali,  
Assistant Director General, ILRI**

Dr. Tarawali highlighted ILRI's long-standing contribution to scientific capacity in Africa through the training and supervision of thousands of students and fellows across disciplines. She detailed how ILRI's efforts have gone beyond traditional research by supporting the development of regulatory frameworks, such as Kenya's Biosafety Act, and by establishing benefit-sharing agreements critical for equitable science.

Through its Biosciences eastern and central Africa (BecA) Hub, ILRI has trained approximately 600 fellows in biotechnology, nurturing home-grown expertise and solutions. Dr. Tarawali also emphasized the institute's role during the COVID-19 pandemic, when African genomics capacity was instrumental in variant detection and surveillance. She introduced the Grand Challenges initiative, which prepares young scientists not only in research but also in communication, policy engagement, and navigating regulatory systems. Her key point underscored that community acceptance is higher when research is African-led, compared to externally driven interventions.



*Misinformation tends to flourish when science is perceived as “foreign” or externally imposed. Local ownership of innovations and home-grown solutions are the most effective antidotes to distrust, as people are more likely to accept technologies and practices developed by African scientists.*

**Dr. Shirley Tarawali,**  
Assistant Director General,  
International Livestock  
Research Institute



**Dr. Moses Aloba, Head of Programs, Science for Africa Foundation (SFA)**

Dr. Aloba outlined SFA's extensive work in strengthening scientific capacity across more than 35 African countries. He noted that the Foundation has supported close to 4,000 fellows and enabled the training of about 330 PhDs across sectors such as health, agriculture, climate, and environmental science. A central focus of the Foundation is ensuring science moves from publication to impact, with tangible benefits for communities.

He provided examples of African leadership in sequencing COVID-19 variants such as Beta and Omicron, showcasing the continent's growing global relevance. Current initiatives also span malaria, HIV, pharmacogenomics, and climate science. Dr. Aloba's perspective emphasized that building African scientific capacity is not only essential for local development but also for Africa's positioning as a global science leader.

He shared the case of the malaria RTS,S vaccine to illustrate the consequences of poor scientific communication. When trial results showed 52% efficacy, the public misinterpreted this as the vaccine being "no better than a coin toss." In reality, he explained, the vaccine's deployment had the potential to prevent as many as 18,000 child deaths annually.



*Miscommunication on the efficacy of malaria vaccine highlighted the need for scientists to present findings more clearly and accessibly, ensuring the public can grasp the real-world significance of research outcomes. We need to move science from being a queen to being a princess, a Cinderella.*

**Dr. Moses Aloba,**  
Head of Programs,  
Science for Africa Foundation



## Testimonials on Adoption of Advanced Agricultural Technologies and the Impact – Crops and Livestock

Two farmers shared compelling testimonies on how innovations in agricultural biotechnology and livestock management are transforming lives in Africa, despite widespread misinformation and disinformation. From Nigeria, **Khalid Umar Salihu** recounted his journey with Bt (PBR) cowpea, illustrating how science-driven innovation uplifted his livelihood and community. Born and raised in a farming family, Khalid faced persistent challenges in cultivating traditional cowpea varieties – low yields, pest infestations, and heavy dependence on chemical insecticides. Pod Borer (Maruca), a major pest, often destroyed entire fields, forcing farmers to apply over ten rounds of insecticides per season, posing health and environmental risks.

With the introduction of PBR cowpea, Khalid and his peers witnessed tangible improvements through “seeing-is-believing” farm demonstrations. Yields rose dramatically from six to over twenty 100-kg bags per hectare, while income tripled from USD 500 to USD 1,700 per hectare. Encouraged by the success, Khalid ventured into seed production and marketing, earning enough to fund his undergraduate and master’s studies. His experience became a testimony, countering myths surrounding Nigeria’s first genetically modified cowpea.

From Zambia, **Brian Singogo** of the Palabana Dairy Co-operative Society highlighted similar transformations in livestock management. With 125 members producing over 7,300 litres of milk daily, the cooperative once struggled with mastitis, antibiotic misuse, and high milk rejection rates exceeding 50%. Through targeted sensitization and capacity-building, members have now embraced proper antibiotic use reduced disease prevalence to under 10%, and achieved zero cases of major livestock diseases. These experiences underscore how science-based innovations and farmer education drive resilient, healthier, and more productive agricultural systems in Africa.



*Misinformation and limited knowledge about antibiotic use contributed to poor adherence to the withdrawal period, leading to milk rejection by offtakers due to antibiotic residues.*

**Brian Singogo,**  
Member, Palabana  
Dairy Cooperative  
Society



## Slaying the Dragons of Misinformation and Disinformation in Science

*Prof. Richard Oduor, Registrar, Research, Innovation & Outreach, Kenyatta University, Kenya*

Prof. Richard Oduor underscored the urgent need to “filter facts from falsehoods,” warning that misinformation, disinformation, and malinformation are thriving because they appeal to people’s mental models – the deep-seated beliefs and values shaping how individuals interpret information. In Africa, he noted, myths such as “eating GMOs alters human genes” persist despite overwhelming scientific evidence proving otherwise. These distortions spread rapidly because they are emotional, simple and relatable, whereas scientific truths are often complex and abstract.

Prof. Oduor emphasized that effective communication must go beyond disseminating facts; it should foster trust, participation, and cultural connection. Storytelling and community engagement were identified as vital tools for bridging science and society. He called for African-tailored communication toolkits, sustained dialogue platforms, and government investment in proactive research and outreach.



*Facts are often rejected if they contradict identity or values.*

**Prof. Richard Oduor,**  
Registrar, Research,  
Innovation & Outreach,  
Kenyatta University, Kenya



## The Evidence Paradox: Why Science Struggles in the Political Arena

*Prof. Jumanne Maghembe, Former Minister, Natural Resources and Tourism, United Republic of Tanzania*

Prof. Jumanne Maghembe reflected on the 'evidence paradox' – the tension between scientific truth and political realities. He noted that despite science's potential to drive innovation and national development, it often struggles for visibility and influence in policymaking.

Prof. Maghembe observed that few scientists hold political leadership roles, a reflection of broader systemic neglect of research and innovation in national budgets. Without adequate funding, scientists remain unable to counter misinformation or showcase the transformative power of biotechnology. He urged African governments to invest consistently in science, foster collaboration among researchers, and create enabling environments for knowledge-driven policymaking – emphasizing that “only when we fund science will it begin to pay.”

Delegates warned that narratives such as “GMOs are a weapon; those who control seeds control life” continue to distort public understanding and undermine sound policy decisions, underscoring the need for credible messengers and clear, culturally grounded communication.



*I urge the scientific community and industry players to work hand in hand with policymakers to build a unified voice – one that dispels misconceptions and stands firm against misinformation about scientific innovations.*

**Prof. Jumanne Maghembe,**  
Ex-Minister, Natural  
Resources and Tourism,  
Tanzania



## Panel Discussion:

# *How Have the Health and Environment Sectors Addressed Misinformation and Disinformation? Challenges and Successes Stories*

A dynamic panel comprising experts from human health, rangeland conservation, and animal biotechnology explored how their respective sectors have addressed misinformation and disinformation. The session featured Jean de Dieu Hakizimana of the Rwanda Biomedical Centre, Prof. Prisca Mugabe of the University of Zimbabwe, and Prof. Mizeck Chagunda, Director of the Centre for Tropical Livestock Genetics and Health.

### **Zimbabwe's Wildlife Conservation: Controversies and Misinformation**

Prof. Prisca Mugabe reflected on the power of narratives in shaping public perception on wildlife conservation in Southern Africa. Misinformation and disinformation arise primarily from the ignorance of, or disregard of the need to contextualize wildlife conservation within the complex nature of the socio-ecological systems that characterize wildlife. Animal populations are part of many other biodiversity components, including humans who coexist in these systems and derive their livelihoods there from. Controversies and misinformation arise when individual animals or even sub populations are given sensational media coverage without balanced and informed considerations of the many landscape interactions that affect these animals, and more importantly, how they relate with the livelihoods of many local communities who live in the interphase of protected areas. This underscores the need for transparent communication and proactive stakeholder engagements to counter misinformation.



*Information about biodiversity and wildlife conservation must be based on a consideration of the related socio-ecological interactions to avoid misinformation.*

**Prof. Prisca Mugabe,**  
Associate Professor,  
University of  
Zimbabwe



## HPV Vaccine: Rwanda's Success Story

Jean de Dieu Hakizimana shared Rwanda's success story in achieving widespread acceptance of the Human Papillomavirus (HPV) vaccine, which has demonstrated 98% efficacy in combating cervical cancer. He explained that the Government of Rwanda, together with health stakeholders, successfully countered rumors and hesitancy through a well-coordinated strategy that included nationwide mobilization prior to the vaccine rollout, use of trusted community health workers as messengers, and youth-led peer communication through magazines targeting girls. By engaging every level of society and highlighting testimonials from those vaccinated two decades ago – many now mothers with healthy children – the country fostered trust and dispelled misinformation, leading to one of the highest vaccine uptake rates in Africa.

## Misinformation in the Fight against Livestock Diseases: Cases of India and Malawi

Prof. Mizeck Chagunda presented lessons from animal health, beginning with the case of Lumpy Skin Disease in India, where a damaging rumor spread that vaccinated cattle were dying from the vaccine itself. In this instance, it was not scientists but BBC journalists who effectively investigated and dispelled the falsehood, illustrating the critical role of credible media in rebuilding public confidence. He also cited an example from Malawi's dairy sector, where farmers possessed partial knowledge about the transmission of two livestock diseases – BVD virus and Brucellosis. While many understood how the former spread, there was widespread misinformation and poor practice regarding Brucellosis prevention. This highlighted the persistent gap between awareness and behavioral change, emphasizing that accurate information alone is insufficient without trust and practical understanding.



*Success in dispelling the false claim that vaccination against Lumpy Skin Disease in India caused livestock deaths did not come from scientists, but from journalists who investigated and corrected the misinformation.*

**Prof. Mizeck Chagunda,**  
Director, Centre for  
Tropical Livestock Genetics  
and Health





### Key Highlights and Take-home Messages

1. Effective responses to misinformation begin with trusted messengers.
2. The media should be recognized and engaged as a critical ally in combating misinformation and promoting the uptake of bio-innovations.
3. Stakeholders should proactively monitor misinformation and respond swiftly with clear, evidence-based and empathetic messages.

## Bus Stop and Idea Exchange:

### *Lessons from Case Studies of Disinformation and Misinformation*

Each case study speaker presented a poster outlining the nature and impact of the misinformation or disinformation, the key actors involved in driving it, the interventions undertaken to counter it, and the resulting outcomes.

#### **Combating Livestock Vaccine Misinformation in Kenya: Lessons from the 2024 Campaign**

*(Maryanne Mwimali, Directorate of Veterinary Services, Kenya)*

In 2024, Kenya rolled out a nationwide campaign to vaccinate 22 million cattle and 50 million small stock against Foot-and-Mouth Disease and Peste des Petits Ruminants. Despite strong policy support, the initiative faced resistance driven by misinformation – ranging from conspiracy theories linking the vaccines to foreign control and political agendas, to fears about safety, side effects, and exaggerated claims of total protection.

The Directorate of Veterinary Services responded through targeted community engagement, emphasizing transparency on vaccine production, testing, and regulation under KEVEVAPI. Local veterinarians, county officers, and trusted community leaders, including President William Ruto, were instrumental in explaining the benefits and countering falsehoods.

While the campaign achieved partial success – improving uptake in several areas – persistent skepticism underscored the deep-rooted issue of public distrust. Nonetheless, the experience strengthened veterinary communication systems and revealed critical information gaps.

Trust remains fundamental to vaccine acceptance; proactive, tailored communication helps dispel misinformation; and empowering credible local champions is essential for building lasting confidence in bio-innovations.



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**Trust remains fundamental to vaccine acceptance; proactive, tailored communication helps dispel misinformation; and empowering credible local champions is essential for building lasting confidence in bio-innovations.**

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## The Age of Misinformation: Anthrax Outbreak in Zambia

*(Prof. Musso Munyeme, Acting DVC Research and Innovation, Palabana University)*

The recent anthrax outbreak in Zambia revealed the devastating impact of misinformation on public health and agriculture. False narratives circulated among farming communities, leading many to refuse cattle vaccination for fear that the vaccines would cause infertility or death. Others turned to herbalists, believing traditional remedies could cure the disease. By the time accurate information reached the affected populations, public trust in official communication had already eroded.

To address the crisis, a coordinated risk communication and community engagement strategy was implemented under the One Health framework. This approach integrated multi-sectoral messaging, media monitoring, and collaboration among veterinarians, health officials, and local leaders.

During the plenary discussions, delegates proposed several actions to strengthen future responses. They emphasized the need for timely press briefings during outbreaks, sustained media engagement by researchers, and continuous trust-building with communities.

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**Delegates also recommended communication in local languages, proactive government engagement, and training of community leaders to ensure accurate, timely information dissemination.**

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Furthermore, they called for continuous farmer training, development of a national veterinary response plan, and stronger presence of state veterinarians during outbreaks.



*Prof. Musso Munyeme explains how misinformation around anthrax outbreak in Zambia impacted interventions to contain the disease.*



*In this session, Verenardo Meeme of AATF shares lessons from the fight against misinformation on crop biotechnology in Nigeria.*

## Misinformation against Crop Biotechnology in Nigeria

*(Verenardo Meeme, Program Officer, AATF)*

Nigeria's adoption of crop biotechnology – despite regulatory successes with Bt Cotton, PBR Cowpea, and Tela Maize – continues to face resistance fueled by misinformation. This Bus Stop examined how false narratives, weak science communication, uninformed journalism, and anti-GMO activism have slowed public acceptance and policy progress. Coordinated efforts through capacity-building, grassroots engagement, and policy dialogues are improving media literacy and farmer adoption. The presenter called for a continental framework promoting sustained public engagement and culturally grounded science communication to drive Africa's agricultural transformation.

### **Key insights and recommendations from participants included:**

- Building capacity of emerging science journalists and agro-input vendors while engaging farmers early in the technology development journey to foster trust and ownership.
- Making communication proactive rather than reactive, avoiding technical acronyms like 'TELA' and 'Bt', and instead using clear, relatable storytelling that frames biotechnology as a livelihood opportunity.
- Earning trust through consistency, passion and transparency, while engaging critics of GMOs in open, respectful dialogue.
- Organizing continuous science communication workshops, empowering industry actors, tailoring outreach across radio, TV and social media, and involving grassroots farmers directly.
- Clearly articulating the benefits of biotechnology alongside effective market strategies.
- Targeting parliamentary committees of experts for informed policymaking, while avoiding perceptions of lobbying.

## Environment versus Environmental Health in One Health

*(Carol Theka, Principal Environmental Officer, Environmental Affairs Department, Malawi)*

This Bus Stop explored how the literal interpretation of environmental terms fuels misinformation and confusion across policy, education, and interdisciplinary collaboration. Participants noted that using “the environment” and “environmental health” interchangeably leads to overgeneralization, narrow interpretations, obscuring of the One Health framework, misguided policies, and public misunderstanding. Clarifying these terms is essential for accurate communication and effective decision-making. The environment refers to the natural world – its ecosystems, air, water, land, and biodiversity – while environmental health is a discipline focused on how environmental exposures impact human health. Clear distinctions between the two can strengthen collaboration and improve public awareness on sustainability and health.

### Solutions proposed by Delegates:

- Identify journalists interested in science reporting and support them through grants, training, and award competitions.
- Organize field visits for journalists to experience scientific advances firsthand, fostering stronger media–science relationships.
- Engage global organizations such as OFAB to promote journalism competitions that highlight science communication.
- Ensure communication is target-specific and tailored to different audiences in the modern media landscape.
- Develop an umbrella framework to harmonize definitions across countries, addressing inconsistencies in international documents.
- Prioritize media capacity-building while encouraging scientists to learn communication techniques from journalists.
- Conduct regular community talks to dispel misinformation and include accurate definitions in educational curricula.



*Carol Theka and other delegates exchange ideas around definition of ‘environment’ vs ‘environmental health’.*

## Nashulai: An African Indigenous Approach to Conservation

Biodiversity conservation in Kenya has grown beyond state-protected areas, expanding into community and private lands through wildlife conservancies. While many conservancies operate on models rooted in the commodification and financialization of nature, the Nashulai Maasai Conservancy stands out for its grounding in African indigenous knowledge systems. This approach promotes coexistence between humans and wildlife, challenging the exclusionary “fortress” conservation models that have historically displaced local communities from biodiverse areas.

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**One major challenge Nashulai faced was misinformation – exaggerated promises about conservancy benefits, narrow narratives dominated by Western conservation models, and the undervaluing of African indigenous knowledge. The conservancy addressed these issues through transparency, regular community outreach, and inclusive annual general meetings that built trust and shared understanding.**

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*Nelson Ole Reijia and other delegates during a Bus Stop session on biodiversity conservation.*

The results have been remarkable. Nashulai successfully reclaimed land for biodiversity conservation, gained both national and international recognition – including the UNDP Equator Prize – and emerged as a leading research hub for scholars globally. The key lesson from Nashulai’s experience is that African indigenous knowledge is central to achieving meaningful, sustainable conservation in Africa. Furthermore, strategic communication is vital to counter dominant capitalist and colonial narratives and to amplify community-led conservation success stories.



# CASE STUDY PRESENTATIONS

## CASE STUDY

1

### Genetically Modified Crops in Kenya: The Cost of Delay

*(Vitumbiko Chinoko, Project Manager, OFAB Africa, AATF)*

Genetically modified (GM) crops in Kenya continue to face commercialization delays, resulting in significant economic and environmental costs for farmers and the nation. A study presented at the conference examined the cost of these delays, revealing that Africa experiences an average lag of 12-15 years in GM crop commercialization, compared to 5-10 years elsewhere. Such delays have deprived farmers of potential benefits, prompting reflection on the balance between investments in biotechnology training and the tangible returns from timely adoption.

The study quantified an average five-year delay across three key technologies in Kenya – Bt maize, Bt cotton, and GM potato – and modeled potential adoption and climate benefits. For Bt maize, whose commercialization could have occurred in 2019, the delay cost was estimated at USD 67 million between 2019 and 2024, with potential gains of USD 218 million by 2029. Bt cotton, ready by 2015 but released in 2020, lost USD 1.2 million and 650 tons in potential production. GM potato, projected for 2028 commercialization, could yield USD 247 million in combined farmer and consumer benefits over 30 years, but a five-year delay could erode USD 89 million of these gains. However, progress remains impeded by misinformation, litigation, and inadequate extension services – issues compounded by populist politics and unchallenged media narratives, with 40% of coverage containing misinformation.

This report calls for urgent action to prevent further regulatory delays, strengthen biosafety institutions, invest in research and development, and enhance farmer education. It emphasizes that timely commercialization of GM crops is critical for Kenya's food security, economic growth, and climate resilience.



*Kenya could have commercialized GM maize in 2019. The cost of this delay now stands at an estimated USD 67 million.*

Vitumbiko Chinoko,  
Project Manager, OFAB  
Africa, AATF



## CASE STUDY

2

### FMD Case Study: Implications of Misinformation in Livestock Disease Management and Vaccine Decision-making

*(Dr. Theo Knight Jones, Principal Scientist, ILRI)*

Dr. Theo Knight-Jones, presented a compelling case study on how misinformation and weak governance undermine the management of Foot-and-Mouth Disease (FMD) in livestock. He emphasized that misinformation fills the “evidence void,” resulting in speculation and poor decision-making that carry far-reaching economic, ecological, and food security consequences.

FMD remains a costly disease, with endemic outbreaks causing annual losses estimated at USD 6.5 billion to 21 billion globally, primarily due to livestock mortality and reduced productivity. Trade restrictions further compound the burden, as affected countries face export limitations. Dr. Jones noted that weak vaccine quality control, driven by lapses in regulatory oversight, compromises disease control efforts, while overreliance on mathematical models rather than veterinary expertise limits practical effectiveness. Additionally, poor management contributes to environmental disruptions, increased greenhouse gas emissions, and declining food availability.

He urged policymakers to recognize that “absence of evidence is not evidence of absence.” Strengthening governance in veterinary medicine regulation, promoting transparent and evidence-based practices, and ensuring diligent, conflict-free contracting are vital. Dr. Jones concluded that without robust scientific evidence and accountable leadership, the costs of misinformation extend well beyond animal health to trade, the environment, and national food security.



*Trying to create evidence in the midst of a politicized disease outbreak requires proactive planning and the adoption of evidence-based best practices.*

**Dr. Theo Knight Jones,**  
Principal Scientist,  
International Livestock  
Research Institute



## CASE STUDY

### 3

## From Discovery to Discrimination: What the Omicron Travel Bans Teach Us About Science and Misinformation

(Dr. Sikhulile Moyo, Botswana Harvard AIDS Institute Partnership, and Kim Waddilove, Communications Officer, Sub-Saharan African Network for TB/HIV Research Excellence)

In their joint presentation, Dr. Sikhulile Moyo and Kim Waddilove reflected on how the discovery of the Omicron variant exposed deep inequities and misinformation in global health communication. They recounted how African scientists, who first detected and transparently reported the variant, were met not with recognition but with blame, leading to discriminatory travel bans that punished openness rather than rewarding it.

The presentation underscored that misinformation and politicized narratives spread faster than verified science, with some media labeling Omicron the “African virus.” This distorted the truth, reinforced damaging stereotypes, and eroded confidence in African scientific leadership. The episode revealed how entrenched inequities continue to shape global responses to health crises.

They called for stronger, evidence-based science communication, fairer governance, and institutional protection for scientists facing public backlash. They emphasized that the Omicron episode illustrates the urgent need to rebuild global trust - where transparency, collaboration, and equity form the foundation of scientific progress and crisis response.



*The labeling of Omicron as an “African variant” reinforced long-standing stereotypes that African science is less trustworthy or that Africa itself is a site of disease rather than innovation.*

**Dr. Sikhulile Moyo**, Botswana Harvard AIDS Institute Partnership



*The Omicron episode teaches us that communicating science is never without risk. When science intersects with politics, media and public fear, even accurate and timely findings can be misrepresented.*

**Kim Waddilove**, Communications Officer, Sub-Saharan African Network for TB/HIV Research Excellence



## POLICY ROUNDTABLE DISCUSSION

*Moderator: Dr. Chris Simuntala, Senior Biosafety Officer, NBA Zambia*

The policy roundtable brought together key regional leaders and policymakers to deliberate on strengthening agricultural trade, biosafety governance, and information management in the face of misinformation and weak policy implementation. The discussion emphasized harmonized regional policies, effective communication between scientists and policymakers, and collaborative approaches to address agricultural challenges across Africa.

**Dr. John Mukuka**, CEO of COMESA/ACTESA, underscored the need for coherent policies that enable regional trade and agricultural productivity. He cited challenges such as inconsistent regulations and weak policy environments, calling for harmonized standards like the COMESA Seed Catalogue, which has availed 13 seed varieties regionally. Dr. Mukuka highlighted initiatives such as COMBIP for tracking transboundary seed movement and deliberate COMESA programs to promote biotechnology, biosafety and seed harmonization. He further noted the inclusion of women and youth in ACTESA's strategic plans to foster inclusivity in policymaking.



*Government and private sector need to be deliberate about policy making and come up with regulations that allow specific standards on the value chain, for example COMESA seed harmonization and the Regional Seed Catalogue*

**Dr. John Mukuka**,  
Chief Executive Officer,  
COMESA/ACTESA



**Hon. Uwumukiza Francoise**, EALA Member and Chair of the Committee on Agriculture, stressed the importance of strengthening regional biosafety frameworks to manage pests and diseases effectively. She called for a proactive approach toward reduction of misinformation's harm among policymakers, and suggested simplification of complex scientific concepts, and engagement with farmers through practical exposure such as study tours.

**Hon. Dr. Christine Mnzava**, MP from Tanzania, emphasized the need for accurate, cross-border information sharing and budgetary support for public awareness. She cautioned that in the age of AI and social media, information can easily be weaponized, underscoring the importance of collaboration across all sectors.



FROM LEFT: Hon. Uwumukiza Francoise, Hon. Dr. Christine Mnzava, Dr. John Mukuka and Dr. Chris Simuntala take part in a panel discussion

Reflections from the session highlighted weak communication between scientists and policymakers, slow policy implementation, and Africa's professionals' tendency to work in silos. Participants called for stronger regional collaboration, improved science communication, and timely policy action, noting that "technology is inherently neutral – it is how we use it that defines its impact."



*In the age of social media and AI, messages can easily be misinterpreted or weaponized; hence, collaboration across all sectors is essential to ensure the accuracy and consistency of information*

Hon. Dr. Christine Mnzava



## FIRESIDE CHAT:

# Re-Imagining The Future: Staying Ahead Of Misinformation And Disinformation

*Zubeida Kananu, President, Kenya Editors' Guild; Dr. Shirley Tarawali, Assistant Director General, ILRI; Dr. Maryanne Mwimali, Chief Veterinary Officer, DVS; Francis Gikaru, Data Scientist, Nendo; Mike Muchiri, Digital Creator and Civic Leader, Ziya Africa*



*FROM LEFT: Francis Gikaru, Mike Muchiri, Dr. Maryanne Mwimali, Dr. Shirley Tarawali and Zubeida Kananu during a fireside chat session.*

This session explored how scientists, communicators and policymakers can collaboratively counter misinformation and disinformation, particularly in the context of science communication and public trust. Speakers emphasized the critical need for coordinated strategies, partnerships, and trusted messengers in shaping credible narratives.

**Zubeida Kananu** urged scientists to view journalists as strategic partners rather than mere event reporters. She underscored the importance of involving journalists, faith leaders, and traditional leaders in countering falsehoods. Highlighting successful collaborations, she cited the Kenyan Editors' role in developing a climate reporting manual and launching a 'Handbook on Biotech Reporting' in partnership with AATF.

**Francis Gikaru** discussed the influence of TikTok among Kenyan Gen Zs, revealing that over 15 million users and 1.3 million daily uploads. He observed that content creation has become a social and economic aspiration, shaping opinions faster than traditional media. Using the example of Kenya's presidential cattle vaccination announcement, he explained how misinformation spread rapidly through TikTok under the 'My Cow My Choice' slogan, turning a well-intentioned campaign into public backlash. He attributed the failure to poor timing, lack of strategic communication, and low trust in the messenger. Key lessons included adopting a farmer-first communication approach, engaging trusted social media voices, using short visual stories, maintaining transparency, listening to public concerns, and addressing skepticism within the scientific community.

**Dr. Maryanne Mwimali** said the Ministry of Agriculture faced challenges implementing the vaccination directive, as it was not involved from the start. The announcement came during a politically charged period, and public distrust of leadership amplified misinformation. She noted that while presidential declarations demand swift technical action, such campaigns require coordinated communication planning to succeed.

**Dr. Shirley Tarawali** emphasized the urgency of learning from this case to strengthen science communication. She called for collaboration across sectors, inviting media into laboratories to build trust and transparency. She advocated for scientists' greater visibility online, suggesting that trained representatives could serve as credible voices.

**Mike Muchiri** concluded that distrust between youth and government fuels misinformation. He urged scientists to work with digital influencers capable of engaging target audiences and recommended stronger regulation of social media to curb the spread of harmful content.



*Scientists should not see journalists as people who are only invited to cover events but as key partners in countering misinformation and disinformation.*

**Zubeida Kananu**, President, Kenya Editors' Guild



*TikTok has become a powerful tool of communication with a wider reach than traditional media — but without the right strategy, it can turn good messages into misinformation.*

**Francis Gikaru**, Data Scientist, Nendo



## Artificial Intelligence and its Potential in Curbing Misinformation and Disinformation

(Dr. Njeri Ngaruiya, ICT4D Consultant and Lecturer, Strathmore University)

The objective of this session was to explore the role of AI in combating misinformation and disinformation, and to discuss how Africa can leverage emerging technologies to build more resilient, informed and democratic societies.

Access to diverse and independent information sources is vital for informed public discourse and democratic participation. However, the unchecked spread of misinformation and disinformation in the digital era undermines trust in institutions, fuels societal division, and endangers public health and governance. With Africa's fast-growing internet and mobile use but limited contextualized regulation, the continent faces unique vulnerabilities to the rapid spread of false information.

AI presents both opportunities and risks – it can serve as the fuel for misinformation through deepfakes and synthetic content, or as the water that helps extinguish falsehoods through detection, tracing, and verification.

AI-driven dashboards can assist policymakers in tracking misinformation trends, while personalized learning tools and gamified media literacy programs can empower citizens to discern truth from falsehood. The session emphasized the need for governments to invest in AI infrastructure, academia to advance NLP research, media to adopt AI fact-checking tools, and youth to drive innovative AI solutions for truth and accountability.



*In agriculture, where misinformation can directly affect livelihoods and food security, AI provides early-warning systems, multilingual fact-checking tools, and product verification mechanisms*

Dr. Njeri Ngaruiya, ICT4D  
Consultant and Lecturer,  
Strathmore University



## PITCHING SESSION:

### Role of AI in Addressing Misinformation

*Moderated by Dr. Diana Horvath, President & Co-founder, 2Blades*

ABBC 2025 symposium featured an exciting pitching competition that highlighted the creativity and ingenuity of young African tech-students in leveraging artificial intelligence to address misinformation. The competition brought together three outstanding teams who had earlier emerged as top innovators at a hackathon organized by ISAAA AfriCenter in May 2025, and who later gained recognition at the Financing Agri-Food Systems (FINAS) Summit held in Nairobi in June 2025. At ABBC 2025, the teams showcased innovative AI-driven solutions designed to counter misinformation and disinformation that continue to hinder the uptake of agricultural innovations, offering fresh perspectives on how technology can strengthen public trust in science. These AI innovations are AgriGuard, AgriTrue and AgriVerify.



*Fatma Omar demonstrates how the AgriGuard AI tool 'prebunks' misinformation before it spreads.*



*ABBC 2025 was a special moment for us – a chance to show how our work can help fight misinformation in science. We were thrilled by the positive feedback we received from the delegates. It felt so nice.*

**Fatma Omar,**  
AI Innovator, AgriGuard

#### AgriGuard:

Misinformation around agricultural biotechnology and other climate-resilient technologies has cost farmers income, yields and trust in science. A team of young tech-savvy graduates has developed an AI tool to curb this menace. The tool, named 'AgriGuard', operates through three arms: ViralFarm, which scans social media to detect myths in real time; AgriFactCheck, an AI-powered SMS/WhatsApp bot that debunks fake claims in local languages; and MythBuster Ag, which delivers AI-generated videos that "prebunk" misinformation before it spreads. Additional features include a crop-help diagnosis center where farmers can upload images of affected plants for professional input, and a crop advisory and planning service offering expert recommendations tailored to soil, climate, and farmer objectives.

### AgriTrue:

AgriTrue is a smart AI-powered platform that combats misinformation and empowers farmers with verified, accessible knowledge. Its tools include Community Notes for collaborative fact-checking by farmers and experts, an ML Analyzer for agricultural image and document verification, Farm Truth for generating detailed agricultural reports and metrics, an AI Chatbot for instant responses, and a Voice Agent tailored to rural farmers with limited literacy or connectivity. Additionally, another feature, 'Know Your Land', equips farmers with insights on soil type, pH, crop suitability, fertilizer use, and weather patterns. AgriTrue is designed to promote informed agriculture through collective intelligence and accessible AI support.



### AgriVerify:

AgriVerify is an AI-powered initiative combating GMO misinformation and counterfeit farm inputs among Kenyan farmers. The platform integrates AI chatbots, interactive quizzes, product verification tools, and multi-platform accessibility (via web and USSD codes) to deliver accurate, easy-to-understand information even in rural areas with limited internet access. Farmers can verify the authenticity of agricultural inputs, build trust in biotechnology, and access information on topics like pest control and fertilizers. The innovation also features virtual reality tools that allow crops to be viewed through a 3D lens, creating a unique educational experience. With plans to integrate local languages, AgriVerify aims for greater inclusivity and broader impact in strengthening farmers' knowledge and decision-making power.



## AI Pitching Session: Key Areas for Support

While the promise of these innovations is evident, the young developers behind them require targeted support to translate their ideas into scalable and sustainable ventures. Key areas for support include:

1. Entrepreneurship mentoring and training: Helping the teams build solid business cases and develop market-ready models.
2. Contextualized content generation: Supporting the adaptation of AI tools to African contexts, including multilingual capabilities for diverse local languages.
3. Capacity building in product development: Providing mentorship and technical guidance on refining prototypes into deployable solutions.
4. Access to networks and markets: Linking the innovators with industry players, investors, and policymakers to accelerate uptake.
5. Seed funding and incubation: Offering initial financial and institutional backing to pilot and scale their solutions.

Through such support, these promising innovations can grow beyond prototypes to become powerful tools in Africa's fight against misinformation, while empowering the next generation of tech leaders on the continent.



*Teams of young innovators who showcased their AI-driven solutions to combat misinformation pose for a photo with Prof. Curtis Youngs (right), Dr. Diana Horvath (fifth from left) and Dr. Margaret Karembu (fourth from left).*

# ONE HEALTH LEADERSHIP TRAINING:

## Introduction to Decolonization in One Health

This was a leadership training for Africa's One Health stakeholders convened under the Capacitating One Health in Eastern and Southern Africa (COHESA) project. Held as part of the 6th Africa Biennial Biosciences Communication (ABBC 2025) symposium, the training introduced the concept of decolonization in One Health and explored pathways and actionable steps for transformative leadership and collaboration.

**Navigating the Complexity of One Health and Systems Change (Dr. Adana Mahase-Gibson):** The session offered powerful insights into how we frame and respond to challenges. It began by distinguishing between simple, complicated, and complex problems. Simple issues can be solved by following established standards with predictable outcomes. Complicated ones require detailed planning and resources. Complex challenges – the kind that define most sustainability and health issues – demand collective engagement and adaptive, multi-stakeholder approaches.

**Caribbean One Health through Caribbean Eyes (Dr. Adana Mahase-Gibson):** The presentation aimed to critically examine One Health in the Caribbean by unpacking its colonial roots, exploring intersectionality, and reflecting on pathways toward decolonial, people-centered systems change. It emerged that Caribbean experience of One Health cannot be separated from the region's colonial history. Colonial thinking, shaped by centuries of European rule, instilled the belief that Western culture and knowledge were inherently superior, while local knowledge and practices were marginalized.



*The Caribbean's experience with the One Health Leadership Series revealed how colonial legacies translated into practice. The program, led largely by global-north experts, adopted a rigid, top-down approach that emphasized technical skills while neglecting cultural context and local leadership.*

**Adana Mahase-Gibson,**  
External Advisor, COHESA  
Project



### **Decolonizing One Health – Case Study of Sleeping Sickness Control in East Africa**

(Prof. Salome Bukachi): The case of sleeping sickness control in East Africa illustrated how colonial interventions, despite aiming to curb disease, reproduced hierarchies and caused profound harm. Strategies such as forced relocation from tsetse-infested areas, destruction of habitats, and controversial game control disrupted livelihoods and eroded traditional knowledge.

### **Lack of Trust in National Institutions' Capability in the Coconut Lethal Yellowing Disease (CLYD) Outbreak In Mozambique**

(Dr. Valter Nuaila): From the late 1970s to the early 1990s, Mozambique was Africa's second-largest coconut producer after Tanzania. Zambezia Province powered the national economy, producing 60,000 tons of copra annually and contributing nearly 60% of Mozambique's GDP. Sadly, this foundation was shattered when CLYD struck in the early 1990s, wiping out coconut plantations and livelihoods. By 2017, Zambezia's GDP contribution had fallen to just 9%. Mozambique invested in building local research capacity. The Ministry of Agriculture repeatedly sought validation from CIRAD in France, even when Mozambican labs produced concordant results – there was lack of trust in national institutions.



*Decolonizing research practice requires transforming the entire research cycle. Communities should co-create research questions, teams must employ culturally adapted and gender-sensitive approaches, and findings should be shared in accessible formats such as 'barazas' (public forums).*

**Prof. Salome Bukachi,**  
Associate Professor, University of Nairobi



*Building resilient plant health systems in Africa means reclaiming trust, negotiating collaborations on equal terms, and ensuring governments lead by valuing their own scientists.*

**Dr. Valter Nuaila,**  
Deputy Director, National Biotechnology Centre, Mozambique



## BUS STOP AND IDEA EXCHANGE

### **BUS STOP 1: Partnership and Practice Dimension** *(Alex and Prisca)*

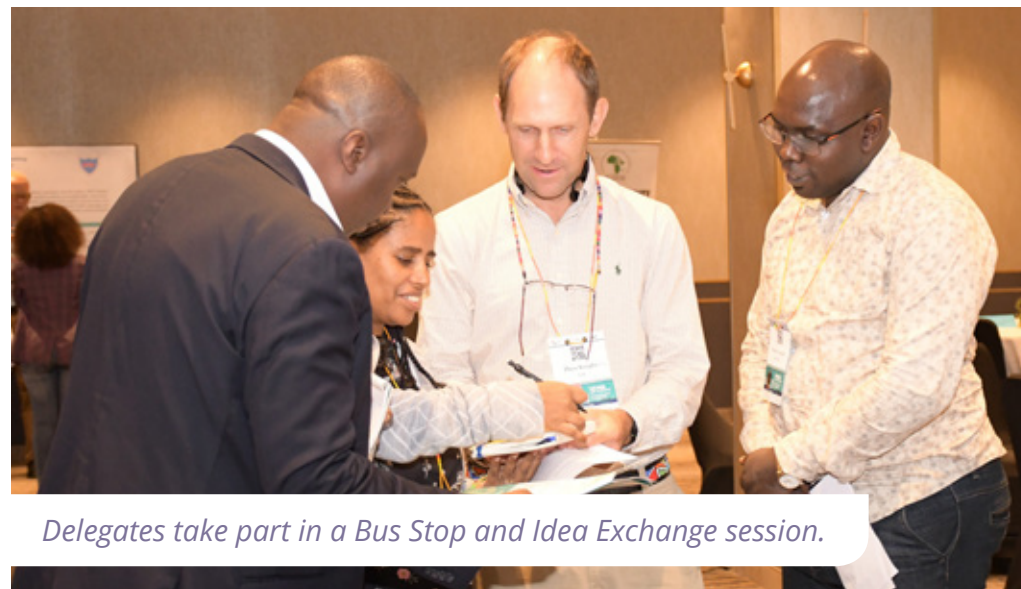
The discussion revolved around improving project implementation, particularly in the context of sustainable development and community engagement. Alexandre Caron and Prof Prisca Mugabe presented a project that they have both been conducting in Zimbabwe.

### **BUS STOP 2: Decolonizing Education and Research in Africa** *(Mirgissa and Margaret)*

The activity from this Bus Stop was aimed at stimulating critical reflection on the role of education and research in Africa's development. Despite the continent's vast natural resources and abundant talent, Africa continues to face persistent challenges including poverty, displacement, and a triple burden of health crises, which remain largely unresolved even amid global scientific and technological advancements.

### **BUS STOP 3: Language Decolonization** *(Bibiana, Adana and Salome)*

This Bus Stop involved the discussion about decolonizing language in development and aid, focusing on common phrases and their underlying colonial implications. The presentation, which Adana N. Mahase Gibson shared, begins with an overview of why language matters, highlighting how certain words and phrases reinforce outdated hierarchies and colonial mindsets.



#### **GROUP 4: CASE STUDY – Decolonizing Research in Africa (Valter)**

Group 4 discussion focused on the urgent need to decolonize research in Africa, with participants emphasizing that true transformation begins with changing our mindset and decolonizing our own thinking. The session highlighted that Africa's research agendas must be locally driven, rooted in indigenous knowledge, funded by domestic resources, and aligned with national priorities rather than being dictated by external interests.

#### **BUS STOP 5: CASE STUDY – Nashulai Conservancy Model (Nelson)**

The model is based on the concept that human beings, domestic Animals, and wildlife can co-exist. In fact, the word Nashulai means co-exist. The Bus Stop featured two Maasai men from Kenya and Tanzania who believe their communities should be given the right to manage the conservancy in their own way, respecting their indigenous knowledge, culture, and traditions.



*Delegates take part in a Bus Stop and Idea Exchange session.*



*Delegates take part in a Bus Stop and Idea Exchange session.*



## SIDE EVENT 2: A STUDY VISIT TO A MAIZE SEED FACILITY IN CENTRAL ZAMBIA

ISAAA AfriCenter, in partnership with Bayer, organized a study visit to the Bayer Itaba Seed Plant – a state-of-the-art maize seed production facility located in Kabwe, Central Zambia. The visit aimed to deepen delegates' understanding of modern seed production processes and Bayer's contribution to enhancing agricultural productivity and food security in Zambia and across Sub-Saharan Africa.

The delegation comprised twenty-two participants, including biosafety regulators, agricultural scientists, early career professionals, farmers, and science communicators. The tour provided an opportunity to appreciate Bayer's collaboration with regulatory authorities and research partners, aligning with the company's global mission – Health for All, Hunger for None. The Itaba Seed Plant's guiding principles – Safety First, Product Excellence, and Productivity – were evident throughout the visit.



*A section of the ABBC 2025 delegates at Bayer's maize seed facility in central Zambia.*

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**Beyond seed production, Bayer invests in farmer capacity building through training sessions and short courses. Delegates commended Zambia's supportive regulatory environment that fosters innovation and public-private collaboration.**

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Delegates toured key sections of the facility, including the foundation seed plant, maize dryer section, and commercial seed plant. At the foundation seed plant, they observed the meticulous seed production process, beginning with the preservation of parent seeds in cold rooms maintained at 10°C and 50% humidity for long-term storage. Male and female maize lines are color-coded – blue for male, pink for female, and white for inbred lines – to ensure traceability and purity, which is maintained at a minimum of 97.78%. Independent data loggers continuously monitor temperature to guarantee optimal conditions. Notably, Bayer's foundation seed operations in Zambia serve the entire Sub-Saharan Africa region, except South Africa, positioning the country as the region's largest seed producer.

In the dryer section, maize is received at 30% moisture content and gradually dried using LPG gas to 12.5% within 72 hours. The process maintains high quality through rigorous sorting and control. The shelled maize, processed at a capacity of 60 tons per day, proceeds to the packing stage at the commercial plant. This plant alone supplies seed to nearly six million smallholder farmers across the continent.

## ABBC 2025 DRAWS TO A CLOSE

After three days of intense deliberations and thought-provoking discussions, ABBC 2025 Symposium drew to a triumphant close. The symposium culminated in a colorful gala dinner that celebrated the remarkable success of the event and the collective resolve to tackle one of the most pressing challenges in modern science – misinformation and disinformation.

The evening marked a historic moment as delegates unanimously adopted the ABBC 2025 Lusaka Declaration and Call to Action, a continental framework outlining key priorities to counter misinformation in science while accelerating the uptake of bioscience innovations for food security, health, environmental sustainability, and improved livelihoods.

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**Among the resolutions captured in the Declaration was a strong call for strengthening African-led engagement and dialogue platforms to enhance science outreach and rebuild public trust in science, technology and innovation (ST&I).**

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*Delegates closely follow the closing ceremony of ABBC 2025.*

Delegates underscored the need for research institutions to mainstream science communication as a core component of research and innovation, ensuring that messages are clear, culturally grounded, and delivered through modern communication channels.

Delegates also emphasized the development of innovative communication toolkits for detecting and addressing misinformation. Another major resolution called for investment in advanced, AI-powered fact-checking systems to enable real-time responses to false or misleading information, underscoring the growing role of technology in safeguarding scientific integrity.

## To Our Delegates, With Deep Appreciation!

In her closing remarks, Dr. Margaret Karembu, the ABBC 2025 Convenor, expressed deep gratitude to the delegates for their unwavering commitment. Reflecting on ABBC's journey since its inception in 2015, she celebrated the forum's impact in shaping Africa's biosciences narrative.

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**Efforts from ABBC symposium series over the past decade have yielded tangible results. Recommendations from the symposia have informed the strengthening of biosafety systems, increased trust in agricultural biotechnology, and facilitated the commercialization of biotech crops in nine African countries – up from just three a decade ago.**

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Dr. Karembu highlighted key initiatives inspired by ABBC resolutions, including a partnership with AUDA-NEPAD and CropLife that has led to the establishment of an online biotech portal that will be launched soon. Another milestone, she noted, is the Africa Science Dialogue platform, which continues to amplify accurate, evidence-based information and close the space for misinformation, thereby enhancing public confidence in science.

## Unveiling of New Partnerships with ISAAA AfriCenter

The evening also witnessed the unveiling of two landmark partnerships that symbolized the symposium's spirit of collaboration.

1. *Memorandum of Understanding (MoU) between ISAAA AfriCenter and ACTESA/COMESA:* Aims at strengthening the implementation of the COMESA Biotechnology Implementation Plan – an agreement that reaffirms ABBC's role in fostering strategic partnerships.
2. *MoU between ISAAA AfriCenter and Iowa State University:* It seeks to deepen mutual understanding of economic, cultural and social issues while strengthening the entrepreneurial ecosystem for science, technology and innovation.



FROM LEFT: Prof Ratemo Michieka (ISAAA AfriCenter Board member), Dr. Robert Karanja (AfriCenter Board Chair), Prof. Curtis Youngs (member, ABBC 2025 Organizing Committee) and Dr. Margaret Karembu (Director, AfriCenter).

## Official Closing

Representing Zambia's Minister of Green Economy and Environment, Dr. Douty Chibamba, the Ministry's Permanent Secretary, officially closed the symposium. He commended the organizers, delegates and local team for making the event a success and expressed pride that Lusaka hosted such a big continental gathering.

Dr. Chibamba noted that the symposium's theme was timely and aligned perfectly with Zambia's environmental agenda. He highlighted the Green Economy and Climate Change Act, which domesticates the Paris Agreement and provides a robust legal framework for regulating carbon markets and advancing sustainable growth.

ABBC 2025 reaffirmed that Africa's progress in science and innovation depends not only on discovery but also on trust, truth and effective communication. The conversations and commitments born in Lusaka will continue to echo across the continent, inspiring a new era of evidence-based dialogue and collective action for a better, informed Africa.



*It was all smiles as delegates celebrate 10 years of ABBC success.*



*The symposium has reinforced the role of science communication in informing and engaging the public. This is key toward active support of Africa's biosciences and climate agenda.*

**Dr. Douty Chibamba,**

Permanent Secretary, Ministry of Green Economy and Environment, Zambia.



## ABBC 2025 RESOLUTIONS

# 1.

Urged for the **strengthening of African-led engagement initiatives and dialogue platforms to enhance science** outreach, foster trust in science, technology and innovation (ST&I), and adopt a more robust approach to combating entrenched misinformation and disinformation within communities.

# 2.

Called on African research institutions to **mainstream science communication as a core function in research and innovation** to ensure messages are clear, culturally relevant and accessible through the most current communication platforms.

# 3.

Further called upon institutions of higher learning to **incorporate science communication modules** that support effective science reporting and strategic science communication.

# 4.

Advocated for strengthening of **existing multi-stakeholder, trans-disciplinary, multi-sectoral dialogue platforms** to break silos, foster regular inter-institutional dialogue, and implement joint communication strategies.

# 5.

Made a commitment to work with member states, regional bodies, including COMESA, SADC, ECOWAS, EAC, AUDA-NEPAD as well as the African Scientific, Research and Innovation Council to **establish a think-tank** that rapidly responds to contentious issues by upholding harmonized scientific guidance.



# 6.

Recommended co-development of a **digital reference point** for commonly used scientific terminologies to improve clarity, policy coherence, and public understanding.

# 7.

Proposed development of **communication toolkits for misinformation and disinformation sensing** that incorporate storytelling, visuals, culturally sensitive messaging to make science relatable and actionable.

# 8.

Called on partners to **invest in advanced fact-checking systems** powered by natural language processing and artificial intelligence to counter misinformation and disinformation in real-time.

# 9.

Urged African governments to **increase investment in ST&I** by leveraging the Kampala Declaration and other regional and global protocols and initiatives that promote sustainable financing and self-reliance.

# 10.

Called for establishment of **clear protocols to safeguard breakthroughs** by African scientists and protect them (our scientists) from victimization and discrimination.



## BEYOND THE HORIZON – IMAGINING ABBC 2027!

### Word Cloud:

Q12 What theme would you like ABBC 2027 to address?

solutions sustainable AI Youth scientific Agriculture Africa information  
science communication theme science Future Biotechnology sure  
One Health development African Bridging Science Communicating

Post-ABBC 2025 symposium responses converged on five dominant thematic areas for ABBC 2027. **[1]** First, delegates prioritized strengthening science communication ecosystems – explicitly countering misinformation, propaganda and linguistic barriers – by embedding media early in research workflows, enhancing transparency, and rebuilding public trust at the science-society interface. **[2]** Second, there was strong interest in harnessing artificial intelligence (AI) and digital platforms (including social media) for evidence translation, audience analytics, and responsible innovation, alongside forward-looking discussions on “Industry 5.0.” **[3]** Third, participants called for community-proximal engagement that valorizes indigenous and local knowledge, with intentional inclusion of youth and gender (e.g., spotlighting women farmers) and context-appropriate rural communication approaches. **[4]** Fourth, One Health emerged as

a cross-cutting frame – linking the health of humans, animals, and ecosystems – often paired with climate and biodiversity resilience, and with proposals to communicate One Health concepts within resource-constrained settings. **[5]** Fifth, several responses proposed application-oriented tracks – precision agriculture, data-driven monitoring, and sectoral acceptance of biotechnology (e.g., interrogating differential acceptance in medicine versus agriculture). Collectively, the proposed themes emphasize actionable, trust-centered communication; responsible integration of AI and data science; co-creation with communities; and policy-relevant framing through One Health and climate resilience. These priorities suggest ABBC 2027 should combine plenaries on strategic direction with practice-focused sessions (toolkits, case studies, and metrics) to operationalize impact across research, policy, and public spheres.

## ORGANIZING COMMITTEE, ABBC 2025



**Margaret Karembu,  
MBS**

Director, ISAAA AfriCenter,  
and ABBC Convenor



**Adana N. Mahase-  
Gibson**

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Capacitating One Health  
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**Bibiana Iraki**

Senior Programs Officer,  
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**Agnes Tsuma**

Programme Lead  
Research, Chemonics  
International



**Christopher Simuntala**

Head of Standards and  
Technical Liaison, National  
Biosafety Authority, Zambia



**Daniel Osei Ofosu**

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