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TBS, The Home of Standards



Permanent Secretary of the Ministry of Industry and Trade, Dr. Hashil Abdallah (centre left), applauds after launching the TBS 50th Anniversary Celebrations.

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PS urges TBS to maintain its momentum at 50



Permanent Secretary of the Ministry of Industry and Trade, Dr. Hashil Abdallah, addresses participants (not in photo) during the launch of TBS's 50th Anniversary Celebrations held at the TBS Head-quarters in Dar es Salaam recently.

By Neema Mtemvu

ermanent Secretary of the Ministry of Industry and Trade Dr. Hashil Abdallah has urged the Tanzania Bureau of Standards (TBS) to continue fulfilling its daily responsibilities as it commemorates its 50th anniversary since establishment to ensure that its objectives are fully achieved.

The celebrations were held under the theme: "Inspiring quality and safety for better livelihood."

Dr. Hashil Abdallah made the call recently on behalf of Minister for Industry and Trade, during the launch of the 50th anniversary celebrations of the Bureau.

He stated that the anniversary serves as a unique opportunity to reflect on the Bureau's 50-year journey as an important institution and a pillar of industrial and commercial development in the country, through safeguarding public health and safety via the development of standards, quality control, and metrology



services that promote continuous improvement.

"Over the past five decades, TBS has made significant progress in its operations, including expanding the scope of service delivery by bringing its services closer to the public and stakeholders, facilitated by improved electronic systems and the strengthening of zonal offices," he said.

He added that TBS has earned significant international recognition for its outstanding performance, receiving the Best Regulator in Africa Award in 2023 and attaining a top-tier ranking.

"In 2024, TBS became the first institution within the Southern African Development Community (SADC) to obtain International Quality Certification, and this year it has achieved International Accreditation for the Food Management System," he said.

He noted that TBS is the first institution within SADC to achieve this milestone, a clear testament to the strong collaboration between the Board, management, and all members of staff.

Meanwhile, the Bureau's Director General Dr. Ashura Katunzi highlighted the long journey of success the institution has achieved over half a century having developed thousands of national standards.

She stated that the achievements have positioned Tanzania among the leading countries in the field of standardization in Africa.

"TBS has successfully developed standards multiple sectors in collaboration across quality with stakeholders. and licenses have been issued to over 4,000 producers 1,700 including more than small-scale entrepreneurs who receive these services through government sponsorship," she said.

TBS was established in 1975 under the Standards Act No. 3 as a standards institution and officially commenced operations on April 14, 1976. In 1977, the Government amended the name and officially recognized it as the Tanzania Bureau of Standards through Act No. 1 of 1977.



A cross-section of participants attending the launch of TBS's 50th Anniversary Celebrations held recently at the TBS Headquarters in Dar es Salaam.



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Address

Tanzania Bureau of Standards Ubungo Area, Junction Morogoro/ Sam Nujoma Roads, P.O.Box 9524, Dar es Salaam TANZANIA.

Contacts:

Tel +255 2224 50298 + 255 2224 50206

+ 255 2224 50949 Telefax: + 255 2224 50959

Email: info@tbs.go.tz Hotline: 0800 110827 Website: www.tbs.go.tz

TBS steps up crackdown on banned cosmetics

By Deborah Haule

•he Tanzania Bureau Standards (TBS), through Eastern its Lake Zone Office, has intensified its campaign to eliminate substandard products from the market particularly cosmetics containing banned ingredients in a bid to safeguard public health.

Speaking at the 20th East Africa Trade Fair, Senior Quality Assurance Officer Mr. Donald Mkonyi, representing the TBS Eastern Lake Zone Manager, revealed that many of the harmful products enter the country through unofficial routes and are being distributed illegally, posing serious risks to consumers.

"TBS has been imposing fines on violators, removing such products from the market, and destroying them. The situation has improved as more traders are now aware of the regulations and are beginning to comply with requirements of standards," Mkonyi stated.

He noted that the enforcement measures were in line with the Standards Act, Chapter 130, and its accompanying regulations, which gives TBS the mandate to penalize and hold offenders accountable.

Mkonyi further stressed that all cosmetics sold in the country must be officially registered with TBS. He urged traders to source their products only from certified suppliers with valid documentation to ensure compliance.

As part of its efforts to enhance service delivery, TBS has restructured its Lake Zone into two administrative areas. The Eastern Lake Zone which covers Mwanza, Simiyu, and Mara regions, while the Western Lake Zone serves Shinyanga, Kagera, and Geita.

Entrepreneur Ms. Dorithe Mtesigwa, а natural soap maker, expressed her appreciation for TBS's support helping in her obtain the TBS quality mark.

"I used to be afraid, but now I can confidently sell my products knowing they are recognized and meet the required standards," she said.



Towards 50 years of TBS excellence — A commendable milestone

s the Tanzania Bureau of Standards (TBS) marks its Golden Jubilee, the nation pauses to reflect on five decades of unwavering commitment to quality, safety, and national development. Established in 1975 under the Standards Act No. 3, and renamed in 1977 through Act No. 1, TBS has grown into one of Africa's most respected institutions in standards development, conformity assessment, and metrology services.

For half a century, TBS has played a vital role in promoting industrial growth, facilitating trade, and protecting consumers. It has become a trusted guardianofpublichealthandsafety, while driving innovation and competitiveness across the manufacturing and service sectors. Today, its Golden Jubilee is not just a milestone; it is a testament

to resilience, professionalism, and visionary leadership.

In his remarks at the anniversary launch on September 18, 2025, the Permanent Secretary of the Ministry of Industry and Trade, Dr. Hashil Twaibu Abdallah, commended TBS for its enduring role in promoting industrialization and trade competitiveness. He reaffirmed the Government's commitment to strengthening the Bureau's capacity to support the nation's Vision 2050, which aims to transform Tanzania into a semi-industrialized, high-income economy.

He emphasized that standards are a cornerstone of industrial development and technological innovation, ensuring safety, enhancing efficiency, and removing technical barriers to trade — thereby

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creating an environment where businesses can thrive and consumers are protected.

At its inception, TBS was mandated to spearhead the development and enforcement of national standards to ensure that products and services meet acceptable quality and safety requirements. Over the years, the Bureau has expanded its scope to include product certification, inspection, food and cosmetics registration, and calibration services.

Currently, TBS operates 12 internationally accredited laboratories in various sectors, including building and construction, textiles and leather, food, electrical, mechanical, microbiology, chemistry, packaging, and metrology. These facilities, equipped with state-of-the-art technology, can test more than 50,000 samples annually. Ongoing projects to construct new laboratories in Dodoma, Mwanza, and Arusha demonstrate TBS's commitment to decentralizing services and improving access across all regions.

In her remarks at the launch, the TBS Director General. Ashura Katunzi, highlighted Dr. the Bureau's contribution industrial competitiveness and market access. With over 4,000 national standards developed and many harmonized with regional and international frameworks such as ARSO, EAC, and SADC, TBS has made Tanzanian products more competitive in both local and global markets.

Through its product certification programme, TBS has issued more than 6,000 licences to use the TBS Standards Mark of Quality, ensuring that locally manufactured goods meet consumer expectations and international trade requirements. The Bureau also inspects over 140,000 import consignments annually and registers more than 10,000 foreign products, safeguarding the nation from substandard and unsafe goods.

Furthermore, the introduction of digital systems such as OAS and i-SQMT has streamlined service delivery, reduced bureaucracy, and enhanced transparency for producers and traders.

TBS's achievements have earned it continental and international recognition. In 2023, the Bureau was honoured with the African Regulator of the Year Award, affirming its leadership in quality assurance. The World Health Organization (WHO) has also rated TBS at the highest performance level (Grade 4), underscoring its competence in food safety control. In 2024, TBS became the first institution in the SADC region to obtain international accreditation for product certification, followed in 2025 by accreditation for its food management system, which is another regional first. These milestones affirm Tanzania's growing influence in global quality infrastructure.

To commemorate this milestone, TBS has lined up several events throughout the year, including the Viwango Marathon, to be led by the Dar es Salaam Regional Commissioner; the Trade and Services Exhibitions, showcasing the role of standards in industrial and service excellence; a Gala Dinner for staff and stakeholders; and a Business Forum bringing together policymakers, manufacturers, and traders to discuss the role of standards in enabling trade under the African Continental Free Trade Area (AfCFTA). The celebrations will culminate on December 12, 2025, with a grand ceremony expected to be graced by the President of the United Republic of Tanzania.

As TBS celebrates 50 years of service under the theme "Inspiring Quality and Safety for Better Livelihood," it stands as a beacon of excellence, innovation, and national pride. With continued government support and stakeholder collaboration, TBS is poised to lead Tanzania into the next 50 years — strengthening quality infrastructure, driving industrial competitiveness, and safeguarding the well-being of every

TBS urges farmers to follow extension guidance



TBS Southern Zone Manager, Mr. Abel Mwakasonda, provides standards education to entrepreneurs during the 2025 Nanenane Southern Zone exhibitions in Lindi.

By Maryam Abdulaziz

he Tanzania Bureau of Standards (TBS) has urged farmers to follow extension officers' guidance to ensure public health and prevent diseases related to agricultural inputs.

TBS Southern Zone Manager Mr. Abel Mwakasonda

made the call during the Nanenane Farmers' Exhibition held at Ngongo grounds in Lindi recently.

"Extension officers provide hands-on training to farmers directly in their fields or gardens, guiding them on the proper use of agro-chemicals

including the essential waiting periods required for the chemicals to degrade and lose potency," he stated.

This ensures that when the crops are harvested and sold to consumers, the products are safe for human consuption.

He added that TBS participated in this year's exhibition with the aim of continuing to educate all Tanzanians engaging in the production and trade of various products to ensure they comply with standards requirements.

"Our goal is to ensure all Tanzanians use safe and quality products," he said.

Mr. Mwakasonda noted that the exhibition was a great opportunity for Tanzanians, especially those from the Southern regions who visited the TBS stall at the Ngongo grounds in Lindi, as they were able to receive education that alleviates the worries of producers and traders in general.

"Therefore, everyone who visited our stall received reliable information and avoided getting misleading information...," he explained.

Mwakasonda encouraged

producers to visit TBS whenever they want information regarding thequality and safety of products.

Additionally, he urged producers to visit TBS laboratories to verify the safety of their products.

"When you buy a product always look for the TBS mark which assures you of quality, reliability and safety"



TBS Eastern Lake Zone laboratories to enhance service delivery



TBS Board Chairman, Prof. Othman Chande (centre), joins members of the TBS Board of Directors and service providers during a recent inspection of the new laboratory and office complex under construction in Mwanza.

By Neema Mtemvu

he Tanzania Bureau of Standards (TBS) has announced that its new laboratory and office complex under construction in the Eastern Lake Zone will significantly enhance service accessibility by bringing testing and administrative functions

closer to clients in the region.

TBS Board Chairman, Prof. Othman Chande made the remarks following a recent inspection of the project's progress.

"By establishing this facility

in the Eastern Lake Zone, we are making it easier and faster for customers to access our testing and regulatory services," he said.

Prof. Chande instructed the contractor, CJIC from China, to speed up construction to ensure



the project is completed on time and begins serving the public.

"We are satisfied with the progress so far, but we encourage the contractor to speed up to meet the deadline," he elaborated.

He emphasized that the expansion of TBS laboratories and offices across the country aligns with President Samia Suluhu Hassan's directive to decentralize services and bring them closer to the people.

For her part TBS Director General Dr. Ashura Katunzi noted that the new facility will eliminate the need to send samples to Dar es Salaam for testing, adding that it will save both time and cost.

"Currently, samples are sent to Dar es Salaam, but our goal is to establish regional laboratories. Construction in Dodoma is 84 % complete, and we expect to begin work in Arusha soon," she said.

This development is expected

to reduce the time and costs associated with transporting samples to distant locations, ensuring efficiency and timely service delivery for the Lake Zone community.

Kiota Architects Project Manager, Architect Chris Olomi reported that the project is currently 47.7 % complete. Construction began last year and is scheduled for completion by April 2026, with a total investment of 12 billion.

"For safety and higher efficiency, always buy TBS-marked/certified electrical appliances"

TBS, ZBS strengthen partnership to boost trade



TBS Acting Director General and Director of Standards Development, Mr. David Ndibalema (left), and ZBS Director General, Mr. Yussuf Nassor, proudly display the signed MoU during the signing ceremony held at TBS Headquarters in Dar es Salaam.

By Neema Mtemvu

he Tanzania Bureau of Standards (TBS) and the Zanzibar Bureau of Standards (ZBS) have signed a fiveyear Memorandum of Understanding (MoU) aimed at enhancing institutional performance, facilitating trade, and improving the management of standards across the United Republic of Tanzania.

The agreement, which will run from 2025 to 2030, marks the third formal collaboration

between the two institutions. It focuses on knowledge sharing, capacity building, and streamlining the movement of goods between mainland Tanzania and Zanzibar.

Speaking during the signing ceremonyin Dares Salaam, ZBS Director General Mr. Yusuph Majid Nassor described the MoU as a significant milestone.

"TBS has over 50 years of experience, while ZBS has only 15 years since its establishment 2011. This partnership instrumental has been development, in our especially in laboratory services." Nassor. said

He noted that the agreement addresses past challenges

where products certified on one side of the Union faced entry restrictions on the other. Under the new arrangement, goods bearing a quality mark from either TBS or ZBS can now move freely across both jurisdictions.

"For example, bottled water from the mainland can now enter Zanzibar without barriers, and vice versa," he added.

Mr. Nassor also congratulated TBS on reaching its 50-year milestone and underscored the importance of sustained

collaboration for the benefit of citizens across the Union.

For his part TBS Acting Director Mr. David Ndibalema echoed the sentiment, stating that the strengthened partnership is simplifying trade procedures and enhancing consumer protection. He emphasized need for harmonized standards to ensure product quality and mutual recognition, ultimately contributing Tanzania's economic and social development.

"The bitterness of poor quality remains long after low price is forgotten! Always use TBS-certified products."

Ett

TBS urges mining stakeholders to prioritise quality



TBS Western Lake
Zone Manager, Mr.
Joseph Makene,
speaks with a visitor at
the Bureau's pavilion
during the 8th National
Mining Technology
Exhibitions in Geita.

By Maryam Abdulaziz

Stakeholders in the mining sector have been urged to adhere to standards in mineral value addition to increase their income.

The call was made recently by the Tanzania Bureau of Standards (TBS) Manager for the Western Lake Zone Mr. Joseph Makene during the 8th National Mining Technology Exhibition.

Makene emphasized that products meeting established standards typically command higher market value, underscoring the importance for stakeholders particularly in the mining sector to prioritise quality assurance.

He stressed that obtaining the Tanzania Bureau of

Standards(TBS)certification is crucial as it provides consumers with verified assurance of a product's compliance with rigorous quality benchmarks.

He emphasized TBS's key role in coordinating the development and enforcement of standards to promote value addition and enhance income generation in the mining sector.

"We are here to educate all stakeholders on the importance of adhering to product and mineral standards," Makene stated, adding, "Compliance with mineral standards is essential for maximizing the economic benefits of mineral resources," he said.

TBS calls on engineers to enforce national standards in feasibility studies



TBS Standards Manager, Eng. Yona Afrika, speaks with visitors at the TBS pavilion during the 2025 Engineering Day exhibition held recently at Mlimani City, Dar es Salaam.

By Neema Mtemvu

Standards (TBS) urged engineers consistently apply National Standards throughout feasi- This was highlighted by TBS bility studies and construction Standards projects, emphasizing

he Tanzania Bureau of vital role in ensuring struchas tural integrity, public safety, and regulatory compliance.

> Manager, Eng. their Yona Afrika during the 22nd

Commemoration of Tanzania Engineers Day in Dar es Salaam.

Hesaidthe Bureau's participation aimed mainly at raising awareness on the importance of using certified products

that meet safety and quality verified by TBS laboratories.

"We urge engineers to use only products tested and certified by TBS in their projects. Our state-of-the-art laboratories ensure all products meet the required quality standards," he said.

He noted that TBS operates three specialized laboratories

dedicated to testing engineering and construction materials, and also calibrates testing equipment to ensure accurate, standards-aligned results.

He emphasized the shift from international to locally developed standards which are created in collaboration with stakeholders which now serve as official benchmarks for all national projects.

He reaffirmed TBS's readiness to provide technical support, encouraging engineers to prioritize certified products and adhere to Tanzania Standards to uphold safety and quality in development initiatives.

RAS applauds TBS for supporting Small Scale Entrepreneurs

By Dennis Mzamilu

orogoro Regional Administrative Secretary Dr. Mussa Ali Mussa has commended the Tanzania Bureau of Standards (TBS) for its commitment to serving the public particularly small scale entrepreneurs, by offering them with the quality mark free of charge.

Speaking during the recent 2025 Nanenane exhibitions held in Morogoro, Dr. Mussa emphasized that TBS services play a vital role in national development. He noted that by ensuring locally produced and exported goods meet required standards, TBS enhances the competitiveness of Tanzanian products in both regional and international markets.

Dr. Mussa also urged TBS to strengthen its collaboration with stakeholders in the agricultural and industrial sectors. He highlighted the importance of educating farmers and producers on standards compliance to help

them increase the value of their products.

Meanwhile, TBS Eastern Zone Senior Quality Control Officer, Mr. Sileja Lushibika, stated that the Bureau is actively implementing measures to extend its services to stakeholders including conducting product inspections in markets and factories, as well as offering training and public education through various media platforms.

Mr. Lushibika added that TBS's participation in the 2025 Nanenane exhibitions underscores its role as a key Government institution. The event, he said, provides a valuable platform for manufacturers, government agencies, and other stakeholders to exchange ideas, showcase innovations, and raise public awareness about the importance of producing and using goods that meet standards requirements.

TBS stresses stakeholder engagement to drive business growth



TBS Senior
Public Relations
Officer, Ms.
Neema Mtemvu,
attends to visitors
at the Bureau's
pavilion during the
2025 Nanenane
Exhibitions in
Mwanza.

By Deborah Haule

he Tanzania Bureau of Standards (TBS) has underscored the importance of engaging stakeholders across various sectors to foster business growth and strengthen the country's economic contribution.

Speaking at the recent Nanenane Farmers' Exhibition in Mwanza Region, TBS Eastern Lake Zone Manager, Ms. Happy Kanyeka emphasized that adherence to product standards is a critical factor in driving business success.

"Meeting product standards is a key prerequisite for fostering business growth and ensuring economic success," she said.

Ms. Kanyeka described the Nanenane exhibition as a vital platform for engaging stakeholders in agriculture, livestock, and fisheries, and for promoting education on standards and quality control.

She noted that the 2025 edition of the exhibition presented a valuable opportunity for TBS to raise awareness, address challenges, and encourage nationwide compliance with quality standards.

"We have standards for agricultural products such as flour and rice. Meat, milk, and sausages fall under livestock, while fish products are covered under aquaculture. Through this exhibition, we have interacted with stakeholders and educated them on the importance of the quality mark and how to obtain it," she explained.

In addition to hosting visitors at the TBS pavilion, Ms. Kanyeka said the Bureau engaged directly with entrepreneurs, advising them on the benefits of the TBS Quality Mark and listening to their concerns.

"We have seen products bearing the quality mark after passing laboratory tests. For those without it, we provide quidance on how to obtain it," she added.

She clarified that TBS offers the quality mark free of charge to small-scale entrepreneurs recognized by the Small Industries Development Organization (SIDO), and encouraged them to seek support.

"TBS is not an enforcement agency but a partner that helps entrepreneurs to improve. When products don't meet standards, we offer guidance to help them comply," she said.

One of the attendees, Ms. Skampam Elirehema shared her experience saying she learned the importance of the TBS quality mark and proper packaging practices.

The Nanenane exhibitions continue to serve as a strategic platform for TBS to educate stakeholders, address industry challenges, and promote improvements in product and service quality across Tanzania.

"Quality is remembered long after the price is forgotten. Always use TBS-certified products"

TBS boosts public education on standards



TBS Quality
Assurance Officer
Mr. Issa Dadi
(right) provides
standards education
to a product
manufacturer during
the 2025 Social
Welfare Week
exhibitions in Dar es
Salaam

By Maryam Abdulaziz

anzania Bureau of Standards (TBS) is reinforcing its commitment to consumer protection by expanding public education on the importance of product

quality and safety standards.

Through targeted outreach at events like the Social Welfare Week Exhibition held at the Institute of Social Works in Dar

es Salaam, TBS has urged manufacturers and importers to comply with national standards, while offering free certification services to smallscale entrepreneurs to support

inclusive economic growth.

TBS Dar es Salaam Special Manager Ms. Meghji stated that the Bureau's involvement in the exhibition themed 'Seek psychological strengthen mental support, health' aligns with its mandate educate the public on the critical role of quality products. and safety

"Our goal is to reach citizens, entrepreneurs, especially and educate them about the services we provide, including factories. inspections at markets. wholesale ports. and retail shops to ensure products entering produced in the country are safe for use," said Meghji.

She added that TBS also offers education through social media, schools and during direct inspection activities to ensure all citizens gain a proper understanding of the

importance of product quality.

Ms. Meghji said that during the exhibition, many entrepreneurs showed up and received indepth information about the product certification service, a service provided free of charge to small-scale entrepreneurs.

She emphasized that with the free service to small-scale entrepreneurs, there is no reason for an entrepreneur to fail to meet standards requirements due to the excuse of cost.

"The government has covered this service through TBS for small entrepreneurs, so there is no longer any obstacle in ensuring their products are of good quality and safe for use by consumers," he emphasized.

Recognizing the contribution of entrepreneurs to economic growth, the government under the leadership of President Samia Suluhu Hassan has been

covering the costs of product quality certification for smallscale entrepreneurs at no cost.

Whatentrepreneurs are required to do to access this service is to visit TBS with an introductory letter from the Small Industries Development Organization and from there, the process of product certification begins.

The goal of this initiative is to enable them to participate in the economy, including economic empowerment, as their products will overcome trade barriers both domestically and within the region.

This is because member states of the East African Community (EAC) have agreed that once products are certified by the standards body of a member country, the products are allowed into the markets of other EAC countries without further testing in the destination member country.

"Misuse of TBS quality mark is a criminal offence punishable under the Standards Act No. 2 of 2009"

TBS unveils 2024 Food Fortification Regulations



TBS Standards Officer, Ms. Mwajuma Iddi, addresses stakeholders during a training session on standards and Food Fortification Regulations for maize products held recently in Dar es Salaam.

By Neema Mtemvu

he Tanzania Bureau of Standards (TBS) has officially launched the Food Fortification Regulations of 2024, mandating the addition of essential nutrients to staple foods such as maize flour to improve the health and nutrition of millions of Tanzanians.

This was unveiled recently in Dar es Salaam by the TBS Director of Standards Development, Mr. David Ndibalema during a stakeholder training session focused on quality, standards, and the new food fortification requirements for maize products. "The implementation of the 2024 Food Fortification Regulations is a major step towards combating malnutrition and improving public health in Tanzania," said Ndibalema.

He explained that by requiring the fortification of widely consumed staples like maize flour, the regulations aim to reduce nutrient deficiencies that contribute to anaemia, stunted growth, and other health issues particularly among vulnerable groups.

"This initiative not only ensures safer and more nutritious food for consumers, but also elevates industry standards, encourages compliance among producers, and aligns Tanzania with global nutrition and food safety guidelines," he added.

Mr. Ndibalema emphasized that the regulations support the country's broader goal of enhancing national well-being and

productivity through improved nutrition.

To ensure compliance, TBS has organized specialized training for stakeholders in the maize industry, focusing on adherence to Tanzania Standard 328. The 2024 Regulations require the fortification of packaged foods such as maize flour, wheat flour, cooking oil, and salt as a prerequisite for product registration and certification.

Representatives from the industry welcomed the initiative whereas Mr. Tabrani Kinoni, representing the Dar es Salaam Maize Flour Processors Association (UWAWASE), pledged to fully implement the training, noting its importance in meeting national quality standards.

Mr. Emanuel Benjamin, Chairman of the Grain Distributors for Milling Machines praised the training for addressing concerns about low-quality grains and committed to educating customers on the importance of maintaining product quality.

"TBS mark of quality: An assurance that you are buying a quality product"

Standards: A key driver of environmental sustainability



Eng. Jane Marwa

n today's world, the quest for environmental sustainability is more pressing than ever. Sustainable practices are essential to safeguarding our planet, from reducing plastic waste and emissions, to promoting clean energy and conserving biodiversity. But did you know that standards are pivotal in achieving this goal?

Standards are documents, established by consensus and approved by a recognized body, that provide, for common and repeated use, rules, guidelines etc. They span in various sectors, from manufacturing and agriculture to construction and

energy. Standards facilitate trade, regulate the market, and encourage technology transfer and economic development. When developed and implemented with the environment concept in mind, standards help reduce environmental impact promote and sustainable practices.

Standards are more than just technical documents. They are tools that shape industries, influence consumer and behaviour, drive environmental responsibility. Standards may work behind the scenes, but their impact is powerful and far-reaching. By aligning economic growth with environmental care, standards light the

toward a greener, cleaner, and more sustainable world for future generations.

Environment includes the physical factors the surroundings of human beings, including air, land, water, climate, sound, light, odour, micro-organisms, biological factors of animals and plants, cultural resources and socio-economic factors of aesthetics, including both the natural and built environment and the way they interact Environmental (National Policy, 2021). Environment is the sum of all external factors influencing living organisms their surroundings.

The pillars of environmental



Preservation of Natural Resources

Protection of Biodiversity

Climate Change Mitigation

IMPORTANCE OF ENVIRONMENTAL SUSTAINABILITY

Environmental sustainability is important because it helps preserve ecosystems and natural resources for current and future generations. Environmental sustainability contributes to clean air, water, and soil, increases biodiversity, and mitigates the impacts of climate change.

sustainability emphasize conserving ecosystems and natural resources by minimizing pollution, reducing waste, and restoring degraded habitats. For sustainability efforts to be effective, policy reform, stakeholder collaboration. technological innovation. and community education be included to drive must meaningful, positive change.

Environmental benefits and anthropogenic stresses

The environment provides countless benefits to humans and all other living things. It gives us the resources to survive and thrive, such as oxygen, food, water and shelter. environment supports our lives on earth, including biodiversity and ecosystem services like pollination, nutrient cycling, water filtration, climate regulation. medicine. security, and cultural benefits. It also offers opportunities for recreation and personal wellbeing, including activities like hiking and camping. Spending time in nature has been shown to improve mental health and reduce stress, and exercise in nature has been shown improve physical health.

Tanzania's economy largely depends on natural resources, including forests, marine and freshwater bodies, wetlands, wildlife, land, natural gas and

minerals. The third five-year Plan Development 2021/22 2025/26 reiterates that environment and natural resources are a national asset and the basis for sustainable development. The development and utilization of these resources contributed positively have towards economic growth and reduction of poverty in the country due to overpopulation and economic growth. The burden on natural resources is increasing, bringing several environmental challenges.

Although the environment is the foundation of sustainable development, the current State the Environment identifies twelve (12)key environmental challenges that require urgent action to halt environmental deterioration in the country. These challenges impact economic development, people's livelihoods. and the health of ecosystems.

twelve The identified (12)environmental challenges are land degradation, deterioration of water sources, impacts of climate change, environmental pollution, deforestation and forest degradation, loss of wildlife habitats and biodiversity. deterioration of coastal and marine ecosystems, wetland deterioration, inadequate waste management; urban environmental challenges: proliferation of invasive species;

and inadequate environmental governance. These challenges threaten the livelihood of the people, the national economy, and the state of the environment, which is crucial in supporting all forms of life.

Humans have been modifying the environment through with processes associated industrialization, population growth and urbanization. One of the most important results of these activities has been increased carbon dioxide emissions, (CO2) primarily due to burning fossil fuels and deforestation. The climate will always change due to the natural forcings of eccentricity (Earth's tilt in its orbit). This causes long-term climate changes that the environment cannot adjust.

A shared responsibility

Whether vou are manufacturer. policymaker, consumer. community or member, you have a role to play in achieving environmental sustainability because thev drive grassroots change. Simple behaviours such as reducing waste, conserving energy and water, recycling, and purchasing environmentally friendly products can all have a huge positive impact on the environment. Promotion and use of standards is one of the most practical steps toward sustainable and resilient

future. Apart from that, we are encouraged to plant trees in our surroundings to help protect and preserve our environment. Trees play a vital role in cleaning the air, preventing soil erosion, providing shelter to wildlife, and combating climate change. By planting trees, we are investing in a greener, healthier future for generations to come.

The role of standards in advancing environmental sustainability

The Tanzania Bureau of Standards (TBS), which is the custodian of standards development, ensures that all standards developed take account environmental into protection, public health. and the safety, general welfare of the people of the United Republic of Tanzania.

TBShasdeveloped and adopted range of environmental standards that are fundamental environmental protection and management, and are aligned with international best practices. These include standards on air and water quality, wastewater treatment, environmental management systems, noise and vibration. radiation, climate change, biodiversity, and solid waste management. Just to mention a few, these include TZS 700-ISO Guide 64:2008, Guide for addressing environmental issues in product standards; TZS 3493-ISO 14006, Environmental management systems — Guidelines for incorporating ecodesign.

All standards, including environmental standards, play a crucial role in advancing environmental sustainability. They promote the efficient use of resources by encouraging the optimal utilization of water, energy, and raw materials. For instance, ISO 50001 supports energy management systems that help organizations improve energy performance and reduce greenhouse gas emissions. Standards also encourage eco-friendly products and practices by defining criteria environmentally friendly goods, such as biodegradable packaging, non-toxic materials, or low-emission technologies. Labels such as eco-labels, Energy Star, or TBS certified products enable consumers to make informed and ecoconscious choices; for example, TZS 538, Packaging and labeling of foods.

Furthermore, standards support waste reduction and recycling by guiding waste management, material recovery, and recycling processes. They help industries minimize their environmental footprint through packaging, reuse, and end-of-life product disposal requirements, such as those outlined in TZS 3045-ISO 15270, Plastics — Guidelines for the recovery and recycling of

plastics waste. Environmental standards also help mitigate climate change by limiting pollution, controlling emissions, guiding the transition to low-carbon technologies. Examples include standards on carbon footprint calculation, greenhouse gas verification, climate resilience planning, such as TZS 2595-ISO 14067. Greenhouse gases — Carbon footprint of products: Requirements and guidelines for quantification.

Lastly, standards are instrumental in supporting the United Nations Sustainable Development Goals (SDGs), particularly Goal 12 (Responsible Consumption and Production), Goal 13 (Climate Action), and Goal 6 (Clean Water and Sanitation).

Mark your calendar for environmental & standards day celebrations

Every year on 5th June, the world celebrates the World Environment Day. The United Nations designated this day to raise awareness about our planet's critical environmental issues. It is a day to remind ourselves that we can change course and build a more sustainable future. This year's (2025) was "ending theme plastic pollution", which aimed to raise awareness about the harmful impacts of plastic waste on ecosystems,



wildlife, and human health.

On the other hand, the World Standards Day is celebrated every October 14th. This year, the World Standards Day will explore how standards provide a shared framework that enables

meaningful collaboration across industries, governments, and organizations to achieve common objectives. With the theme "Shared Vision for a Better World – Spotlight on SDG 17: Partnerships for the Goals," the campaign will highlight concrete

examples that demonstrate the power of partnerships and the positive impact of working together through standards.



Let us all work together, and make use of the standards to protect our environment.

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* Eng. Jane Marwa is a Standards Officer in the Chemical Standards Section at TBS.

From nutrition to growth: The role of iodated salt in children's well-being



Miraji Kambangwa



Table salt (fine, left) and coarse salt

alt processing dates back to around 6000 BC. In ancient civilizations, salt was highly valued for food preservation, mummification, and trade. It even served as a form of currency and was essential for human survival. Its importance is reflected in words like salary and salad, both derived from the Latin word sal, meaning salt [1].

The most common and correct Swahili name for salt is chumvi. Other names such as munyu, mkubwa wa jiko, and dawa ya mboga are also used, but less frequently. Salt is an edible product that is a crystalline solid, white, pale, or light grey in colour. It consists mainly of sodium chloride, obtained from the sea, underground rock salt deposits, or natural brine, and should be free from dust.

dirt, sand, or other impurities. lodated salt means salt that contains an essential micronutrient (iodine) which is important for body functions and intellectual growth.

Children are individuals who depend on adults to express, understand, and protect their needs because they are not yet able to explain or decide things for themselves.

Nowadays, many adults are changing their lifestyles to prevent non-communicable diseases and often reduce their daily intake of salt. However, this reduction can lower the amount of iodine available to both adults and children, which may affect children's growth and development.

lodine deficiency disorders is a major public health problem worldwide, in which more than two billion people have insufficient iodine intake, including 285 million

school-age children [2].

Salt iodation is the process of adding iodine to edible salt to prevent iodine deficiency disorders. This is usually done using potassium iodate (KIO□), which is prepared as a solution and then evenly sprayed or mixed with the salt during processing. On a small scale, this can be done manually bottles. using spray while larger operations use drip-feed systems and mechanical mixers on conveyor belts for uniform distribution. Once iodated, the

salt may be dried if needed and is then packaged in moisture-proof materials to protect the iodine content. To ensure quality and effectiveness, the final product is regularly tested to confirm it contains the correct amount of iodine as per standard requirements.

The recommended daily intake of iodine is 120 µg/d for school children and, 150 µg/d for adult men and women (WHO, 2004).



lodation of salt using a knapsack sprayer

Roles of iodated salt in children's health

lodine in iodated salt is a vital micronutrient required for the production of thyroid hormones, which regulate growth, brain development, and metabolism. For children, adequate iodine intake is essential for physical growth, cognitive development,

and overall well-being.

One of the most effective and affordable ways to ensure sufficient iodine intake is through the use of iodated salt.

For decades, iodine deficiency has been a silent public health problem, especially in developing countries. Children who do not get enough iodine are at risk of stunted growth, goiter, delayed puberty, and impaired mental development. In severe cases, iodine deficiency can lead to learning difficulties and poor school performance, affecting a child's future potential.



A normal male and three females with severe longstanding hypothyroidism with dwarfism (stunted growth). (Picture by the National Library of Medicine, NLM)

To address this, the World Health Organization (WHO) and UNICEF have long recommended universal salt iodization as a simple but powerful solution.

lodated salt enriches everyday diets with the right amount of iodine, reaching people from all income levels. Unlike costly supplements, salt is consumed by nearly everyone, making it an ideal carrier for delivering this

essential nutrient. Studies have shown that communities using iodated salt have lower rates of goiter, better growth outcomes, and improved learning performance among children.

Tanzania's efforts and standards

In Tanzania, the government through the Tanzania Bureau of Standards (TBS) has developed a National Standard, TZS 132-EAS 35, Fortified edible salt — Specification, which sets requirements for fortified edible salt intended for human consumption. This standard focuses on both specific and fortification requirements to ensure quality and safety. TBS plays a key role in monitoring salt quality, raising public awareness, and enforcing compliance among producers and distributors.



TBS staff and salt industry stakeholders pose for a group photo during a salt standards awareness session in Bagamoyo

To strengthen these efforts, on 22nd October 2024, the Minister of Industry and Trade, Hon. Selemani Saidi Jafo, signed the revised edition of Standards (Food and Fortification) Regulations, which require that all salt imported, manufactured, or sold for human and animal consumption in Tanzania must be iodated. It is prohibited to produce, distribute, or sell noniodated salt for consumption.

TBS is responsible for overseeing and enforcing the Standards (Food Fortification) Regulations 2024, making sure that staple foods like maize flour, wheat flour, edible oil, and salt are properly fortified and meet national standards for nutrients, safety, labelling, packaging, and storage.

The development of guidelines to support the effective implementation of the Regulations is currently in progress, with TBS and other stakeholders actively engaged in the preparation process.

Parents and caregivers play a vital role in protecting children's health by ensuring that the salt used at home is iodated and marked with the TBS mark. Using iodated salt is a simple but powerful step toward building a healthier, smarter, and more productive generation.

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- * Mr. Miraji Kambangwa is a Standards Officer in the Chemical Standards Section at TBS.

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