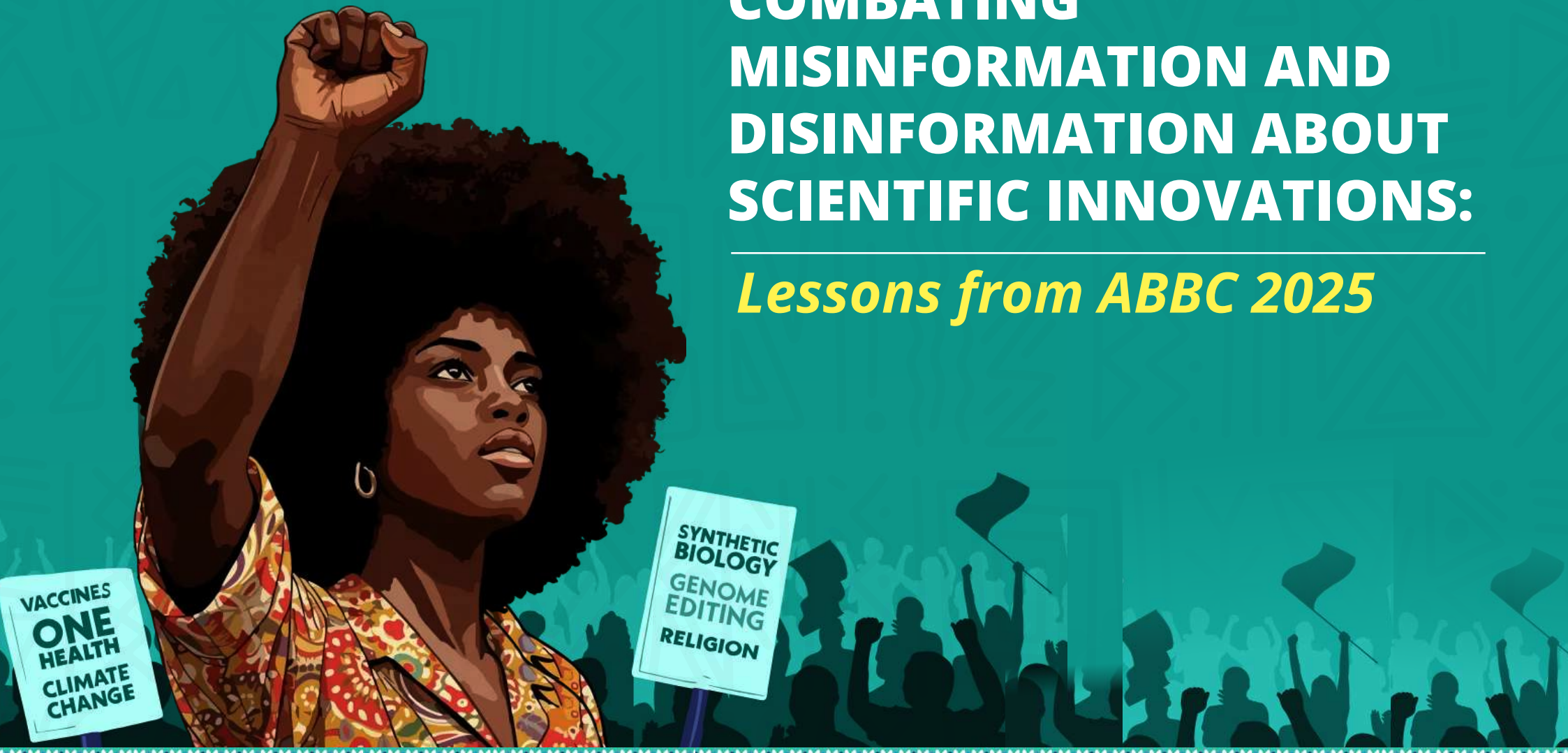
ABBC 2025

COMBATING MISINFORMATION AND DISINFORMATION ABOUT SCIENTIFIC INNOVATIONS:

Lessons from ABBC 2025



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About the Booklet

This booklet presents key lessons from misinformation and disinformation against innovations in agriculture, health and environment in Africa. These lessons emerged during a 'Bus Stop and Idea Exchange' session happening at the Africa Biennial Biosciences Communication Symposium (ABBC 2025) held in Lusaka, Zambia from August 26 - 28, 2025.

It captures practical experiences and responses to misinformation in several contexts, including livestock vaccine campaigns in Kenya, anthrax vaccination efforts in Zambia, and the adoption of biotech crops in Nigeria. The booklet also explores how misinformation shapes public understanding of environmental and environmental health issues.

From this session, the booklet provides insights into lessons and interventions against misinformation and disinformation in livestock vaccine campaign in Kenya, cattle vaccination against anthrax in Zambia, and adoption of biotech crops in Nigeria. It also discusses how misinformation sets in the concept of environment and environmental health.

Further, drawing from the case of Nashulai Maasai Conservancy in Kenya, this booklet highlights key lessons in addressing misinformation around biodiversity conservation.

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

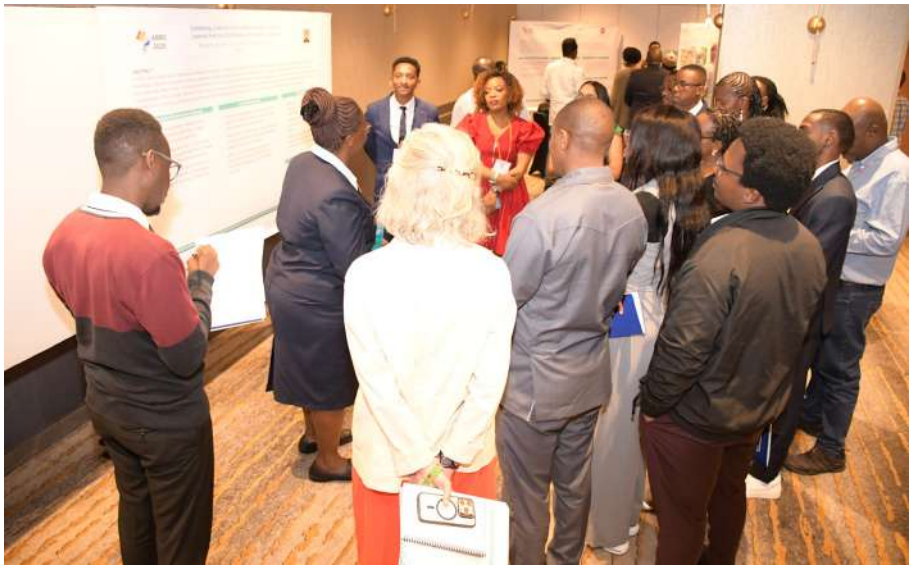
(Maryanne Mwimali, Directorate of Veterinary Services, Kenya)

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 the Kenya Veterinary Vaccines Production Institute (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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SUMMARY

Misinformation/Disinformation Challenge

- Distrust and Conspiracies – Narratives tied livestock vaccination to Bill Gates, foreign control, or hidden political agendas.
- Safety and Transparency Gaps – Lack of clear communication on vaccine ingredients, testing, and oversight fueled fears and speculation.
- Fabricated Stories – False claims of animal deaths, unrealistic promises of total disease protection, and comparisons to COVID-19 vaccines

How It Was Handled

- Community Engagement – Local veterinarians and officials directly engaged communities to explain benefits and address fears.
- Transparency and Oversight – Clear information on vaccine production/testing and KEVEVAPI's regulatory role were emphasized.
- Influencer and Leadership Involvement – Trusted local leaders and President Ruto defended the campaign, countering false narratives.

Outcomes

- Partial Success – Some citizens accepted vaccination and recognized livestock health benefits.
- Persistent Skepticism – Political and historical distrust continued to limit full uptake
- Strengthened Systems –Veterinary teams gained capacity, and information gaps were exposed for future improvement.

Lessons Learnt

- Trust is Fundamental
- Proactive, Tailored Communication Works
- Local Champions are Key

The Age of Misinformation: Anthrax Outbreak in Zambia

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

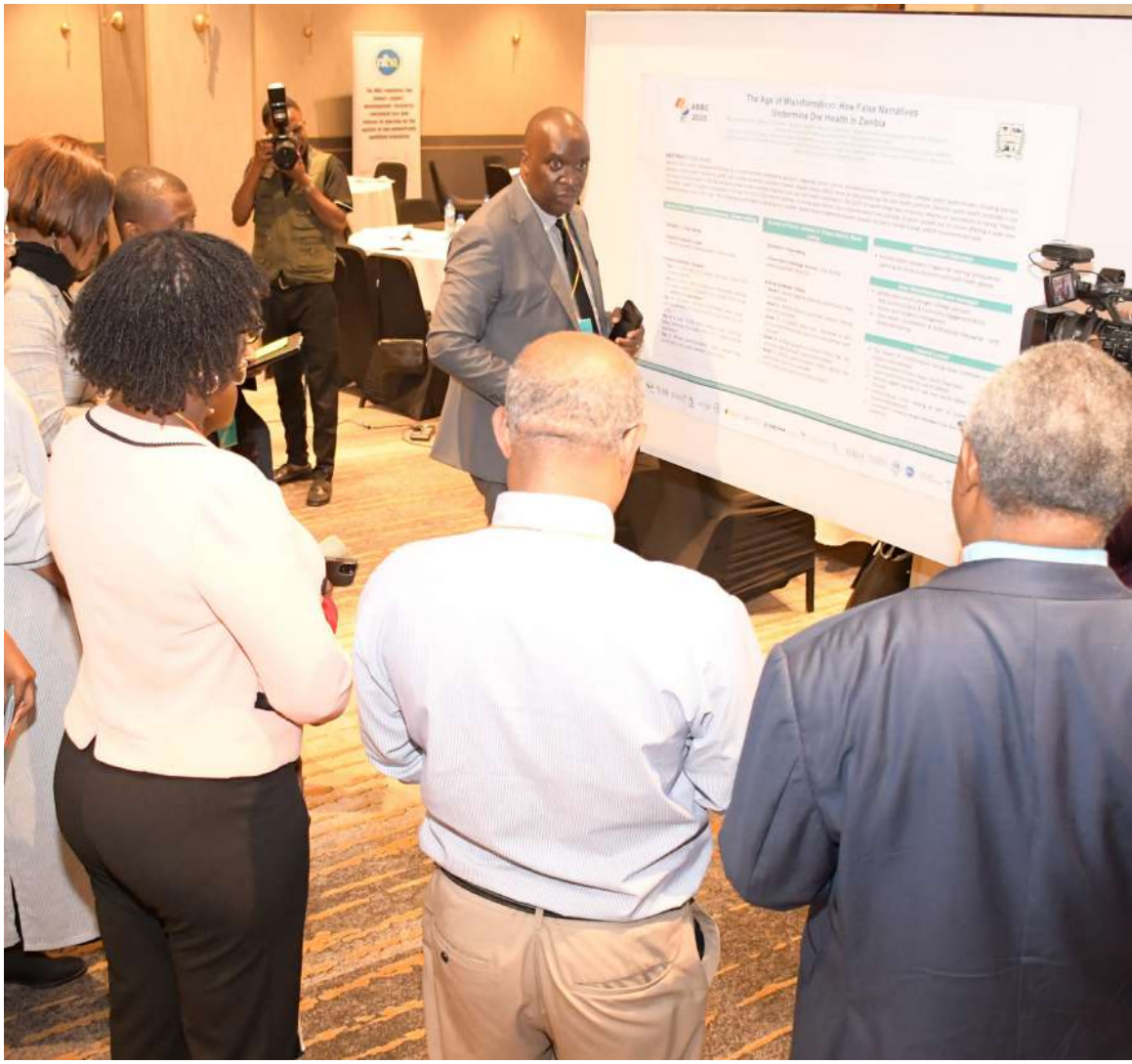
The recent anthrax outbreak in Zambia revealed the devastating impact of misinformation on public health and agriculture. False narratives circulated among farming communities, leading many to refuse cattle vaccination for fear that the vaccines would cause infertility or death. Others turned to herbalists, 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.

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

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.

SUMMARY

Echoes of Panic: Cholera in Kanyama, Urban setting

SCENARIO 1 – Urban Setting:

Kanyama Compound, Lusaka – densely populated, limited sanitation infrastructure.

Cholera Outbreak – Kanyama

- Day 1: A child dies from acute diarrhea. Local clinic suspects cholera.
- Day 2: A voice note circulates on WhatsApp claiming the water supply is poisoned by a foreign NGO trying to "control the population."
- Day 3: Residents boycott chlorinated water tanks, destroy Ministry of Health banners, and refuse to visit clinics.
- Day 4: A viral TikTok video shows a man vomiting, falsely claiming it's a side effect of a "cholera vaccine experiment."
- Day 5: Official communication finally reaches the community—but trust is eroded. Cases triple.

Echoes of Panic:, Anthrax in Chama district, Rural setting

SCENARIO 2 – Rural Setting:

Chama District, Muchinga Province – rural Wildlife, livestock-dependent community.

Anthrax Outbreak – Chama

- Week 1: Several Hippos & cattle die mysteriously. Posts on Facebook
- Week 2: Farmers refuse to vaccinate livestock, fearing infertility and death.
- Week 3: A popular radio host interviews a self-proclaimed herbalist who claims to "cure anthrax" with tree bark.
- Week 4: Anthrax spreads to humans. Panic rises. No one buys meat anymore. Livelihoods collapse.
- Week 5: Official communication finally reaches the community—but trust is eroded.
- A lot of resources used to sort the problem.

Misinformation Outcomes

- Misinformation epidemic triggers far reaching consequences spanning across socio-economic and public health spheres.

How Misinformation was managed

Zambia took a multi-pronged, strategic approach:

I. Risk Communication & Community Engagement (RCCE).
II. Rumor and Infodemic Management
III. One Health Coordination & Multisectoral Messaging – with Media Monitoring

Lessons Learnt

The impact of misinformation during these outbreaks revealed critical vulnerabilities.

I. Misinformation Thrives in Gaps—So Fill Them Early.
II. Community Trust Is the First Line of Defense.
III. Monitor digital channels in real time [Social Media Can Amplify or Correct].
IV. Institutionalize rumor tracking as part of outbreak surveillance [Rumor Management].
V. Coordination Prevents Mixed Messages [Use One Health coordination platforms].

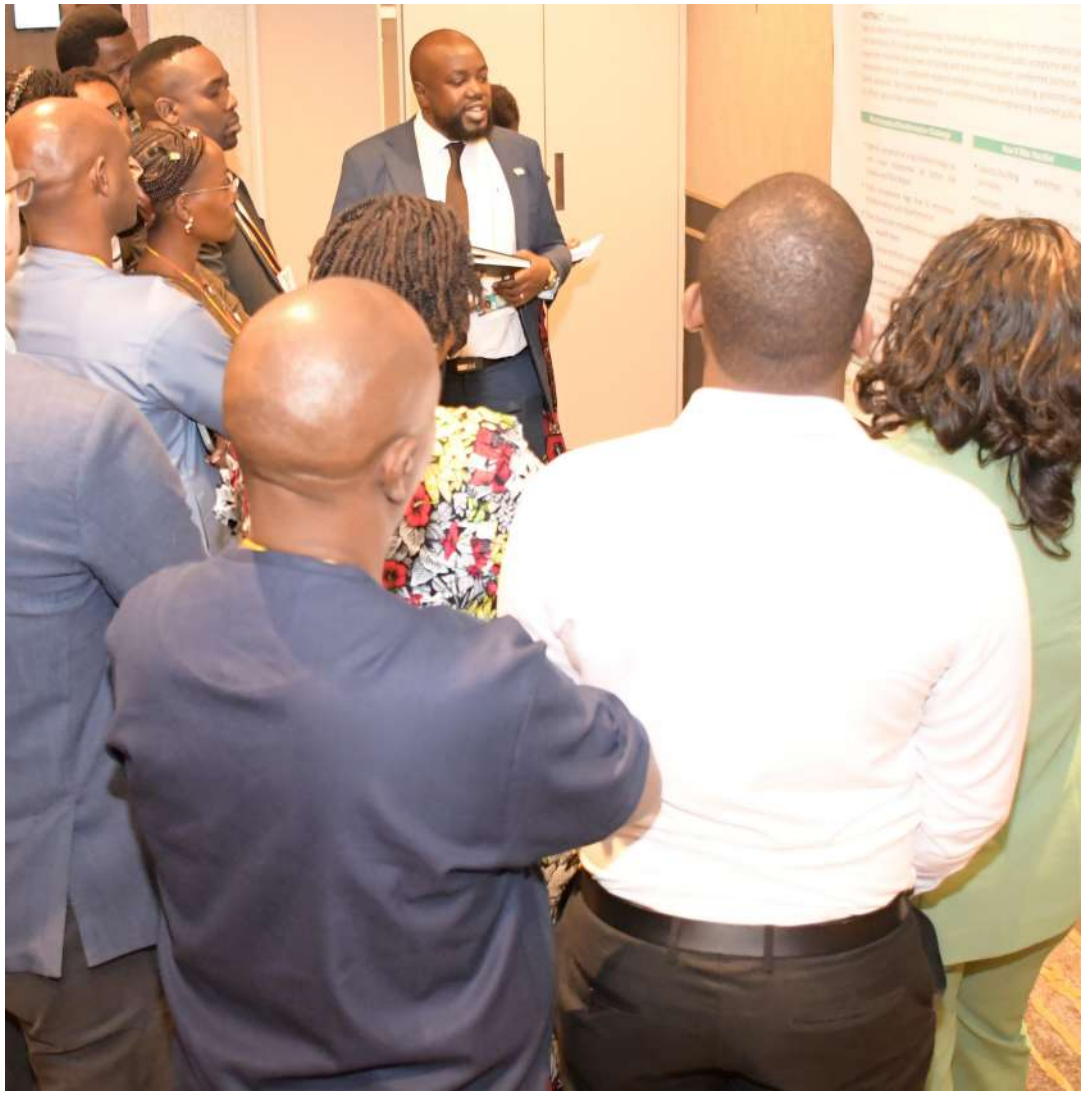
Misinformation against Crop Biotechnology in Nigeria

(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.



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

SUMMARY

Misinformation/Disinformation Challenge

- Nigeria's adoption of crop biotechnology has seen major milestones: Bt Cotton, PBR Cowpea and Tela Maize.
- Public acceptance lags due to entrenched misinformation and disinformation.
- Three dominant misinformation categories:
  i. Health fears
  ii. Socio-political conspiracies
  iii. Environmental distortions
- Root causes include:
  i. Low public awareness.
  ii. Poorly informed journalism.
  iii. Deliberate anti-GMO campaigns

How It Was Handled

- Capacity-building workshops for journalists.
- Grassroots farmer sensitization campaigns.
- Targeted social media outreach.
- High-level policy dialogues with decision-makers.
- Communication reframed to connect with cultural values.
- Risk communication embedded in outreach.
- Qualitative analysis of media, policy documents, and interviews guided strategy.

Outcomes

- More accurate, balanced media coverage of biotech.
- Increased farmer adoption of biotech crops.
- Stronger political support for evidence-based regulation.
- Reduced polarization in public discourse.
- Improved institutional capacity for bioscience communication

Lessons Learnt

- Fact correction alone is insufficient, sustained, relevant engagement is essential.
- Science storytelling helps resonate with local values.
- Communication strategies should be integrated into national biosafety frameworks.

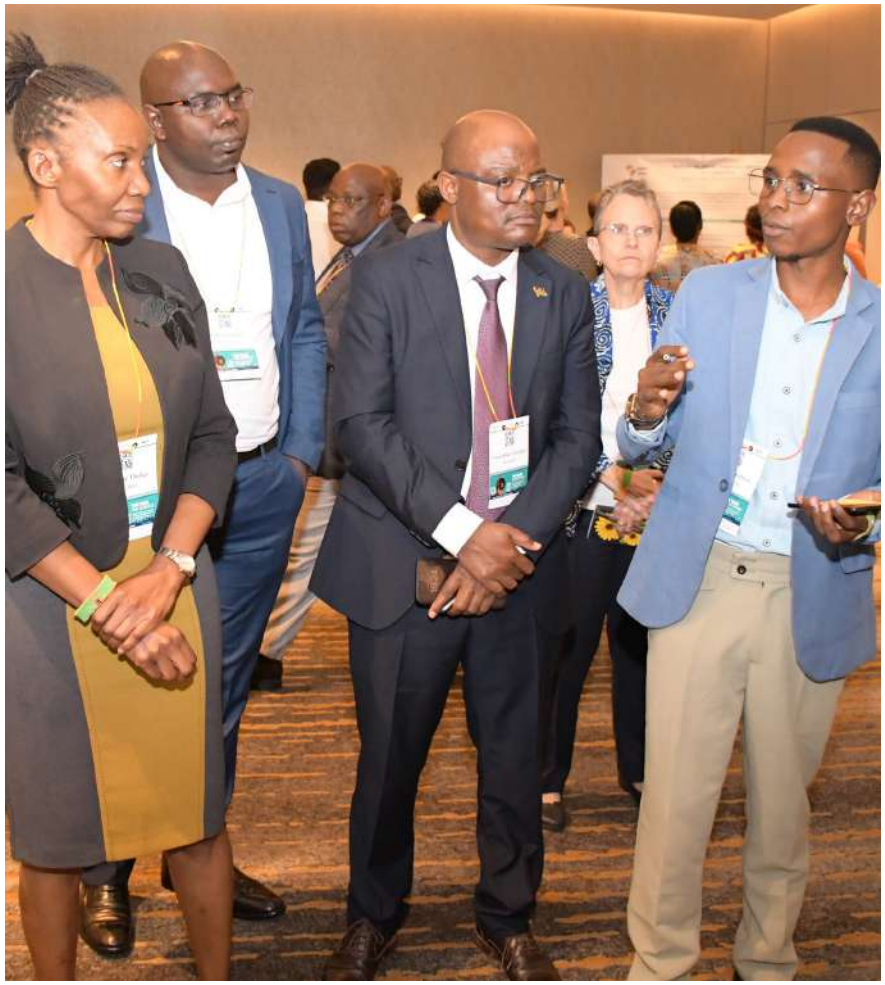
Environment versus Environmental Health in One Health

(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'.

SUMMARY

Misinformation/Disinformation Challenge

- The use of the word environmental health to refer to the environment, especially in the One Health context.
- This term is widely used by human and animal health colleagues when referring to the environment.

How It Could be Handled

- Clarify Definitions in Policy and Official Documents
- Integrate the Distinction in Training and Education
- Raise Public Awareness through Communication Campaigns
- Encourage Cross-Sector Collaboration
- Use Precise Terminology in Media and Reports
- Establish Clear Mandates and Roles
- Monitor and Evaluate Understanding in Programs

Expected Outcomes

- Stronger Collaboration and Coherence
- More Effective and Inclusive Interventions
- Smarter Use of Knowledge and Resources

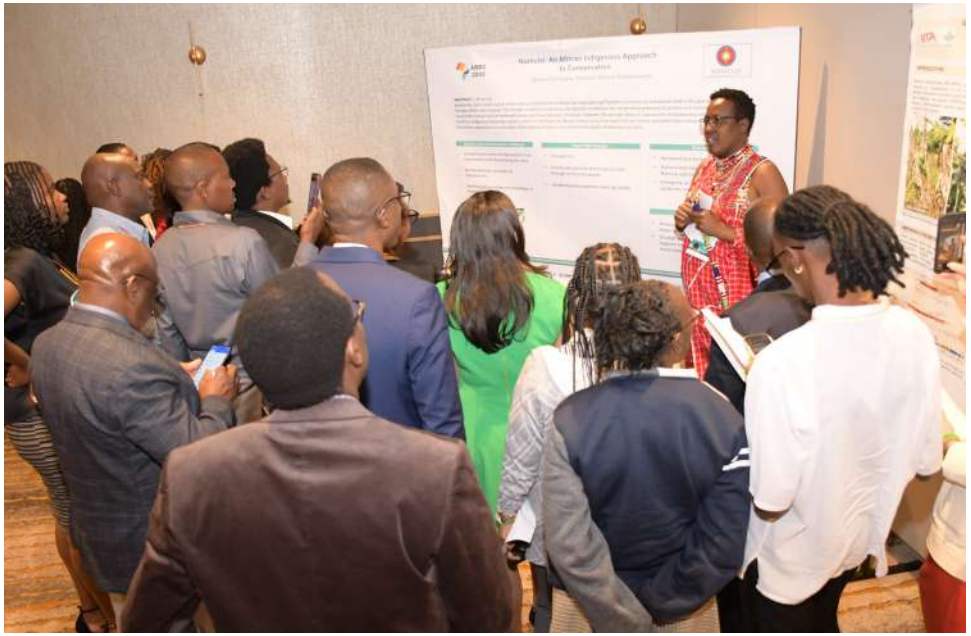
Lessons Learnt

- Consistent terminology and clear policies foster coordination and break down silos
- Knowledge, skills, and confidence are essential to shift practices and empower stakeholders.
- Collaborative, community-driven, and cross-sectoral approaches deliver broader, sustainable benefits.

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.

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.



Nelson Ole Reiyia 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.

SUMMARY

Misinformation/Disinformation Challenge

- Overstating promises and expectations from conservation while downplaying the costs
- Narrow dominant narratives on conservancies
- Devaluing African indigenous knowledge on biodiversity conservation

How It Could be Handled

- Transparency
- Community outreach both in person and through community barazas
- Conducting annual general meetings (AGM)

Expected Outcomes

- Reclaimed land for biodiversity conservation
- National and international recognition of the Nashulai approach e.g. UNDP Equator Prize
- Emergence as a key research site for academics near and far

Lessons Learnt

- African indigenous knowledge is key in fostering meaningful conservation in Africa
- Strategic communication is critical to supplant dominant capitalist and colonial conservation narratives