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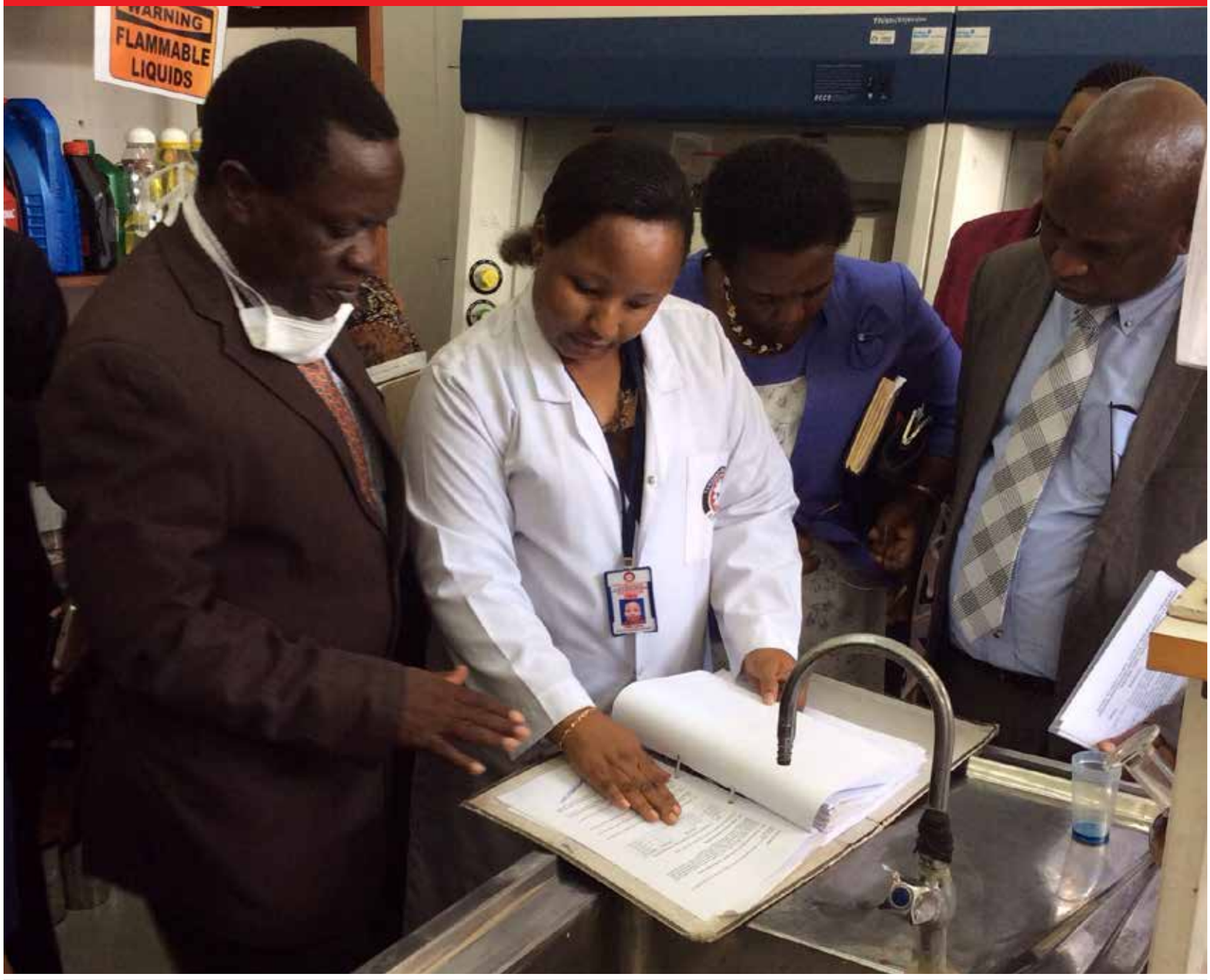
inside stories



The Minister for Industry, Trade and Investment, Hon. Charles Mwijage reviews test methods with the Head of Chemistry Laboratory, Ms Edith Lyimo, during his familiarization visit at TBS in December 2015.

VISION

A model of excellence in standardization and quality assurance services by 2025.

MISSION

To promote standardization and quality assurance in industry and commerce through standards development, quality assurance, metrology and testing services for sustainable socio-economic development.

QUALITY POLICY

Tanzania Bureau of Standards (TBS) endeavours, as mandated, to deliver quality products that include standards and quality assurance services by meeting and even exceeding customers' requirements so as to retain their loyalty. TBS provides resources and continually improves her processes to ensure that employees are capable of consistently producing quality products at the right time.

CORE VALUES

i. Customer focus
We deliver services to meet consumers' expectations.

ii. Quality culture
We employ the best available practices and professional values in performing our duties.

iii. Transparency
We exercise openness, impartiality, accurately and promptly share information with all stakeholders.

iv. Integrity
We constantly demonstrate impartiality, fairness and honesty while upholding the highest ethical standards.

v. Team work
We work together through concerted efforts to achieve our corporate goals.

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Let us join hands against sub-standard products

Public outcry on the increase of sub-standard products in the market has increased tremendously despite the fact that Tanzania Bureau of Standards (TBS) has been striving hard to fight against either the importation or production of the below average products in the country.

It is vivid that there are some unfaithful businessmen and women who tend to violate the country's rules and regulations by either producing or importing sub-standard product knowingly with the aim of making super profit.

For unfaithful importers to accomplish their missions of ensuring that the sub-standard products enter the country, they are forced to use unofficial routes.

It has been discovered that since the Government has strengthened security in all official routes such as airports, harbours and borders, it has been discovered that unfaithful importers do not use the official routes instead they use un-official routes where the Government's watchdogs cannot easily put them into hands.

For local producers, basically Small and Medium Entrepreneurs (SMEs) are the ones who produce various products without prior-permission from TBS and other relevant authorities.

Although TBS has been educating SMEs on the procedures and importance of producing quality products it has been a trend for some SMEs to produce and take uncertified products to the market.

As a way to ensure that the sub-standard products are cleared from the market, recently TBS introduced a campaign aiming at removing all sub-standard products in the market. The products include substandard tyres, used undergarments, oil lubricants, electrical appliances and other products which fall under the compulsory standards.

The move is backed up by the newly appointed Minister for Industry, Trade and Investment, Hon. Charles Mwijage, who insists that he will join TBS efforts in ensuring that the Tanzanian market is not turned into a dumping ground.

Hon. Mwijage made it clear during his visit at TBS Headquarters in Dar es Salaam, where he lamented that it is painful and unfair for a faithful local manufacturer who invests a lot of money on the production of quality products to compete with unfaithful importer who imports cheap sub-standard products.

According to the Minister, the dirty games by some unfaithful businessmen and women cannot be tolerated any more noting that the Ministry of Industry, Trade and Investment in collaboration with the Bureau and other government watchdogs will work hand in hand to make sure that the sub-standard products are no longer in the market.

The Era of sub-standard products in the market has come to an end as the TBS Management has set various strategies that include recruiting new staff who shall be allocated to the new border offices.

Some of the expected new offices will be at the borders of Namanga, Holili, Horohoro, Rusumo, Tanga and Sirari.

Other offices will be opened at Kasumulo, Tunduma and Mwanza port.

TBS has also opened an office at the Dar es Salaam's Mwalimu Julius Kambarage Nyerere International Airport (JKIA) and it will soon open another one at the Kilimanjaro International Airport (KIA), zonal offices in Mwanza, Arusha and Mbeya.

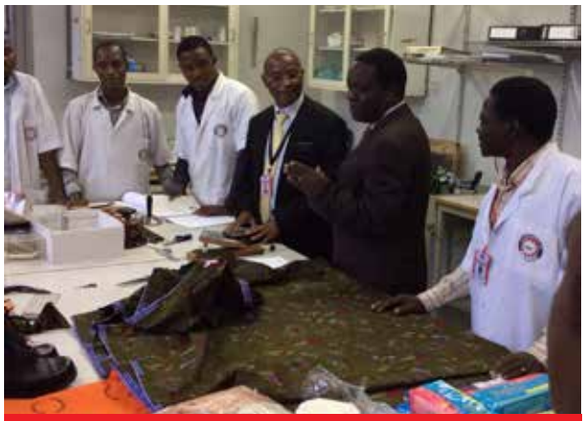
The increase in number of staff from 228 to 428 by December 2015 has facilitated all these efforts, as for many years TBS was facing a serious shortage of staff.

The "remove sub-standard products from the market" campaign does not only end up in removing the below average products from the market, but also involves public education on the effects of sub-standard products in the market.

With 945,203 square kilometres, Tanzania has a lot of un-official borders and harbours while TBS has only 428 staff. With this number of workers, TBS cannot be at all areas all the time thus partnership with other government organs and the general public at large is highly needed.

It is our hope that all these efforts will bear fruits because we are hoping that the public will play its part by refraining itself from buying sub-standard products like used undergarments and others of the like.

Tanzania not a dumping ground - Mwijage



The Minister for Industry, Trade and Investment, Hon. Charles Mwijage (second right) comments on testing of textile materials during his visit at TBS.

Tanzania Bureau of Standards (TBS) has been urged to put more efforts in fighting against the importation and manufacturing of substandard products in the country since Tanzania is not a dumpling place for below average goods.

The Minister for Industry, Trade and Investment Mr. Charles Mwijage made the remark during his familiarization tour at the TBS headquarters in Dar es Salaam.

Mr. Mwijage commended TBS for its efforts of curbing substandard products in the country adding that more efforts were needed to ensure that the Tanzanian market is not turned into a dumping ground.

"TBS should invest much on public education that the issue of quality cannot be compromised…therefor all manufacturers and importers should observe standards," he insisted.

He further elaborated that the national's standards watchdog should provide information and education to the general public on various activities it performs through the use of media. He emphasized that the government will do all possible to ensure that the land does not turned to a dumping place.

The Minister also visited TBS test houses where he applauded workers for good performance in ensuring that all products are accurately tested.

He reminded workers to adhere to professionalism by ensuring timely delivery of services to win public confidence.

However, Mr. Mwijage highlighted public complaints and corruption practices among some TBS staff.

"There is a need to take serious measures against the reported acts and the TBS Management should take punitive measures against the culprits", he noted.

TBS through some international agents started to test products in the countries of origin before been shipped to Tanzania through the 'Pre-shipment Verification of Conformity (PVoC)' in February 2012 as a way to avoid the importation of substandard products in the country.

Through PVoC, all importers of products are required to make sure that their products are tested in the countries of origin before been transported to Tanzania by the TBS international agents which are SGS and Bureau Veritas.

Masikitiko named TBS Director General

President Jakaya Mrisho Kikwete has appointed Joseph Masikitiko as the Tanzania Bureau of Standards (TBS) Director General.

Before his elevation Masikitiko was the TBS acting Director General.

Mr. Masikitiko holds a CPA and Masters Degree in Business Administration from Mzumbe University of Morogoro. He earlier served as the Director of Corporate Services.

TBS Destroys over 2,000 bundles of imported roofing sheets, shuts down milk processing factory

TBS inspectors destroy substandard roofing sheets.

The Tanzania Bureau of Standards (TBS) has destroyed over 2,100 bundles of imported roofing sheets worth 900m/- which belong to Dar based Uni Metals East Africa Company for failure to meet required standards.

Speaking in Dar es Salaam during an exercise to tear down the sheets at the company's premises, the TBS Standard officer Joseph Ismail, said the sheets did not meet the minimum standard gauge of 32 mm thickness.

"A huge consignment of these sheets does not have at least the minimum thickness gauge they are not fit for roofing identical houses," he said

He said substandard sheet have a short life span, therefore hurting the final consumers.

He said earlier this year, officials of TBS tested samples

of their products and found out that some do not meet the required standard hence not safe for users.

Ismail who was accompanied by police officers and some TBS officials said in February this year they wrote a letter to the company's management directing to collect all roofing sheet that are already in the market and destroy them at their own cost.

He said the company responded and collected the said bundles and ordered to rewrite actual gauge of other sheets which were out of required national standards of TZS 1477: 2011

The standard officer said the Bureau would continue to inspect industries and other manufacturers to ensure they comply with production standards within the region.

Speaking, company's director identified as Rohit Panjwani said they were not aware that the imported sheets were of low quality.

He said they would continue collaborating with relevant government authorities in order to avoid importation of substandard goods.

Meanwhile, the Bureau has shut down a milk processing factory operating on the outskirts of Sanya Juu township of Siha District after it was discovered that its management had forged the TBS mark of quality.

The factory which produce pasteurized and Homogenized milk products including packed fresh milk, cultured milk, cheese, Ghee, Yoghurt and Ice Creams under the Kilimanjaro brand their packages bear the TBS mark with serial number TZS-1220 and TZS-251 which are fake as the factory has ever been certified by TBS.

Kilimanjaro Creamaries has breached the Standards Act number 2 of 2009 by using TBS quality mark without undergoing the relevant process for certification.

TBS was compelled to close the factory, to prevent the firm from further production until all the relevant procedures are completed.

TBS to introduce Imports Standards Mark (ISM)

TBS Director General, Mr. Joseph Masikitiko presents to a manufacturer a licence to use the TBS standards mark of quality on certified products. Looking on is the Director of Quality Management, Eng. Tumaini Mtitu.

Tanzania will from next year introduce an Import Standard Mark (ISM) to identify imported goods in the local market in order to protect consumers' health and the country from being a dumpsite for substandard products.

TBS Director General Joseph Masikitiko unveiled the move in Dar es Salaam recently while granting standard licences to manufacturers whose products had met relevant standards requirements.

At the event, 41 companies received standard mark licences, licence extension and tested product certificates.

"We are in the final stage of preparing the document, recruit and educate local businessmen countrywide," he said

When operational, all imported products will have to bear the import standardization mark from TBS regardless the fact that they already have such a mark from the countries of origin.

The mark will would answer the outcry by the local business community about unfair competition when quality goods are forced to compete with substandard ones, normally sold at throw-away prices.

Meanwhile, the Bureau of has suspended licences to 32 companies for failing to meet the requirements of using TBS standard's mark of quality and tested product certificate.

The companies include beverage and drinking water producers, bakeries and confectionaries and motorcycles importers from the country and abroad.

The suspension of the licences meant that it could no longer guarantee the quality of the products manufactured by the companies.

ISO General Assembly approves strategic plan

The International Organization for Standardization (ISO)'s 38th General Assembly has approved a six- part strategic plan for 2016-2020 and its implementation that will focus on active engagement of all stakeholders.

The meeting which took place in Seoul Korea drew 165 ISO Member countries under the chair of the ISO President Dr.Zhang Xiaogang.

The meeting approved six strategic plan areas including development of high quality standards through ISO's global membership ,effective stakeholders and partners engagement, strong foundation in people and organization development, effective use of technology communication and ISO Standards to be used everywhere.

It was highlighted that one of organization's greatest strengths is its ability to cross national borders and bring the world together to make great things happen and that can only be achieved through a strategic plan

Regarding high quality standard through ISO's Global membership, members agreed that the organization must both excel in the core business of developing standards

which includes applying goods standardisation practices such as those established by the World Trade Organization and ensure it makes the most of its valuable network of national members.

On people and organization development, the meeting focused on supporting the transfer of knowledge to a younger generation of experts through provision of capacity building solutions for ISO members, taking account for their strategic priorities, culture and economic development.

The meeting also resolved to develop partnerships and working more closely with ISO member on issues of national knowledge sharing and development.

It also observed that the use of technology strategy will invest on solutions that facilitate stakeholder's engagement and easy access to content through ISO's network of members, providing opportunities for said members to deliver services to stakeholders and customers in new ways.

The strategy on ISO standards to be used everywhere will ensure a coherent and credible collection of standards that are used effectively by industry and bring recognised benefit to economies.

ISO is an independent non-governmental international organization with membership of 165 national standards bodies.

Through its members, it brings together experts to share knowledge and develop voluntary consensus-based, market relevant international standards that support innovation and provide solutions to global challenges

The next 39th ISO General Assembly will be held in September 2016, Beijing China.

Tanzanian delegates during the 38th ISO General Assembly in Seoul, South Korea. They are Chairman of TBS Board of Directors Prof. Cuthbert Mhilu (centre), TBS DG Mr. Joseph Masikitiko (right) and Director

NIT, TBS implement vehicle inspection pact

Tanzania Bureau of Standards (TBS) and National Institute of Transport (NIT) have started to implement the pact regarding the inspection of all un-inspected imported vehicles.

The pact which was signed in February this year assigned NIT to conduct the job with effect from July 1, 2015.

The inspection of products including used motor vehicles before being transported to the country helps not only to know if the vehicles conform to the set requirement but also assists in protecting the consumers' health, environment and local industries against unfair competition.

All importers of used motor vehicles from UK, Japan, and United Arab Emirates are reminded that it is a must to inspect all used motor vehicles before they are shipped to Tanzania.

The Standards body started to inspect used motor vehicles in 2002 with the purpose of ensuring that all imported used motor vehicles are roadworthy and conform to relevant standards.

ANY DOUBT WITH IMPORTED PRODUCT? SHOP WITH CONFIDENCE WITH ISM MARK

MEETINGS HELD

During the period of July — December 2015, the following standardization meetings were held:

MEETING	DATE
National Consultative Meeting on Mechanical Engineering (MEDC)	2015–09–09
Divisional Standards Committee on Electrical Engineering (EEDC)	2015–07–08
General Techniques Divisional Committee (GTDC)	2015-09-04 & 2015 -09 – 18
Divisional Committee on Mechanical Engineering (MEDC)	2015–09–16
Divisional Standards on General Techniques (GTDC)	2015-10-30
Divisional Standards on Textile and Leather (TDC)	2015 -12-17
National Consultative meeting on Oil seeds, Fats and Oil Products	2015-12- 7-8
Food and Agriculture Divisional Standards Committee (AFDC)	2015-11-08 – 2015-11-14
Textile and Leather Divisional Standards Committee (TDC)	2015 -12-17
National Consultative Meeting on Oil seeds, Fats and Oil Products	2015-12- 7-8
Electrical Installations Technical Committee (EEDC3)	2015-07-09
Mining Exploration Technical Committee (MMDC1)	2015–07–08
Mineral Processing Technical Committee (MMDC3)	2015–08–31
Concrete Technical Committee (BCDC1)	2015-09-18
Packaging Technical Committee (GTDC4)	2015-09-11
Mining Technical Committee (MMDC2)	2015–09–10
Agriculture and Food Technical Committee (AFDC)	2015-07-08-09
Fish and Fishery Products Technical Committee (AFDC 23)	2015-07-07 & 2015-07-27-29
Microbiology Technical committee (AFDC 8)	2015- 07-27
Fresh Fruits and Vegetables Technical Committee (AFDC 26)	2015-08-10-12
Cement and Lime Technical Committee (BCDC4)	2015-10-8
Quantities, units, symbols & conversion factors Technical Committee (GTDC1)	2015-10-01
Packaging Technical Committee (GTDC4)	2015-10-16
Metals and Structures Technical Committee (MEDC 2)	2015-10-20
Roof Materials and Finishes Technical Committee (BCDC 9)	2015-12-02
Metals and Structures Technical Committee (MEDC2)	2015-12-15
Water Quality Technical Committee (CDC6)	2015-08-18
Plastic and Plastics Products Technical Committee (CDC11)	2015-08-31 & 2015-09-17
Technical Committee on Fiber (TDC 11)	2015 -09-18
EAC Regional Technical Harmonization meeting on Fish and Fishery Products (EASC/TC/003)	2015-08-10-14
Leather and Leather Products Technical Committee (TDC11)	2015-10-22
Textile Apparel Technical Committee (TDC2)	2015-12-15 & 2015-12-29
Fertilizers & Soil Conditioners Technical Committee (AFDC 10)	2015-10-2 & 2015-10- 20
Technical Committee on Microbiological Specifications for Foods (AFDC 8)	2015-10-22
Technical Committee Cereals, Pulses and Legumes (AFDC 16)	2015-10-12-13
Fish and Fishery Products Technical Committee Meeting (AFDC 23	2015-11-03
Tobacco and Tobacco products Technical Committee (AFDC 20)	2015-12-04
Conformity Assessment Technical Mirror Committee (ISO -CASCO)	2015-11-23
Radiation Technical Committee (EMDC 5)	2015-11-13
Wastewater Technical Committee (EMDC 1)	2015-12-8
Domestic Insecticide Technical committee (CDC 08)	2015-10-20
Cosmetics and Creameries Technical Committee (CDC 3)	2015-12- 04

FINALIZED TANZANIA STANDARDS

During the period of July — December, 2015 the following Tanzania Standards were finalized:

1. **TZS 1737-1: 2015/ISO9884-1: 1994, Tea sacks** – Specification-Part 1: Reference sacks for palletized and containerized transport of tea

2. **TZS 1737-2: 2015/ISO9884-2: 1999, Tea sacks**- Specification-Part 2: Performance specification for sacks for palletized and containerized transport of tea

3. **TZS 1739: 2015/ISO 3676: 2012, Packaging** – Complete, filled transport packages and unit loads – Unit load dimensions

4. **TZS 1740: 2015/ISO 3394: 2012, Packaging** – Complete, filled transport packages and unit loads - Dimensions of rigid rectangular packages.

5. **TZS 1741: 2015/ ISO28219: 2009, Packaging** – Labelling and direct product marking with linear bar code and two-dimensional symbols

6. **TZS 1742: 2015/ ISO 21067: 2007, Packaging** – Vocabulary

7. **TZS1571: 2015,** Rural and urban addressing.

8. **TZS 46: 2015, Turmeric whole, in pieces and ground** – Specification

9. **TZS 358: 2015, Cardamoms** – Specification

10. **TZS 31: 2015, Chillies and capsicums (whole and ground)** – Specification

11. **TZS 284-1: 2015 (IEC 60076-1:2011). Power Transformers** – Part 1: General

12. **TZS 1518-8: 2015, PVC insulated cables of rated voltages up to including 450/750V-Part 8:** Single core, flat twin and 3-core sheathed cables for fixed wiring

13. **TZS 600: 2015, Protection of persons and equipment by enclosures** – Probes for verification

14. **TZS 1768: 2015, Code of practice for production,** processing and handling of coffee beans was finalized under the coffee and coffee products technical committee.

15. **TZS 1743: 2015,** Code of hygienic practices for spices and dried aromatic plants

16. **TZS 1744: 2015,** Dehydrated garlic specification

17. **TZS 1745: 2015, Dried mangoes** – Specification

18. **TZS 1208: 2015, (Revision of TZS 1208: 2009)** – Tilsiter Cheese – Specification

19. **TZS 1214: 2015, (Revision of TZS 1214: 2009)** – Camembert Cheese – Specification

20. **TZS 1214: 2015, (Revision of TZS 1214: 2009)** – Camembert cheese – Specification

21. **TZS 1208: 2015, (Revision of 1208: 2009)** – Tilsiter cheese –Specification

22. **TZS 1762: 2015, Milk and milk products** – Determination of alkaline phosphatase activity, Part 1: Fluorimetric method for milk and milk based drinks.

23. **TZS 1763: 2015/EAS 821:2014, Maize seed** – Requirements for certification.

24. **TZS 1764: 2015/EAS 822:2014, Sorghum seed** – Requirements for certification.

25. **TZS 1765: 2015/EAS 823:2014, Sunflower seed** – Requirements for certification.

26. **TZS 1766: 2015/EAS 824:2014, Soybean seed** – Requirements for certification.

27. **TZS 1767: 2015/EAS 825:2014, Groundnut seed** – Requirements for certification.

28. **TZS 830:2015/EAS 820:2014, Dextrose monohydrate (Glucose power)** – Specification (Revision of TZS 830: 2004).

NEW PROJECTS INITIATED

During the period of July — December, 2015 the following projects of standards were initiated:

1. **BCDC 5 (4404) P1 Bitumen and bituminous binders** – Terminology.
2. **BCDC 5 (4402) P1 Bitumen and bituminous binders** – Specification for paving grade
3. **BCDC12(4520)** P1 Plywood for Concrete Shuttering works-specification
4. **BCDC 5 (4403) P1 Bitumen and bituminous binders** – Framework for specifying cut-back and fluxed bituminous binders
5. **BCDC 5 (4405) P1 Bitumen road emulsions** – Part: Specification for anionic bitumen road emulsions
6. **BCDC 4(4523) P1 Petroleum and natural gas industries** -- Cements and materials for well cementing - Part 1: Specification
7. **BCDC 9(4522) P1 Laminate floor coverings** – Specification
8. **BCDC 9 (4521)** P1 Gypsum cove cornices
9. **GTDC4 (4572)** P1, Packaging-Polypropylene knitted raschel bags for green tea leaves
10. G**TDC1 (4653) P1, Quantities and units-Part 1**: General (ISO 80000-1:2009)
11. **TBS/AFDC 26(4532)**P1 Breadfruit Specification
12. **TBS/AFDC 26(4533)**P1 Fresh Okra Specification
13. **TBS/AFDC 26(4534)**P1 Fresh Watermelons Specification
14. **AFDC 20 (4452) P1- Cigars**-Specifications
15. **AFDC 20 (4453) P1 -Hooker Tobacco**-Specification
16. **AFDC (4455) P1-Snuff**- specifications
17. **AFDC (4456) P1-Tobacco and tobacco products**-determination of total ash
18. **AFDC (4458) P1 Tobacco and tobacco products**-determination of loss in mass on heating
19. **AFDC 20 (4460)** P1 Tobacco and tobacco products determination of total Nitrogen percent by mass
20. **AFDC 20 (4461) P1 Tobacco and tobacco products**-Determination of total chlorides
21. **AFDC (4562) P1 Cigarettes** – Determination of filling density
22. **CDC6(4508) P1 packaged/bottled alkaline drinking water** – specification
23. **CDC6(4509) P1 packaged/bottled carbonated drinking water** – specification
24. **CDC6(4510) P1 packaged/bottled flavored drinking water** – specification
25. **CDC 6(4513) P1/ISO 5664 Water quality** – Determination of ammonium – Distillation and titration method
26. **CDC 6(4514) P1/ISO 5961 – Water quality** – Determination of cadmium by atomic absorption spectrometry
27. **CDC 6(4515) P1/ISO 7027 – Water quality** – Determination of turbidity
28. **CDC 6(4516) P1/ISO 6777 – Water quality** – Determination of nitrite – Molecular absorption spectrometric method
29. **CDC 6(4517) P1/ISO 6333 - Water quality** – Determination of manganese –formaldoxime spectrometric methods
30. **CDC 6(4518) P1/ISO 6332 - Water quality** – Determination of iron – Spectrometric method using 1,10-phenanthroline
31. **CDC 6(4519) P1/ISO 6703-1 - Water quality** – Determination of cyanide – Part 1: Determination of total cyanide
32. **CDC 6(4520) P1/ISO 6059 - Water quality** – Determination of the sum of calcium and magnesium – EDTA titrimetric method
33. **AFDC 22 (4475) P1 Chicken meat** – Specification
34. **BCDC 4 (4567) P1 Petroleum and natural gas Industries** – Cements and materials for well cementing – Part 2: Testing of well cements
35. **BCDC 4(4568) P1 Petroleum and natural gas Industries** – Cements and materials for well cementing – Part 3: Testing of Deepwater well cement formulations.
36. **BCDC 4(4569) P1 Petroleum and natural gas Industries** – Cements and materials for well cementing – Part 4: Preparation and testing of foamed cement slurries at atmospheric pressure.
37. **Classification of large busses** (ordinary, semi-luxury and luxury).
38. **BCDC 4(4570) P1 Petroleum and natural gas Industries** – Cements and materials for well cementing – Part 5: Determination of shrinkage and expansion of well cement formulations at atmospheric pressure.
39. **BCDC 4(4571) P1 Petroleum and natural gas Industries** – Cements and materials for well cementing – Part 6: Methods of determining the static gel strength of cement formulations
40. **EEDC 5 (4644) P1 Crystalline Silicon terrestrial photovoltaic modules**- Design qualification and type approval.
41. **EEDC 5 (4645) P1 Solar photovoltaic (PV) power systems**- Glossary
42. converted Safari vehicles
43. **CDC 3 (4625)P1/ISO 21148:2005 Cosmetics** – Microbiology – General instructions for microbiological examination
44. **CDC 3 (4626)P1/ISO 21149:2006Cosmetics** - Microbiology - Enumeration and detection of aerobic mesophilic bacteria

45. **CDC 3 (4627)P1/ISO 21150:2006 Cosmetics** - Microbiology - Detection of Escherichia coli
46. **AFDC 10 (4646) P1 - Fertilizer** – Ammonium Nitrate – Specification
47. **AFDC 10 (4643) P1 - Fertilizer**– Granulated rock phosphate – Specification (Rev. TZS 988: 2009
48. **AFDC 10 (4642) P1 - Fertilizer** – Rock phosphate powder – Specification (Rev. TZS 987: 2009)
49. **CDC 3 (4628)P1/ISO 22717:2006 Cosmetics** – Microbiology – Detection of Pseudomonas aeruginosa
50. **CDC 3 (4629)P1/ISO 22718:2006 Cosmetics – Microbiology** – Detection of Staphylococcus aureus
51. **CDC 3 (4630)P1/ISO 11930:2012 Cosmetics** - Microbiology - Evaluation of the antimicrobial protection of a cosmetic product
52. **CDC 3 (4631)P1/ISO 16212:2008 Cosmetics** – Microbiology - Enumeration of yeast and mould
53. **CDC 3 (4632)P1/ISO 18416:2007 Cosmetics** - Microbiology - Detection of Candida albicans

STANDARDS CIRCULATED FOR STAKEHOLDERS' COMMENTS

During July – December, 2015 the following Draft Tanzania Standards were circulated for stakeholders' comments:

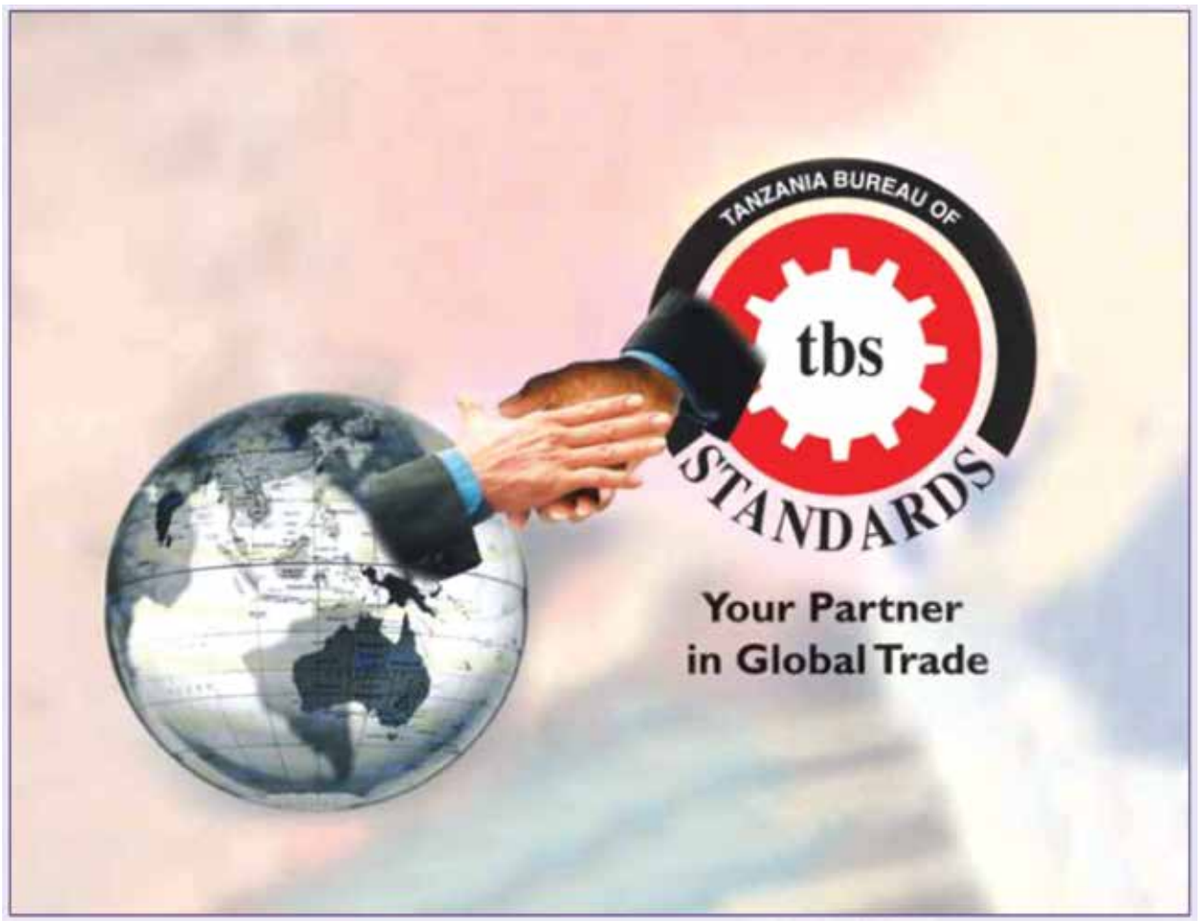
1. **FDEAS 827: 2014 Fresh and frozen whole fin fish** – Specification
2. **FDEAS 829: 2014 Transport of live fish seeds for aquaculture purposes** — Code of practice
3. **FDEAS 830: 2014 Frozen fish sticks (fish fingers), fish portions and fish fillets** — Breaded or in batter — Specification
4. **FDEAS 831: 2014 Frozen fish fillets** — Specification
5. **FDEAS 832: 2014 Fish industry** — Operational cleanliness — General Guidelines
6. **FDEAS 833: 2014** Code of practice for processing and handling of dried fish and fishery products
7. **FDEAS 834: 2014** Code of practice for processing and handling of salted fish and fishery products
8. **AFDC 14 (4141) – Camembert cheese** – Specification
9. **AFDC 14 (4138) –Tilsiter cheese** – Specification
10. **DEAS 870: 2015** – Crackers from marine and freshwater fish, crustaceans and molluscan shellfish -Specification
11. **DEAS 871: 2015 – Fish sausage** – Specification
12. **DEAS 872: 2015 - Frozen octopus** – Specification
13. **DEAS 873: 2015 - Frozen tuna loins** — Specification
14. **DEAS 874: 2015 - Processing and handling of prawns or shrimp** — Code of practice
15. **DEAS 875: 2015 – Quick frozen prawns and shrimps** – Specification
16. **DEAS 876: 2015 – Smoked fish, smoke flavoured fish and smoke dried fish** — Specification
17. **MEDC 10 (3408) P3 – Agricultural Machinery** – Four-Wheel Tractor –Test Methods.
18. **MEDC2 (4105) P3** – Specification for Stainless Steel Wash-hand Basin and Wash Troughs
19. **MEDC2 (4111) P3** – Steel wire products for fencing – Specification
20. **AFDC 1 (4256) P3** – Hazard Analysis and Critical Control Point (HACCP) System – Requirements for any organization in the food chain.
21. **AFDC 22 (4433) P3** – Fresh, Chilled and Frozen bovine meat (beef) - Specification.
22. **AFDC 22 (4390 :) P3** – Fresh meat in retail – Code of hygiene (Revision TZS 183).
23. **AFDC 22 (4478) P3** - Code of hygiene for meat processing plant (Revision TZS 458)
24. **AFDC 22 (4391) P3** – Abattoir design, Ante mortem and post mortem inspection of slaughtered animals, fresh meat and processed meat products – Code of hygiene (Revision TZS 110:1981)
25. **AFDC 26 (4532)P3** – Fresh breadfruit – Specification
26. **AFDC 26 (4670)P3** - Fresh Garlic– Specification
27. **AFDC 26 (4534)P3** – Jackfruit Specification
28. **AFDC 26 (4433)P3** - Fresh Okra – Specification
29. **AFDC 26 (4342)P3** - Fresh sweet banana – Specification
30. **AFDC 26 (4062) P3** – Code of hygienic practices for fresh fruits and vegetables.
31. **AFDC 14 (4220)P3** – Determination of turbidity in sterilized milk
32. **AFDC 14 (4220)P3** – Determination of turbidity in sterilized milk
33. **AFDC 14 (4180)P3 – Flavoured milk** – Specification
34. **AFDC 14 (4218)P3** - Determination of creaming index in milk
35. **AFDC 14 (4137)P3- Cream cheese** – Specification
36. **CDC 2(4234)P2Household fabric softeners** — Specification
37. **CDC2 (4235) P2 Powder Sanitizers** – Specification
38. **CDC2 (4236) P2 Heavy-duty alkaline detergents for 'Cleaning-in-place' in food and beverage industry** – Specification
39. **CDC2 (4237) P2 Acidic detergents for 'Cleaning-in-place' in food and beverage industry** – Specification
40. **CDC2 (4406) P2 Liquid drilling detergent**— Specification

VOTING/BALLOTING OF ISO STANDARDS

During July – December, 2015 the following International Standards (ISO) were circulated for balloting:

1. **IS0 7540: 006 Ground Paprika** –Specification
2. **ISO/FDIS 18537:2015 Traceability of crustacean products** – Specifications on the information to be recorded in captured crustacean distribution chains
3. **ISO/FDIS 16741:2015 Traceability of crustacean products**-Specifications on the information to be recorded in farmed crustacean distribution chains
4. **ISO/FDIS 18539:2015 Traceability of molluscan products**-Specifications on the information to be recorded in captured molluscan distribution chains
5. **ISO/FDIS 137; Wool** – Determination of fibre diameter – Projection microscope method.
6. **ISO/FDIS 17608; Textiles** – Bare elastane yarns-Determination of resistance to chlorinated water (swimming pool water).
7. **ISO 2962:2010, Cheese and processed cheese products** - Determination of total phosphorus content -- Molecular absorption spectrometric method
8. **ISO 5546:2010, Caseins and caseinates** - Determination of pH (Reference method)
9. **ISO 6091:2010, Dried milk** – Determination of titratable acidity (Reference method)
10. **ISO 6732:2010, Milk and milk products** – Determination of iron content - Spectrometric method (Reference method)
11. **ISO 10932:2010, Milk and milk products** – Determination of the minimal inhibitory concentration (MIC) of antibiotics applicable to bifidobacteria and non-enterococcal lactic acid bacteria (LAB)
12. **ISO 11813:2010, Milk and milk products** – Determination of zinc content - Flame atomic absorption spectrometric method
13. **ISO 12081:2010, Milk** – Determination of calcium content – Titrimetric method
14. **ISO 26462:2010, Milk** – Determination of lactose content – Enzymatic method using difference in pH
15. **ISO 1211:2010, Milk – Determination of fat content** – Gravimetric method (Reference method)
16. **CIB: SC9 N 1777,** Application of the confirmation procedure ISO 16140 – 6
17. **CIB: SC9 N 1779,** Call for experts ISO/TC 34/SC 9 WGs
18. **CIB: SC9 N 1778,** Reso 680 Activation of ISO 11133/AMD 1 confirmation media
19. **ISO/TS 14067** Carbon Footprint of products proposed to be upgraded to International Standard
20. **FDIS 13065 to ISO 13065ISO:2015** "Sustainability criteria for bioenergy"
21. **ISO/DIS 13061-11 Physical and mechanical properties of wood – Test methods for small clear wood specimens** – Part 11: Determination of resistance to impact indentation.
22. **ISO/FDIS 8903 (Ed 2) Broadleaved sawn timber** - Nominal sizes
23. **ISO/DIS 18402 Timber Structures** - Structural Insulated Panel roof construction - Test methods.
24. **ISO NWIP – N409 - Textiles; Man - made fibre** – Determination of dye-uptake of polyester fibre at normal pressure.
25. **ISO 7482-1 Raw goat skins-Part 1:** Description of defects
26. **ISO 7482-2 Raw goat skins-Part 2:** Guidelines for grading on the basis of mass and size.
27. **ISO TC 134 ISO/TC 134** Fertilizers and Soil Conditioners Committee on: Determination of Secondary Nutrients and Trace Metals in Fertilizers by mixed acid digestion and quantification by ICP-OES.
28. **ISO/N 1281 Tobacco and tobacco products** – Determination of ammonia – Method using ion chromatographic analysis.
29. **ISO/CD 20778 Routine analytical cigarette-smoking machine** -- Definitions and conditions for the intense smoking regime.
30. **ISO/CD 20779 Cigarettes** — Determination of total and nicotine-free dry particulate matter using a routine analytical smoking machine with an intense smoking regime.
31. **CIB: SC9 N 1981,** Enquiry on strains used for controls of confirmation media and reagents. A filled table was submitted composed of the strains that are used in TZ. Those used strains were provided by TC members from their institutions.
32. **CIB: SC9 N 1780_WG 25** Whole-genome sequencing: WGS for Food Microbial Typing and Genomic Characterization of foodborne microorganisms. Version 1.4.
33. **ISO 2820:1974** leather raw hides of cattle and horses methods of trim.
34. **ISO 2821:1974** Leather raw hides of cattle and horses preservation by stack salting.
35. **ISO 2822-1:1988** Leather Raw cattle hides and calf skins part 1: Description of defects.
36. **ISO 4683-1:1988-**Leather Raw sheep skins part 1:description of defects
37. **ISO 4683-2:1988**-Leather Raw sheep skins part 2: Designation and presentation.

38. **ISO 7482-1:1998**-Leather Raw goat skins part 1: Description of defects
39. **ISO 7482-2:1998-Leather Raw goat skins part 2**: Guidelines for grading on the basis of mass and size.
40. **ISO/WD 11050 Wheat flour and durum wheat semolina** – Determination of impurities of animal origin.
41. **ISO 7971-2:2015 Cereals** – Determination of bulk density, called mass per hectoliter – Part 2: Method of traceability for measuring instruments through reference to the international standards instrument.
42. **ISO 7971-3:2015 Cereals** – Determination of bulk density, called mass per hectoliter – Part 3: Routine method.
43. **ISO TS 14027** Product Category Rule proposed to be working draft. The vote casted was 'abstain' as there was no reference document or link.
44. **ISO 14044: 2016** Environmental management Life Cycle Assessment: Principle and frame work.
45. **ISO 14040: 2016** Environmental management Life Cycle Assessment.
46. **ISO 14024:1999/ d Amd 1.** Environmental labels and declaration - Type 1 Environmental labelling- principles and procedure.
47. **14063: 2016 Environmental management:** Environmental communication guidelines and examples.



THINK NO FURTHER TBS GOT YOU COVERED IN ENSURING QUALITY OF GOODS IN THE MARKET.

Training

During the July — December 2015 period, 28 members of the staff attended long courses training sponsored by TBS, while a good number of employees attended short courses sponsored by TBS and other donors.

a) Long term training

S/N	NAME & POSITION	COURSE	DURATION	SPONSOR	DATE OF COMMENCE MENT & COMPLETION	PROGRESS REPORT	PLACE
1	**Mr. Johannes Maganga** Senior Standards Officer I	Masters in Engineering Management	2 years	TBS	October 2011 – September 2013	He has successfully completed course - work, proceeding with dissertation and reported for duty	UDSM
2	**Mr. Gervas Kaisi** Senior Quality Assurance Officer I	Masters of Science in Environmental Technology and Management	2 years	TBS	October 2013 – October 2015	He has successfully completed his studies.	Ardhi University
3	**Mr. Salvatory Rusimbi** Senior Quality Assurance Officer I	MBA (Corporate Management) Executive mode	18 months	TBS	January 2014 – September 2015	He has successfully completed studies.	Mzumbe
4	**Mr. Joshua Katabwa** Senior Quality Assurance Officer I	MBA (Corporate Management) Executive mode	18 months	TBS	January 2014 – September 2015	He has successfully completed his studies.	Mzumbe
5	**Mr. Feruzi Ibrahim** Principal Laboratory Technician I	Bachelor of Medical Laboratory Science-Microbiology/ Immunology	3 years	TBS	01st October 2012-01st October 2015	He has successfully completed his studies, proceeding with internship.	MUHAS
6	**Mr. Ridhiwani Ramadhani** Principal Quality Assurance II	Masters of Science in Food Science	2 years	TBS	October 2012 - October 2014	He has successfully completed his studies.	SUA

S/N	NAME & POSITION	COURSE	DURATION	SPONSOR	DATE OF COMMENCEMENT & COMPLETION	PROGRESS REPORT	PLACE
7	**Mr. Jabir Abdi** Senior Systems Administrator I	Masters of Science in Information Technology Management	2 years	TBS	October 2012 – October 2014	He has successfully completed his studies.	IFM
8	**Ms. Rehema Nyamoga** Quality Assurance Officer I	Masters of Science in Chemistry	2 years	TBS	October 2012 – October 2014	She has successfully completed her studies.	UDSM
9	**Ms. Innocencia Mtetewaunga** Personal Secretary I	Diploma in Secretarial Studies	2 years	TBS	January 2013 – December, 2015	She has seated for final year exams waiting for results.	TPSC
10	**Mr. Charles Challe** Senior Procurement Officer I	Masters of Science Procurement & Supply Chain Management	2 years	TBS	October 2013 – October 2015	He has successfully completed his studies.	Mzumbe
11	**Mr. Hamis Sudi** Senior Standards Officer I	Masters of Science Mathematical Modeling	2 years	TBS	October 2013 – October 2015	He has successfully completed course work – Proceeding with dissertation	UDSM
12	**Mr. Ingram Kisamo** Senior Metrologist I	MBA (Corporate Management) Executive mode	18 months	TBS	January 2015 – September 2016	He has successfully completed course work- Proceeding with dissertation	Mzumbe
13	**Mr. Joseph James** Senior Metrologist I	Masters of Science Mathematical Modeling	2 years	TBS	October 2013 – October 2015	He has successfully completed his course work - Proceeding with dissertation	UDSM
14	**Mr. Selemani Abdallah** Office Assistant I	Diploma in Procurement and supply Management	2 years	TBS	August 2013 – August 2015	He has successfully completed his studies.	CBE

S/N	NAME & POSITION	COURSE	DURATION	SPONSOR	DATE OF COMMENCEMENT & COMPLETION	PROGRESS REPORT	PLACE
15	**Mr. Yona Afrika** Standards Officer I	Masters of Science Production Engineering	2 years	TBS	October 2013 – October 2015	He has successfully completed course - work, proceeding with dissertation and reported for duty	UDSM
16	**Ms. Evelyne Kahatano** Personal Secretary I	Diploma in Secretarial Studies	2 years	TBS	July 2013 – June 2015	She has successfully completed her studies.	TPSC
17	**Ms. Amina Yasini** Quality Assurance Officer I	Msc degree in Public Health and Food Safety	2 years	TBS	October 2014 – October 2016	She has successfully completed course work – Proceeding with dissertation	SUA
18	**Ms. Salama Shekilango** Quality Assurance Officer I	Msc degree in Public Health and Food Safety	2 years	TBS	October 2014 – October 2016	She has successfully completed course work – Proceeding with dissertation	SUA
19	**Ms. Flora Luvanda** Quality Assurance Officer I	Msc degree in Public Health and Food Safety	2 years	TBS	October 2014 – October 2016	She has successfully completed course work – Proceeding with dissertation	SUA
20	**Ms. Victoria Stephen** Quality Assurance Officer I	Masters of Science in Chemistry	2 years	TBS	October 2014 – October 2016	She has successfully completed course work – Proceeding with dissertation	UDSM
21	**Ms. Justina Ngalla** Personal Secretary II	Diploma in Secretarial Studies	2 years	TBS	July 2015- July 2017.	She has completed first semester, no progress report received yet.	TPSC

S/N	NAME & POSITION	COURSE	DURATION	SPONSOR	DATE OF COMMENCEMENT & COMPLETION	PROGRESS REPORT	PLACE
22	**Ms. Anna Mhalu** Quality Assurance Officer I	Msc degree in Public Health and Food Safety	2 years	TBS	October 2013 – October 2015	She has successfully completed course-work, proceeding with dissertation and reported for duty	SUA
23	**Mr. Rwiza Rutina** Assistant Internal Audit I	Masters of Business Administration (MBA)	2 years	TBS	July 2015-July 2017	He has just started first semester, no progress report received yet	UDSM
24	**Ms. Zena Chijoriga** Quality Assurance Officer I	Msc in Food Quality and Safety Assurance	2 years	TBS	July 2015-July 2017	She has just started first semester, no progress report received yet.	SUA
25	**Mr. Laurence Chenge** Standards Officer I	Msc in Food Quality and Safety Assurance	2 years	TBS	July 2015-July 2017	He has just started first semester, no progress report received yet.	SUA
26	**Ms. Ruth Malele** Office Assistant I	Certificate in Records Management	I year	TBS	July 2015-July 2016	She has just started first semester, no progress report received yet.	VETA
27	**Mr. Florian C Batakanwa** Quality Assurance Officer I	Msc in Oil and Gas Management	2 years	TBS	July 2015-Sept 2016	He has just started first semester, no progress report received yet.	UK
28	**Mr. Joseph Ismail** Standards Officer I	Master of Science in Renewable Energy	2 years	TBS	Nov 2015-Nov 2017	He has just started first semester, no progress report received yet.	UDSM

b) Short term training

During the period under review, members of TBS staff attended short course training as follows:

1. Training on ISO 9001:2015 "Quality Management System and Internal Auditors

Nineteen (19) members of staff attended a five day training on ISO 9001:2015 "Quality Management System and Internal Auditors in Dar es Salaam from 30th November – 4th December 2015.

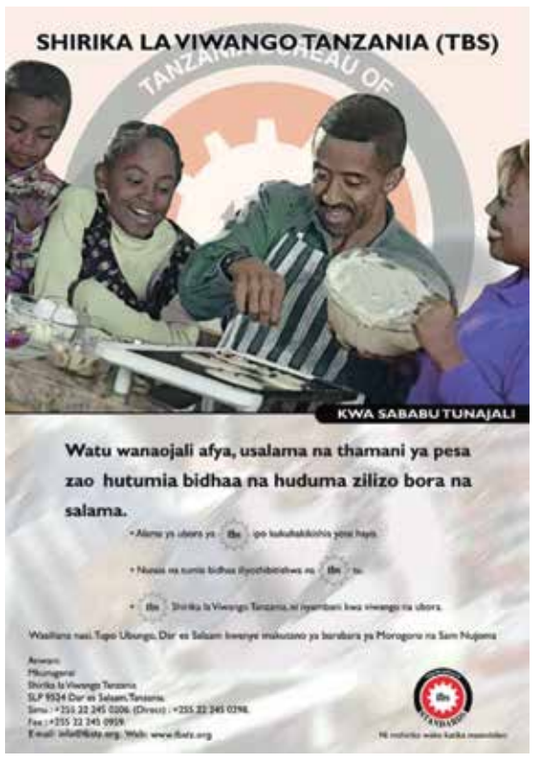
2 Other training attended

Other short training opportunities attended during the period of July – December 2015 are as shown in the following table:

S/N	NAME	COURSE	DURATION	SPONSOR	DATE	PLACE
1.	**Mr. Godfrey Benedict** Standards Officer II	International Training Programme on Standardization and Quality Assurance	56 days	ITEC	12th October - 04th December 2015	India
2.	**Mr. Henry Massawe** Standards Officer II	International Training Programme on Standardization and Quality Assurance	56 days	ITEC	12th October - 04th December 2015	India
3.	**Mr. Peter Martin** Quality Assurance Officer I	Training Course For Import –Export Textile Product Testing Technicians of Developing Countries of 2015.	28 days	Government	23rd November -22nd December 2015	China
4.	**Mr. Freedom Mwakibete** Principal Lab. Technician II	Training in Bitumen Analysis	1 week	TBS	19th -23rd October 2015	Dar es Salaam-
		Training in Bitumen Analysis	2 weeks	TBS	5th -10th October 2015	Mombasa
5.	**Mr. Stephen Minja** Quality Assurance Officer I	Training in Bitumen Analysis	1 week	TBS	19th -23rd October 2015	Dar es Salaam
		Training in Bitumen Analysis	2 weeks	TBS	5th -10th October 2015	Mombasa
6.	**Mr. Frank Emmanuel** Accounts Technician II	Seminar on Accounting and Auditing Standards	3 days	TBS	29th -31st October 2015	Mwanza
7.	**Mr. Joseph James** Senior Metrologist I	Seminar for Measurement for Industrial Development especially in Pharmaceutical sector.	5 days	PTB	02nd -04th December 2015.	Mombasa
8.	**Mr. Safari Fungo** Standards Officer I	Training Course in Paint Technology Tenable in Coating Technology Centre	5 days	TBS	9th to 12th November 2015	UK

S/N	NAME	COURSE	DURATION	SPONSOR	DATE	PLACE
9.	**Mr. Ridhiwani Ramadhani** Senior Quality Assurance Officer I	Training on Quality Infrastructure Development in Support of World Trade	6 days	SIDA	4th to 30th October 2015	Sweden
10.	**Mr. Seti Siga** Principal Lab Technician I	Training on Uncertainty of Measurement (Physical)	5 days	TBS	19th to 23rd October 2015	South Africa
11.	**Mr. Sigifrid Mhagama** Principal Assistant Accountant I	Accounts Annual Conference 2015	3 days	TBS	3rd December 2015-5th December 2015.	Dar es Salaam
12.	**Mr. Hassan Ngabwama** Assistant Accountant I	Accounts Annual Conference 2015	3 days	TBS	3rd December 2015-5th December 2015	Dar es Salaam
13.	**Mr. Frank Emmanuel** Assistant Accountant II	Accounts Annual Conference 2015	3 days	TBS	3rd December 2015-5th December 2015	Dar es Salaam
14.	**Mr. Moses Mngondo** Assistant Accountant II	Accounts Annual Conference 2015	3 days	TBS	3rd December 2015-5th December 2015	Dar es Salaam

QUALITY IS A STORY BEHIND EVERY PRODUCT



Product samples tested and calibrations made

During the period under review several requests for testing, calibration and packaging services were received and testing/ calibration performed in the various laboratories, as per the following table:

S/N	LABORATORY	EXPECTED OUTPUT	ACTUAL	ACHIEVEMENT
1	Building & Construction	850	404	47.5%
2	Electrical	80	126	157.5%
3	Mechanical	320	508	158.8%
4	Chemistry	600	506	84.3%
5	Food	950	925	97.4%
6	Textile	400	217	54.3%
7	Packaging	50	41	82.0%
8	Metrology	3500	3418	97.7%
9	*Cotton	250	0	0.0
	TOTAL	**7000**	**6145**	**87.8%**

Staff matters

Recruitment

During the period of July – December 2015, the following staff joined the TBS workforce:

S/N	Name	Designation	Gender
1.	John Michael Tesha	Inspector II	M
2.	Mbumi Mwampeta	Quality Assurance Officer II	F
3.	Vicent Mabula	Quality Assurance Officer II	M
4.	Jeremiah Mhamba	Quality Assurance Officer II	M
5.	Riziki Billy Sinkwai	Metrologist II	M
6.	Barnabas Maganga	Metrologist II	M
7.	Wambura Wishega	Metrologist II	M
8.	Endael Kamala	Metrologist II	F
9.	Luhangano M. Lupenza	Metrologist II	M
10.	Goodluck Mtenga	Quality Assurance Officer II	M
11.	Alfred Emil	Metrologist I II	M
12.	Aziza Marley	Quality Assurance Officer II	F
13.	Jameson Samson	Metrologist II	M
14.	Said Busara	Metrologist II	M
15.	Pendo V. Mauya	Quality Assurance Officer II	F
16.	John Zacharia	Metrologist II	M
17.	James Nhagala	Metrologist II	M
18.	Joseph B. Tarimo	Standards Officer II	M
19.	Catherine Baata	Quality Assurance Officer II	F
20.	Israel Anyisile	Quality Assurance Officer II	M
21.	Jumanne Mrisho	Quality Assurance Officer II	M
22.	Alexander Mashalla	Standards Officer II	M
23.	John Yarrot	Metrologist II	M
24.	Eugenia Kibasa	Quality Assurance Officer II	F

25.	Paul Sabai	Quality Assurance Officer II	M
26.	Krispus Shembilu	Metrologist II	M
27.	Catherine Bulemo	Quality Assurance Officer II	F
28.	Josephat Sospeter	Quality Assurance Officer II	M
29.	Paul S. Ndege	Standards Officer II	M
30.	Projestus Kasimbazi	Standards Officer II	M
31.	Neema T. Msemwa	Standards Officer II	F
32.	Salim S. Mohamed	Standards Officer II	M
33.	Daudi Nkubile	Quality Assurance Officer II	M
34.	Pumbua Kazungu	Laboratory Technician II	M
35.	Fadhili F. Festo	Inspector II	M
36.	John Stanslaus	Quality Assurance Officer II	M
37.	Ritha Matindiko	Quality Assurance Officer II	F
38.	January H. Faustine	Inspector II	M
39.	Grangay Masala	Inspector II	M
40.	Edith J. Kavishe	Quality Assurance Officer II	F
41.	Mwajuma Iddi	Standards Officer II	F
42.	Bruno A. Laswai	Laboratory Technician II	M
43.	Abdi Jumanne	Quality Assurance Officer II	M
44.	Peter Musiba	Quality Assurance Officer II	M
45.	Samson Tuisabe	Quality Assurance Officer II	M
46.	Florah Aidan	Quality Assurance Officer II II	F
47.	Philemon I. Kigosi	Inspection Technician II	M
48.	Hamisi Jafari	Quality Assurance Officer II	M
49.	Edian G. Revelian	Inspection Technician II	M
50.	Ramadhan Swalehe	Quality Assurance Officer II	M
51.	Frank Egidius	Laboratory Technician II	M
52.	Godfrey Mbevi	Inspection Technician II	M
53.	Ahmad K. Said	Quality Assurance Officer II	M
54.	William A. Mduma	Laboratory Technician II	M
55.	Edes T. Ernest	Quality Assurance Officer II	M
56.	Pokela Ibrahim	Quality Assurance Officer II	M
57.	Harith N. Harith	Quality Assurance Officer II	M
58.	Fadhili D. Sinkala	Inspection Technician II	M
59.	Hussein Said	Quality Assurance Officer II	M
60.	Issa Dadi	Inspection Technician II	M
61.	Dadi Elia	Inspection Technician II	M
62.	Dorice Masembe	Inspection Technician II	F
63.	Buliro Magesa	Inspection Technician II	M
64.	Henry Msuya	Standards Officer II	M
65.	Humphrey Shonga	Legal Officer II	M
66.	Godfrey Nguka	Laboratory Technician II	M
67.	Athuman I. Athuman	Quality Assurance Officer II	M
68.	Makoye Ngereya	Planning Officer II	M
69.	Batuel Mwasegile	Laboratory Technician II	M
70.	Frederick L Mwambafula	Quality Assurance Officer II	M
71.	Noela R. Mwita	Inspection Technician II	F

During the period under review, the following international standards were receieved in the TBS library:

AGRICULTURE AND FOOD STANDARDS

- ISO 18537:2015 Traceability of crustacean products – Specification on the information to be recorded in captured crustacean distribution chain
- ISO 15539 :2015 Traceability of molluscan products - Specification on the information to be recorded in captured molluscan distribution chain
- ISO 18867 :2015 Microbiology of the food chain – Polymerase chain reaction (PCR) for the detection of food – borne pathogens – Detection of pathogenic Yersinia enterocolitica and Yersinia pseudotuberculosis
- ISO 16741:2015 Traceability of crustacean products – Specification on the information to be recorded in farmed crustacean distribution chains.

CHEMICAL STANDARDS

- ISO 18134-2: 2015 Solid biofuels – Determination of moisture content – Oven dry method - Part 2: Total moisture – Simplified method
- ISO 18134-3:2015 Solid biofuels – Determination of moisture content – Oven dry method - Part 3: Moisture in general analysis sample
- ISO 19973 - 2:2015 Pneumatic fluid power – Assessment of component reliability by testing – Part 2: Directional control valves
- ISO 19973 - 3:2015 Pneumatic fluid power – Assessment of component reliability by testing – Part 3: Cylinders with piston rod
- ISO 19973 - 5:2015 Pneumatic fluid power – Assessment of component reliability by testing – Part 5: Non – return valves, shuttle valves, dual pressure valves (AND function), one- way adjustable flow control valves, quick-exhaust valves.
- ISO 20844:2015 Petroleum and related products – Determination of the shear stability of polymer-containing oils using a diesel injector nozzle.

ENVIRONMENTAL STANDARDS

- ISO 16258- 1:2015 Workplace air – Analysis of respirable crystalline silica by X-ray diffraction – Part 1: Direct-on-filter method
- ISO 16258- 2:2015 Workplace air – Analysis of respirable crystalline silica by X-ray diffraction – Part 2: Method by indirect analysis.
- ISO 16733 -1: 2015 Fire safety engineering – Selection of design fire scenarios and design fires. – Part 1: Selection of design fire scenarios
- ISO 16900-6:2015 Respiratory protective devices – Method of test and test equipment – Part 6: Mechanical resistance/strength of components and connections
- ISO 16900-9:2015 Respiratory protective devices – Method of test and test equipment – Part 9: Determination of carbon dioxide content of the inhaled gas.
- ISO 16900-10:2015 Respiratory protective devices – Method of test and test equipment – Part 10: Resistance to ignition, flame, radiant heat and heat
- ISO 16900-13:2015 Respiratory protective devices – Method of test and test equipment – Part 13: RPD using generated breathable gas and special application mining escape RPD: Consolidated test for gas concentration, temperature, humidity, work of breathing, breathing resistance, elastance and duration
- ISO 18191:2015 Water quality – Determination of pHt in sea water – Method using the indicator dye m-cresol purple

MECHANICAL STANDARDS

- ISO 289 – 1 :2015 Rubber, unvulcanised - Determinations using a shearing- disc viscometer - Part 1: Determination of Mooney viscosity
- ISO 289 – 3:2015 Rubber, unvulcanised - Determinations using a shearing- disc viscometer - Part 3: Determination of the Delta Mooney value for non –pigmented, oil-extended emulsion-polymerized SBR.
- ISO 4000-1:2015 Passenger car tyres and rims - Par 1: Tyres (metric series)
- ISO 4347:2015 Leaf chains clevises and sheaves – Dimensions, measuring forces, tensile strength and dynamic strength.
- ISO 5149- 1:2015 Refrigerating systems and heat pumps – Safety and environmental requirements - Part 1: Definition, classification and selection criteria - Part 4: Post crash electrical safety.
- ISO 6469-4:2015 Electrically propelled road vehicles – Safety specifications
- ISO 6721- 10:2015 Plastics – Determination of dynamic mechanical properties - Part 10: Complex shear viscosity using a parallel-plate oscillatory rheometer
- ISO 7623:2015 Steel cord conveyor belts – Cord-to-coating bond test – Initial test and after thermal treatment.
- ISO 8308:2015 Rubber and plastics hoses and tubing – Determination of transmission of liquids through hose and tubing walls
- ISO 8267 -1:2015 Aircraft – Tow bar attachment fittings interface requirements – Part 1: Main line aircraft
- ISO 8267 -2:2015 Aircraft – Tow bar attachment fittings interface requirements – Part 2: Regional aircraft
- ISO 10231:2015 Motorcycle tyres – Test methods for verifying tyre capabilities.

- ISO 14456:2015 Gas cylinder – Gas properties and associated classification (FTSC) codes
- ISO 14907 -1: 2015 Electronic fee collection – Test procedures for user and fixed equipment - Part 1: Description of test procedures
- ISO 17885:2015 Plastics piping systems - Mechanical fittings for pressure piping systems - Specifications
- ISO 17859:2015 Fine ceramics (advanced ceramics, advanced technical ceramics) – Measurement method of piezoelectric strain at high electric field.
- ISO 18263 -1 :2015 Plastics – Mixtures of polypropylene (PP) and polyethylene (PE) recyclate derived from PP and PE used for flexible and rigid consumer packaging - Part 1: Designation system and basis for specification.
- ISO 18489: 2015 Polyethylene (PE) materials for piping systems - Determination of resistance to slow crack growth under cyclic loading - Cracked Round Bar test method
- ISO 19043:2015 Natural rubber latex concentrate – Determination of total phosphate content by spectrophotometric method.
- ISO 19050:2015 Rubber , raw, vulcanised - Determination of metal content by ICP-OES
- ISO 23671:2015 Passenger car tyres – Method for measuring relative wet grip performance - Loaded new tyres

MANAGEMENT STANDARDS

- ISO 9000:2015 Quality management systems - Fundamentals and vocabulary
- ISO 9001:2015 Quality management systems – Requirements
- ISO 15378:2015 Primary packaging materials for medicinal products - Particular requirements for the application of ISO 9001:2008, with reference to Good manufacturing Practice (GMP)

METROLOGY STANDARDS

- ISO 17608:2015 Timekeeping instruments - Watch external parts made of hard materials - General requirements and test methods
- ISO 16610 – 30:2015 Geometrical product specification (GPS) – Filtration - Part 30: Robust profile filters – Basic concepts
- ISO 16610 – 40:2015 Geometrical product specification (GPS) – Filtration - Part 40: Morphological profile filters – Basic concepts
- ISO 16610 – 60:2015 Geometrical product specification (GPS) – Filtration - Part 60: Linear areal filters – Basic concepts

TEXTILE STANDARDS

- ISO 17608 :2015 Textile - Bare elastane yarns - Determination of resistance to chlorinated water (swimming – pool water)

New handbook helps SMEs better manage risks

Evidence reveals that only half of all small and medium-sized enterprises (SMEs) make it beyond their fifth year, suggesting that running a successful business requires managing risks effectively. Making a commitment to better understand and manage risk is therefore key to helping SMEs survive and grow sustainably.

A new handbook has just been published to help SMEs proactively prepare for risk and protect their business. *ISO 31000 – Risk management – A practical guide for SMEs* gives hands-on guidance on how to make the most of ISO 31000:2009, the International Standard on risk management processes, and integrate good practices in both their strategic decisions and their day-to-day operations.

Many SMEs do not engage in formal risk management

"Whilst most SMEs manage risk to a large extent, a number of SME leaders don't consider implementing formal risk management processes, believing they aren't big enough to warrant a proper risk management system or because they feel they are too busy running the company," says John Lark, the author of the handbook.

"However," he comments, "there is significant opportunity for SMEs that do engage in a more structured risk management practice. SMEs that do implement risk management in a way that is aligned with the principles and processes found in ISO 31000 can become more successful and be in a position to evolve into big companies."

"Effective risk management is no longer something that only big business can have. This guide has been written for the leaders in small organizations, people whose commitment and energy have created the enterprise and who, by implementing risk management effectively, can help their business to survive and grow."

Supporting the implementation of ISO 31000

ISO 31000:2009, by providing comprehensive principles and guidelines, can help all organizations put in place strong processes to identify opportunities and threats and effectively manage, leverage and adapt to risk.

ISO 31000 – Risk management – A practical guide for SMEs has been designed to complement this standard. It is structured as a checklist with a series of questions and related actions that guide users through the creation of a successful risk management system.

"The guide is a clear, simply worded explanation of how to implement risk management effectively," explains Lark. "The question-and-answer format, as well as a comprehensive table of contents, allows readers to jump immediately to a subject or aspect of risk management that is of interest to them, or which is proving to be difficult."

Published jointly by ISO, the ITC (International Trade Centre) and UNIDO (United Nations Industrial Development Organization), this handbook has been designed to help SMEs better understand and manage risk and ultimately strengthen their small businesses, which represent the vast majority of enterprises around the world.

Arancha González, Executive Director of ITC, Li Yong, Director General of UNIDO, and Acting ISO Secretary-General Kevin McKinley have indicated that they hope this guide will serve as a practical and beneficial resource for SMEs in their efforts to improve their competitiveness and increase their participation in international trade through better recognizing and managing risk.

The handbook can be purchased from your national ISO member and through the ISO Store.

Anti-bribery standard reaches voting stage

Despite numerous national laws and international agreements designed to fight it, bribery remains a destructive and economy-eroding malaise. But a new ISO standard aims to help.

Contributing to poverty, undermining human rights, increasing costs and reducing the quality of products and services, bribery is high on the political agenda for many countries, and while many governments have done much to combat it, organizations must also proactively play their part. ISO is developing a standard to help organizations do just

that; it has now reached the crucial public enquiry and voting stage (DIS), where ISO members involved in its development vote on the current draft before moving closer to publication. ISO 37001, Anti-bribery management systems, is designed to help organizations fight bribery by establishing a culture of integrity, transparency and compliance. While the standard cannot guarantee that no bribery has or will occur, it can help organizations implement effective measures to prevent and address it.

Neill Stansbury, Chair of the ISO project committee developing the standard, under the stewardship of BSI, ISO's member for the UK, said the benefits of implementing the standard are many.

"ISO 37001 will help provide assurance to management, investors, business associates, personnel, and other stakeholders that an organization is taking reasonable steps to prevent bribery."

Anyone interested in commenting on the draft can do so through their national ISO member.

ISO 37001 is due to be published late in 2016.

During the period under review, the Bureau continued to offer certification services under its Standards Mark, Tested Product and Batch Certification schemes, including the Pre-shipment Verification of Conformity to Standards (PVoC).

1. LIST OF LICENCES FOR TBS QUALITY MARK

S/N	CLIENT	PRODUCT(S)	LICENCE No.	STATUS
1	USHIRIKA WA UFUGAJI WA NYUKI BUYUNGU, KANKOKO- KIGOMA	HONEY (KANKOKO)	1562	SME
2	USHIRIKA WA UFUGAJI WA NYUKI KIBONDO, KIGOMA	HONEY (KIBONDO)	1563	SME
3	RIFT VALLEY TEA SOLUTIONS, DSM	BLENDED TEA	1564	NORMAL
4	JUNYU INVESTMENT INTERNATIONAL, MOSHI	CEMENT (MOSHI)	1565	NORMAL
5	BAKHRESA FOOD PRODUCTS, DSM	ENERGY DRINK	1566	NORMAL
6	MURZAH SOAP & DETERGENTS,DSM	SYNTHETIC DETERGENT POWDER (PUFF & FOMA)	1567	NORMAL
7	BAF MILLERS LTD, DSM	DRINKING WATER (BAF)	1568	SME
8	NGUVU DISTILLERIES, KIBAHA	POTABLE SPIRIT (NGUVU)	1569	SME
9	MBEYA DEW PLANT, MBEYA	DRINKING WATER (MBEYA DEW)	1570	NORMAL
10	BAKHRESA FOOD PRODUCTS, DSM	DRIED MANGO FRUIT BAR	1571	NORMAL
11	VEOPEZA CO LTD, DSM	PEANUT BUTTER (VEOPEZA)	1572	SME
12	JAMBO PLASTIC LTD, DSM	LASTIC CRATES	1573	NORMAL
13	SUNSHINE INDUSTRIAL CO LTD, DODOMA	SUNFLOWER SEED OIL (SUNBELT)	1574	NORMAL
14	T-BETTER FOOD AND BEVERAGES COMPAY LTD, DSM	DRINKING WATER (T-BETTER MOTION)	1575	NORMAL
15	BUNENA DEVELOPMENT CO LTD, KAGERA	DRINKING WATER (BUNENA BRAND)	1576	NORMAL
16	MIKOANI EDIBLE OIL AND DETERGENTS LTD, DSM	LAUNDRY BAR SOAP (MARHABA)	1577	NORMAL
17	MIKOANI EDIBLE OIL AND DETERGENTS LTD, DSM	RBD PAL OLEIN (AZANIA GOLD)	1578	NORMAL
18	VICTORIA PERCH LTD, MWANZA	FROZEN FISH FILLETS	1579	NORMAL
19	CHANG JIANG INVESTMENT, MTWARA	CEMENT	1580	NORMAL
20	FELDA IFFCO SDN, MALAYSIA	RBD PALM OLEIN (HAYAT)	1581	NORMAL
21	PANASONIC ENERGY T CO LTD, DAR ES SALAAM	PRIMARY DRY CELL BATTERIES (PANASONIC)	1582	NORMAL

22	BAKHRESA FOOD PRODUCTS LTD- VINGUNGUTI PLANT, DAR ES ALAAM	EDIBLE ICE LOLLIES (AZAM)	1583	NORMAL
23	JAMANA PRINTERS LTD, DAR ES SALAAM	SCHOOL EXERCISE BOOKS & PAPERS (JAMANA)	1584	NORMAL
24	NATURE RIPE KILIMANJARO LTD, DAR ES SALAAM	JAM (PINEAPPLE & ANANAS)	1585	SME
25	NATURE RIPE KILIMANJARO LTD, DAR ES SALAAM	CHUTNEY	1586	SME
26	INSIGNIA LTD, DAR ES SALAAM	METAL CROWN CLOSURS	1587	NORMAL
27	VICTORIA MOULDERS LTD, MWANZA	POLYETHYLENE PIPES	1588	NORMAL
28	MALAGALASI MINERAL WATER, KIBONDO, KIGOMA	DRINKING WATER (MALAGALASI)	1589	SME
29	BAKHRESA FOOD PRODUCTS LTD – TAZARA B PLANT, DAR ES SALAAM	DRINKING WATER (UHAI)	1590	NORMAL
30	TANUK AFRICA LTD, DAR ES SALAAM	COLD ROLLED STEEL SECTION	1591	NORMAL
31	NAMPACK (T) LIMITED DAR ES SALAAM	METAL CRWON CLOSURE	1592	NORMAL
32	MANYARA FOOD LIMITED, MANYARA	SUNFLOWER SEED OIL (AFICA GATE)	1593	NORMAL
33	MASS PLASTIC CO LTD, DAR ES SALAAM	PLASTIC CARRIER BAGS	1594	NORMAL
34	AFRI TEA & COFFEE (1963) BLENDERS LIMITED DAR ES SALAAM	BLENDED BLACK TEA (AFRI TEA)	1595	NORMAL
35	AFRI TEA & COFFEE (1963) BLENDERS LIMITED DAR ES SALAAM	ROASTED GROUND COFFEE	1596	NORMAL
36	GSM STEEL LIMITED DAR ES SALAAM	ALUMINIUM ZINC COATED SHEET	1597	NORMAL
37	GSM STEEL LIMITED DAR ES SALAAM	PRE PAINTED IRON SHEET	1598	NORMAL
38	GSM STEEL LIMITED DAR ES SALAAM	GALVANIZED CORRUGATED IRON SHEET	1599	NORMAL
39	KILIMANJARO CREMARIES LIMITED, MOSHI	CULTURED MILK (KILIMANJARO SUPER MTINDI)	1600	NORMAL
40	KILIMANJARO CREMARIES LIMITED, MOSHI	PASTEURIZED MILK (KILIMANJRO SUPER FRESH)	1601	NORMAL
41	DWINEX INTERNATIONAL ARUSHA	POTABLE SPIRIT (VODKA & GIN)	1602	NORMAL

42	MZALENDO INDUSTRIS CO LTD ARUSHA	DRINKING WATER (MZALENDO)	1603	NORMAL
43	GOFU MATS PACKAGING INDUSTRIES LIMITED, DSM	PLASTIC CARRIER BAGS	1604	NORMAL
44	SAINT- GOBAIN LODHIA GPSUM INDUSTRIES LTD, ARUSHA	GYPSUM PLASTER BOARD	1605	NORMAL
45	NAYOPEKER AGRO COMMODITIES CO, DSM	HONEY	1606	NORMAL
46	IMAGE FARM NO 5, IRINGA	SUNFLOWER SEED OIL (IMAGE 5 PURE)	1607	NORMAL
47	BUZWAGI VEGETABLE OIL CO TD, KAHAMA	SUNFLOWER SEED OIL (BUZWAGI)	1608	SME
48	KILIMANJARO COFFEE DELEARS (1995) LTD, MOSHI	ROATED GROND COFFEE	1609	NORMAL
49	SAINI FOOD PRODUCTS TD, DSM	DRINKING WATER (MAJI BORA)	1610	NORMAL
50	GSM FOAM CO LTD DAR ES SALAAM	DOMESTIC MATTRESS	1611	NORMAL
51	RED 100 LIGHTING CO LTD, CHINA	ENERGY SAVING LAMPS (TRONIC)	1612	NORMAL
52	BENGDU DEMEI COMMODITY CO LTD, CHINA	VACUUM FLASKS	1613	NORMAL
53	SICHUAN YUANXING RUBBER CO LTD, CHINA	MOTORCYCLE & SCOTTER TYRES	1614	NORMAL
54	SICHUAN YUANXING RUBBER CO LTD, CHINA	RUBBER TUBES	1615	NORMAL
55	CHEMI & COTEX INDUSTRIES LIMITED, DSM	READY TO DRINK BEVERAGE (CHEI COLA BLACK CURRANT & ORANGE)	1616	NORMAL
56	CHEMI & COTEX INDUSTRIES LIMITED, DSM	TOOTHBRUSH (WHITE DENT)	1617	NORMAL
57	CHEMI & COTEX INDUSTRIES LIMITED, DSM	VINEGAR (SIMBA CHEF)	1618	NORMAL
58	CHEMI & COTEX INDUSTRIES LIMITED, DSM	SODIUM BICARBONATE (SIMBA CHEF)	1619	NORMAL
59	TEMBO TILES LIMITED, DSM	PAVING BLOCKS	1620	NORMAL
60	AFRI TEA & COFFEE (1963) BLENDERS LIMITED DAR ES SALAAM	INSTANT COFFEE (AFRI CAFÉ)	1621	NORMAL
61	KILIMANJARO CREAMERIS LIMTED, MOSHI	GHEE	1622	NORMAL
62	KILIMANJARO CREAMERIS LIMTED, MOSHI	YOGHURT	1623	NORMAL
63	NYOTA VENTURE CO LTD, DSM	NYLON FISHNET TWINE	1624	NORMAL

64	TABISCO ENTERPRISES LIMITED, DAR ES SALAAM	BISCUITS	1625	NORMAL
65	MURZAH WILMAR EAST AFRICA, DAR ES SALAAM	SYTHETIC ETERGENT POWDER (PUFF & FOMA)	1626	NORMAL
66	GRACE PRODUCTS LIMITED, DAR ES SALAAM	PETROLEUM JELLY (MY BABY GARDENER)	1627	SME
67	GRACE PRODUCTS LIMITED, DAR ES SALAAM	LIQUID DETERGENT (GRACE)	1628	SME
68	MURZAH WILMAR EAST AFRICA, DAR ES SALAAM	SUNFLOWER SEED OIL (SUNDROP)	1629	NORMAL
69	MURZAH WILMAR EAST AFRICA, DAR ES SALAAM	HARDENED VEGETABLE FAT (SALADI)	1630	NORMAL
70	MURZAH WILMAR EAST AFRICA, DAR ES SALAAM	RBD PALM OLEIN (KORIE)	1631	NORMAL
71	AIKA NATURAL PRODUCTS, MTWARA	HERBAL SOAP (AIKA)	1632	SME
72	SHANGDONG LING LONG CO LTD, CHINA	RUBBER TUBES	1633	NORMAL
73	SHAHI ENGINEERING AND CONSTRUCTION CO LTD, DSM	PLASTIC CARRIER BAGS	1634	NORMAL
74	CHUCHUBA ICE INDUSTRIES LTD, MOSHI	DRINKING WATER (KILI MAJI)	1635	NORMAL
75	SAYONA STEEL LIMITED, MWANZA	HOUSE HOLD COOKING UNTENSILS (SUFURIA)	1636	NORMAL
76	KIMARA FRESH WATER INVESTMENT, DSM	DRINKING WATER (KATA KIU)	1637	SME
77	CHANG QING INTERNATIONAL INVESTMENT CO LTD, DSM	DOMESTIC MATTRESS (OCEAN KISS)	1638	NORMAL
78	MASTER CABLE (T) LTD, DSM	FLAT TWIN PVC INSULATED CABLE	1639	NORMAL

***Key**
Normal: Means a manufacturer who paid for their own certification fees
SME: Means the certification fees is paid by the Government

2. LIST OF TESTED PRODUCT CERTIFICATES

S/N	CLIENT	PRODUCT(S)	TPC No.	STATUS
1	ASAS DAIRIES LTD, IRINGA	FLAVOURED MILK(ASAS)	0238	NORMAL
2	JAMBO PLASTIC LTD, DSM	PLASTIC JERRY CANS (JAMBO)	0238	NORMAL
3	JAMBO PLASTIC LTD, DSM	PLASTIC PALLS (JAMBO)	0240	NORMAL
4	JAMBO PLASTIC LTD, DSM	PLASTIC TABLE (JAMBO)	0241	NORMAL
5	BAKHRESA FOOD PRODUCTS, DSM	BOTTLED ALKALINE DRINKING WATER (UHAI)	0242	NORMAL
6	LUNA CANDLES & PAPER PRODUCTS LTD, DAR ES SALAAM	CANDLES (AFRICA)	0243	NORMAL
7	TANUK AFRICA LTD, DSM	SQUARE STEEL HOLLOW SECTION	0244	NORMAL
8	O.I.T (T) CO LTD, DSM	CANDLES (TIGER)	0245	NORMAL
9	THE BOX FACTORY, DSM	CORRUGATED BOXES	0246	NORMAL

***Key**
Normal: Means a manufacturer who paid for their own certification fees
SME: Means the certification fees is paid by the Government

3. LIST OF LICENCES EXTENDED

S/N	CLIENT	PRODUCT(S)	LICENCE No.	STATUS
1	FLAMINGO CAFETERIA, DSM	BROWN BREAD	1455	NORMAL
2	LUCKY CEMENT LTD, PAKISTAN	CEMENT (KILIMANJARO)	1018	NORMAL
3	MEGA TRADE INVESTMENT LTD, ARUSHA	POTABLE SPIRIT (VAN ROH)	0520	NORMAL
4	ELIESH GROUP, MUSOMA	MBILIMBI PICKLES (ELIESH)	1522	SME
5	NGO CHEW HONG EDIBLE OIL PTE, INDONESIA	RBD PALM OLEIN (TURKEY)	1311	NORMAL
6	JIELONG HOLDING T LTD, SHINYANGA	SUNFLOWER SEED OIL (ALASKA)	1537	NORMAL
7	MBEYA CEMENT, MBEYA	POZZOLANIC CEMENT (CEM IV/B 32.5R)	0434	NORMAL

***Key**
Normal: Means a manufacturer who paid for their own certification fees
SME: Means the certification fees is paid by the Government

4 BATCH CERTIFICATES ISSUED

Batch Certification Scheme for Imports is part of implementation of the Standards (Batch Certification of Imports) Regulations for products covered under compulsory standards. Under this scheme, the Bureau is also implementing Pre-shipment Verification of Conformity to Standards (PVoC) through which products are tested and verified in countries of origin before shipment to Tanzania. During the July — December 2015 period, the number of batch certificates issued was 374, while the number of Certificates of Conformity was 14775.

ABCs of sub-standard solar panels

Henry Masawe

The revolution in the solar industry for the past decades has made solar energy an increasingly powerful alternative to the conventional energy source. Solar Panel is one of the fundamental equipment which uses arrays of solar photovoltaic cells to convert photons into usable electricity. In line with that global trend, Tanzania is also experiencing a continuous growth of the solar industry which has brought an ever expanding base of solar installations and its business at large; unfortunately this has been associated with the mushrooming of sub-standard solar panels.

The situation raised an alarm to the general public which of course is the call for being cautious against installation of sub- standard solar panels since it could not save the intended purpose of power generation. By using solar panels, we harvest clean and renewable energy from the sun as an alternative to the conventional energy source.

The global $77B USD solar industry is wrestling with revelations that, some suppliers have used substandard coating materials to save costs. The defects are causing panels to fail as early as two years into their (supposedly) 25 year's lifespan. To some other countries for instance in European countries it has been reported that, the defects in panel electrical systems have caused fires in some cases, according to the report revealed in The New York Times. In some cases materials whose use-by date has passed were also used, causing the cell to simply fall apart after installation (Jason, 2013).

The government of Tanzania through its standards body, Tanzania Bureau of Standards (TBS) is working tirelessly to combat sub-standards products from the market by instituting various measures as exemplified by the strict market surveillance, port inspections and products certification just to mention a few.

Nevertheless, our country is very porous and indeed we are still facing malpractice as executed by unfaithful entrepreneurs as well as businessmen and women who struggle to their best to penetrate sub-standards products to the market with the aim of making super profit regardless of economic or social effects of the products to the community. A quality solar panel is estimated to survive for at least 25 years but a substandard solar panel can last for only one or two years.

Since the general public is the one which is directly affected by those malpractices, there is a need to highlight the ABCs on how to realize substandard solar panel.

Market intelligence revealed that some solar panels that are being circulated in local markets are of a low quality, with no specification but also no idea of which company made them. But there are some suppliers who are offering branded solar panels but still some of them are substandard.

With this trend, it is emphasized to shop with verified supplier or distributor since "knock-off" versions of solar panels are being sold by counterfeit solar panel producers which mostly are of low quality.

Thus, sourcing from reputable suppliers of solar panel that conforms to Tanzania Standard, TZS 878:2006/EAS 364:2005, will ensure consumers are able to return to their suppliers after sales services in case assistance or warranty will be needed in the future.

Five ways to get suspicious of substandard solar panels

The quality of a substandard solar panel is verified through testing. Solar panels are tested at the Tanzania Bureau of Standards (TBS) electrical laboratory by measuring its performance and electrical characteristics at Standard Testing Conditions (STC).

All solar panels imported to Tanzania are required to conform to Tanzania Standard that is **TZS 878:2006/ EAS364:2005.**

In connection to that, buyers of solar panels can make physical inspection of the panel prior to purchase so as to avoid falling in buying substandard ones; consequently the following five features can be used as a rule of thumb for inspection of a solar panel before purchasing.

A solar panel must have a name plate which contains very detailed electrical characteristic information of the respective solar panel. All solar panels must have indelible and permanently attached nameplate which shall have information printed in such a manner that no later modifications are possible without obviating detection.

The following are the minimum information that are required to be on the nameplate of solar panels; name and logo of the original manufacturer or supplier, type designation and serial number and maximum system voltage.

Others information are rated nominal power (Pmax) at STC (1000 W/m^2, 25°C cell temperature, and air mass [AM] 1.5 global spectrum), Maximum negative production tolerance (- % or ± %) of Pmax at STC and rated nominal short circuit current (Isc), open circuit voltage (Voc), voltage at maximum power point (Vmax), and current at maximum power point

(Imax) at STC.

A Sub-standard Solar panel does not contain all of the above information on the name plate. However, consumers and end users should also be careful on the language used on the solar panel name plate; manufacturers of substandard solar panels use tricky language which is very difficult to understand.

Experience shows that the substandard solar panel manufacturers use confusing languages in such a way a client might think it is a spelling error while it is not.

Solar panel must have a uniform color for all cells. A substandard solar panel contains cells made up of colours different from silicon crystals which are not uniform throughout the solar panel as revealed in the side picture. When observed clearly at different angles, the panel reflects as if it has more than one colour.

The number of cells is also one of the easiest techniques to suspect a substandard solar panel. The common available solar panel in the market has 36 cells for 12V system voltage and 72 cells for 24V systems voltage. The numbers of cells in a solar panel are always even numbers.

Furthermore, consumers should be cautious by looking on how the wires used to connect the cells of the solar panel. Connections of wires within a sub-standard solar panel are very poor as if they have been soldered by hand. Wire strips are connected straight without linking to each cell.

A standard solar panel wires connect from one cell to the next one. The wire connecting adjacent cells looks like it is cut, but in reality the wire runs from the bottom of one cell to the top of the next one.

Moreover, mechanical parts of the solar panel must be firm and well-sealed such that there is no space in which water can pass through. Consumers can test the tightness of the solar panel body by holding long sides at the middle and pull outside. If the sides move the consumer should be suspicious of a sub-standard solar panel. The Solar panel should not be broken, cracked, bent, misaligned or torn external surfaces.

Consequences of using sub-standard solar panels;

Sub-standard solar panel has a low life span. While many solar panels are expected to generate power for over 20 years, this is often not the case with the below average solar panels.

Sub-standard solar panel may lead to the initiation of fire. Photovoltaic systems (solar panels) are subject to electrical faults like any other electrical installation such as arc faults, short circuits, ground faults and reverse currents. In the worst case, faulty conditions on the photovoltaic system will not only result in a hot spot, but also a direct current (DC) arc. Arcing has been found to be the main reason of larger rooftop fires on commercial buildings starting on PV systems and have gained a lot of attention.

Sub-standard solar panel causes a poor design of alternative source of power hence loss of money on investment. Consumers who entertain sub-standard solar panel would have difficultness in the designing of the PV System. Sub-standard solar panel declares low output power which is written on the name plate and is used in the sizing the system. This will result to wrong selection of the solar system components. Sizing of the battery and inverter would not suit the system.

Therefore the general community is strongly advised to pay attention when purchasing solar panels. Together we can eliminate substandard products from the market.

In preparation of this article assistance was drawn from the following publications;

Jason, M. (2013, May 29). Chinese Solar Firms Caught Using Substandard Materials. Retrieved February 10, 2016, from DailyTech LLC: http://www.dailytech.com/Chinese+Solar+Firms+Caught+Using+Substandard+

What exactly is an optimum draining interval of engine oil? Is it at every 3,000 km? Not always!!

Nickonia Mwabuka

This is the question posed not only by lubricating oil users, but also oil companies and machine operators. They all try to find the simple and concise answer, unfortunately all answers are provided by service technician at the service garage, that the next service will be after 3,000 km!!!, and they provide with a placard as evidence, put at your vehicle steering.

Service technicians at the garage, normally have only one and simple answer that the next service of your expensive vehicle is after 3,000 km!!, regardless of the quality of oil used, type of vehicles, model and year of manufacturing, which actually determine the draining intervals of engine oils. Strictly, that is not always the case to all types of lubricating oils as well as the type of engine and operation conditions.

Technically, over 50% of engine wears occur during the last 20% of the engine oil life. Again the question is to determine when the oil is within that 20% and to substitute it earlier, along with the filter.

To arrive at a logical decision on the length of this interval, there are several ways, including the following:

Engine designer and manufacturers have the deepest knowledge of their equipment, acquired from studies

conducted during developing of the engine, from the field test, and the market feedback. Based on the experience, engine manufacturers publish their recommendations regard the traveling kilometers and hours of operation of the engine before service can be carried out. These recommendations refers to the type of service the engine will be provided (normal service, severe service, overwhole service, to mention a few), as well as the level of quality of the engine oil in question.

It is therefore, normally recommended that manufacturers' institution must be observed; any change with respect to what is recommended must be supported by reliable and convincing experimental data provided in the vehicles manual.

The severity of services has a great importance in determining the interval of the engine oil draining (substitutions) interval. High load conditions for instance, requires shorter interval as compared to normal load conditions.

The operation regimes in general, have their importance; for instance, short trip conditions with frequent stop-and-go in cities and towns (talk of dala dala in Dar es Salaam) are more severe than highway traveling. This is because frequent re-starting and short- trips tend to cause a strong acid concentration in the engine, which may result in increase of engine wear and corrosion due to formation of strong acid. A very hot dusty environment may increase the severity of the operation, unless adequate air filtering and engine cooling are provided.

Size and type of engine also affect the determination of the oil drain interval. Naturally aspirated (NA) engines for instance, do not produce the same specific power as supercharged/turbo charged engines; therefore longer intervals will be possible in the former types, again depending on the quality of oil used.

In indirect injection engines, there is a general tendency to produce more soot than in direct injection types: a higher soot concentration reduces the usefulness of the engine oil. Inadequate maintenance, causes more severe operation conditions. For instance, poor condition of the injector, leads to an incomplete combustion of fuels; consequently to a greater accumulation of pollutant in the engine oil. A bad control or the non -substitution of the air or fuel filters as scheduled, entails more severe operating conditions.

Engine oils of high quality can be used for longer period of time. For quality engine oil, manufacturers normally accept considerable longer drain intervals.

The quality of the fuels used in vehicles influences the duration of the engine oil, for example, a fuel with a high sulphur content, leads to formation of strong acids which can cause an accelerated reduction of basicity or the base number, an additive responsible for reduction of strong acid in oil.

An engine with a high oil consumption, the draining interval can be extended, why, because the topping continue to reintegrate the level of the additives.

Currently engine designers and manufacturers recommend that, with proper use of quality engine oils and operating conditions, draining can be done even at 10,000 km and beyond.

Observing all these factors, one cannot drain engine oil at a uniform traveling kilometer, which in most cases at at every after 3,000 km!!! actually the 3,000km was originated from 3,000 miles (almost 4,800 km).

Vehicle and machine owners should re-think more than twice before deciding to drain engine oils and ask the following questions:

- Is the Tanzania standard available and its recommendation?
- Engine designers' recommendation?
- The quality and performance levels of engine oils in use?
- The model and year of manufacturing?
- Operating condition (e.g. cities, town, highways)?

Advancement in technology of additives, added to oils for quality enhance, have contributed to have varieties of engine oils with different performance levels. Such variation in performance have specific draining intervals.

Basing on the international acceptable quality of engine oils, TBS, have formulated relevant national standards to guide users in getting quality of engine oils. You will not only get standards from TBS, but also advice on when you should change (drain) used oil in your engine.

In such case, you will be reducing road accident, environmental pollution, and health effect, protect your engine and its parts and serve national economy through reducing importation of vehicle spare parts.

Utilize TBS for the betterment of your business and longer life of your engine and machines.

Benefits of instrument against manual classing of cotton lint

Gervas Kaisi

Since the invention of the cotton gin approximately 200 years ago, cotton quality has been classed subjectively based on the visual evaluation of

cotton fiber properties done by a well-trained human classer. Instrument testing of cotton fibers began approximately 90 years ago but high speed, accurate, reproducible testing of every bale became available during the past 30 years and its use is now increasing rapidly.

Historically it was the cotton producers of Texas, USA who pushed for instrument testing of their whole cotton production. The push was meant to enable the producers to sell their cotton at its true value, to improve their cotton varieties and have the improvements recognized objectively, to improve fiber quality by optimizing ginning process, to ensure that farmers are paid for the actual quality that they deliver and to avoid claims.

The push to the instrument testing of cotton not only resulted into cotton producers demanding premiums instead of discounted cotton prices but also the development of improved cotton varieties for Texas was accelerated. With that success, High Volume Instrument (HVI) testing has been adopted in the other states as well as other countries namely Australia, Uzbekistan, China, Pakistan, Colombia, India and sub-Saharan African cotton-producing countries i.e. Benin, Burkina Faso, Cameroon, Mali, Mozambique, Tanzania, Uganda, Zambia, and Zimbabwe.

Currently, about half of all cotton produced around the world is classed with High Volume Instrument (HVI) or Standardized Instrument for Testing of Cotton (SITC).

Instrument Cotton Classification

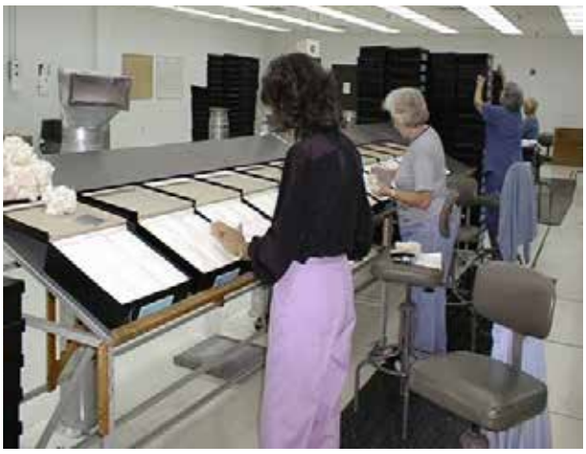
Instrument test results provide more information to spinners that allows more efficient use of cotton, thereby enhancing demand. Instrument test results also provide information to seed breeders, cotton producers and ginners, enabling the production of cotton with characteristics desired by the spinning industry. Instrument testing can also render the trading of cotton more efficient. The benefits of instrument over manual cotton classing are indicated through an increase in the interest of these programs by cotton growing countries outside the United States. The HVI data, which is the basis of the crop value and the trade of this commodity, allows the producer to make timely financial plans and decisions. The data also may allow cotton buyers to trace every individual cotton bale and its fiber quality worldwide when interlinked with the existing world cotton marketing networks.

High Volume Instrument (HVI) at TBS Cotton Testing Laboratory

Manual Cotton Classification

The grade of the cotton in the bale is assessed visually on the basis of three attributes, color, leaf content and preparation. Hand (manual) classification for staple depends on sight and touch and strength is achieved by pulling a small specimen of cotton from the sample and comparing it with staple standards. Character is a complex set of elements which does not have any standards. It refers to those elements of cotton quality that are not included in grade or staple length. Some of these elements are measurable but others depend on the classer's judgment. Traditionally, character was assessed from the way the sample is handled.

Developing local standards for grade may have validity in representing the specific cotton quality with respect to color and trash of a certain growing region. However, the resulting variety in grade descriptions, lacking any instrument measurement information, continues to confuse the stakeholders in the cotton industry. Generally, manual classing provides very few (only three) supporting information to the textile industry spinners hence becomes difficult for them to achieve the intended quality of yarn (thread).



Manual classing

Cotton bale with samples

Cotton Marketing Industry

The cotton marketing industry is dynamic and subject to continuous market-driven developments. Actors in such a competitive, commercial environment who cannot optimize their operations and meet customers' demands will lose their market shares by obtaining lower prices for their cotton and eventually be pushed out of the market completely. Due to this competitive reality, testing the quality parameters of cotton lint precisely and accurately is of major importance to sellers since the information enables them to target cotton of particular qualities to users whereby most of them are textile industry spinners.

Accurate and precise instrument testing of cotton also provides information to spinners enabling them to optimize the laydowns used for yarn production, thus encouraging the use of more cotton for manufacturing purposes. Accurate information about the cotton quality parameters of individual bales and of the composition of traded lots is a necessary tool in cotton marketing. The shifting from manual classing towards instrument measurement of fiber characteristics is an important step towards making cotton trade more transparent and objective. Although the price of cotton lint is primarily linked to fiber characteristics, it is also linked to non-quality factors such as the way it is marketed internationally. African cotton has two comparative advantages in the world market; the intrinsic quality of its fiber and the fact that it is handpicked.

Cotton like all commodities, is differentiated by quality parameters for trading purposes. Commercially worldwide, six parameters are considered in cotton trading as shown below;

i. Micronaire is a measure of the air permeabilty of compressed cotton fibers. It is often used as an indication of fiber fineness and maturity.

ii. Staple Length is the average of the longest 50% of the fibers (Upper Half Mean Length-UHML). It is measured in 100th's and in 32's of an inch.

iii. Length Uniformity Index (LUI) is the ratio (given as a percent) of the average length, to the upper-half-mean-length. LUI is an indicator of how fibers will perform in the spinning of yarn.

iv. Strength (Str) reports the force in grams required to break a bundle of fibers one tex unit in size. A tex unit is the weight in grams of 1,000 meters of fiber.

v. Color grade (Rd & +b) is determined by the degree of reflectance (Rd) and yellowness (+b) as established by official standards and measured by the high volume instrument. Reflectance indicates how bright or dull a sample is, and yellowness indicates the degree of pigmentation.

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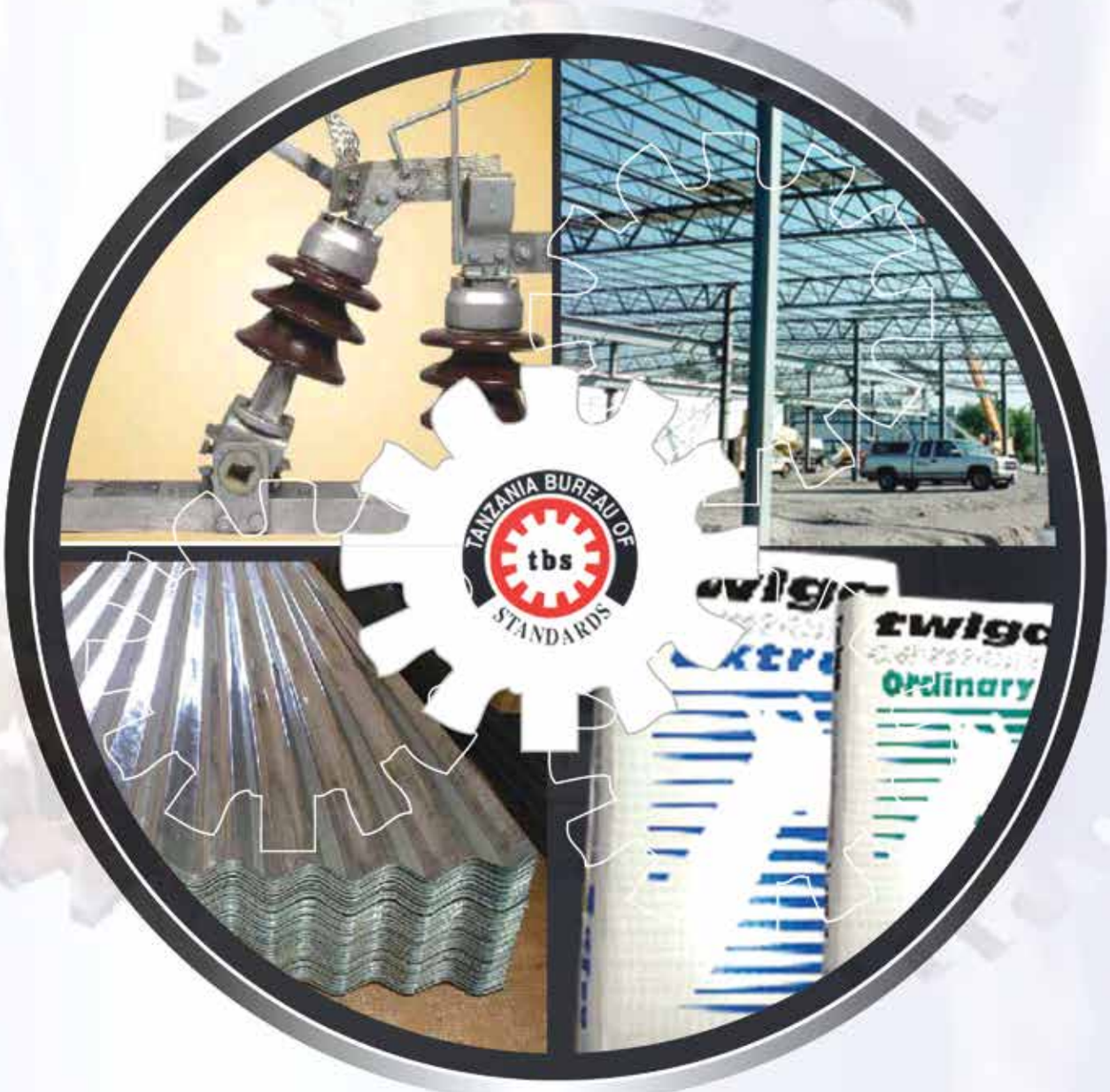

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