



# ERB MAGAZINE

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## The ERB's Vision for STEM Education in Tanzania



400 new engineers admitted to the profession

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### SEPTEMBER TO REMEMBER

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## FROM THE ERB BOARD CHAIRMAN DESK



**D**ear Tanzanian Citizens, Greetings from the Board of Directors at the Engineers Registration Board (ERB)

I am delighted to address you as the ERB Board Chairman and share our collective commitment to empowering engineering professionals for Tanzania's future.

Engineering plays a pivotal role in driving progress, innovation, and sustainable development. As the guardians of the engineering profession, the ERB is dedicated to ensuring the highest standards of excellence and professionalism within our industry.

Our goal is to support and nurture engineering talent in Tanzania, enabling professionals to thrive and contribute meaningfully to our nation's growth.

We work tirelessly to provide robust registration processes, enforce ethical conduct, and foster continuous learning and development.

Thank you for your unwavering support and trust in the Engineers Registration Board.

**Eng. Menye D. Manga, Adv**  
**ERB Board Chairman**



## ERB Registrar's Note

Welcome back to the printed edition of ERB Magazine! After almost five years of being out of the game, we are thrilled to return to our roots, delivering insights, stories, and updates in a format that has long connected our community.

As the proud publication of the Engineers Registration Board (ERB) of Tanzania, we will advocate four roles of the ERB; Registering Engineers, overseeing Professional Development, watching for Professional Conduct, and Accreditation of Engineers.

Also, we are proud that ERB recognizes and plays the pivotal role we play in promoting the engineering profession and supporting the next generation of innovators. We second the efforts.

The ERB's commitment to excellence in engineering is underscored by the introduction of the STEM Support Program, an initiative designed to ignite a passion for Science, Technology, Engineering, and Mathematics among young students in secondary schools and vocational training centres.

This program not only aims to cultivate technical skills, but also seeks to inspire creativity, critical thinking, and problem-solving abilities in our youth. By fostering an environment that encourages exploration and curiosity in STEM fields, we are investing in a future where Tanzanian engineers can thrive and lead on a global scale.

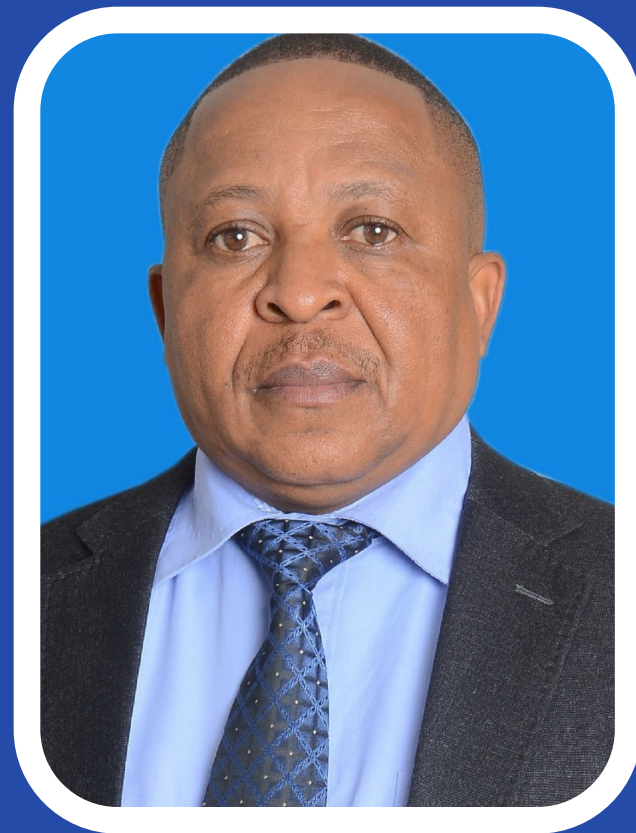
In this issue, we will feature stories of remarkable individuals and organizations that are making significant strides in the engineering landscape. From groundbreaking projects to innovations in sustainable practices, our pages will showcase the ingenuity that defines our profession. Additionally, we will provide insights into the regulatory landscape, ensuring our readers are informed about the latest developments in engineer registration and oversight.

Skills development remains a cornerstone of our mission. As we reflect on the challenges posed by recent global events, the need for continuous learning and adaptation has never been more critical. We will share resources and opportunities for professional development, empowering engineers to stay ahead in a rapidly evolving industry without forgetting Artificial Intelligence issues that are touching every professional.

We invite you, our valued readers, to engage with us as we embark on this new chapter. Your feedback, stories, and experiences are vital in shaping the content and direction of Engineers Magazine. Together, let us build a vibrant community that not only celebrates engineering achievements but also champions the pursuit of knowledge and innovation.

As we turn the page, we look forward to inspiring you, challenging you, and, above all, connecting you with the heart of the engineering profession in Tanzania.

Here's to a future filled with possibility!



**Eng. Bernard Kavishe**

Greetings from the Engineers Registration Board (ERB) of Tanzania! As the Registrar of the ERB, I am honored to address you and highlight our commitment to promoting engineering excellence and ensuring the safety of all Tanzanians.

Engineers play a vital role in shaping our nation's infrastructure, innovation, and economic growth.

At the ERB, we take our responsibility of regulating the engineering profession seriously, ensuring that only qualified and competent engineers practice in Tanzania.

We strive to uphold rigorous standards, enforce ethical conduct, and facilitate continuous professional development.

By doing so, we ensure that engineers possess the necessary skills and knowledge to undertake projects of varying complexities while maintaining public safety at the forefront.

Together, let us continue to build a brighter future through engineering excellence and safety.

**Eng. Bernard Kavishe**  
ERB Registrar

## National News

# The ERB's Vision for STEM Education in Tanzania

**By ERB correspondent**

The Engineers Registration Board (ERB) recognizes the need to cultivate a new generation of engineers in a world increasingly driven by science and technology. The ERB is focusing on this goal by introducing the STEM Support Program, which encourages young students in secondary schools and vocational education training centers to engage in STEM studies. Through these initiatives, the ERB aims to equip students with the relevant skills and knowledge needed to navigate an uncertain future. The ERB's Vision for STEM Education in Tanzania

The ERB Registrar, Engineer Bernard Kavishe, stated that around 26 secondary schools and vocational centers across the country have been supported through the STEM Program, receiving resources such as teachers, laboratories, e-libraries, and advocacy.

Engineer Kavishe explained that the program emerged following research conducted by the ERB, which identified several challenges and subsequently set initiatives to address them.

"First, the ERB conducted research and collected sufficient data. We began by encouraging

girls to engage with and pursue studies in science and mathematics. We initiated the 'Planting a Seed for Future Engineers' project and now have supporting schools. Additionally, we organised a STEM Marathon," said Engineer Kavishe.

According to Engineer Kavishe, the government's expansion of schools under President Samia Suluhu Hassan cannot stand alone and requires support from other stakeholders to effectively tackle these challenges.

"ERB program aligns with President Samia Suluhu Hassan's goals to increase the number of female experts in science and technology.

Addressing residents in Rwinga, Migerege village, Namtumbo District, Ruvuma Region recently, the President emphasised the crucial role of education for girls in fostering both community and national development. She affirmed that the school-building initiative aims to increase the number of female experts in science and technology.

"These initiatives will help foster a more inclusive and skilled workforce for the future. This initiative is part of the government's broader efforts to strengthen education and promote gender equality across the country," stated President Samia.

During the Engineers Day celebration in 2024, the ERB launched its initiative, "Plant a Seed for

**The initiatives will help foster a more inclusive and skilled workforce for the future. This initiative is part of the government's broader efforts to strengthen education and promote gender equality across the country.**

**President Samia Suluhu Hassan**



**President Samia Suluhu Hassan in a group photo with pupils of secondary school bearing her name after inaugurating it, in Rwinga, Migerege village of Namtumbo District, Ruvuma Region recently. The secondary school for girls is dedicated to science and technical subjects with the capacity of accommodating over 1,000 pupils from Form One to Form Six.**





**Girls into science**

*“The Registrar of the Engineers Registration Board (ERB), Eng. Bernard Kavishe, presenting an award to a student from Old Moshi Girls’ Secondary School for excelling in science subjects, as part of the STEM campaign for girls.”*

Future Engineers,” addressing the urgent challenge of inspiring young Tanzanians, particularly those in secondary schools, to embrace STEM studies.

Established in 1968, the ERB is dedicated to nurturing the engineering profession in Tanzania. Engineer Bernard Kavishe, the ERB Registrar, highlighted that one engineer is needed for every 5,000 people, indicating a significant gap in engineering talent.

With only 8,000 engineers in a nation aiming for 12,000, the ERB is committed to strengthening this workforce and ensuring it reflects the diversity of Tanzanian society, including efforts to promote gender equality in a traditionally male-dominated field.

To kick-start this vision, the ERB launched an outreach program in the Geita and Kagera regions, benefiting over 6,591 students across thirteen schools.

These initiatives aim not only to spark interest in STEM subjects but also to tackle the widespread misconceptions that these fields are overly difficult—particularly among young women. Collaboration with the Women’s Institute of Engineers (IET-WC) has proved vital in promoting an inclusive environment where all students feel empowered to pursue engineering.

Recognising the barriers that often deter girls from STEM education, the ERB is committed to changing narratives around these subjects, emphasising that with support and encouragement, every student can excel.

**Addressing Educational Gaps**  
Through extensive outreach, the ERB identified significant challenges within the education system, such as a severe shortage of qualified science and mathematics teachers, inadequate teaching resources, and under-equipped laboratories. In response, the ERB has initiated a program to fund volunteer STEM teachers, set to commence in June 2023. This program piloted in Kagera, will deploy 20 passionate teachers to schools



**Boys not left behind**

*Eng. Joshua Njulumi from the Engineers Registration Board (PDA Unit) presenting an award to a student from Soya Secondary School, located in Chemba District, Dodoma Region, for excelling in science subjects during the STEM school campaign conducted by ERB.*

in Kagera and Karagwe, where their expertise will directly enhance the learning experiences of students, particularly young girls.

Stakeholders, including government officials and local educators, have praised this initiative, acknowledging that improving access to quality STEM education is essential for Tanzania’s future economic and social development.

Speaking in Dodoma, the Director of Roads, Engineer Aloyce Matei, articulated that the program not only aims to enrich students’ knowledge but also seeks to reshape societal perceptions of science education.

**Community Support and Collaboration**

The ERB’s efforts exemplify the importance of collaboration among various stakeholders, including government bodies and educational institutions. By fostering partnerships, the ERB aims to build a robust framework for STEM education that can overcome current deficiencies in teacher availability and resource distribution. Teachers selected for the program, such as Melkizedeck Nkulu and Maria Mhoja, express optimism about

the positive impact they can make in their students’ lives. Their commitment reflects the broader goal of the ERB: to inspire a love for science and mathematics that translates into professional pursuits in engineering and beyond.

**A Call for Unity**

The ERB’s initiative underscores a vital message: unity and collaboration are key to addressing the educational challenges facing Tanzania. As the Swahili proverb goes, ‘Umoja ni Nguvu’ (Unity is strength). By bringing together teachers, government officials, and community leaders, the ERB aims to cultivate a supportive ecosystem that nurtures future engineers.

As Tanzania progresses into a more technologically advanced future, the ERB’s “Plant a Seed for Future Engineers” project serves as a beacon of hope and a pathway for young students to transform their aspirations into reality. Through this initiative, the foundation is being laid for a generation of engineers ready to tackle the challenges of tomorrow.



**Girls into science**

*Students rising hands supporting for ERB STEM campaign for girls.*

**Engineers urged to embrace AI**

**T**ANZANIAN engineers have been challenged to leverage Artificial Intelligence (AI) technology to address various community challenges that require engineering solutions.

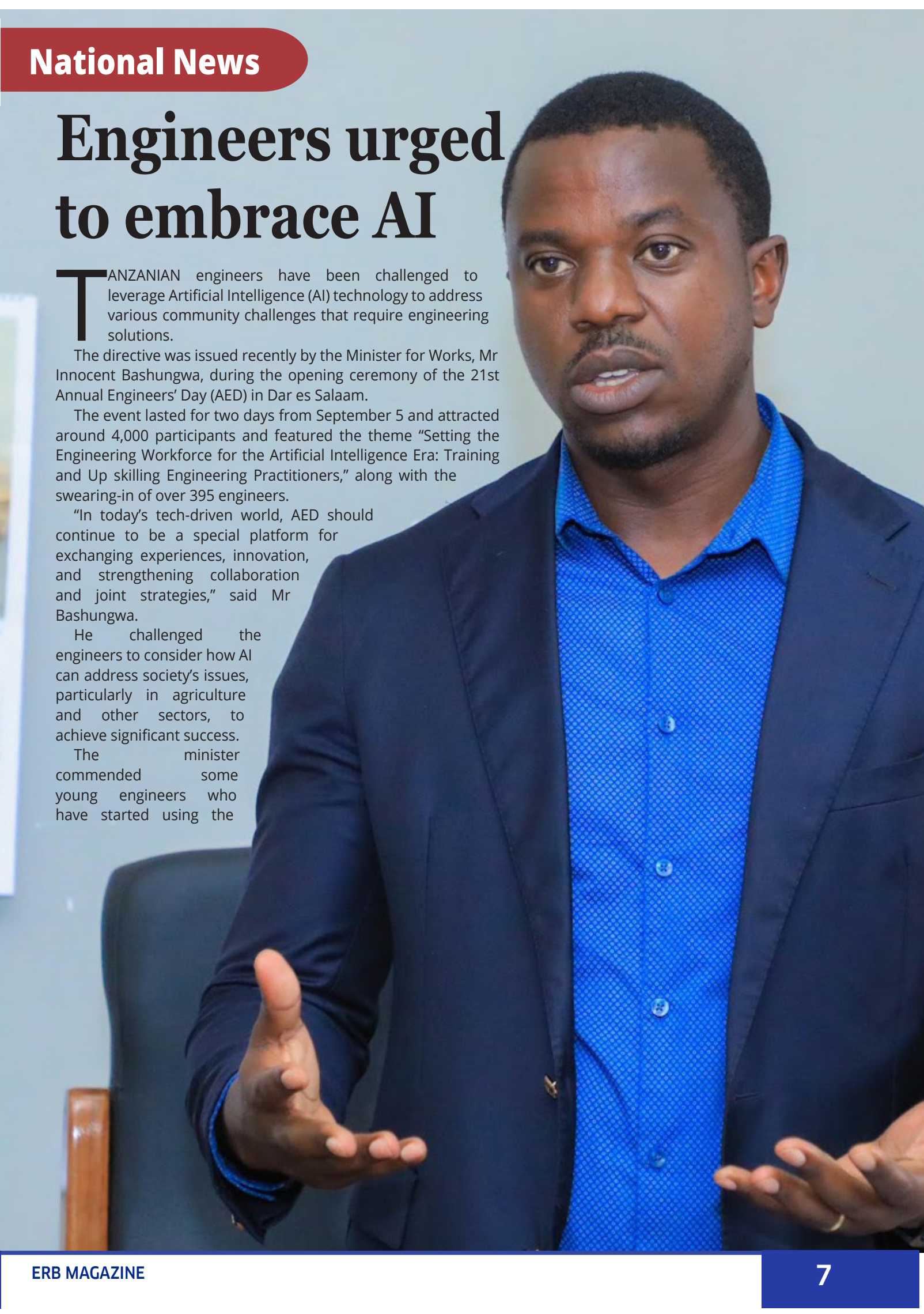
The directive was issued recently by the Minister for Works, Mr Innocent Bashungwa, during the opening ceremony of the 21st Annual Engineers’ Day (AED) in Dar es Salaam.

The event lasted for two days from September 5 and attracted around 4,000 participants and featured the theme “Setting the Engineering Workforce for the Artificial Intelligence Era: Training and Up skilling Engineering Practitioners,” along with the swearing-in of over 395 engineers.

“In today’s tech-driven world, AED should continue to be a special platform for exchanging experiences, innovation, and strengthening collaboration and joint strategies,” said Mr Bashungwa.

He challenged the engineers to consider how AI can address society’s issues, particularly in agriculture and other sectors, to achieve significant success.

The minister commended some young engineers who have started using the





technology to enhance productivity in sectors like agriculture and encouraged others to follow suit so as to create opportunities and solutions for community challenges.

Regarding local content, he assured engineers that the government is committed to promoting and protecting local contractors and their expertise.

Mr Bashungwa urged them to use the conference as an opportunity to discuss the government's efforts to improve local content in the country.

He stated that the government has allocated 40 per cent of all projects to local contractors, with 95 per cent of registered contractors being locals, with only 6 per cent being foreigners, aiming to increase local participation further.

The minister said the government, through the Ministry of Works, has allocated 840bn/- for 114 projects to repair bridges and culverts damaged by El Niño rains, emphasizing that local contractors should be considered for all budgeted projects based on established criteria.

He thanked President Samia Suluhu Hassan for amending the Public Procurement Act of 2023, which have raised the project value threshold from 10bn/- to 50bn/-, allowing local content to compete for these projects.

The ERB, Chairman Engineer Menye Manga stated that AED is significant for engineers to exchange ideas on new knowledge in engineering, share experiences, and identify various opportunities in different engineering sectors.

He emphasized that engineering impacts various life sectors and that engineers' participation is crucial in achieving Sustainable Development Goals (SDGs).

The ERB Registrar, Engineer Benard Kavishe, mentioned that due to the Fourth Industrial Revolution, the board aims to enhance engineers' skills for active participation in AI and soft skills usage.

He noted that the ERB continues its SEAP, which has significantly benefited around 13,000 professionals over the past 21 years.

**In today's tech-driven world, AED should continue to be a special platform for exchanging experiences, innovation, and strengthening collaboration and joint strategies.**

Minister for Works,  
Mr Innocent Bashungwa



Engineers attentively listening during the opening day of the 21st Annual Engineers Day (AED), held on September 5-6, 2024, at the Mlimani City Hall conference venue in Dar es Salaam."

# Govt to review local content regulations

By Special Correspondence

In a significant move to prioritise Tanzanian professionals in executing projects within the country and securing tenders abroad, the government has decided to review local content regulations.

This initiative responds to long-standing challenges faced by local engineers, who have often been overlooked in the execution of construction projects within the country.

Many obstacles have impeded local participation, including stringent bidding requirements such as turnover thresholds, tender security, performance security, specific experience, working capital, and equipment availability.

Additionally, difficulties in securing project financing, delayed payments, and limited collateral options from banks have further complicated matters.

In response to these challenges, the government has decided to revise the Public Procurement Act (PPRA) 2023 and its regulations, introducing additional strategies to uplift local professionals.

Speaking at the conclusion of the second day of the 21st Annual Engineer's Day celebrations, a member of the committee formed under the Ministry of Works to gather feedback on local content, Dr Matiko Mtuli, outlined the government plans and strategies to address these issues.

Dr Mtuli stated that the Ministry of Works is currently reviewing its policies to ensure that the objectives and directions regarding local content are clearly defined.

He said the Engineers Registration Board (ERB) is also committed to



Minister for Finance, Dr. Mwigulu Nchemba

enhancing local capacity, ensuring that all necessary skills and competencies are developed through engineering education.

Dr Mtuli stated that the government aims to complete policies and regulations focused on developing the construction sector by 2025, with a target of having 65 per cent of construction projects executed by local contractors.

Furthermore, 50 per cent of development projects carried out by TANROADS, are expected to be entrusted to local firms.

By 2035, he said, the government envisions that approximately 80 per cent of all projects will be undertaken





Engineers on-site, after overseeing project activities, ensuring adherence to safety standards, and providing technical expertise to support successful project completion

by local contractors, with 75 per cent of TANROADS projects also to be executed by local firms.

He said the PPRA, together with relevant institutions, will continue to monitor and adjust regulations to ensure they are conducive for local contractors to thrive.

To sustain this initiative, Dr Mtuli highlighted the government plans to allocate 10 per cent of the budget each year to enhance local participation.

"This includes 30 per cent of the budget earmarked for local preference, 10 per cent for practical training projects, and another 30 per cent for projects exclusive to local firms.

"Additionally, five per cent of the budget will be set aside for special groups," said Dr Mtuli.

Furthermore, he expounded that the government is also working to enhance the Contractors Assistance Fund, aiming to increase its capital to 100bn/-.

He said the fund will support local contractors in accessing the necessary financing for their projects.

Moreover, the government plans to establish partnerships with

banks and development partners to secure favorable lending terms for local contractors.

"All development project proposals will now be required to include components that promote local content and capacity building," he said.

The ERB has implemented various strategies to strengthen local content capacities and ensure professionals are competent in their careers.

Highlighting these strategies, ERB Registrar, Engineer Benard Kavishe, noted that the board has introduced initiatives such as the Structural Engineers Apprenticeship Programme (SEAP), which has benefited more than 13,000 locals and the STEM Supporting Programme (SSP) aiming at preparing future engineers from grassroots levels.

He also said the board is focused on nurturing young professionals through the Young Engineers Forum (YEF), which will assist graduate engineers in navigating their careers and integrating entrepreneurship, helping them overcome challenges faced by experienced engineers.

Engineers Registration Board (ERB) is also committed to enhancing local capacity, ensuring that all necessary skills and competencies are developed through engineering education.

Dr Matiko Mtuli

# 400 new engineers admitted to the profession

In a significant event celebrating the transformation in the engineering sector, over 400 engineers took a professional oath.

The oath was administered at two separate occasions with approximately 50 engineers sworn in during the Youth in Engineering Forum (YEF) held on September 3-4, while another 395 engineers took their oath on the opening day of the 21st Annual Engineers Day (AED) on September 5-6, 2024.

These remarkable events marked a significant milestone for these professionals as they pledged to uphold the highest standards of practice, conduct, and ethics.

Advocate Mercy Jilala administered the oaths during the AED session, emphasising the importance of upholding this pledge in their daily work.

She reminded them of the significant responsibility they carry in safeguarding the welfare and wellbeing of society.

At the opening of the YEF, the oath was administered by Advocate Agricola Magera.

Gracing the YEF, the Deputy Minister in the Prime Minister's Office (Labour, Youth, and People with Disabilities), Mr Patrobas Katambi,

urged engineers to respect the oath they had taken, committing themselves to serve the nation with diligence.

He called on them to avoid any form of corruption and to embody patriotism in their professional lives.

The Engineers Registration (Professional Practice, Conduct, Oath and Ethics) Rules, 2014 [G.N. No. 278 of 2014] requires all newly registered Professional and Consulting engineers to take an oath before commencing their professional roles.

The oath serves as a solemn commitment to the principles and values that govern their profession, ensuring the protection and welfare of the public.

Engineers Registration Act Cap 63, requires all professional and consulting engineers have valid practicing licenses.

A practicing license remains valid for a maximum period of three years, it may be renewed upon demonstration of the Engineer of 90 Professional Development Units (PDUs).

One PDU is equivalent to one hour spent by an engineer learning a new skill relevant to the field.



"Oath-taking ceremony of engineers being sworn in during the opening day of the 21st Annual Engineers Day (AED) on September 5-6, 2024





# ‘Embrace skills to cope with fourth Industrial Revolution’

*Eng. Adv. Menya Manga, the ERB Chairperson, presented an award to the Zanzibar Minister for Lands and Human Settlements Development, Ms. Rahma Kassim Ali, during the closing ceremony of the 21st Annual Engineers' Day held in Dar es Salaam. He was accompanied by the Permanent Secretary of the Ministry of Works, Dr. Aisha Amour, and the Registrar of the Engineers Registration Board, Eng. Bernard Kavishe.*

ENGINEERS in the country have been urged to efficiently apply the knowledge and insights they have acquired to tackle the challenges arising from the fourth industrial revolution.

That would enable them excel in the dynamically advancing technological landscape, the

Zanzibar Minister for Lands and Human Settlements Development, Ms Rahma Kassim Ali, said when closing the 21st Annual Engineers' Day celebrations held in Dar es Salaam.

The event span around two-days from September 5th-6th with a theme "Setting the Engineering Workforce for the Artificial Intelligence Era: Training and Up Skilling Engineering Practitioners."

About 15 topics were discussed. These include project and quality management, financial analysis management, negotiation skills as well as health and stress management

in the event which attracted around 4,000 participant both physically and virtually.

Ms Ally stated that the topic has come at an opportune time as the world is facing several challenges in that area.

"The main theme of this day has come at the right time as the world is facing challenges arising from the fourth industrial revolution, and it is clear that our engineers must be equipped with the necessary skills to thrive in the rapidly advancing technological changes because nowadays the world is in technology. Therefore, let us use the knowledge we have received to move from one step to another," said Ms Ali.

She urged engineers to maintain unity and solidarity by helping and uplifting one another so as to move forward together.

She further commended President Samia Suluhu Hassan for her efforts in strengthening the resilience and capabilities of engineers.

She said the initiative has acted as a

catalyst for transformative change, fostering numerous accomplishments within the engineering field in the country.

Ms Ali also expressed her satisfaction with the measures implemented by the ERB to promote substantial engagement of engineers and local consulting firms in major projects emphasizing the importance capacity building for local engineers so that they can take the lead in developing the nation.

Furthermore, she commended the ERB for taking initiative to prepare future engineers by encouraging student particularly girls, to pursue Science, Technology, Engineering, and Mathematics (STEM) subjects, which have been predominantly male dominated.

The Chairman of the ERB Board, Eng Menya Manga, commended all engineers who took part and made valuable contributions throughout the two-day event, including their active involvement in the discussions.

He also recommended that engineers prioritize their health by scheduling regular check-ups to safeguard themselves against non-communicable diseases such as hypertension and diabetes.

Presenting the Board's strategies earlier, the ERB Registrar, Eng Benard Kavishe,



highlighted several plans the board ought to take to bring about development in the engineering industry in the country. He mentioned the initiatives includes the establishment of a School for Professional Engineers, that will train engineers soft skills and specialized expertise that are not

typically covered in traditional classroom settings.

Eng Kavishe said another strategy involves providing comprehensive incubation and mentorship for youth in engineering so as to capacitate them with entrepreneurial for self-employment within the profession.

Moreover, he also explained another strategy to start planting a seed for future engineers by encouraging children, especially girls, to pursue STEM subjects by sending science teachers to schools.

They have already begun in more than three schools with 20 teachers and they are in the process of supplying books, laboratory equipment, and an E-library.

He encouraged engineers in the country to focus on learning new communication skills, including languages like English, to secure tenders abroad.

One of the participants, Eng Heavenlight Emilian, expressed gratitude to the Board for organizing the AED, stating that it has helped them and broadened their horizons, especially in AI-related matters.

She noted that through the discussions held, engineers have the opportunity to make good use of the information to assist them in various areas such as agriculture and construction.



*Pictured is the Zanzibar Minister for Lands and Human Settlements Development, Ms. Rahma Kassim Ali (wearing a hijab), visiting the Dar es Salaam Institute of Technology (DIT) exhibition booth to witness the scientific innovations by the institute during the Engineers' Annual Day (EAD) in Dar es Salaam.*



# SEPTEMBER TO REMEMBER



Different pictures of the Marathon for STEM event held at UDASA Ground, University of Dar es Salaam (UDSM) on the 8th of September, 2024. The guest of honour at the event was the Minister for Education, Science, and Technology, Professor Adolf Mkenda. The event was also participated by ERB Registrar Eng. Bernard Kavishe, ERB workers, students from different schools, and the professional engineer's community.



Eng. Ester Christopher from the Women Engineers Chapter speaking to students at Old Moshi Girls Secondary School as part of a campaign to encourage girls to pursue science subjects and become future engineers and doctors. (STEM PROMOTION)



Planting a Seed for Future Engineers: A group photo of students from Kilimanjaro Girls Secondary School and the ERB team during their STEM campaign during the visit at the school.



Students from Kaloleni Secondary School proudly displaying their new bags provided by ERB as an incentive for outstanding performance in science subjects. They are joined by teachers and ERB representatives, highlighting the mission to support STEM education and empower students in their academic journey.



# ERB launches initiatives to boost female representation in engineering



## By Special Correspondence

WHILE male engineers vastly outnumbering their female counterparts, the Engineering Registration Board (ERB) in recognizing the need for a more inclusive and diverse workforce, is taking proactive measures to address the disparity.

The ERB seeks to empower women in engineering, promote equal opportunities, and foster a more balanced representation in a field vital to the nation's development.

This initiative not only aims to inspire the next generation of female engineers but also to enhance the overall innovation and effectiveness of the engineering sector as a whole.

Statistically, only 15 per cent of engineers in the country are women, while men accounting for a substantial 85 per cent, which is to say, out of every 10 engineers in Tanzania only 2 engineers are female.

During the Annual Engineers Day events,

which was seconded by a marathon, ERB board Chairman, Engineer Menye Manga, reaffirmed the board's commitments to investing in education and encouraging young generation particularly girls to pursue science subjects.

He noted that the board aims to achieve gender parity of 50-50 in science and technology, particularly in engineering, with a target of increasing the number of female engineers to at least 25 per cent over the next three years.

Zanzibar's Chief Secretary, Engineer Zena Saidi, while concluding the Youth in Engineering Forum (YEF) held on September 4, 2024, commended the ERB, Contractors Registration Board (CRB), for their deliberate efforts to empower and increase the number of female engineers in the country.

"I urged stakeholders to continue supporting initiatives that encourage girls to study Science, Technology, Engineering, and Mathematics (STEM), as these fields hold significant potential," Engineer Saidi noted.

The ERB Registrar, Engineer Benard Kavishe, outlined a specific plan being

**In recognition of the contributions of female engineers, the Minister of Works, Innocent Bashungwa, awarded a medal to one of the engineers participating in the 9th Tanzania Women Engineers Convention and Exhibition (TAWECE), held at JNCC in Dar es Salaam on 21-22 August 2024.**

implemented by ERB, including the STEM Supporting Project (SSP) aimed at motivating and enabling girls to study science and engineering.

He pointed out that a significant pool of engineers in the country comes from a young generation that often misses the opportunity to study science due to insufficient science teachers, laboratory equipment, and science textbooks in secondary schools.

Engineer Kavishe highlighted that ERB, in collaboration with the Institute of Engineers Tanzania (IET) Women Chapter, has embarked on a program aimed at preparing future engineers.

He said the initiative has already reached five regions, including Dar es Salaam and Tanga. Additionally, in collaboration with TANROADS, they have engaged 6,000 students in the Geita, Mwanza, and Kagera regions. He further said that as a result of the government's significant efforts in education, there is a notable increase in school attendance among children, especially girls.

ERB has begun intervening by allocating science teachers and investing in science laboratories and e-libraries.

Currently, the project is being piloted with 20 teachers funded by ERB in three secondary schools, with six teachers assigned to Kagera River Girls Secondary School, six to Kyerwa Secondary School, and eight to Lutem General Silas Mayunga Secondary School.

Moreover, the board has developed various strategies to raise funds for this initiative.

They recently held a marathon aimed at raising money for buying science textbooks and laboratory equipment to be distributed to schools.

One of female engineer and CEO of Nebiha Food Products, Engineer Neshika Mlinga, expressed her confidence in ERB's initiative noting it will help to increase the number of women engineers.

She emphasized the importance of girls building confidence through studying STEM subjects, highlighting the need to challenge societal norms and foster a new perspective that science education is not solely for men, but equally accessible to women.

"It feels empowering to be a woman



**Eng. Mary J. Nindi on-site, diligently carrying out her engineering duties, overseeing project activities, ensuring adherence to safety standards, and providing technical expertise to support successful project completion.**

engineer in this male-dominated field. If it's possible for men, then it's equally possible for women. Girls need to be inspired and encouraged to pursue their dreams through engineering," said Engineer Mlinga.

Engineer Heavenlight Emilian, a graduate from the University of Dar es Salaam, noted that ERB move to create substantial opportunities for female engineers to showcase their skills and gain the recognition they deserve, is

helpful.

She called on collective support the efforts of uplifting women, especially girls, in education and to encourage them to pursue STEM subjects.

"It is important for women to have confidence, even though men seem to dominate many sectors, even in schools, it is essential for girls to believe in themselves and collaborate with men to achieve their goals," said Engineer Emilian.



**Participants from the ERB, Eng. Angela Andrew and Eng. Veronica Ninalwo, attended the 9th Tanzania Women Engineers Convention and Exhibition (TAWECE), held at JNCC in Dar es Salaam on 21-22 August 2024.**





The Deputy Minister in the Prime Minister's Office (Labour, Youth, Employment, and Persons with Disabilities), Patrobas Katambi, presenting a certificate to exhibitors at the exhibition held during the Young Engineers Forum in Dar es Salaam at the PSSSF Commercial Complex. The event, themed 'Empowering Youth in Their Professional and Business Journey,' was organised by the Engineers Registration Board (ERB).

# Hold on technological innovation- Young engineers told



The Deputy Minister in the Prime Minister's Office (Labour, Youth, Employment, and Persons with Disabilities), Patrobas Katambi, enjoying the performance of a traditional dance group during the Young Engineers Forum held at the PSSSF Commercial Complex in Dar es Salaam.

**Y**OUNG engineers have been urged to prioritize technological advancements and actively seek opportunities for learning and innovation to secure a brighter future for themselves and the nation. Zanzibar Chief Secretary, Engineer Zena Ahmed Said made the call on Wednesday September 4, this year, at the conclusion of the 2024 Youth in Engineering Forum (YEF) held in Dar es Salaam.

The two-day gathering, organised by the Engineers Registration Board (ERB) from September 3 to 4, attracted over 250 participants under the theme "Engineering and Entrepreneurship: Accelerating Excellence."

The event aimed to empower young professionals in engineering to pursue self-employment and innovation.

"I encourage all engineers to focus on technological development and continually seek opportunities for learning," said Eng Said, adding: "We must commit to being

innovative students and leaders who contribute positively to society and help build a better future for all Tanzanians."

Engineer Said emphasized the importance of not solely relying on traditional employment but also exploring opportunities by combining technical knowledge with an entrepreneurial spirit.

She urged engineers to leverage government initiatives, such as low-interest loans and the 10 per cent funding for youth, women and people with disabilities offered by local councils, to start their own businesses and create opportunities for others. She also encouraged engineers to address challenges in various sectors, including agriculture, livestock and fishing, by designing and developing solutions that utilize their engineering expertise.

"We need young engineers to take action by innovating and using their skills to drive positive change in their personal and professional lives while contributing to national development. The strength of our nation lies in its youth, who are expected to lead change across



Eng. Adv. Menya Manga, the ERB Chairperson

different sectors," she stated.

Engineer Said commended President Samia Suluhu Hassan and her Zanzibar counterpart, Dr Hussein Mwinyi, for their ongoing support of the engineering sector, noting that their efforts to promote innovation and enhance the capacity of Tanzanian engineers have been crucial to its success. She also thanked the

Ministry of Works for its commitment to encouraging female students to pursue science and engineering professions.

Deputy Permanent Secretary for the Ministry of Works, Dr Charles Msonde, praised the ERB for organising the forum and urged the board to build on this success for next year's event to reach an even wider audience of engineers.



The Deputy Minister in the Prime Minister's Office (Labour, Youth, Employment, and Persons with Disabilities), Patrobas Katambi, reviewing exhibitions at the Young Engineers Forum held at the PSSSF Commercial Complex in Dar es Salaam. The event, organised by the Engineers Registration Board (ERB), was themed 'Empowering Youth in Their Professional and Business Journey.'





Minister for Education, Science and Technology, Professor Adolf Mkenda

## Mkenda advocates for STEM education

MINISTER for Education, Science and Technology, Professor Adolf Mkenda, has called on stakeholders across the country to support government initiatives aimed at advancing science and technology through education.

He stressed the crucial role of STEM (Science, Technology, Engineering and Mathematics) education for national development, noting that Tanzania and other Sub-Saharan countries are still behind in these areas.

Prof Mkenda made these comments during the Engineers Registration Board (ERB) marathon, themed "Run for STEM," held on September 8, 2024 at the UDASA grounds of the University of Dar es Salaam.

The marathon aimed to raise funds to support secondary school students, particularly girls, in pursuing STEM subjects.

The funds will be used for procurement and establishment of science books, online library access, laboratory equipment and science teachers. "I urge all stakeholders to come forward and support these efforts. No country progresses without science and technology," Prof Mkenda stressed.

He highlighted that national progress does not rely solely on abundant resources like

minerals, oil, or forests, or on a large population. Instead, he said, technology and industries are essential for utilizing and processing these resources for real development.

Prof Mkenda noted that many countries were colonized due to a lack of advanced technology, emphasizing the need to invest in science and technology.

Prof Mkenda praised the ERB for supporting the government's science and technology initiatives and assured that the Tanzania Education Institute (TEI) will ensure all available books are accessible online.

He also mentioned ongoing government efforts in science education, including the construction of 26 girls' secondary schools, some of which have already opened.

Additionally, through the Samia Scholarship program, the government is providing full funding for students pursuing science, engineering, ICT and mathematics at the university level. The scholarship program has been expanded to include the Samia Extended program, which supports students pursuing master's degrees abroad and will soon launch a system for science students.

ERB Board Chairman, Engineer Menye Manga, emphasized that the marathon's goal

is to encourage students, especially girls, to pursue STEM subjects.

He noted the aim of achieving a 50-50 gender balance in engineering, where currently only about 15 per cent of practitioners are women, with plans to increase this to at least 25 per cent over the next three years.

Engineer Neshika Mlinga, CEO of Nebiha Food Products and a marathon participant, expressed enthusiasm for the ERB initiative, which she believes will open opportunities for students, especially girls, to excel in science subjects.

Dar es Salaam Girls Secondary School is one of the 26 schools benefiting from this initiative.

Ms Elizabeth Mponzo, a teacher at Dar es Salaam Girls Secondary School, commended the effort, noting it will motivate girls to study hard and minimize distractions.

She thanked the ERB for initiating the marathon, which will enhance learning and teaching through resources like computers and science teachers.

Precious Tony, a Form Five student at Dar es Salaam Girls Secondary School, expressed readiness to embrace the support from ERB and excel in science subjects to pursue fields such as engineering.

## ERB to establish School of Professionals Engineers (SoPE)

IN a groundbreaking initiative to enhance the competence, skill sets and value addition to the construction industry, the Engineers Registration Board (ERB) is set to be established the School of Professional Engineers (SoPE).

The school will operate under the ERB and will equip engineers with soft skills to complement their technical expertise.

This initiative was unveiled by ERB Registrar, Engineer Bernard Kavishe,

during the closing of the 21st Annual Engineers Day (AED), held from September 4 to 5, 2024, at the Mlimani City Conference Centre in Dar es Salaam.

Engineer Kavishe noted that the ERB has already established a secretariat in Morogoro to handle all procedures of establishing the training facility.

"This school will offer its services online and will utilise a distance learning model using a Moodle platform," said Engineer Kavishe.

The registrar explained that SoPE will offer new knowledge not covered in university engineering programmes, including project management, soft skills, safety management, research methodology, data management, green infrastructure, communication skills, and report writing.

He emphasised that the school will provide a solution for local engineers and affiliated professions so as to make the remain competitive in the job market, enabling them to secure tenders both domestically and internationally.

The registrar further noted that SoPE will not only enhance the skills of engineers but also those of architects and quantity surveyors working in the construction industry.

Through short courses and research and development programmes, SoPE aims to improve soft skills and professional so as to up recognition of engineers across Tanzania.

In addition to its academic role, the school will serve as the regional office of the ERB in Morogoro, supporting monitoring activities, delivering lessons, and promoting sustainable development for engineering professionals.

With its robust infrastructure, SoPE is set to become a central hub for engineering excellence and innovation.



The Registrar of the Engineers Registration Board (ERB), Eng. Bernard Kavishe.



## Empowerment

# ERB to establish Incubation Program for Young Professionals

THE Engineers Registration Board (ERB) has embarked on a journey to empower young graduate engineers with the upcoming launch of the Young Engineers Incubation Program.

This initiative aims to help young professionals navigate the challenges and obstacles that veteran engineers have faced, clearing their path to successful careers.

This groundbreaking initiative was unveiled by the ERB Registrar, Engineer Benard Kavishe, during his introductory remarks at the Youth in Engineering Forum (YEF) launch event held on September 3, 2024, in Dar es Salaam.

"We have approximately 40,000 engineers, of whom 30,000 are graduate engineers and young professionals," Engineer Kavishe said adding;

"Given this demographic, we must identify unique and targeted ways to engage with them, ensuring they do not face the same challenging paths that veteran engineers have encountered."

Engineer Kavishe noted that the incubation program will focus on equipping youth with the essential 21st-century professional skills necessary for running successful and reputable business ventures, significantly contributing to the country's development.

"In this incubation, we aim to teach them how to overcome barriers we encountered, enabling them to establish compliant, well-governed, tax-paying, and transparent companies that are also creditworthy, thus fully participating in nation-building," he said.

The Registrar explained that the trained engineers will become contractors and consulting engineers who will collaborate effectively with architects and quantity surveyors throughout the construction industry.

He emphasized the ERB's commitment to supporting young professionals, instilling hope by nurturing and developing their careers for a brighter future in engineering.

Additionally, he highlighted the board's initiatives to prepare future engineers from the grassroots level by significantly investing in both primary and secondary education, aiming to attract more students, especially girls, to pursue science subjects.

He unveiled that the initiative has begun with the allocation of science teachers to more than five pilot schools out of the 26 science secondary schools established by the government, calling for further intervention from stakeholders to support these initiatives.

Engineer Menye Manga, the ERB Board Chair, highlighted that the board continues to play a vital role in supervising the engineering cadre, including managing training programs like the Structured Apprenticeship Programme (SEAP), which has benefited over 13,000 individuals over the past 21 years.

He mentioned that through the amendments to the Public Procurement Act (PPRA) of 2023 and its regulations have opened more rooms for graduate Engineers to seize the opportunities for internship and practical trainings in every big projects.

"These changes will enhance the availability of practical training opportunities for young engineers. Previously, we encountered challenges, including bias against local engineers, particularly youths, women and people with disabilities," he said.

Furthermore, he commended the government for allocating approximately 840bn/- to about 114 projects that will facilitate local content initiative, urging more young engineers to seize these opportunities.

The ERB Board Chair also expressed gratitude to all private companies and institutions that offer practical training opportunities for young graduate engineers.

He acknowledged the support from institutions such as Tanzania Electric Supply Company (TANESCO), TANROADS, DAWASA, TTCL, TARURA, TRC, TAA, TCAA, TPA, and TEMESA, among others.



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## Economic News



Participants posed after the Youth in Engineers Forum held for two days, at PSSF Commercial Complex in Dar es Salaam, September 2024.

# Create jobs for economic growth, youth urged

TANZANIAN youths have been encouraged to leverage their education and skills not only to seek employment but also to create jobs and drive innovations for economic growth.

Deputy Minister in the Prime Minister's Office (Labour, Youth, Employment and Persons with Disabilities), Mr Patrobas Katambi, made the remark when officiating the 2024 Youth in Engineering Forum (YEF) organized by the Engineering Registration Board (ERB) in Dar es Salaam.

The forum commenced on September 3, 2024, themed "Entrepreneurship and Engineering Accelerating Youth Excellence," featuring the certification of approximately 50 engineers and the presentation of awards to top graduates from various universities.

"We must combine our skills, knowledge and experience with our competencies and seize the opportunities available, including those provided by the government, to build a stronger economy," said Mr Katambi.

He highlighted the government's commitment to create employment opportunities, revealing plans to generate up to 1.5 million jobs annually, aiming for about eight million new jobs over the next

five years.

Mr Katambi stressed that the government's role is to create an enabling environment that facilitates direct employment and self-employment.

He noted that the National Youth Development Policy, launched earlier this year, focuses on skills development, innovation and talent to combat youth unemployment.

He also stresses the importance of the National Skills Development Plan (NSDP), which enhances youth skills through vocational training and practical experience, benefiting 104,160 individuals so far, with over 3,000 participants in reskilling initiatives.

"The government is also committed to protecting local content by ensuring that tenders suited for Tanzanians are awarded to local experts," he said.

He noted that new laws encourage local professionals to collaborate with foreign experts for succession planning.

Mr Katambi emphasized that the government is discouraging the importation of construction materials to protect local jobs, safeguarding 162,968 employment opportunities along the way.

He urged innovation hubs like the Commission of Science and Technology (COSTECH) and the Small Industries Development Organisation (SIDO) to support young engineers in bringing their innovations to market.

Additionally, the Youth Development Fund has provided 1.2/- billion in financial support, including grants and low-interest loans, to 57 projects.

ERB Chairman, Eng Menye Manga, expressed gratitude to the government for allocating approximately 840/- billion for local content and encouraged youth to take advantage of these opportunities.

He also praised both the private and public sectors for offering internship and job opportunities to young engineers.

Eng Manga highlighted that the ERB's Youth Engineering Programme aims to support 400 youths initially, with plans to expand further.

Young engineer, Mwesiga Rwegelela, noted that the Youth Engineering Forum represents a bright future for young engineers and urged his peers to use the opportunity to create prospects for themselves and others.



# How YEF 2024 inspired young engineers to redefine industries



**Exhibitor namely HEBO Consult showcasing their activities during Youth in Engineering Forum (YEF) held at PSSSF Commercial Complex from 3rd to 4th September, 2024.**

In a world where innovation meets opportunity, the Engineers Registration Board (ERB) marched out in a significant move to usher the young professionals into a better future.

ERB launched the Youth in Engineering Entrepreneurship Forum (YEF) as its maiden initiative, to help young professionals solve the unprecedented challenge of unemployment, that will stand as a beacon of inspiration and empowerment.

The event lasted for two days from September 3, 2024, precursor to the 21st Annual Engineers Day (AED).

The forum was aimed not only to empower young Engineers, but also equip them with entrepreneurial mindset and also integrating their carrier and technical skills with other fields to create opportunity for themselves and others.

It is believed that the event will galvanize dreams of young and visionary engineers, propelling them into a future brimming with possibilities.

The two days were marked with insightful presentations from skilled and experienced individuals from various professional fields, each painting a piece of meaningful image in almost plain canvas of youth mindsets.

The atmosphere buzzed with excitement, each presentation was a stepping stone toward transforming ideas into impactful ventures.

From the groundbreaking work of the Seris Foundation to the entrepreneurial journey of Neshika Mlinga, the day was a celebration of creativity, collaboration, and the relentless pursuit of excellence

As the forum unfolded, it became clear the

next generation of engineers is not just ready to tackle challenges they are facing, but poised to redefine the landscape of their industries.

The opening session was marked by inspiring words from the guest of honour, Mr Patrobas Katambi, the Deputy Minister in the Prime Ministers Office (Labor, Youth and People With Disabilities), who reiterated the government's unwavering commitment to supporting youth.

Emphasizing the importance of education, skill development, and ethical conduct, he urged young people to seize opportunities in the rapidly evolving job market.

Mr Katambi highlighted the government's initiatives, including policy reforms and funding for training programs, aimed at creating conducive environments for youth to thrive.

He also acknowledged the challenges faced by young people, such as unemployment and the need for capital.

The Deputy Minister called for collaboration among all stakeholders to drive economic growth and empower Tanzanian youth.

His address underscored the importance of continuous learning and adaptability in meeting the demands of the modern job market, encouraging youths to innovate and take risks, citing examples of successful entrepreneurs like Henry Ford.

The event kicked off with a powerful presentation from the Seris Foundation, which has been at the forefront of empowering young engineers through mentorship workshops and practical experiences.

Their unique approach integrates engineering, healthcare, and women's development,

encouraging innovation and entrepreneurship.

The foundation also offers technology scholarships and grants, making a tangible difference in the lives of aspiring engineers.

At the event themed "Engineering and Entrepreneurship: Accelerating Excellence," the CEO of Nebiha Food Products, Engineer Neshika Mlinga, sparked a light of hope among young engineers through her inspiring story that captivated the audience with her journey of building a successful nutrition-based company.

She stressed the importance of cultivating an entrepreneurial mindset, compliance in product development, and the significance of building a strong team through Nebiha Academy.

This online training platform provides practical courses designed to support young entrepreneurs in navigating the complexities of business.

The up and coming engineers were also equipped with knowledge on how they can address a critical issue of mental health among youth, in a presentation given by Dr Batwai Wambui.

In the presentation, the mental health professional outlined the urgency of recognizing the signs and symptoms of mental illness, for immediate help-seeking and the creation of a supportive environment.

"By promoting mental health awareness and reducing stigma, we can empower young people to lead healthy, fulfilling lives," said Dr Wambui.

#### Soft skills

The importance of practical application of engineering principles and essential soft skills in today's competitive job landscape was among key

points emphasized by advocate Suzane Ndomba.

She called for continuous learning and adaptability to navigate the evolving engineering sector.

In his presentation, Dr Anthony Githinji from Kenya discussed the design and production of semiconductors, highlighting their crucial role in driving technological advancement in Africa.

He stressed the need for Africa to develop its own semiconductor capabilities to reduce reliance on imports and foster innovation.

Engineer Raymond Tadeus followed with a presentation on shifting the engineering mindset towards entrepreneurship.

He highlighted the importance of professional engineers starting their own businesses to capitalize on the increasing demand for natural resources.

He outlines key factors for success as including improved financial planning, a growth-oriented approach, and leveraging support from government and industry experts.

But also the young engineers were exposed to a powerful mindset shift talk focusing on from engineer to entrepreneur, the essential ingredients for engineering entrepreneurship, such as hard work, continuous learning, and effective communication, were discussed.

By combining technical expertise with soft skills, engineers can successfully navigate the entrepreneurial landscape, the participants heard.

The young engineers were emphasized on design thinking, illustrating how engineering can transform challenges into opportunities by focusing on community needs and desired outcomes.

The day concluded with Dr Tobias Swai's insights on crafting a winning business plan.

He emphasized the pivotal role of a comprehensive business plan in propelling engineering ventures, covering operational strategies and market analysis. He said a robust business plan serves as a vital tool for attracting investors and securing necessary support.

On the second day, YEF was marked with yet more presentations that included insights from the Business Registration and Licensing Agency (BRELA) on formalizing businesses and ensuring compliance, as well as the crucial role of the Construction Regulatory Board (CRB) in ensuring quality and safety in the construction industry.

The Institute of Tax Administration (ITA)'s Counsel for Legal Tax Compliance, Mr Anthony Temu, also highlighted the importance of understanding tax obligations for aspiring entrepreneurs, providing valuable insights into tax laws and compliance.

Finally, the Institute of Directors Tanzania (IoDT), Founding CEO, Mr Said Kambi, spoke on corporate governance for young engineers, emphasizing the young engineers to incite the future by building it right away.

The forum wrapped up with a session on mastering negotiations, equipping young engineers with the confidence to advocate for their worth.

This forum was not just an event, it was a call to action for young engineers to embrace their potential, innovate, and contribute to a thriving future.

As they left, the energy in the room was palpable, filled with hope and determination to transform ideas into impactful realities.



## Vision

A world-class entity that regulates engineering practitioners for quality services delivery to the public.



## Mission

To regulate engineering practice in Tanzania Mainland and promotion of engineering excellence among engineering practitioners through enhancing their innovativeness, competitiveness and professionalism.

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# YOUTH VOX-POPUL



**Sarah Uthman Bawji, Computer Science Engineer student from SJUIT**

YEF will offer young engineers valuable exposure by broadening their horizons. This forum will help them to gain motivation and develop essential skills to launch their own projects across various fields. It aims to eliminate the barriers that young people encounter while pursuing their dreams, as the ERB connects them with successful professionals in their careers. I look forward to joining in the future to seize this opportunity, as I genuinely appreciate how it creates pathways for us as young people. ENDS



**Evenlight Urio, Mechanical Engineer**

The Forum presents an opportunity for us young Engineers to ensure we learn and utilise new technologies, such as Artificial Intelligence (AI), to integrate with our carrier in helping us pursue self-employment in various sectors, including agriculture, construction, engineering, among others. I call upon fellow youngsters, particularly girls, to seize this significant opportunity as a stepping stone towards future development, so they can also inspire other girls.



**Samson John Kiula, Mining Engineer, graduate from UDMS**

"As young engineers, YEF means a great deal to us. Personally, it has opened my mind to think beyond my field of study and consider what it takes to succeed, including the various paths I can take. One of the key lessons we've learned is that while technical skills are essential, soft skills play a crucial role and contribute significantly to engineering. Through YEF, I expect to grow in my engineering career and discover how to invest in achieving success. Initially, I was unaware of number of things, but since participating, I have experienced personal growth."

## EDITORIAL BOARD

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## Engineers Board Embraces Digital Transformation with Enhanced Management Information system Version II

- The Engineers Board of Tanzania is proud to announce significant advancements in its technology infrastructure, reflecting its commitment to providing efficient and accessible services to the engineering community.

Recognizing the pivotal role of technology in today's world, the Board has invested heavily in **digitizing** its operations in collaboration with **e-Government Authority**.

The recently launched **version 2** of the Management Information System (MIS) is a testament to this dedication. Building upon the positive feedback received from the engineering community, the Board has refined the system to enhance user experience and address identified issues.

### Key improvements in the new MIS version include:

>> **Enhanced Search Functionality:** stakeholders can now easily locate engineers by name or registration number, ensuring that only qualified and registered professionals are engaged for projects.

>> **Intuitive Interface:** The new MIS boasts a streamlined design that is easier to navigate, ensuring a smoother user experience

>> **Simplified Account Access:** Registered engineers can now access their accounts using their registration numbers and personal passwords, eliminating previous login challenges.

>> **Project Registration Made Easy:** Previously limited to consulting engineers, project registration is now accessible to all professional engineers across Tanzania. This expanded access to register projects through MIS Version 2 promotes compliance and enables engineers to concentrate on the essential aspects of project implementation.

### A Call for Feedback and Future Innovations:

The Board encourages engineers to **update their profiles in their MIS Version 2 system** to stay up-to-date with ERB eservices and all stakeholders to provide feedback on the new MIS version to ensure its continued improvement and alignment with the evolving needs of the engineering profession.

As part of its ongoing digital transformation, the Board is excited to announce the **upcoming launch of the MIS mobile app**. This innovative tool will provide engineers with convenient access to e-services offered by the Board, further simplifying their professional lives.



**In conclusion**, the Engineers Board of Tanzania is committed to leveraging technology to deliver exceptional services to the engineering community. The enhanced MIS and the upcoming mobile app are significant milestones in this journey, empowering engineers and promoting professional excellence.





# Tanzania's ERB sees steady growth to 41,000 registrations

By Special Correspondence

The Engineering Registration Board (ERB) has reported a significant increase in the registration of engineers and technicians, with total registrations reaching 41,169 as of 30 June 2024.

This marks steady growth in the engineering profession over the years, according to Engineer Jamhuri Msabila, head of statistics at the ERB.

In his remarks, Msabila highlighted the impressive rise in registrations, particularly among Graduate Engineers (GEs), which have surged to 25,489 since the Board's inception. "This growth reflects not only the increasing demand for engineering services in our nation but also the dedication of our educational institutions to produce skilled professionals," she stated.

The data reveals a notable trend in the registration of Professional Engineers (PEs), which now stands at 9,189, alongside 2,936 engineering technicians. "These figures indicate that we are nurturing a capable workforce ready to tackle the challenges of our developing infrastructure," Msabila added.

The report also included the registration of consulting firms, which has reached 430, encompassing both local and foreign entities. Engineer Msabila emphasised the importance of these firms in promoting collaboration and innovation within the engineering sector. As the country continues to invest in its infrastructure and technological advancements, Msabila reaffirmed the ERB's commitment to ensuring that all practising engineers meet the required professional standards.

"We are dedicated to maintaining the integrity of the engineering profession and fostering an environment that encourages continuous professional development," Engineer Msabila said, reminding engineers that:

"Section 15(1) d of CAP 63 requires deletion of Engineer upon failure to pay annual subscription fees for two consecutive years."

Engineer Msabila insisted that "Regulation 11(1) & (2) of the Engineers Registration Regulation of 2010 requires that within two months following the date of registration of an engineering practitioner by the Board, registration fees must be paid; otherwise, their registration will be immediately abandoned."

According to him, the ERB will continue to monitor registration trends and work towards enhancing the regulatory framework that supports the engineering profession in Tanzania.

## ENGINEERS REGISTRATION BOARD

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Tel: +255 26 2960086/87, Email: registrar@erb.go.tz

The officer whose photograph appears on this card is dully authorised under the provisions of the Engineers Registration Board Act Cap. 63 made there under.

In the performance of official duties under these provisions, the inspector shall have unhindered access to collect information and evidence to ensure implementation of Engineers Registration Act Cap. 63 Section 4.

Eng. Bernard Kavishe  
**REGISTRAR**  
Issuing Authority

authorised ERB officers, ensuring efficient management while maintaining oversight.

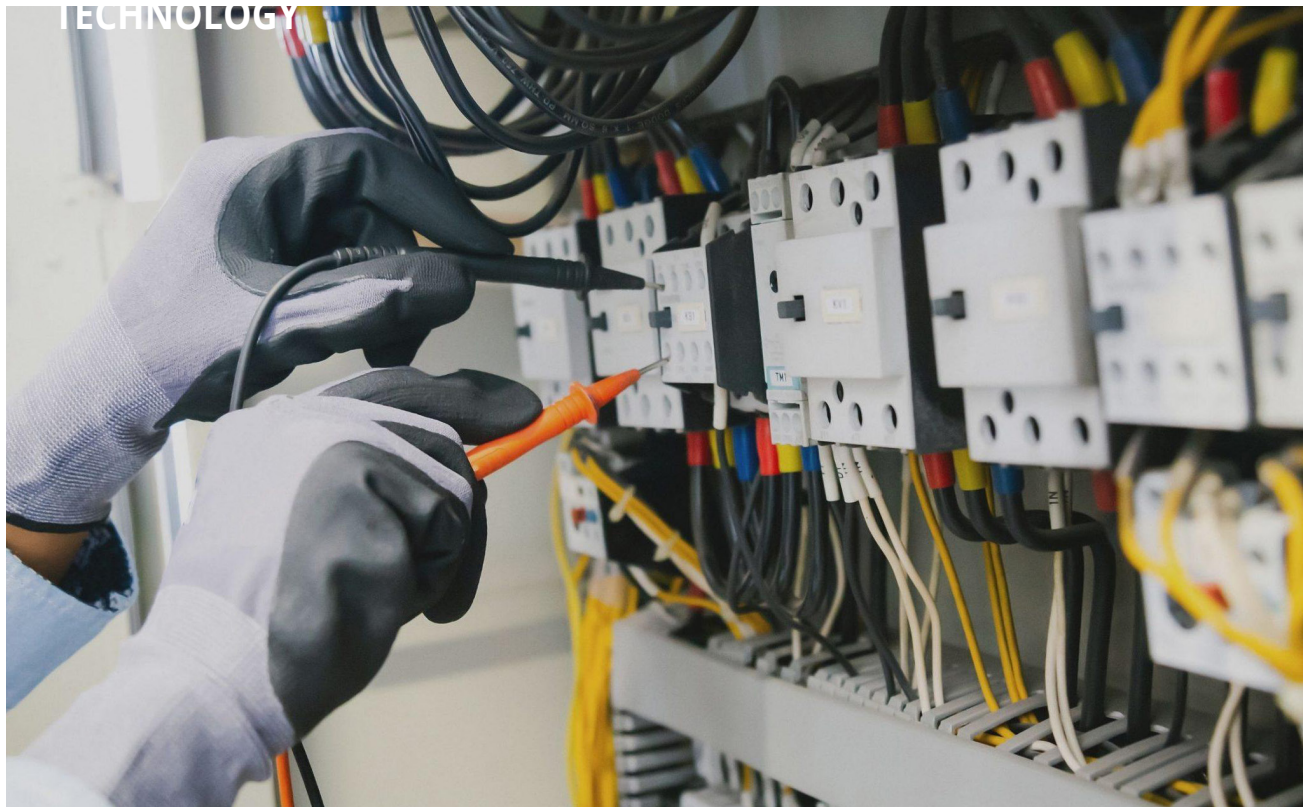
As the implementation of the Order for Inspector Credentials commences, Engineer Kavishe's vision for a more accountable and professional engineering environment is taking shape.

With every inspector credential issued, the foundation is being laid for a safer, more regulated construction industry, ultimately benefitting the citizens of Tanzania.

Through this initiative, the ERB is not only enhancing its operational framework but also underscoring its commitment to upholding the highest standards in engineering.

Reflecting on the journey ahead, Engineer Kavishe expressed optimism: "I know that with the right tools and dedicated professionals, the future of engineering in Tanzania is indeed bright."

TECHNOLOGY



## ERB launches new Inspector Credential System

### Focusing on engineering oversight enhancement

By EBR Magazine Reporter

The Engineers Registration Board (ERB) is enhancing its oversight capabilities by introducing a new system for issuing inspector credentials.

This significant initiative is being driven by the Ministry of Works under ERB Registrar Eng. Bernard Kavishe who says the order aims to empower inspectors with credentials as well as signifying their authority and expertise in overseeing construction projects, investigating accidents, and facilitating the registration of engineers and firms.

"The 'Order for Inspector Credentials' marks a pivotal moment in the ERB's efforts to strengthen the integrity and efficiency of engineering practices across Tanzania," he stated.

According to Engineer Kavishe, the order has been meticulously crafted, drawing from a robust legal framework, including Section 4 of the Engineers Registration Act (Cap 63) and the Engineering Works, Services and Projects Monitoring Regulations of 2015.

The Registrar noted that each inspector will receive a unique credential embedded with a barcode that, when scanned, will reveal comprehensive information about the holder.

This innovation is designed to bolster accountability and transparency, ensuring that only qualified individuals can carry out the vital tasks entrusted to them.

Discussing the benefits of the new system, Engineer Kavishe remarked, "The inspector credentials will significantly reduce the risk of impersonation. By ensuring that only authorised personnel are recognised as inspectors, we can

protect the integrity of our engineering sector and enhance public trust."

Furthermore, the advantages of the new credential system extend beyond identification; it promises enhanced legitimacy by providing a clear designation for Board-authorized personnel.

The ERB anticipates that this recognition will foster a culture of respect and authority, which is critical in a sector where adherence to standards is paramount.

The credentials are also set to streamline operations within the ERB.

By simplifying construction monitoring and regulatory activities, the Board can allocate resources more effectively and respond more swiftly to emerging challenges in the engineering landscape.

The new system will facilitate the delegation of responsibilities, empowering the Registrar to assign specific tasks to



# How EBR promotes industry growth through Annual Return Submissions

By EBR Correspondence

The Engineers Registration Board (ERB) is crucial in ensuring the quality and integrity of engineering consultancy services in Tanzania.

Engineer Erick Nestory, Acting Assistant Registrar Enforcement, (ER-E), at ERB, says that a key element of the mission is the requirement for every firm to possess a valid practising licence, as mandated by Section 12A of the Engineers Registration Act Cap 63.

“For engineering consulting firms, possessing a valid Practising Certificate is essential for legal operation,” Eng. Nestory said and added that:

“This certificate is issued annually upon the submission of Annual Return Forms and the payment of annual fees.”

However, Eng. Nestory said these annual returns are much more than just a legal requirement they serve as comprehensive reports detailing a firm’s activities, financial performance, staffing levels, and compliance with regulations.

In emphasising the significance of these submissions, Eng Nestory said; “Annual returns allow the ERB to assess the performance of the consultancy industry

comprehensively. By analysing these returns, we gain valuable insights into the overall health and performance of the engineering consultancy sector.”

Moreover, these submissions enable the ERB to monitor compliance effectively. Eng. Nestory added, “Identifying non-compliance issues among registered firms allows us to intervene promptly, ensuring that standards are maintained and improved.”

Recognising the importance of a smooth and efficient annual return process, the Board has implemented several improvements.

“We are committed to making this process as straightforward as possible for engineering firms,” Eng. Nestory explained.

He elaborated the key enhancements include the Extended Deadline for Audited Financials where the firms have until April 30th to submit their audited financial statements, allowing for accurate and complete preparation.

Another is the Uniform Reporting Format, as he said the initiative ensures consistency and comparability across different firms, facilitating more effective data analysis and simplifying documentation requirements.

The third is the Online Submission Platform and explained that The Board is developing an online platform to allow for immediate data verification, reducing administrative overhead and streamlining the reporting process.

Eng. Nestory said in a proactive move, the ERB has requested all registered engineering consulting firms and laboratories to resubmit their annual returns for 2023 by October 30, 2024. All submissions can be made through the following link: [Annual Return Submission](https://forms.edodoso.gov.go.tz/x/IOazXruv ).

“The ERB plans to share the results, observations, and challenges identified through the annual return evaluation process at conferences with engineering stakeholders,” said Eng. Nestory and he highlighted the importance of the information exchange:

“By sharing insights, we can promote growth and foster a strong, vibrant engineering consultancy sector in Tanzania.”

Through streamlined processes and open communication, the ERB and engineering firms can work collaboratively to ensure a thriving consultancy industry that will significantly contribute to Tanzania’s continued development.

“Together, we can navigate challenges and seize opportunities, ensuring that our engineering sector not only meets but exceeds the standards of excellence,” Eng. Nestory concluded.

As the ERB continues to enhance its processes, the engineering community stands ready to engage and contribute to a future of growth and innovation.

# EBR connecting talents as Diaspora unite in Comoros for Eng. Solutions



By ERB Special Correspondence

Engineers Registration Board (ERB), is connecting talents. This is the conclusion one can make after a significant move made by ERB to support Tanzanian engineers living abroad.

In the move, EBR is collaborating with the Ministry of Foreign Affairs and East African Cooperation, by establishing a comprehensive database of Tanzanian engineering practitioners in the diaspora.

Speaking with the journalist about the program, Eng. Jamhuri Msabila the head of ..... Department at the EBR said: “This partnership has opened doors for a unique initiative: the Special Joint Clinic for Tanzanian Diaspora held in Moroni, Comoros August 2nd to 7th, 2024.”

He added that: “The Embassy of Tanzania in Comoros, hosted the clinic which aimed to offer tailored services to Tanzanians living in the archipelago, addressing their professional and personal needs.”

Msabila said the initiative comes at a crucial time, as the diaspora community contributes approximately 25 per cent to Comoros’ national income, highlighting the importance of supporting this vital group.

As one of the ERB congresses in the event, Eng. Msabila outlined that the event kicked off by the Ambassador of Tanzania in Comoro, Hon. Saidi Yakubu, who set the stage for collaboration among public and private sectors.

According to Eng. Msabila, the Deputy Permanent Secretary of the Ministry of Foreign Affairs, Ambassador, Honourable Said Mussa, articulated the clinic’s objectives and emphasised the need for clarity on diaspora policies and the promotion of collective services.

During the official opening ceremony, the Permanent Secretary of the Union of Comoros, Honourable Said Mohamed, underscored the strengthening of bilateral relations and the commitment to support the

Tanzanian diaspora.

“This laid a robust foundation for the week ahead, which was filled with engagements tailored to the diverse needs of attendees,” he said.

Among the notable activities, ERB set up a booth that attracted members of the diaspora involved in the construction industry. These professionals gained insights into regulatory practices and voiced their need for further assistance with compliance and professional development.

The EBR co representative, Mariane Mgombere, engaged actively, emphasising the board’s commitment to supporting Tanzanian engineers abroad.

Participants also had the opportunity to explore local markets, identifying potential investment opportunities that could enhance their economic prospects.

The week culminated with discussions on maritime transport, fostering collaboration between Tanzania and Comoros in this critical sector.

The outcomes of the clinic were promising, revealing increased awareness among participants about the services available to them and enhancing their understanding of local market conditions.

Furthermore, a series of recommendations emerged to refine future initiatives, including establishing a working group for policy advocacy and creating a platform for diaspora investments.

As the clinic drew to a close, participants left with a renewed sense of purpose, eager to exploit the construction opportunities available in Comoros.

For Tanzanian engineers, the path forward is bright, with ERB committed to facilitating further connections and support. This initiative not only strengthens the diaspora’s role in the economy but also builds lasting ties between Tanzania and its citizens abroad, proving that together, they can achieve remarkable things.

## ANNUAL RETURN

Annual Return =  $\left( \frac{\text{Ending Value}}{\text{Beginning Value}} \right)^{\frac{1}{\text{Years}}} - 1$

osome





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**ERB**   
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