



Annual INNOVATORS INCUBATION Program 2025

Concept Note

3-7 Nov 2025



Meru University of Science
and Technology

www.tukuzeafrika.org

Executive Summary

Kenya's high school students have shown remarkable creativity through platforms such as the Kenya Science and Engineering Fair (KSEF) formally Kenya Science congress. Yet most innovations end at the competition stage without structured support to refine them into sustainable, market-ready solutions.

To bridge this gap, the Tukuze Afrika Foundation a youth-led organization in partnership with the Meru University of Science and Technology (MUST) as the main host, alongside the Meru National Polytechnic (MNP) and Kenya Methodist University (KeMU), is launching the Innovators Incubation Program 2025. Running from **3rd – 7th November 2025** at the Innovation & Entrepreneurship Center, MUST, the program will incubate 10 winning innovations, engaging 24 students and 10 teachers.

The program combines technical training (electronics, 3D printing, drones, AI), innovation methods (human-centered design, IP rights, global citizenship, SDGs), and industry exposure through job shadowing. Teachers will be retooled in Project-Based Learning to strengthen school-level STEM Clubs and sustain innovation culture.

Unlike competitions, this initiative is part of an annual cycle kSEF to Bootcamp to MUSTIEW to Incubation to Follow-up & Market Pipeline ensuring continuity and committing to develop at least one student innovations into the market each year.

By the end of 2025, the program will deliver: 10 refined prototypes, 24 student innovators skilled in STEM and entrepreneurship, 10 retooled teachers, stronger industry-school-university linkages, 208 trees planted, and Meru institutions recognized as a hub for high school innovation incubation.

We invite partners, sponsors, and industry leaders to join us in resourcing and mentoring this initiative. Together, we can transform student creativity into sustainable enterprises, community solutions, and job opportunities, advancing Kenya's Vision 2030 and the SDGs.



Background

In May 2025, Tukuze Afrika Foundation, in partnership with Meru University of Science and Technology (MUST) and other stakeholders, successfully organized the Innovators Bootcamp, Exhibition & Awards under the theme “From Ideas to Impact.”

The Bootcamp and Exhibition brought together over 250 students and teachers from more than 100 schools, showcased 22 innovative projects, and celebrated 15 winning innovations. The event was graced by H.E. Dr. Joyce G. N. Kithure, Second Lady of the Republic of Kenya, who emphasized the national importance of nurturing young innovators as future drivers of Kenya’s development.

Looking ahead, in October 2025, Meru University will host the MUST Innovation and Exhibition Week (MUSTIEW), spotlighting even more student innovators.

As a natural continuation of these milestones, the Innovators Incubation Program will be held from 3rd – 7th November 2025 at the Innovation & Entrepreneurship Center, Meru University, immediately after schools close. It will bring together the Top 7 innovations from the Bootcamp and the Top 3 innovations from MUSTIEW, specifically targeting Form 2 and Form 3 high school students.

Through this program, the selected students will not only refine their prototypes but also acquire entrepreneurial skills and mindsets that are essential in today’s world. By nurturing them early, the program contributes to solving the challenge of youth unemployment by preparing innovators who can create their own enterprises, generate jobs, and develop solutions that address both local and global challenges.

Innovators Bootcamp Sponsors and partners



H.E. Dr. Joyce G. N. Kithure
Spouse to the Deputy President
Of the Republic of Kenya



Problem Statement

Kenya's youth represent the largest demographic but face rising unemployment, underemployment, and limited access to innovation ecosystems. In rural counties like Meru and Tharaka Nithi, students often lack:

1. Access to advanced STEM tools and mentorship.
2. Opportunities to refine prototypes beyond exhibitions.
3. Exposure to real-world industry environments.
4. Awareness of how their innovations connect to global sustainability challenges (SDGs).

At the national level, the Kenya Science and Engineering Fair (KSEF) formerly known as the Kenya Science Congress provides a structured competition for high school students, progressing from sub-county to county to regional to national levels. While KSEF motivates creativity and participation, it is primarily competition-driven. Most projects end at the National competition stage and do not benefit from structured follow-up, training, or mentorship to turn them into real-world solutions.

This means that even innovations rooted in local problems, which may not advance in the competition, often disappear despite their high potential. For example, students from Marimanti Girls developed a honey extractor after observing the struggles of community members with traditional honey extraction methods. While such an innovation might be overlooked in a competition setting, it represents a practical local solution that could be scaled to benefit communities across Kenya and even globally. Without incubation, such innovations risk being abandoned instead of improved and scaled.

Additionally, at competitions like KSEF, students rarely undergo training on problem identification, design processes, or intellectual property protection, nor are they exposed to advanced technologies such as 3D printing, drones, or artificial intelligence that could elevate their projects.

The Innovators Incubation Program is designed to fill this gap. It shifts the focus from competition to solution development and long-term learning, by equipping students with the skills, mentorship, and exposure needed to:

1. Refine prototypes into practical solutions.
2. Connect innovations to local and global needs.
3. Protect and commercialize their ideas.
4. Experience hands-on training with advanced STEM tools.

In doing so, the program ensures that even local, community-driven innovations have a chance to grow into sustainable solutions that can transform societies



About Us

The Tukuze Afrika Foundation is a youth-led organization committed to advancing Science, Technology, Engineering, and Mathematics (STEM) education, innovation, and 21st-century skills among young people in Meru, Tharaka Nithi Counties, and beyond. Guided by the belief that Africa's future lies in nurturing creativity and resilience among its youth, the Foundation creates inclusive platforms where learners can gain hands-on experience, showcase innovations, and develop solutions to real-world challenges.

Alongside flagship initiatives such as the Innovators Bootcamp, Exhibition, and Awards, we are also establishing STEM Clubs in schools to sustain innovation year-round. These clubs nurture curiosity, critical thinking, and teamwork while preparing students for opportunities like the Bootcamp and Incubation Program.

In May 2025, the Bootcamp engaged over 250 students and teachers from 100+ schools, showcased 22 innovations, and celebrated 15 winners. Our efforts have earned global recognition, including a 2025 UNESCO GCED Prize nomination, affirming our role as a leader in empowering youth as innovators and responsible citizens.

Through these initiatives, Tukuze Afrika is building a pipeline of future innovators, entrepreneurs, and researchers equipped to thrive in the Fourth Industrial Revolution while contributing to Kenya's Vision 2030 and the SDGs.

Objectives

1. To incubate and refine 10 winning high school innovations (7 from the Innovators Bootcamp and 3 from MUSTIEW) into functional, scalable prototypes through hands-on training, mentorship, and technology exposure.
2. To empower 24 student innovators (Form 2 and 3) with advanced STEM, entrepreneurship, and sustainability skills that will prepare them for higher education pathways, research opportunities, and enterprise creation.
3. To strengthen the innovation pipeline from high schools to universities and industry by positioning the Innovation & Entrepreneurship Center at Meru University as a hub for nurturing young innovators.
4. To connect all 24 student innovators with at least 20 industry, government, and community partners through job shadowing and mentorship, offering them real-world exposure and practical workplace experience.
5. To align every student project with relevant Sustainable Development Goals (SDGs), ensuring they directly contribute to local needs while addressing global challenges such as climate action, clean energy, sustainable agriculture, and quality education.
6. To promote environmental responsibility among young innovators by offsetting the program's carbon footprint through the planting of 208 trees and publishing an Environmental Sustainability Report in line with the UNFCCC framework.
7. To establish a collaborative ecosystem of schools, universities, government, private sector, and development partners to support these 24 student innovators beyond incubation through ongoing mentorship, research development, and potential commercialization.

Innovativeness and Feasibility of the Program

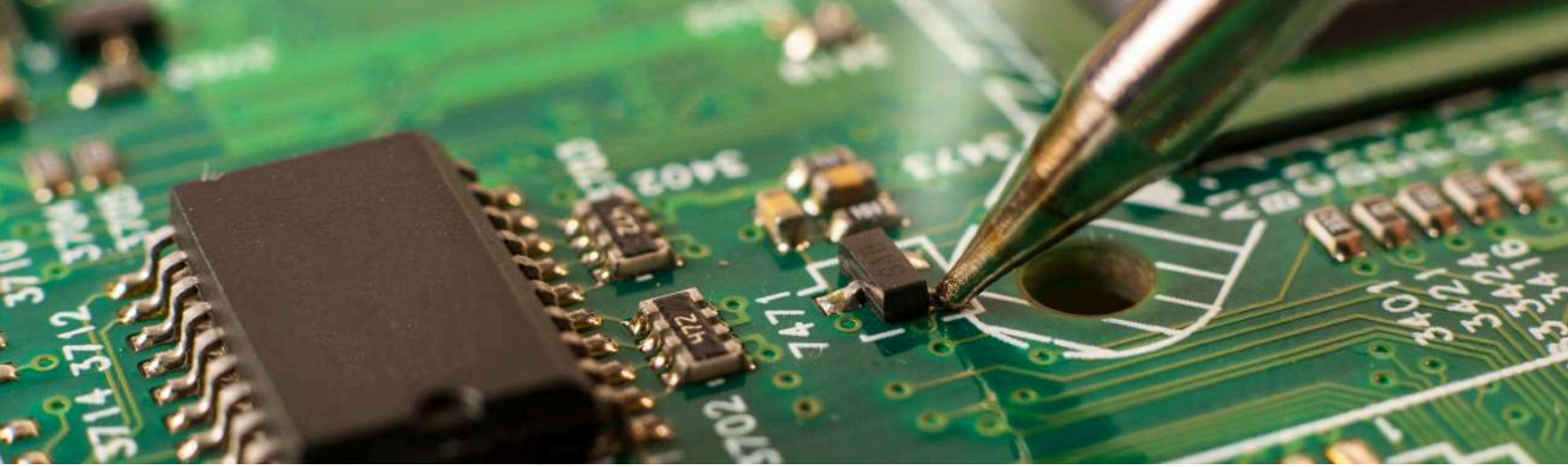
The Innovators Incubation Program 2025 is both innovative in design and feasible in implementation, making it a pioneering model for advancing high school innovations in Kenya. Unlike competitions such as the Kenya Science and Engineering Fair (KSEF), which largely focus on exhibitions and end at the competition stage, this program emphasises incubation, solution development, and long-term learning.

Its innovativeness lies in several aspects: it targets high school students, equipping them early with entrepreneurial mindsets and 21st century skills. It blends advanced technologies (AI, drones, 3D printing, Virtual Reality) with community-rooted solutions (e.g., the Marimanti Girls' honey extractor). It embeds sustainability through carbon tracking, tree planting, and alignment with the SDGs, and it ensures a multiplier effect by retooling 10 teachers in Project-Based Learning and innovation mentorship. Finally, it creates university–industry–school linkages through job shadowing and mentorship.

The program is feasible because it builds on an existing annual system of innovation activities and leverages a strong multi-institutional partnership:

1. May 2025 – Innovators Bootcamp: brought together 250+ student innovators and teachers, producing 15 winning innovations.
2. October 2025 – MUST Innovation and Exhibition Week (MUSTIEW): will showcase additional high school innovations, from which the top 3 will join incubation.
3. November 2025 – Innovators Incubation Program: a one-week in-campus incubation hosted at Meru University of Science and Technology (MUST), with Meru National Polytechnic (MNP) leading Electronics & Soldering Skills training, and Kenya Methodist University (KeMU) facilitating Drone Piloting & Technology training.
4. Follow-up & Market Pipeline: after incubation, selected projects will continue receiving mentorship, with a commitment to ensure at least 1 innovations per year are developed into the market, channeled into a structured pipeline for further research, scaling, and commercialization.

This cycle makes the incubation program not just a one-time event, but an annual ecosystem that consistently identifies, supports, and develops young innovators. With the combined expertise of Meru University of Science and Technology, Meru National Polytechnic, and Kenya Methodist University, alongside industry partners, the program ensures continuity, technical depth, and real-world outcomes.



Core Training Modules for students Innovators

3 – 7 Nov 2025

The incubation program is built around nine core modules, each carefully designed to strengthen both the students and their innovations.

1. **Electronics and Soldering Skills (Meru National Polytechnic):** Students will learn how to assemble, repair, and improve electronic circuits. This practical knowledge will enable them to make their prototypes more durable, functional, and reliable, ensuring that their ideas are not just theoretical but physically workable.
2. **3D Printing Technology (Meru University):** Learners will be introduced to computer-aided design (CAD) and how to translate their ideas into tangible prototypes using 3D printers. This will help them create customized components, reduce production costs, and accelerate innovation cycles by moving quickly from design to product.
3. **Drone Piloting and Technology (Kenya Methodist University):** The program will expose students to the basics of drone operation and applications in agriculture, mapping, environmental monitoring, and logistics. By understanding drone technology, students can explore new possibilities for applying aerial solutions to local challenges such as food security and disaster response.
4. **Artificial Intelligence (AI) Fundamentals (Meru University):** Students will be introduced to the concepts of AI and its applications in everyday life. By exploring simple AI tools, they will learn how to add “smart” features to their innovations, such as automation or predictive capabilities, making their projects more advanced and future-ready.
5. **Human-Centered Design & Systems Thinking (Meru University):** This module will train students to approach innovation from the perspective of the end user. They will learn how to analyze problems holistically, empathize with users, and design solutions that are user-friendly, practical, and sustainable. This ensures that their innovations solve real community challenges.

6. **Intellectual Property Rights (IPR) (Meru University):** Students will be introduced to patents, copyrights, and trademarks, and learn how to protect their innovations. This knowledge is critical in ensuring that their creative efforts are safeguarded and can be commercialized responsibly in the future.

7. **Global Citizenship Education (GCED) (Meru University):** Beyond technical skills, students will engage in values-based learning to foster leadership, inclusivity, ethics, and cultural awareness. This will help them become innovators who are not only technically competent but also socially responsible and globally aware.

8. **Sustainable Development Goals (SDGs) (Meru University):** Each innovation will be aligned with one or more SDGs, such as clean energy, quality education, or climate action. This alignment will give students a broader perspective, showing them how their local solutions contribute to global challenges, while also making their innovations more attractive to investors and partners.

9. **Job Shadowing:** During the program, students will spend one day shadowing professionals in university and institutes departments and companies, organizations, and corporates within a 20 km radius of Meru Town. This will give them real-world exposure to workplaces, role models, and career pathways, while helping them understand how innovation is applied beyond the classroom.

Teachers' Retooling and Capacity Building

3 – 7 Nov 2025

In addition to student incubation, the program will retool 10 teachers who accompany their students. Teachers are key drivers of innovation in schools, and by equipping them with new skills, we ensure the incubation has a multiplier effect beyond the 24 participating students.

Environmental Sustainability Commitment

During the Innovators Bootcamp, we tracked the program's carbon footprint as part of our commitment to responsible event management. To offset this footprint, we are planting 208 trees in Meru County, contributing directly to local reforestation efforts. In addition, we will publish an Environmental Sustainability Report to ensure transparency and accountability. This initiative reflects our voluntary alignment with the UNFCCC framework and demonstrates our dedication to promoting climate responsibility among young innovators and partners.



Partners' Meetup & Networking Breakfast



To foster collaboration and recognize our supporters, we will host a Partners' Networking Breakfast on **24th October 2025** at **Chandy Gardens, Meru**.

This event will bring together:

- Directors, Principals and teachers
- Corporate sponsors and partners
- Government and county leaders
- Universities and institutes staff
- Industry mentors and stakeholders

Breakfast Pass

5,000/=

The Breakfast will serve as a platform to:

- Share outcomes and insights from the Innovators Bootcamp and Exhibition.
- Align partners on the upcoming Incubation Program and clarify their roles in training, mentorship, job shadowing, and support.
- Provide an informative session for schools, partners, and leaders to better understand the incubation model, expected outcomes, and more opportunities for collaboration.
- Facilitate a networking session for partners, creating linkages between schools, industry, government, and universities.
- Publicly recognise sponsors and celebrate their contributions to youth innovation and STEM education.
- Offer a media engagement opportunity, with TV coverage and a live broadcast session to ensure wider visibility and recognition for all participating partners.

Chief Guest

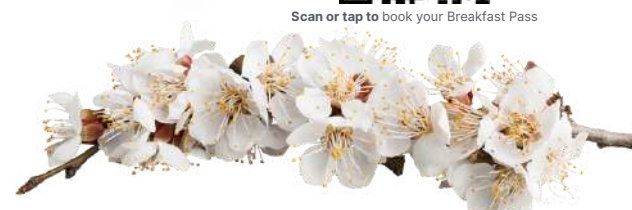
H.E Hon. Rev. Mutuma M'Ethingia
The Governor County Government of Meru



<https://tr.ee/innovationpartners>



Scan or tap to book your Breakfast Pass



**24th
Oct
2025**



Expected Outcomes

By the end of the Innovators Incubation Program, we will achieve outcomes that directly benefit students, communities, and partners:

1. **10 high school innovations refined into stronger, functional prototypes** – with potential for scaling, commercialization, or adoption in local communities. This creates real opportunities for partners to support the development of solutions that address agriculture, health, education, and environmental challenges.
2. **24 student innovators equipped with advanced STEM, innovation, and entrepreneurship skills** – forming a pipeline of future-ready talent. Partners benefit by connecting early with some of the brightest young minds who represent Kenya's next generation of researchers, engineers, and entrepreneurs.
3. **10 teachers retooled in Project-Based Learning and 21st Century Skills** – becoming innovation champions who will mentor and train hundreds of students in their schools. This ensures the incubation's impact continues beyond the 24 innovators, spreading to more learners and building a stronger innovation culture across the region.
4. **Stronger university-industry-school linkages** through mentorship and job shadowing where companies, institutions, and organisations within Meru and beyond will directly engage with students. This offers partners a chance to mentor youth, showcase their industries, and inspire potential future employees.
5. **208 trees planted to offset the program's carbon footprint** – demonstrating our commitment to climate responsibility. Partners contributing to this effort will be publicly recognized as champions of environmental sustainability, aligning with CSR priorities and the UN Sustainable Development Goals.
6. **An Environmental Sustainability & Innovation Impact Report published** – documenting outcomes and best practices. This report will highlight all supporting partners and provide visibility across schools, universities, communities, and media.
7. **Enhanced recognition of partner Institutions of Higher Education as a hub for high school innovation incubation** – positioning the Meru University of Science and Technology (MUST), Kenya Methodist University (KeMU), the Meru National Polytechnic, and their partners at the center of a growing ecosystem that nurtures young innovators, supports research, and drives community-based solutions.

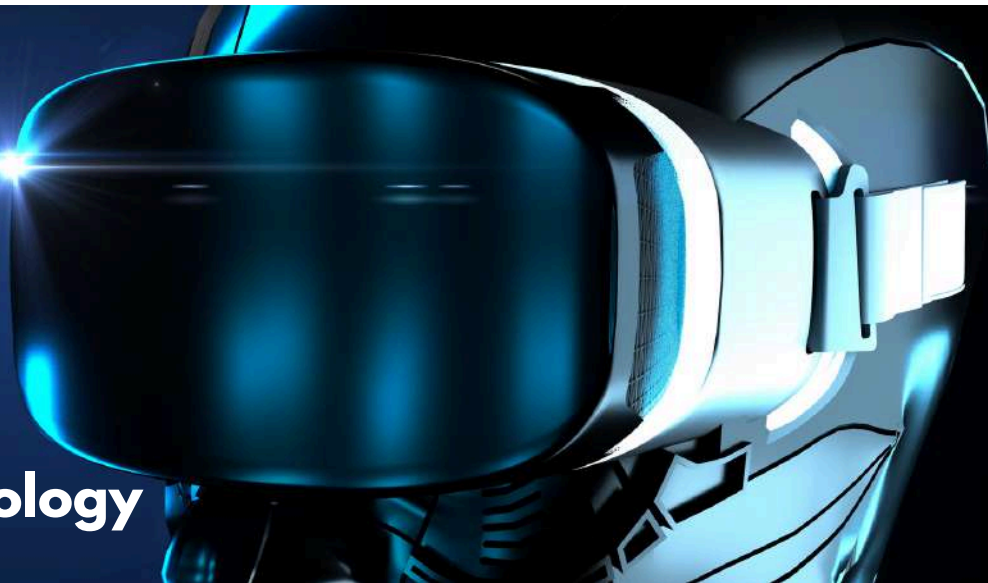


Tukuze
AFRIKA



Drone Technology

Virtual Reality Technology



**3D Printing & CAD
Technology**



**Soldering and
Electronics Skills**

Support We Are Seeking



To deliver a transformative and impactful incubation experience, we are inviting partners and sponsors to walk with us in shaping the next generation of innovators. Your support will directly contribute to advancing high school innovations from prototypes into real-world solutions.

We are seeking:

- **Financial Support** – to cover essential logistics such as meals, student facilitation, accommodation, Innovation development and training resources. This ensures all 24 student innovators can fully participate regardless of background, making the program inclusive and accessible.
- **Technical Expertise** – from professionals and specialists in areas such as Artificial Intelligence, drones, electronics, 3D printing, and design thinking. By sharing their knowledge, experts will mentor students and expose them to cutting-edge technologies that expand their horizons.
- **Industry Partnerships for Job Shadowing** – companies, organizations, and institutions within a 20 km radius of Meru Town are invited to host students for one-day job shadowing. This real-world exposure will allow students to see how innovation is applied in professional environments, inspiring career choices and fostering stronger school to industry to university linkages.
- **Equipment and Technology Support** – including drones, 3D printers, soldering kits, laptops, and related innovation tools. Access to such equipment is critical in helping students refine their prototypes into practical, durable solutions.
- **Visibility and Recognition Partnerships** – through media coverage, documentation, branding, and awards. These ensure that student innovators, supporting schools, and partners receive the recognition they deserve while amplifying the visibility of the program and its impact.

By contributing in any of these ways, partners will not only empower young innovators but also actively shape the future workforce, research pipeline, and sustainable solutions for our communities and beyond.

Why Partner With Us?

1. **Unmatched Visibility:** As a partner, your brand will be featured on TV and radio coverage, live event broadcasts, banners, teardrops, certificates, and reports. This ensures your support is seen and celebrated across schools, communities, and national media.
2. **Tangible Impact:** Your partnership directly empowers 24 of Kenya's brightest high school innovators and 10 teachers to refine and scale 10 community-rooted innovations into real solutions that improve lives.
3. **High-Value Networking:** You will have priority access to Directors, principals, teachers, government and county officials, industry mentors, university leaders, and the media during the Partners' Breakfast, incubation week, and awards events.
4. **CSR & SDG Alignment:** By supporting this program, you fulfil your corporate social responsibility goals while advancing SDGs 4 (Quality Education), 8 (Decent Work & Economic Growth), 9 (Industry, Innovation & Infrastructure), and 13 (Climate Action).
5. **Championing Sustainability:** Your organization will be recognized as a climate action leader through our tree planting initiative and Environmental Sustainability Report, positioning you as a visible advocate for responsible innovation and green growth.



SELECT THE RIGHT PACKAGE FOR YOU

We invite partners to support the Innovators Incubation Program 2025 through tailored packages that provide maximum impact, visibility, and engagement opportunities.

<https://tr.ee/innovationpartners>



Scan or tap to Choose Your Package

PACKAGE	INVESTMENT	BREAKFAST SPEAKING SLOT	BREAKFAST PASSES	BRANDING & VISIBILITY
Platinum Partner	500,000+ Kes	10 Mins	10 Guests	Lead Partner branding on all materials, certificates, and reports; Up to 4 banners (podium) + 7 teardrops across venue; featured in Impact Report; priority recognition, Exclusive TV interview, radio features, and media coverage, tree name tag, co-branding on 2 training sessions, Exhibition Booth
Gold Partner	250,000 - 499,000 Kes	7 Mins	6 Guests	Key Partner branding on materials; Up to 3 banners (podium) + 3 teardrops; recognition in Impact Report; invited as industry mentor/job shadowing partner, Media mentions/interviews, tree name tag, co-branding on one training session, Exhibition Booth
Silver Partner	100,000 - 249,000 Kes	5 Mins	4 Guests	Supporting Partner branding on shared banners; 2 banners (Podium) + 2 teardrops; recognition in Impact Report; option to sponsor a training session, Media mentions, Shared Booth
Bronze Partner	50,000 - 99,000 Kes	3 Mins	2 Guests	Contributor branding on shared materials; 1 banner (Podium) + 2 teardrop; recognition in Sustainability Report and tree planting, Acknowledgment in media coverage, shared Booth
Supporter	20,000 - 49,000 kes	2 Mins	1 Guest	Recognition in program acknowledgments and Sustainability Report; 1 banner at the event, Acknowledgment in media coverage, Display Table

BANKING DETAILS

Lipa na Mpesa

Paybill No: 522533

Account Number: 7850969

Display Name: Tukuze Afrika Foundation

Account No: 1327101815

Account Name : Tukuze Afrika Foundation

Bank Name: Kenya Commercial Bank (KCB)

Branch: Meru

Swift Code: KCBLKENX

Branch code: 123

Bank Code: 01

HIGH-LEVEL SUMMARY BUDGET

The estimated cost of delivering the Innovators Incubation Program 2025 is KES 1,400,000. This budget covers all essentials to host 24 student innovators and 10 teachers for one week at the Innovation & Entrepreneurship Center, Meru University of Science and Technology (MUST).

CATEGORY	EST COST (KES)	DESCRIPTION
Human Resources & Facilitation	260,000	Trainers, mentors, technical experts, teacher facilitation, and volunteer support.
Meals & Hospitality	220,000	Meals, refreshments, and water for students, teachers, and facilitators during the 5-day program.
Student Facilitation & Support	280,000	Transport support, stipends, and accommodation for 24 student innovators to ensure equal participation.
Training Resources & Equipment	240,000	Electronics kits, soldering materials, 3D printing supplies, drones, laptops, and consumables for hands-on learning.
Logistics & Operations	180,000	Venue setup, transport support, coordination, communication, and contingency.
Media & Documentation	90,000	Media coverage, photography, video documentation, and publicity.
Branding & Visibility	100,000	Banners, teardrops, certificates, partner branding at the venue and in reports.
Environmental Sustainability	30,000	Tree planting (208 trees), environmental sustainability report, and accountability documentation.
Total	1,400,000	

BUDGET JUSTIFICATION

This budget ensures the program is impactful, inclusive, and visible. It covers high-quality training and facilitation, student support to ensure equitable participation, and strong branding and media visibility to highlight partners' contributions. It also integrates sustainability actions (tree planting and reporting), ensuring accountability and alignment with the SDGs. With this investment, the program will deliver refined innovations, empowered teachers, stronger industry linkages, and a sustainable pipeline of young innovators in Meru and beyond.

CONCLUSION

Kenya's young innovators are brimming with creativity, yet too often their ideas stall at exhibitions without the mentorship, tools, and pathways needed to reach the market. This is the gap the **Innovators Incubation Program 2025** seeks to fill transforming promising prototypes into viable solutions that can change lives, create jobs, and inspire communities.

The program's impact will be far-reaching: students will gain advanced STEM and entrepreneurial skills, teachers will be retooled to guide project-based learning in schools, partners will strengthen their role in shaping future-ready talent, and communities will benefit from innovations addressing real challenges in agriculture, health, education, and the environment. Importantly, students who engage in innovation and hands-on problem solving consistently **perform better in their classwork**, as they develop critical thinking, creativity, and resilience skills that strengthen both academic achievement and lifelong learning.

We invite **corporate sponsors, institutions, government leaders, and industry stakeholders** to partner with us in this journey. Your support whether financial, technical, or in-kind will not only fuel the incubation of student innovations but also ensure visibility for your brand as a champion of youth innovation and sustainability.

By joining us, you become part of a growing ecosystem that nurtures young innovators, drives community-based solutions, and positions Meru as a hub of inclusive, future-focused innovation. Together, we can ensure that the next generation of innovators do not stop at ideas, but transform them into impactful **enterprises, solutions, and opportunities** for all.

EARLY SPONSORS AND PARTNERS

Main host



Partners



Module Hosts





Our Contact Persons

Boniface Munene | +254723 175 181 | munene@tukuzeafrika.org
 Mercy Muendo | +254701 157 105 | muendo@tukuzeafrika.org
 Mary Achieng' | +254714 157 559 | achiengmary@tukuzeafrika.org

Mwithumwiru Day Secondary School
 P.O BOX 2025 - 60200
 Meru.

stem@tukuzeafrika.org
letspartner@tukuzeafrika.org
www.tukuzeafrika.org