“The Mawazo Learning Exchange gave me a new perspective on how I can do my PhD and link it to policy to improve lives. I can now influence policy. My communication skills have also improved and I can now speak with boldness.”

*Renee Munayi*
PhD Candidate in Chemistry, University of Nairobi
2021 Mawazo Learning Exchange Fellow

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Dear Friend of Mawazo,

2021 marked the Mawazo Institute’s fifth year in existence, and what a year it was! Above all, even as we continued to adapt to the second year of a global pandemic, 2021 was our great year of transition.

In February, we launched our 2021/22 Mawazo Learning Exchange (MLEX) Fellowship Programme with a cohort of 40 inspiring Fellows. The Fellows represent eight different countries, and are some of the best and brightest young African women researchers at the forefront of exciting and innovative research projects in Africa. In addition, in 2021, we welcomed our first Policy Fellow, piloting the Policy Fellowship Programme providing tailored support for researchers to conduct policy engagement on the continent.

In May, we embarked on a strategic planning journey with the help of On Think Tanks who provided essential recommendations to create a robust and impactful strategic plan for 2021-2025. The process helped us streamline our activities into two main programmes - the Mawazo Learning Exchange (MLEX) Fellowship Programme which provides training and professional development, mentorship and financial support to African women researchers pursuing their PhDs; and the Mawazo Voices Programme, which supports African women researchers (including our Fellows) on their public engagement and policy influence, including promoting their work on various platforms, strategic communications and partnerships building to create impact pathways, and research and learning to support our activities as well as understand the various ecosystems in which our beneficiaries operate.

Through the year, we were proud to create new relationships with new funders, including the Bill and Melinda Gates Foundation, the Mastercard Foundation and the United Kingdom’s Foreign, Commonwealth and Development Office (FCDO), as well as reestablish and strengthen existing ones. In total, 2021, Mawazo received $2,134 in individual donations and grants from the aforementioned donors as well as the International Development and Research Centre (IDRC), the Hewlett Foundation, the Open Society Foundations, and others. Not only has the additional financial support enabled us to grow our team as well as expand our programmes, guided by the critical strategic conversations that took place throughout the year, but it has also allowed us to strengthen our operations by seeking the support from 100 Degrees Consulting to upgrade and improve our financial systems.

And perhaps our biggest transition was our change in leadership. After five years of leading Mawazo, in August of 2021, Dr. Rose M. Mutiso stepped down as Mawazo’s CEO and handed over the reins to myself, as the Acting CEO. Dr. Mutiso co-founded Mawazo with Board Chair Rachel Strohm, and has overseen the organisation from a small two-person team to the established, 14-person entity that it is now. During her time as the CEO, the Mawazo Institute built a strong pipeline of institutional funders and individual donors, enabling us to support 10 PhD Scholars and 40 MLEX Fellows. Her dedication, hard work and vision for the organisation, has led us through tremendous growth, and laid a strong foundation for our future. We can not thank her enough for her contributions to the Mawazo Institute and we remain ardent supporters as she continues to impact access to and public use of research in the region.

Overall the necessary transitions that Mawazo underwent in 2021, have allowed us to set our sights on even larger, more ambitious targets. As we wrap up our first five years of existence, we can’t help but be awed by the strides we have made, and excited for the growth over the next few years. It is with deep, immense gratitude that I acknowledge everyone who has contributed to and collaborated with us over the years. Our commitment remains strong to supporting the next generation of women researchers and thought leaders in Africa to achieve our mission - a world in which the voices and Big Ideas of African women researchers shape the future of the continent and the world - and we hope that you will continue to join us in doing so.

Enjoy reading more about everything Mawazo has been up to in 2021!

Fiona Wanjiku Moejes, PhD
Acting CEO and Director of Programmes
Mawazo Institute

Our Mission

Support the Big Ideas of early-career women researchers and thought leaders in Africa to strengthen their research, policy influence and public engagement.

1. We support the professional development and thought leadership of early-career African women researchers.
2. We increase the public utility, visibility, and impact of evidence-based, locally produced and -women-led research in Africa.

Our Programs

Mawazo Learning Exchange
Training, professional development, mentorship and financial support for early-career African women researchers.

Mawazo Voices
Public and policy engagement, strategic communications, research and learning, and creation of impact pathways through a network of partners to facilitate impact.

Our Vision

A world in which the voices and Big Ideas of African women researchers shape the future of the continent and the world.
At Mawazo, we seek to support the generation and uptake of homegrown and evidence-based solutions to pressing development needs. Mawazo targets individuals as important agents of change. We focus on young women, who are significantly underrepresented in academia and research, and who can contribute important knowledge and perspectives to issues affecting African development. We work to unlock their potential by equipping them with the skills and networks to conduct high quality research.

We also provide training and platforms to support their public writing and policy influence, which fills gaps left by many local higher education institutions. We aim to prepare them to be future thought leaders and public scholars who have impact and visibility both within and outside the academy.

We are registered in the US as a 501(c)3 non-profit organisation, with a local branch office in Kenya, and were founded in 2017 in Nairobi.

"In a different world, as an African woman in science, I would have been one of Mawazo’s beneficiaries and this is why the work I do with Mawazo is personal. It’s something I’m very passionate about."

Fiona Wanjiku Moejes, PhD and Director of Programmes
2021 was truly a transformational year for Mawazo. It was a year of reflection and brainstorming, leading to the development of Mawazo’s new strategic plan for the period 2021-2025, which we will continue to strengthen in 2022. Our new strategy aims to highlight and consolidate Mawazo’s programming and vision for a world in which the voices and ideas of early career African women shape the future of the continent and the world. After a dedicated review process, we chose to make the following strategic amendments:

**2021 Year of Transition**

2021 was truly a transformational year for Mawazo. It was a year of reflection and brainstorming, leading to the development of Mawazo’s new strategic plan for the period 2021-2025, which we will continue to strengthen in 2022. Our new strategy aims to highlight and consolidate Mawazo’s programming and vision for a world in which the voices and ideas of early career African women shape the future of the continent and the world. After a dedicated review process, we chose to make the following strategic amendments:

**Expanding our network of support to include all African women and not just women in East Africa.**

**Defining our Mawazo programming across two main areas;**

- The Mawazo Learning Exchange Fellowship Programme (MLEx) and;
- The Mawazo Voices Programme, which includes strategic communications and partnerships as well as policy and public engagement

February 2021 saw us welcome our first cohort of 41 PhD candidates to the **Mawazo Learning Exchange (MLEx) Fellowship Programme**. They represent eight African nationalities, are based at institutions across the East African region, and are pursuing innovative local research in a range of fields including Agriculture, Biotechnology, Chemistry, Climate Change, Engineering, Food Science, Health, Physics, and Women’s Studies. Our MLEx Fellows (pages 16 to 19) represent the next generation of African researchers and are some of the best and brightest young African women, at the forefront of exciting and innovative research projects in Africa. The **2021 Cohort is set to conclude their training in June 2022.**

“**As we wrap up our first five years of existence, we can’t help but be awed by the strides we have made, and excited for the growth over the next few years. It is with deep, immense gratitude that I acknowledge everyone who has contributed to and collaborated with us over the years.**”

Fiona Wanjiku Moejes PhD,
Acting CEO and Director of Programmes
Additionally, we inaugurated the Mawazo Institute’s Policy Fellowship Programme, announcing our first Policy Fellow, Sahra Ahmed Koshin. Sahra is a Somali-Dutch PhD Candidate at the University of Nairobi and the University of Copenhagen, researching gender issues in Somalia with a focus on diaspora humanitarianism in complex crises. She is the Founder and Director of the Somalia Gender Hub, a leading centre for research on women and gender in Somalia. The Mawazo Policy Fellowship is a six-month non-residential fellowship programme for young African women conducting policy-relevant research in Africa. The Programme provides hands-on engagement through access to platforms and a grant to fund policy activities. Policy Fellows also benefit from the opportunity to participate in events and activities organised by Mawazo and/or partner organisations that are relevant to their work.

2021 was also the year that the Mawazo Institute welcomed new funding partners, namely, the Foreign Commonwealth Development Office (FCDO), the Mastercard Foundation and the Bill and Melinda Gates Foundation. These new partnerships are making investments into current programmes and beneficiaries, and are also supporting the 2021 cohort of the MLEx Fellowship Programme. These institutional donations coupled with individual donations significantly impacted our capabilities as an organisation. We remain indebted to all those who have been in solidarity with us throughout the year.

We also expanded our team to include more permanent members, including a Director of Programmes (Fiona Wanjiku Moejes, PhD who is now the Acting CEO), a Communications Manager (Frhadi Wanjiku), and three interns (Joy Khanali, Ruth Kimani and Shirley Irungu) to allow us to remain committed to deepening our programmes and the pool of beneficiaries that they support.

And perhaps the biggest transformation was the departure of Mawazo’s co-founder, Dr. Rose M. Mutiso, officially stepped down as the CEO in August. Five years of hard work, dedication and leadership from Dr. Mutiso has seen Mawazo blossom into a leading actor in the research space in East Africa. We have garnered hundreds of attendees for our public engagement events, supported 41 MLEx Fellows and 10 PhD Scholars, and grown our staff from two permanent members to six full-time staff members, five consultants and three interns. Dr. Mutiso’s shared dreams for Mawazo will continue to be achieved by our Board and team members, and the impact of her legacy will be felt for years to come.

As the Mawazo Institute continues the process of transformation, we remain committed to delivering high quality and high impact programming. The strides we have made in 2021 have allowed us to streamline our vision, and effectively meet our mission. It is on this solid footing that we prepare to tackle what lies ahead and ensure that we continue to support early-career African women researchers as they work to find solutions to local and global development challenges.

We look forward to breaking new ground together as we launch our 2021-2025 Strategic Plan in 2022.

“One of the things that really brought Rose and I together, as we were founding Mawazo, was recognising that both women in the sciences and social sciences face very similar challenges in launching their professional careers.”

Rachel Strohm, Board Chair and Mawazo Co-Founder
Celebrating Five Years of Investing in Africa’s Scientists
How did we get here? A timeline of our first five years at the Mawazo Institute

"The shape of Mawazo has evolved and exceeded my wildest dreams. Over the first five years, our idea of who we are, what we're trying to achieve, and how we reach our beneficiaries has really been shaped by the people who joined the team - bringing their vision into the mix."
Dr. Rose Mutiso, Former CEO and Mawazo Co-Founder

2016
- Rachel and Rose develop the idea for a research institution in Africa for African women (Berkeley, California)
- Mawazo secures initial seed funding
- Mawazo Institute is registered in the United States

2017
- Mawazo Institute is registered in Kenya
- Mawazo hires its first employee: Elaine Mungai, Programme Manager
- Mawazo launches its 1st programme: PhD Scholars Programme
- 170+ applications received
- Mawazo secures its first institutional funding partners (Oct 2018)

2018
- Mawazo welcomes its first cohort of PhD Scholars: 10 Kenyan PhD candidates whose research holds developmental relevance and the potential for transformational change in their communities and beyond
- 10 research fields, 6 universities and 12 SDGs targeted by Mawazo researchers
- Mawazo launches its 2nd programme: The Public Engagement Programme
- We hold our first public engagement event, the Nairobi Ideas Night (March 2018)
- We launch the first episode of the Nairobi Ideas Podcast (Oct 2018)
- We publish our first E-books: The Faces of Kenyan Science and Science Kibao (Dec 2018)
- Mawazo grows to 7 employees and consultants

2019
- The 1st cohort of Mawazo PhD Scholars graduate
- $80,000 in research, travel, and training grants disbursed
- Mawazo appoints its inaugural Board Chair: Rachel Strohm

2020
- Mawazo announces its 3rd programme: The Mawazo Learning Exchange Fellowship and platform
- 109 applications received from 14 countries
- Mawazo responds to the COVID-19 pandemic
- We carry out our first survey of the impact of COVID-19 on Africa’s higher education system
- Mawazo grows to 10 employees and consultants

2021
- Mawazo launches the Mawazo Learning Exchange Fellowship: an online learning platform developed with our core beneficiaries in mind
- 48 Fellows chosen from 8 countries
- Dr. Rose Mutiso steps down as CEO
- Dr. Fiona Moejes steps in as Acting CEO
- Mawazo launches its 4th programme: The Policy Fellowship
- Mawazo welcomes its 1st policy Fellow, Sahra Ahmed Koshin
- Mawazo attracts $1.3 million in new funding
- Mawazo creates a new Strategic Plan for its next 5 years of operation
- Mawazo grows to 14 employees and consultants

Thanks for journeying with us!
Inside the Programmes:
The Mawazo Learning Exchange

In 2020, the Mawazo institute launched the Mawazo Learning Exchange (MLEx), a professional training platform for early-career African women in academia and research, as well as a growing library of resources tailored to the African context and available to scholars and academics, globally. The MLEx programme is guided by four principles:

1. To create a learning environment that encourages critical thinking, supports diverse ways of learning, and offers flexible access to on-demand content tailored to the African context.
2. To provide training courses that significantly, and demonstrably, increase the performance of the individual fellows in their doctoral programs to fulfill their potential as thought leaders with impact and visibility in academia and beyond.
3. To offer a venue that facilitates contact between fellows and academic institutions and professional experts in their scientific fields.
4. To foster a sense of community that encourages reciprocity and cooperation among fellows while bolstering coaching and mentorship.

As quality professional development is central to MLEx, we provide training via a combination of tailor-made on-demand virtual courses through our in-house MLEx e-learning platform and virtual live sessions. These are complemented by a virtual Leadership and Career Retreat. These courses are developed in-house by Mawazo staff members and external expert contributors, and are grouped into two categories: MLEx CoreCourses that cover core academic and professional competencies (e.g., research budgeting & financial management, academic publishing, grants writing, policy and public engagement and science communication) and MLEx MicroCourses that expose Fellows to new concepts that enhance their research and professional development (e.g., Internet and data security, gender lens for researchers, ethics in research).

In 2021, we introduced our inaugural cohort of the MLEx programme to three CoreCourses as well as three MicroCourses. Early 2022 will see us launch the Gender Lens for Researchers MicroCourse as well as the Public Engagement and Science Communication and Leadership and Career CoreCourses. The creation of these courses required the engagement of 37 experienced external experts.

CoreCourses:
- Budgeting and Financial Management
- Academic Writing, Publishing and Grants
- Policy Engagement for Researchers

MicroCourses:
- Ethics in Research
- Internet and Data Security
- Participatory Action Research

Our 41 Fellows, in East African institutions across the region, were from Kenya, Uganda, Rwanda, Tanzania, Ethiopia, Benin, Sudan, and the Democratic Republic of Congo. All Fellows were also assigned to MLEx Peer Groups, which are small interdisciplinary groups of four-to-five Fellows. This increased peer interactions, mentorship, support, and networking. Additionally, we connected 30 experienced mentors with our Fellows, for a year-long virtual MLEx Mentorship Programme.

December 2021 saw us launch the Mawazo Fellows Fund, which is available to all MLEx Fellows and alumni of the MLEx Fellowship Programme as well as its preceding programme, the PhD Scholars Programme. They are eligible for funding on a rolling basis for research activities, conference travel, specialisation training, and research translation. Fellows and alumni are eligible for grants that can support time-bound activities (within 6 months) with demonstrated benefits for their research and professional development. We encourage our beneficiaries to utilise this funding to secure and fund work placements at reputable institutions in academia, research, and the public and private sectors. The first cycle of grants are due to be disbursed in January 2022.

A mid-programme check-in conducted in November 2021 showed that all Fellows rated their experience of the programme, up to the mid-programme check-in, highly:

- Excellent: 38%
- Very Good: 48%
- Good: 15%
- Not Applicable: 15%

Out of 40 respondents

As we begin to prepare for our next cohort of Fellows to the MLEx programme, we are eager to broaden our application recruitment beyond the East African region. This is to allow future cohorts to have a broader continental representation.

This is the beginning of the MLEx Fellowship Programme, We look forward to a more impactful year ahead.

“"When I joined the Mawazo MLEx programme, I had just begun my PhD. There were many things I wasn’t aware of, for example budgeting and financial management. I also did not have funds for work, but through the knowledge I acquired through the MLEx programme, I improved my understanding of resource mobilisation for research. I got two more grants to support the second half of my study thanks to this. Joining Mawazo has been the best thing that happened to me in 2021.”

Evaline Chepng’etich Sang
PhD Candidate in Agribusiness Management, Jomo Kenyatta University of Agricultural Technology
2021 Mawazo Learning Exchange Fellow
Meet the Class of 2021: 

**MLEEx Fellows**

**Agriculture**

- **Edna Muthamia-Kenya**
  - Edna’s research will help reduce the overall use of synthetic fungicides in flower production systems for more environmentally friendly disease control and management measures.

- **Evaline Chepng’etich Sang’-Kenya**
  - Evaline equips young learners with the skills and knowledge necessary to transform agriculture into agribusiness. She also studies the effectiveness of climate change adaptation strategies in improving income for farmers.

- **Kavengi Kitonga-Kenya**
  - Kavengi is evaluating the role of tsetse fly and tick management control strategies in enhancing the welfare of smallholder livestock farmers. Diseases caused by tsetse flies and ticks in various serious, remain neglected areas of research.

- **Pauline Orondo-Kenya**
  - Pauline examines how habitat conditions affect malaria vectors, and is developing additional information on how to control immature mosquitoes before they emerge from their breeding places.

- **Marie Zaninka-Rwanda**
  - Using agribusiness virtual marketing platforms, Marie is building the capacity of smallholder livestock farmers to get fair prices for their produce. Through her research, she hopes to stimulate rural development and reduce poverty by increasing farmer’s incomes.

- **Rogia Gomez-Benin**
  - Rogia studies biosecurity measures within poultry farms and their impact on the final quality of poultry products. This new research will shed light on the existing flaws in health management (biosecurity) within farming systems on the continent.

- **Veronika Okaron-Uganda**
  - Velma’s research identifies leaf spot resistant lines in groundnuts to support the efficient development of improved varieties, and disease management. Groundnuts is an important global-cereal crop and a major source of protein and vitamins in many rural areas of Africa.

**Biotechnology**

- **Hellen Gitonga-Kenya**
  - Hellen’s goal is to improve the livelihoods of smallholder farmers in East Africa. Her research investigates the significance of secondary metabolites in resistance of Cowpea to Flower Bud Thrips, in order to enhance improvement of the crop for farmers.

- **Joanne Adero-Uganda**
  - Joanne studies the sweet potato genome to identify genetic markers for disease resistance that can be used to accelerate development of resistant varieties for resource poor communities that are highly dependent on the crop for food, nutrition and income security.

- **Pauline Muriuki-Kenya**
  - Pauline investigates cancer drug development using Photodynamic Therapy (PDT), a treatment that combines light energy with a drug (photosensitizer) to destroy cancers and precancerous cells.

- **Ruth Mwangi-Kenya**
  - Ruth examines how habitat conditions affect malaria vectors, and is developing additional information on how to control immature mosquitoes before they emerge from their breeding places.

- **Sylvia Mutinta-Kenya**
  - Using genome editing tools, Sylvia is building parasitic resistance in staple cereals by managing the parasitic plant, Striga. Striga greatly impacts production of Africa’s most staple cereals (maize, millet, sorghum and rice), reducing production by 30%-100%.

- **Velma Okaron-Uganda**
  - Velma’s research identifies leaf spot resistant lines in groundnuts to support the efficient development of improved varieties, and disease management. Groundnuts is an important global-cereal crop and a major source of protein and vitamins in many rural areas of Africa.

**Chemistry**

- **Emily Ngeno-Kenya**
  - Emily studies the concentration levels of endocrine-disrupting chemicals in water sources and how to remove them using local plants. These chemicals can cause/ result in adverse health effects including neurological disorders, behavioural disorders, reproductive health disorders, tumours and birth defects.

- **Flora Chikrona-Kenya**
  - Flora is studying the level of Perfluorooctyl acid toxic, persistent organic pollutants in surface water. From her findings, she hopes to develop an effective method for removing them that is cheap, readily acceptable, and that uses locally available materials.

**Climate Change & Environment**

- **Desta Gebeeyehu-Ethiopia**
  - Desta provides innovative research-based evidence to policymakers on the use of solid wastes for clean energy, and biofertiliser to reduce environmental pollution and enhance the economic benefits to communities.

- **Fatuma Nakiguli-Uganda**
  - Fatuma develops novel protocols for recycling bio-waste to produce low-cost, and better nutritional algae-based feeds for livestock, poultry and fisheries. Her novel bio-feeds will help boost livestock, poultry and fish farming, contributing to increased food production and security.

- **Lilian Kong’ani-Kenya**
  - Lilian’s research explores policies on the use of medication to resolve developmental conflicts. Her research also contributes towards the achievement of SDG16 and the Africa Agenda Goal 1, which aim to achieve peace, justice and strong governance institutions.

- **Maysoon Osman-Sudan**
  - Maysoon investigates the impacts of climate change and land use and land cover changes (SULCC) on crop production for smallholder crop farming. Her findings will provide essential information on how small-scale farmers can adapt to these changes to minimise risk.

- **Mutono Nyamai**
  - Mutono studies the prevention of waterborne diseases by examining urban water supply. She is investigating the spatial and temporal patterns of water distribution in Nairobi and how it is associated with morbidity of waterborne diseases in the region.

**Meet the Class of 2021:**

**MLEx Fellows**
Meet the Class of 2021: MLEEx Fellows

Meet the Class of 2021: MLEEx Fellows

Sally Musungu

Sally’s goal is to improve the climate change crop pest monitoring framework for a food secure world. She is developing a pest monitoring framework that will guide policymakers to make intervention strategies that reduce and manage crop pest burden.

Yvonne Githiora

Yvonne’s research promotes stakeholder voices in ecosystem service assessment in western Kenya. She focuses on the link between communities and ecosystems, and how scientific information can be used to inform development planning and processes.

Engineering

Dorcus Bernard-Kenya

Dorcus’ research into the use of Super Absorbent Polymers (SAPs) in irrigation will provide new knowledge on how to increase water use efficiency in irrigation, leading to enhanced resilience of livelihoods in arid and semi-arid lands to the effects of drought and climate change.

Frida Andalu-Tanzania

Frida’s research will contribute to greener practices in the petroleum industry. She is developing a volatile corrosion inhibitor from plant extracts that can be used for corrosion inhibition in gas pipelines. Conventional inhibitors are toxic and hence unsafe to the environment.

Food Science

Elizabeth Wafula

Elizabeth’s research uses near infrared spectroscopy and material science to develop prediction models for the rapid selection of beans that have optimum performance in micronutrient delivery, cooking behaviour, and storage stability. Her research will contribute to food security.

Linnet Mwangi-Kenya

Linnet analyses food safety in camel milk as a source of nutrition. Her research will help inform strategies, interventions and policies for the control of zoonotic tuberculosis, which is transmitted from sick camels to consumers through consumption of unpasteurised milk and products.

Milcah Wambua-Kenya

Milcah explores the use of cassava and other drought-resistant crops for domestic and commercial goods. Her research will contribute to food security, improved nutrition and income of smallholder farmers in Kenya through innovations in the cassava value chain.

Health Sciences

Hellen Koka-Kenya

Hellen identifies and investigates vector-borne diseases to help control outbreaks. By testing ticks, mosquitoes, and other insects to identify what viruses or bacteria they transmit, her research will help inform public health policies on monitoring outbreaks of these diseases.

Janet Surum-Kenya

Janet investigates academic resilience in marginalised areas. Her research will help promote the understanding and utilisation of academic resilience as an asset that students can draw from to achieve their educational goals and improve life chances.

Lorine Nyongesa-Kenya

Lorine explores sustainable biocontrol of insect pests and pathogenic microbes. By studying microorganisms that produce insect toxins and antimicrobial compounds, which are potentially useful in the biocontrol of insect pests, her research will help increase food security and health outcomes.

Mary Muriithi

Using molecular and bioinformatics tools to explore genetic changes in estrogen metabolism enzymes, Mary’s research will help understand the role of these mutations in the development of estrogen receptor-positive (ER+) breast cancer in Kenyan women, which constitutes 70% of breast cancer cases in the country.

Mercy Mwanja-Uganda

Mercy’s research assesses the quality of perinatal care and develops a context specific quality of perinatal care delivery model aimed at reducing perinatal deaths. Her research will strengthen maternal health care.

Peace Uwambaye-Rwanda

Peace’s research focuses on the role of periodontitis, a common gum disease, on preterm births. Her findings will inform policies on the improvement of oral health during pregnancy, contributing to the improvement of maternal and neonatal health.

Trizah Milugo-Tanzania

Trizah studies mosquito-parasite interactions with the aim of designing interventions that can disrupt the transmission of the malaria parasite to humans. The sub-Saharan African region carries a disproportionately high share of the global malaria burden, with many of the annual deaths preventable.

Physics

Cynthia Umuhire-Rwanda

Angel’s research uses space science analysis to develop weather and climate predictions that can help improve disaster management, agricultural yields, pandemic prediction, as well as improving GPS functions and operations used by companies and institutions.

Women’s Studies

Judy Ngina-Kenya

Judy is finding sustainable solutions for addressing gender gaps in food systems. Her research studies existing gender dynamics and how they affect the uptake of new technologies and methodologies in agriculture.

Thérèse Umuhizo

Thérèse is a research epidemiologist with a focus on tropical and viral infectious disease research and development programs. Her research will inform policy on the risk that viral infectious diseases pose in our society, and the timing and effectiveness of interventions.

Mary Mutigi

Mary’s research will contribute to greener practices in the petroleum industry. She is developing a volatile corrosion inhibitor from plant extracts that can be used for corrosion inhibition in gas pipelines. Conventional inhibitors are toxic and hence unsafe to the environment.

Rehema Matendo-Congo

Rehema uses plant-based treatment to mitigate mycotoxin contamination in local foods. Her research will impact food insecurity in the DRC, through the prevention and reduction of mycotoxin contamination in foods commonly consumed in the community.

Peace Uwambaye-Rwanda

Peace’s research focuses on the role of periodontitis, a common gum disease, on preterm births. Her findings will inform policies on the improvement of oral health during pregnancy, contributing to the improvement of maternal and neonatal health.

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MLEx Fellows
Inside the Programmes:

Mawazo Voices

About Mawazo Voices

The Mawazo Voices programme marks a shift in the strategic direction of our programming by combining existing Mawazo programmes under one umbrella that can help us leverage their impact. Under this new approach, Mawazo Voices will rely on Mawazo’s existing and innovative communication tools and public and policy engagement activities to amplify the work of African researchers, and share findings on African women in higher education and research.

Through Mawazo Voices, we will elevate the Big Ideas and voices of African researchers and thought-leaders, with a focus on African women researchers. The programme will also support and provide opportunities for researchers to cross over into non-academic sectors, where they can impact and contribute to solutions that address critical societal issues on the continent – and beyond. Our key focus areas under Mawazo Voices are described here.

Public and Policy Engagement

Using our in-house platforms, such as the Nairobi Ideas Podcast, Nairobi Ideas Nights, and Nairobi Ideas Exchanges, we continue to develop media that establishes African researchers on the continent as a source of timely, relevant, and credible evidence for informed decision making at all levels. Through public and policy engagement activities, Mawazo is able to ensure that the high-quality research of Mawazo’s beneficiaries becomes part of public discourse, which can help facilitate open discussion on the challenges currently facing the African continent, and possible solutions.

2021 saw us host the Nairobi Ideas Exchange: African in the Ivory, a virtual discussion where African women researchers, innovators and storytellers explored the persistent inequalities limiting who can do science - and who gets to benefit from its discoveries. This event was supported by funding from the Open Society Foundation and Falling Walls Engage. You can watch the discussion on our YouTube channel (Mawazo Institute).

In October, with a grant from the COVID-19 Africa Rapid Grant Fund, Mawazo partnered with storytelling trainer, Kendi Ntwiga-Nderitu, to host a virtual science communication workshop for scientists whose current area of work is helping the public and decision-makers to navigate the pandemic. Four female scientists from Malawi, Nigeria, South Africa, and Zimbabwe took part in the Stories for Impact Workshop where they learned how to share information and deliver science advice by adapting a storytelling for impact approach which merges technical information with personal stories.

Two more workshops are planned for 2022, targeting a total of 15 female scientists. In addition, with support from the Open Society Foundation and the COVID-19 Africa Rapid Grant Fund, we launched the third season of the Nairobi Ideas Podcast which focused on the COVID-19 pandemic.

Strategic Partnerships

Mawazo’s partnerships have increasingly been fundamental to improving our programming, extending our reach and anchoring Mawazo Voices. Our criteria for evaluating partnerships are: mission alignment, financial sustainability, and potential for impact.

Some of the organisations we worked with in 2021 include the African Population Health Research Centre (APHRC), AuthorAID, the L’Oréal-UNESCO For Women In Science initiative, Falling Walls Engage, Partnership for African Social and Governance Research (PASGR) and The Conversation Africa, with whom we partner with on training, capacity building and public engagement activities.

Mawazo also maintains strong links to local universities and research institutes through our programme beneficiaries who are located in universities across East Africa. We have also built a network of local academics and researchers who support our work as expert reviewers, implementers, and advisors. These partnerships and collaborations have gone a long way in creating a strong and better research community.

To become a Mawazo partner, you can contact us at contact@mawazoinstitute.org.
In 2021, through our staff and beneficiaries, Mawazo Voices provided timely insights on global conversations, including the status of women in science and the environment, the power of science engagement, the future of energy, and ongoing challenges in diagnosing rare diseases in Kenya. Through Mawazo Voices, we continued to build the capacity of African researchers to share their own science stories. Below, we share a selection of some of our contributions to thought leadership:

**Women in Science**

Dr. Fiona Moejes, Mawazo’s Acting CEO and Director of Programmes, was featured in a live TV broadcast of Mastercard Foundation, EdTech Monday, where she shared insights on the role of Edtech in laying the foundation for women’s leadership.

Later in the year, Dr. Fiona was selected as 1 of 20 African women forming the 2022 cohort of Women for the Environment Africa. The cohort includes leaders from 12 African countries with a diverse range of backgrounds, disciplines, and strengths. Through the programme, Dr. Fiona, a marine scientist, joined other women leaders to explore how to change the way conservation and environmental protection is done in Africa.

Women for the Environment Africa:

**Science Engagement**

The outgoing CEO, Dr. Rose Mutiso, was invited to give a talk at the Regional Scholarship and Innovation Fund (RSIF) Guest Webinar series where she discussed the path to research and thought leadership for early career African scientists.

RSIF Guest Webinar:

**RSIF Guest Webinar Series**

Topic: Path to Research & Thought Leadership for Early Career African Scientists

Guest Speaker: Dr. Rose Mutiso, CEO & Founder, Mawazo Institute

Location: Virtual

Date: 20th March 2022

RSIF Guest Webinar:

Rose was also one of eight Kenyans named in the 2021 Apolitical 100 Most Influential where she was recognised as the co-founder and CEO of the Mawazo Institute.

On the Mawazo blog, we interviewed 2021 Mawazo Learning Exchange Fellow, Judy Ngina, on why gender equity needs to be a priority in agricultural research.

On the Mawazo blog, we interviewed 2021 Mawazo Learning Exchange Fellow, Judy Ngina, on why gender equity needs to be a priority in agricultural research. Ngina is a Kenyan junior researcher enthusiastic about exploring topics at the nexus between gender and development. Her research, at the University of Nairobi, explored how existing gender dynamics in agriculture affect the uptake of new technologies and methodologies.

**Science Engagement**

Kari Mugo, Mawazo’s Public Engagement Lead, attended the Falling Walls Science Summit in Berlin where she took part in a Round Table discussion on the future of the science engagement field. Discussants included global funding institutions and sector leaders in science engagement.

**FALLING WALLS FOUNDATION**

In October, with a grant from the COVID-19 Africa Rapid Grant Fund, Mawazo partnered with storytelling trainer, Kendi Ntwiga-Nderitu, to host a virtual science communication workshop for scientists who are helping the public and decision-makers to navigate the pandemic. Four women scientists from Malawi, Nigeria, South Africa, and Zimbabwe took part in the Stories for Impact Workshop where they learned how to share information and deliver science advice by adapting a storytelling for impact approach which merges technical information with personal stories.
“The Mawazo Learning Exchange programme has been highly impactful. I am one of the lucky women that has been trained by Mawazo Institute on professional development and financial management. While conducting research I was able to manage funds on my own. I was applying what I was taught in class on budgeting and financial management.”

Sylvia Mutinda
PhD student of Molecular Biology and Biotechnology at Pan African University (Kenya)
2021 Mawazo Learning Exchange Fellow

The survey further revealed that while 82.4% of respondents were able to continue their education or work from home during the pandemic, many saw losses in productivity and increases in their domestic responsibilities as a result. In this area there were notable gender differences:

- Women reported greater losses in productivity than men and increases in their domestic responsibilities as men's domestic responsibilities decreased.
- In contrast, decreases in productivity were not necessarily aligned with increases in domestic responsibilities for other groups: for example, older respondents, instructors, and people in Arts and Humanities fields reported smaller losses in productivity despite larger increases in domestic responsibilities than comparison groups, while people in North Africa reported some of the largest productivity losses despite being the only regional cohort to report a decrease in domestic responsibilities.

Finally, the survey explored how the COVID-19 pandemic affected access to career-enabling opportunities and resources. The single most severe effect was related to mobility – the ability to travel to pursue opportunities – where 64.4% of respondents reported significant decreases.

In this case, demographic differences in our findings suggested that women, older respondents, people in West Africa, and people in Arts and Humanities and STEM fields were the least affected. In contrast, young respondents (especially those aged 20-29), people based in North Africa, and people working in Social Sciences, Journalism, and Information fields consistently reported the greatest effects. You can view the full report sharing our findings on our Publications page on the website.
### Research by 2021 Mawazo Learning Exchange Fellows

<table>
<thead>
<tr>
<th>Fellow</th>
<th>Type</th>
<th>Title</th>
<th>Journal or Platform</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elizabeth Nakhungu Wafula</td>
<td>Journal Article</td>
<td>Antinutrient to mineral molar ratios of raw common beans and their rapid prediction using near-infrared spectroscopy</td>
<td>Food Chemistry Journal</td>
<td>05/08/2021</td>
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<tr>
<td>Lillian Kong’ani</td>
<td>Conference Proceedings</td>
<td>Conflicts Associated With The Installations Of Geothermal Energy, Case Of Olkaria IV Project, Kenya</td>
<td>The 15th JKUAT Scientific, Technological and Industrialisation Conference Book of Abstracts</td>
<td>25/03/2021</td>
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<tr>
<td>Maysoon Osman</td>
<td>Journal Article</td>
<td>Climate Variability and Change Affect Crops Yield under Rainfed Conditions: A Case Study in Gedaref State, Sudan</td>
<td>MDPI’s Agronomy Journal</td>
<td>24/08/2021</td>
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<tr>
<td>Mutono Nyamai</td>
<td>Journal Article</td>
<td>Spatio-temporal patterns of domestic water distribution, consumption and sufficiency: Neighbourhood inequalities in Nairobi, Kenya</td>
<td>Habitat International Journal</td>
<td>01/03/2021</td>
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<tr>
<td>Peace Uwambaye</td>
<td>Journal Article</td>
<td>Prevalence of Periodontitis and Associated Factors among Pregnant Women: A cross sectional survey in Southern Province, Rwanda</td>
<td>Rwanda Journal of Medicine and Health Sciences</td>
<td>14/03/2021</td>
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### 2018 PhD Scholars Alumni

<table>
<thead>
<tr>
<th>PhD Scholar</th>
<th>Type</th>
<th>Title</th>
<th>Journal or Platform</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elizabeth Benson</td>
<td>Conference Proceedings</td>
<td>Comparative Analysis of Machine Learning Classification Techniques for Neonatal Hypoglycaemia Symptoms Screening</td>
<td>Proceedings of the Kabarak University International Research Conference on Computing and Information Systems</td>
<td>11/06/2021</td>
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<tr>
<td>Agnes Nasir</td>
<td>Journal Article</td>
<td>Modelling the Spread of Schistosomiasis in Humans with Environmental Transmission</td>
<td>Bulletin of Mathematical Biology Journal</td>
<td>05/04/2021</td>
</tr>
</tbody>
</table>

**Note:** The above tables are based on the information provided in the image. The dates and platforms may vary depending on the original source.
Cosmas is a Public Sector/International Development specialist with over ten years of experience in financial and grants management, institutional strengthening, capacity building and project management. He has worked with African governments in Kenya, Malawi, Burundi and Ethiopia – and the International community in various sectors including Health, Security, Education, Research, Private Sector Development amongst others. He is experienced working with African Regional Governments and agencies including AU and COMESA, World Bank, USAID, ODI, DANIDA, Wellcome Trust, KENPHIN amongst others. He has previously worked as a senior manager in Advisory Services at PwC, Kenya where he worked with development partners and governments to facilitate smarter investments and adoption of strong financial governance. He is passionate about solving socio-economic problems through lean and effective interventions such as technology. He holds a BSc in Statistics from the University of Nairobi and a Postgraduate Diploma in Business Administration from the University of Nairobi.

Rachel Strohm

Rachel Strohm is a co-founder of the Mawazo Institute. She served as chief operating officer (COO) of Mawazo from 2016 - 2018, and has been the chair of the Board since 2018. She is passionate about closing the funding gap for African women in research, and amplifying their voices as subject area experts. Rachel’s own research focuses on the expansion of social protection systems across Africa. She is the current associate director of the social protection research program at Innovations for Poverty Action. Rachel holds an MA in political science from the University of California, Berkeley, an MA in international relations from the School of Advanced International Studies at Johns Hopkins University, and a BA in geography and French from Dartmouth College. Originally from Chicago, she is currently based in Nairobi.

Kim-Andrée Potvin

A native of Canada, Kim has over 20 years of experience in finance in various C-level roles in asset management, private banking and fund administration services in Europe (Paris, Luxembourg and Geneva) with expertise in ESG & impact investing. She is currently Chief Operating Officer and Partner at Bambo Capital Partners. Prior to that, she was the Chief Operating Officer of Swiss Private Bank Lenz & Co and for over 15 years at BNP Paribas in roles such as Chief Operating Officer in Switzerland, Head of Asset and Fund Services in Luxembourg and Head of Internal Audit Belgium. A dedicated conservationist, humanitarian and advisor to entrepreneurs in Europe and Africa, she is involved in numerous Boards on these continents. Enthusiastic and spontaneous by nature, Kim appreciates exciting environments where the status quo can be challenged. She is enthusiastic, practical and enjoys working in varied teams that strive to innovate. On the academic side, she has a bachelor’s degree in commerce (Finance and International Business) from McGill University as well as a Master’s Degree in Business (International Business) from Sherbrooke University in Canada. She is fluent in French and English.

Ruth Levine, PhD

Ruth Levine, PhD, is the CEO of IDinsight, a global advisory, data analytics, and research organization that amplifies social impact by partnering with leaders to develop tailored solutions. She was the program director of Global Development and Population Program at the William and Flora Hewlett Foundation between 2011-19. Previously, Ruth was a deputy assistant administrator in the Bureau of Policy, Planning and Learning at the U.S. Agency for International Development. In that role, she led the development of the agency’s evaluation policy. Ruth spent nearly a decade at the Center for Global Development, as a senior fellow and vice president for programs and operations, she co-founded the Center’s Global Health Policy Program. She also designed and evaluated health and education projects at the Inter-American Development Bank and the World Bank.

Cosmas Mulumba

Cosmas is an auditor with more than ten years of experience in auditing and financial management. He has worked as an auditor for various organizations including Afcoa, African Accounting Association, UNDP, AFRIL Fund, and KPMG. He holds a Master’s Degree in Business Administration from the University of Nairobi.

Daniele Ressler

Daniele Ressler is a senior nonprofit leader based in Nairobi, Kenya, with 13 years of experience in international development and research. Her “north star” is operational excellence and impactful social change informed by data and research – particularly in scaling organizations. Daniele is Impact Director of Lesaka Community Alliance, an FGD delivering community-based health services in Migori County, Kenya, where she directs Lesaka’s global financials, grants, and legal compliance; as well its monitoring, evaluation, and research activities. Additionally, Daniele brings a wealth of practical knowledge within the research and policy realms: leadership roles overseeing impact evaluations/SERCTs at Innovations for Poverty Action in Kenya and Uganda; as Director of Operations and Country Director, respectively, and management of post-conflict research initiatives at James Madison University’s Center for International Stabilization and Recovery. She holds an MSc in International Development from the University of London’s School of Oriental and African Studies, and an MWF from James Madison University.

Kyle Polite

A passionate nonprofit leader originally from Galesburg, Illinois, Kyle Polite is the current Deputy Director of Development at San Francisco Opera and was formerly the Managing Director of West Coast Development at the Tuck School of Business at Dartmouth. He previously lead the University of Sydney’s $2BN INSPIRED campaign – the first, and largest fundraising campaign in the history of Australian education – and had the privilege of working with the Global Fund for Children and the Partnership to Strengthen Innovation and Practice in Secondary Education (FISP/PS) to empower community-based organizations that support women, children and education throughout East Africa. Kyle earned his bachelor’s degree in Music and Ancient Languages at Dartmouth College studied Music History and Bassoon Performance at the Royal College of Music in London and held a Graduate Fellowship in Advanced Arts Leadership at the University of North Texas. In addition to Mawazo, he is a current board member of the Performing Arts Workshop in San Francisco, California and a past member of the Dartmouth Alumni Association of Silicon Valley, the Association of Fundraising Professionals International and the New York Regional Economic Development Council.

Christina Nduba-Banja

Christina is an advocate based in Nairobi who is experienced in advising on a broad range of commercial matters with a particular focus on mergers and advising private equity firms on acquisitions and investments in companies in Kenya. She specialises in assisting local and international clients set up business operations in Kenya within the regulatory framework while mitigating legal risks. She also has experience in Kenyan property law, real estate and joint ventures. She joined Coulson Harney as an Associate in January 2014 and was promoted to a Senior Associate in March 2015. Coulson Harney is a top tier full-service law firm based in Nairobi, Kenya and is part of Bowman’s: a premier Pan-African law firm with offices in four African countries and over 400 specialised lawyers. She holds an LLB from the University of South Africa, and a postgraduate diploma in Law from the Kenya School of Law.
## Financial Report

Annual income and expenditure for Mawazo in 2021 are summarised below:

### Mawazo 2021 Overall Operating Revenues and Expenses

<table>
<thead>
<tr>
<th>OPERATING REVENUES</th>
<th>AMOUNT (US$)</th>
<th>% of Total Exps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Donations</td>
<td>202,134.06</td>
<td></td>
</tr>
<tr>
<td>Foundations and other donors</td>
<td>992,621.85</td>
<td>32.8%</td>
</tr>
<tr>
<td><strong>TOTAL REVENUES</strong></td>
<td>*1,194,755.91</td>
<td>32.8%</td>
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</table>

<table>
<thead>
<tr>
<th>OPERATING EXPENSES</th>
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<tbody>
<tr>
<td>Programme Expenses</td>
<td>Scholar Expenses</td>
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<tr>
<td></td>
<td>3,291.35</td>
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<tr>
<td></td>
<td>Scholar Grants</td>
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<tr>
<td></td>
<td>-</td>
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<tr>
<td></td>
<td>Public Engagement</td>
</tr>
<tr>
<td></td>
<td>156,908.50</td>
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<tr>
<td></td>
<td>Policy</td>
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<tr>
<td></td>
<td>37,070.51</td>
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<tr>
<td></td>
<td>Training and Resources</td>
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<tr>
<td></td>
<td>163,025.25</td>
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<tr>
<td>Total Program Expenses</td>
<td>360,296</td>
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<tr>
<td></td>
<td>67.2%</td>
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<tr>
<td>Supporting Services Expenses</td>
<td>Administration Expenses</td>
</tr>
<tr>
<td></td>
<td>157,870.74</td>
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<tr>
<td></td>
<td>Fundraising Expenses</td>
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<tr>
<td></td>
<td>18,208.42</td>
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<tr>
<td>Total Supporting Services Expenses</td>
<td>176,079.16</td>
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<tr>
<td></td>
<td>32.8%</td>
</tr>
<tr>
<td><strong>TOTAL EXPENDITURE</strong></td>
<td>536,374.78</td>
</tr>
</tbody>
</table>

*Please note that this figure includes grants received in Q4 2021 for activities in 2022 and 2023.*
By donating to the Mawazo Institute, you’ll be supporting the next generation of women driving research for development in Africa. Your donations help us provide a range of resources to the promising young women we support.

To make a donation by check, please mail your contribution to:

The Mawazo Institute
P.O. Box 965, La Grange, IL 60525 USA.
The Mawazo Institute is registered 501(c)(3) non-profit in the US.

All donations are tax deductible for US donors. To donate by Card, Paypal or M-changa log in to:

mawazoinstitute.org/donate-to-us
2021 Annual Report

About Mawazo Institute

The Mawazo Institute is a Nairobi-based non-profit that leverages experts, citizens, and decision makers to inspire the big ideas our future needs.

contact@mawazoinstitute.org | www.mawazoinstitute.org

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