

## TANZANIA BUREAU OF STANDARDS

# ANNUAL REPORT & ACCOUNTS 2016/2017



***Members of the Zanzibar House of Representatives get acquainted with the activities of the TBS Textile and Leather Laboratory, when they paid a familiarization visit at TBS in 2017. They are accompanied by the TBS Director General, Prof. Egid Mubofu (left).***

**June 2017**

## ACRONNYMS

<b>ARSO:</b>	African Organization for Standardization
<b>EDF:</b>	European Development Fund
<b>EU:</b>	European Union
<b>HACCP:</b>	Hazards Analysis Critical Control Point
<b>FAO:</b>	Food and Agriculture Organization
<b>IEC:</b>	International Electrotechnical Commission
<b>ISO:</b>	International Organization for Standardization
<b>MBA:</b>	Masters of Business Administration
<b>MP:</b>	Member of Parliament
<b>MPA:</b>	Masters of Public Administration
<b>NEP:</b>	National Enquiry Point
<b>NSB:</b>	National Standards Body
<b>NSGRP:</b>	National Strategy for Growth and Reduction of Poverty
<b>PTC:</b>	Packaging Technology Centre
<b>PVoC:</b>	Pre-shipment Verification of Conformity to Standards
<b>SPS:</b>	Sanitary and Phytosanitary
<b>SADCAS:</b>	Southern African Development Community Accreditation System
<b>SGS:</b>	Société Générale de Surveillance
<b>SMEs:</b>	Small and Medium Enterprises
<b>SANAS:</b>	South Africa National Accreditation System
<b>Sida:</b>	Swedish International Development Cooperation Agency
<b>TASPII:</b>	Trade and Agriculture Support Programme II
<b>TBS:</b>	Tanzania Bureau of Standards
<b>TBTs:</b>	Technical Barriers to Trade
<b>TCCIA:</b>	Tanzania Chamber of Commerce, Industry and Agriculture
<b>TFDA:</b>	Tanzania Food and Drugs Authority
<b>TPDC:</b>	Tanzania Petroleum Development Corporation
<b>TPRI:</b>	Tropical Pesticides Research Institute
<b>TZS:</b>	Tanzania Shilling
<b>UNEP:</b>	United Nations Environmental Programme
<b>WHO:</b>	World Health Organization
<b>WTO:</b>	World Trade Organization

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## TBS BOARD OF DIRECTORS



**Prof. Makenya A H Maboko**  
Chairman



**Prof. Egid B Mubofu**  
Secretary



**Prof. Preksedius Ndomba**  
Member



**Dr. Jasson B B Bagonza**  
Member



**Mr. Godfrey Simbeye**  
Member



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Member



**Mr. Khatibu M Khatibu**  
Member



**Ms. Msim M Ramadhan**  
Member



**Dr. Khalid Massa**  
Member



## LETTER OF TRANSMITTAL



**Hon. Charles Mwijage (MP)**  
Minister for Industry, Trade and Investment  
P O Box 9503  
DAR ES SALAAM

**Honourable Minister,**

It is my will to present to you the annual report of Tanzania Bureau of Standards for the Financial Year 2016/2017. TBS performs its duties as mandated by the Standards Act No. 2 of 2009 and its Regulations. During the year under review, the Bureau contributed to the development of industrialization and trade facilitation in the national economy through Standardization, Quality Assurance, Metrology and Testing (SQMT) activities. This report contains the Audited Accounts of the Bureau for the period July 1, 2016 to June 30, 2017, together with the Director General's report on the business and state of affairs of the Bureau. I would be contented if you would submit this report to the National Assembly.

**Prof. Makenya A H Maboko**  
CHAIRPERSON, TBS BOARD OF DIRECTORS

## TBS MANAGEMENT



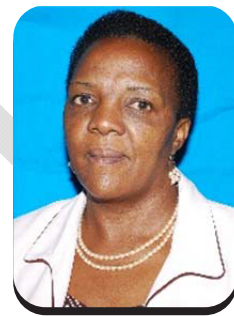
**Prof. Egid B Mubofu**  
Director General



**Ms. Agnes Mneney**  
Director of Testing,  
Calibration and  
Packaging Services



**Ms. Edna Ndumbaro**  
Director of Standards  
Development



**Eng. Tumaini Mtitu**  
Director of Quality  
Management



**Mr. Dunstan Kalugira**  
Testing and Calibration  
Manager



**Ms. Mary Meela**  
Process Technology  
Standards Manager

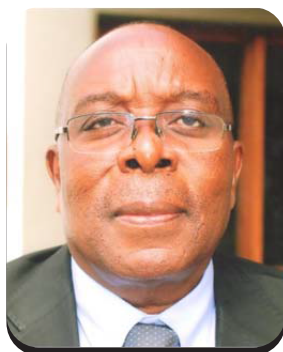


**Mr. Charles Mung'onya**  
Acting Finance, Planning  
and Administration  
Manager



**Ms. Matilda Kasanga**  
Documentation and ICT  
Manager

## CHAIRPERSON'S STATEMENT



**Prof. Makenya A H Maboko**  
**Chairman, TBS Board of Directors**

Tanzania Bureau of Standards continued to perform its routine works of Standardization, Quality Assurance, Metrology and Testing (SQMT) activities which cut across national, regional and international levels during the year 2016/2017. On the local scene, preparation and implementation of national and international standards continued at high pace while TBS also continued to represent Tanzania's interests in regional and international standards bodies such as East African Standards Committee, Southern African Development Cooperation (SADC), African Regional Organization for Standardization (ARSO), International Organization for Standardization (ISO), International Electrotechnical Commission (IEC) and the FAO/WHO Codex Alimentarius Commission.

The number of new Tanzania standards formulated increased from 229 in 2015/2016 to 396 during the year under review.

TBS made steady progress in the area of standards implementation particularly batch certification. This in turn led to an increase in internally generated income by 72.48 percent, from TZS 23,254.6 million in 2015/2016 to TZS 40,109.2 million in 2016/2017, accounting for 85.31 percent of total income. The increase in income was mainly due to access to TANCIS which strengthened quality control of

imports at entry points. This led to penalties to importers who violated import procedures.

During the year under review, TBS accounts were submitted and audited in time in accordance with the law, and for the 23<sup>rd</sup> year in succession TBS received a clean report from its external auditors, Quintex Financial Services.

Future activities of the Bureau will focus on extending the scope of laboratory accreditation to include more test methods, opening of more upcountry offices at border areas, opening three zonal offices (Mbeya, Dodoma and Mtwara), to continue with construction of modern "Test House" building.

Furthermore, TBS activities will be geared at controlling quality of imported goods and supporting the Small and Medium Enterprises (SMEs) and development of TBS human resource.

I would like to extend my appreciation for the support that TBS continued to enjoy from the Government of the United Republic of Tanzania, the continued support from Trade Mark East Africa (TMEA) Tanzania and other development partners, members of Technical Committees, clients, stakeholders and sympathizers for their valued and untiring support.

Finally, on behalf of the TBS Board of Directors, I wish to congratulate the Management and entire staff of TBS for their commitment and contribution which has made this year a successful one.

**Prof. Makenya A H Maboko**

**CHAIRPERSON, TBS BOARD OF DIRECTORS**

## DIRECTOR GENERAL'S REPORT



**Prof. Egid B Mubofu**  
Director General

### 1. BACKGROUND

#### 1.1. Establishment

Tanzania Bureau of Standards was established by the Standards Act. No. 3 of 1975 under the name of the National Standards Institute. The Institute became operational on 16 April, 1976 vide Government Notice No. 173 of 1976. Its name was changed to the present one of Tanzania Bureau of Standards under Act No. 1 of 1977. In March 2009, the Standards Act No. 3 of 1975 was repealed and replaced by the Standards Act No. 2 of 2009 which came to be operational in June 2009. TBS is a parastatal organization under the Ministry of Industry, Trade and Investment; and the sole National Standards Body.

#### 1.2. Core Functions

The Bureau's mandate is to promote standardization and quality assurance in industry and commerce sectors. The major functions of TBS are as enumerated hereunder:-

- a) Formulation and promulgation of Tanzania Standards in all sectors of the country's economy. Priorities have been established for national standards in the fields of

agriculture and food, textiles and leather, chemicals, engineering, the environment and the service industry.

- b) Implementation of promulgated standards through third party certification schemes including the Standards Mark Scheme.
- c) Improvement of the quality of industrial products both for export and local consumption through various certification schemes like pre-export inspection and testing, batch certification scheme, the tested product certification scheme and quality system registration.
- d) Promotion of standardization and quality assurance services in industry and commerce through training of personnel in company standardization, ISO 9000 and 14000 series of standards, quality assurance, laboratory techniques accreditation, ISO 17025, ISO 15189, Packaging Technology and HACCP.
- e) Undertaking the testing of product samples drawn by TBS inspectors in the course of implementing standards (certification samples), as requested by manufacturers (type-testing samples), brought by consumers (consumer complaint samples) or for checking laboratory proficiency (proficiency testing samples).
- f) Undertaking calibration of industrial and commercial measuring equipment and instruments as the custodian of the national measurement standards.
- g) Provision of quality assurance services in foreign countries through



Pre-shipment Verification of Conformity to standards (PVoC).

### 1.3. Information Services

TBS provides information dissemination services through its information centre to cater for standards and standards related information needs of industrialists, researchers, academicians, traders and all stakeholders. The centre maintains and updates a full set of Tanzania Standards as well as international standards like ISO, IEC and WHO/FAO Codex Alimentarius Commission standards, standards issued by other countries all over the world, laws and regulations, standards catalogues, journals, news bulletins and other publications related to standardization and quality assurance. The standards sales section of the centre receives enquiries and orders for copies of Tanzania standards, foreign and international standards.

TBS also hosts the National Enquiry Point for Tanzania, under the WTO Agreements on Technical Barriers to Trade. NEP maintains a collection of the following technical information:

Tanzania National Standards, technical regulations and conformity assessment procedures.

International Standards belonging to International Organization for Standardization (ISO), Codex Alimentarius Commission (CAC) of the Food and Agriculture Organization (FAO) and World Health Organization (WHO), etc.

Foreign and Regional Standards – South African Standards, British Standards, Indian Standards, Sri Lankan Standards, Malaysian

Standards, Japanese Standards, German Standards, Kenya Standards, Zimbabwe Standards, Mauritius Standards, East African Standards, etc.

Notifications from WTO members.

DIN Global database, a CD-ROM, which comprises 100,000 document references on foreign and international standards.

Reference books, including directories, technical and scientific dictionaries and catalogues.

Periodicals and standards related bulletins.

NEP provides the following services:

Notifications of proposed technical regulations and conformity assessment procedures to WTO TBT Secretariat in Geneva.

Distribution of TBT notifications from WTO members to interested parties in Tanzania.

Handling of comments of Tanzania notifications received from WTO members.

Responding to requests for information both from WTO members and interested parties in Tanzania on national standards, technical regulations and conformity assessment procedures.

### 1.4. Organizational Structure

The current organizational structure of TBS is hinged upon a typical scientific institutional structure with policy-cum-functional powers vested in the Board of Directors to which the Director General is answerable. The organizational structure of the Bureau is made up of four directorates

namely standards development, quality management, testing, calibration & packaging services, and corporate services.

Operationally an elaborate committee system exists, through which national standards are processed and approved. The committee system includes technical committees responsible for initial scrutiny of drafts presented by the TBS secretariats, the divisional committees responsible for setting out priorities for standardization projects and endorsing drafts scrutinized by the technical committees and the Board of Directors of TBS which is responsible for setting out policy and for approval of finalized draft standards into national standards. The implementation of standards is done by direct interaction with industry and commerce through various schemes and testing services provided to manufacturers.

## 2. ACTIVITIES REPORT

### 2.1. Introduction

#### Economic Overview

Tanzania's real gross domestic product (GDP) growth rate slowed in 2017. According to government data, growth for the first three quarters of 2017 stood at 6.8%, down from 7.3% during the same period in 2016. The decline is mainly due to slower growth of services from the supply side and slower expansion of consumption and investment from demand side. Although Tanzania's real GDP growth rate is estimated to have slowed, it was the highest in the East African Community (EAC) for 2017 (The World Bank in Tanzania).

During the year under review, the pace of formulation of Tanzania standards and

harmonization of East African standards was sustained. Standardization activities centered on promoting SMEs, internal and external trade, and protection of consumers from substandard imported goods.



***TBS Acting Head of the Engineering Standards Section, Mr. Henry Massawe apprises a visitor to the TBS pavilion on engineering standards, during the Annual Engineers Day 2017 at Dr. Jakaya Kikwete Convention Centre in Dodoma***

### 2.2. Standards Preparation

#### 2.2.1. Finalized standards

During the year 2016/2017, the standards development directorate finalized a total of 396 standards compared to 229 standards in the previous year. Standards finalized included standards on quantities and units, data elements and interchange formats, aluminium and aluminium alloys, extruded rods/bars, tubes and profile, solid mineral fuels, hard coal and coke, brown coals and ignites, soil quality, ceramic tiles, fire detection and alarm systems, coaxial communication cables, quality management system, trailers/semi-trailers, glossary of mining terms, geological exploration by geophysical method, energy management system and Information and documentation.

Other finalized standards were determinations for water quality, fruits and



vegetables, milk and milk products, and nitrogen dioxide, stibine, butadiene, benzene, butane, formaldehyde, methyl mercaptan and sulphur in work place atmosphere.

Other standards included specifications for refined sugar, brown sugar, icing sugar, fruit wine, Fertilizer-Nitrogen, phosphorus and potassium (NPK) compound, single super phosphate and cattle feed supplements.

Other standards included code of practice for biotechnology - Guideline for the conduct of food safety assessment of foods produced using recombinant-DNA animals, principles for the risk analysis of foods derived from modern biotechnology and handling of samples for microbiological analysis.

Textile products standards included method for colour fastness to washing with soap or soap and soda, colour fastness to perspiration and colour fastness-to spotting by water.

Chemical specifications included carbonated and /or flavored drinking water, sweeping brooms, painters' brushes, toilet brush, commode chutes, strainer mop buckets, wet mops, gaseous oxygen for medical use, dissolved acetylene gas and scouring powders.

Environmental standards included protection against ionizing radiation, electrical and electronic waste management: Handling, collection, transportation, refurbishment, dismantling, recycling, storage and disposal; and acoustics – general tolerance limits for environmental and occupational noise.

Test methods standards included standards for genotoxicity, carcinogenicity

and reproductive toxicity, petroleum products – corrosiveness to copper, and fluid fertilizers – preliminary visual examination and preparation of samples. Others included determination of transparent and opaque liquids, ammonia Cal nitrogen content – titrimetric method after distillation; and starch and derived products – heavy metals content.

This brought the total number of national standards finalized during the year 2016/2017 to 396 in various sectors as indicated in the Table 1.

**Table 1 – Standards finalized per sector in 2016/2017**

S/N	Sector/Subsector	Number of Standards
1	Agriculture and Food	133
2	Chemical and Chemical Products	79
3	Textiles	27
4	Environment	16
5	Mechanical engineering	35
6	Electrical engineering	32
7	Building & construction	24
8	Mining engineering	25
9	General techniques	25
	<b>Total</b>	<b>396</b>

### 2.2.2. Meetings

A total of 153 meetings were convened by the Standards Development Directorate during the period under review. These included 34 Divisional Committee meetings, 98 Technical Committee meetings and 21 Working Group meetings. The standardization projects deliberated upon by various meetings included those in the following areas:

#### a) Food and Agriculture

- i) Blood meal – Specification
- ii) Steamed and calcined bone meal – Specification
- iii) Fertilizers – Methods for determination of free acidity
- iv) Coconut cream (milk) powder
- v) Fresh water melons
- vi) Fish handling, processing and distribution — Code of practice
- vii) Pilau masala – Specification

## **b) Chemicals**

- i) Soap – Sampling and test methods
- ii) Sodium hydroxide for industrial use – Sampling – Test Sample – Preparation of the main Solution for carrying out certain determinations
- iii) Sodium silicate for industrial use – Specification
- iv) Containers and accessories for pharmaceutical preparations
- v) Liquefied Petroleum Gas – Specifications

## **c) Textile**

- i) Woven fabric – Determination of bow and skewness
- ii) Universal system for designation linear density (Tex system)
- iii) Code of practice for inspection and acceptance criteria for used textile products (Mitumba)
- iv) Cotton fibres – Determination of micronaire value
- v) Guide for care labelling on Textile products
- vi) Tests for colour fastness – Colour fastness to sea water
- vii) Standard atmospheres for conditioning and testing
- viii) Tests for colour fastness – Part B02: Colour fastness to artificial light: Xenon arc fading lamp test.

## **d) Environment**

- i) Tolerance limits for industrial effluents discharged into inland surface water
- ii) Municipal and industrial waste water – General tolerance limits for municipal and industrial waste water
- iii) Electrical and electronic waste management – Handling, collection, transportation, recycling, reuse and storage

## **e) Mechanical Engineering**

- i) Steel tubes and fitting – Methods for sampling
- ii) Pipe threads where pressure-tight joints are made on the threads – Specification
- iii) Classification of buses
- iv) Automotive maintenance workshop – Requirements
- v) Trailers / semi-trailer – Specification

## **f) Electrical Engineering**

- i) Lead acid starter batteries – Part 1: General requirements and methods of test
- ii) Video surveillance systems for use in security applications – Part 1-1: System requirements – General
- iii) Alarm and electronic security systems – Part 11-1: Electronic access control systems – System and components requirements
- iv) Recommendations for small renewable energy and hybrid systems for rural electrification – Part 9-5: Integrated system – Selection of stand-alone lighting kits for rural electrification
- v) Electromagnetic compatibility and Radio Spectrum Matters (ERM) – Electromagnetic Compatibility (EMC) standard for radio equipment and services - Part 1: Common technical requirements
- vi) Information technology equipment – Safety – Part 1: General requirements
- vii) Audio, video and similar electronic apparatus – Safety requirements.

### **g) General techniques**

- i) Quantities and Units – acoustic, characteristics numbers, atomic and nuclear physics, solid state physics, physical chemistry and molecular physics
- ii) Packaging – Distribution packaging – Graphical symbols for handling and storage of packages
- iii) Quality Management System – Requirements
- iv) Road Traffic Safety (RTS) management system – Requirement with guidance for use

### **h) Building and construction**

- i) Ceramic tiles – Part 8: Determination of linear thermal expansion
- ii) Wood-based panels – Fiber board, particle board and oriented strand board (OSB) – Vocabulary
- iii) Civil engineering specifications – Performance graded asphalt binder
- iv) Precast concrete pipes and ancillary concrete products – Part 5: Specification for ogee pipes and fittings (including perforated)
- v) Soil test methods – Terms and definitions

### **i) Mining**

- i) Solid mineral fuels – Vocabulary – terms relating to coal preparation
- ii) Hard coal and coke – Manual sampling
- iii) Methods for the petrographic analysis of coals – Part 1: Vocabulary



**Winners of the students essay competition organized by TBS show their certificates of participation. Seated are TBS Director General, Prof. Egid Mubofu (centre), Director of Standards Development, Ms. Edna Ndumbaro (right) and the United Nations Environment Programme (UNEP) Country Coordinators (Tanzania).**

During the year 2016/2017, the Bureau initiated a total of 105 new standardization projects compared to 127 initiated during the previous year. New standardization projects initiated during the year included graphical symbols for use on detailed maps, plans and geological cross-sections, standard guide for use of metal detection method for subsurface exploration, classification of terminologies for exploration of mineral deposits, classification of buses, requirements for automotive maintenance workshop, safety requirements for audio, video and similar electronic apparatus, common technical requirements for electromagnetic compatibility and radio spectrum matters (ERM); electromagnetic compatibility (EMC) standard for radio equipment and services and requirements for valve regulated stationary lead acid batteries.

Other projects initiated were secondary cells and batteries containing alkaline or other non-acid electrolytes – vented nickel-cadmium prismatic rechargeable single cells, video surveillance systems for use in security applications – system requirements-general, alarm and electronic security systems – electronic access control systems – system and components requirements.

Specifications were water for construction, aquaculture and irrigation, receiving waters, hard or soft sweeping brooms, painters' and decorators' brushes, strainer mop buckets, oxygen for medical use, gaseous oxygen,

carbon dioxide and nitrogen technical grade, dissolved acetylene gas, cattle feed supplement, compounded poultry feed, fish feeds, goat and sheep feed supplement and pig compounded feed.

### **2.2.3. Regional and international standards work**

During the year under review, TBS participated in various regional and international standardization meetings. The meetings included International conference for mechanical and industrial engineering held at AICC, Arusha from 2016-09-01 to 2016-09-02.

The Bureau also participated in the stakeholders round table meeting on strengthening compliance to standards requirements which was held in Dar es Salaam on 28<sup>th</sup> and 29<sup>th</sup> July 2016, meeting of water meters with Junaco and investor from Baylan Watermeters of Turkey to discuss water meter standards held at TBS conference room on 2016-09-28, meeting with Lighting Global officers to discuss on Renewable Energy Portal website at REA HQ, Dar es Salaam on 2016-07-14; and attended the launching ceremony of Renewable Energy Portal on 2016-08-19.

TBS participated in the 4<sup>th</sup> Extraordinary meeting of the East African Standards Management Committee (SMC) meeting held from 5<sup>th</sup> – 9<sup>th</sup> December 2016 in Nairobi – Kenya. The committee recommended a total of 95 Final Draft East African Standards (FDEAS) for approval and 90 international standards for endorsement by the East Africa Standards committee (EASC) and other structures in EAC, thereafter gazetting in the region before the national adoptions in accordance with the EAC procedures. TBS also

coordinated the 20<sup>th</sup> East African Standards Committee (EASC) Technical Subcommittee meetings. The Meetings were held at the Ministry of Foreign Affairs and East African Cooperation of the respective partner states through video conference from 13<sup>th</sup> – 16<sup>th</sup> December, 2016. The meetings were for preparation for the upcoming 20<sup>th</sup> EASC planned in January, 2017. The subcommittee meetings were for Testing, Metrology and Codex Forum on Quality assurance.

From 2017-02-06 to 2017-02-10 TBS participated in the Lusaka Colloquium on Codex matters held in Lusaka, Zambia. The colloquium discussed the agenda of the upcoming Codex Technical Committees on Contaminants in Foods (CCCF), Food Hygiene (CCFH) and Food Additives (CCFA). Continental positions were developed for member states to consider when submitting their comments to Codex.

From 4<sup>th</sup> to 12<sup>th</sup> February, 2017 the Bureau attended and participated in the 3<sup>rd</sup> session of the Codex Committee for Spices and Culinary Herbs in Chennai. During the meeting, the grouping of spices and culinary herbs were approved and recommended for adoption by CAC and 7 new work items on dehydrated garlic, dried chilli pepper and paprika, dried garlic, cloves, saffron, nutmeg and basil were approved.

TBS participated in the 20<sup>th</sup> East African Standards Committee (EASC) meeting, held in Arusha from 24<sup>th</sup> to 28<sup>th</sup> April 2017, which recommended to the Sectoral Council on Trade, Industry, Finance and Investment (SCTIFI) 104 East African Standards which have since been endorsed, whereas 108 International Standards (IS) normatively referenced were also endorsed for national adoptions. The key sectors covered which have mostly



traded items in the region are fish and fishery products, horticulture, paper and paper products, cement, cosmetics, surface active agent, cereals and pulses.

From 2017-06-13 to 2017-06-18 TBS attended the Codex Alimentarius Inter-Regional Colloquium in Ottawa, Canada. The Colloquium was meant to prepare for the up-coming Codex Executive Committee (CCEXEC) and Codex Alimentarius Commission (CAC). Various positions were reached to assist member states to prepare their own positions.

## 2.3. Standards Implementation

### 2.3.1. Certification

During the year 2016/2017 a total of 346 pre-licence and 1,148 surveillance inspections were conducted. Also the Bureau collected a total of 534 open market samples during the year under review. Furthermore, TBS granted 291 standards mark licences/tested product certificates/ licence extensions compared with 190 standards mark licences/ tested product certificates/licence extensions in the previous year.

### 2.3.2. Technical assistance to exporters

During the year under review, the Bureau continued to provide services to Tanzanian exporters. In total, twenty (20) pre-export certificates were issued to exporters of various products. The performance was 40% compared to annual target of 50 certificates.



*The TBS Director General, Prof. Egid Mubofu (right) presents a licence to use the TBS standards mark of quality to a client, during a grant of licences ceremony.*

### 2.3.3. Imports

During the period of 2016/2017, a total of 9,927 batch inspections were conducted, 1,328 batch certificates/release letters for regular importers were issued and 31,282 Certificates of Conformity (CoCs) under PVoC programme were granted compared to 29,872 PVoC inspections during the year 2015/2016.

Also 32,945 vehicle inspections were conducted during the year 2016/2017 compared to 37,798 vehicle inspections during 2015/2016.

### 2.3.3. Quality control training

During the year 2016/2017 the number of training seminars in quality assurance/management amounted to 32 against the projected figure of 28 equivalent to 114.3%.

**Table 2 – Quality Assurance/Management Seminars 1997/98 – 2016/2017**

FISCAL YEAR	SEMINARS CONDUCTED	INDUSTRIAL PERSONNEL TRAINED	PARTICIPANTS TRAINED		
			TOP	MIDDLE	SHOP FLOOR
1997/1998	11	81	-	81	-
1998/1999	8	169	-	169	-
1999/2000	11	214	-	214	-
2000/2001	4	158	-	158	-

2001/2002	2	81	-	81	-
2002/2003	4	30	-	30	-
2003/2004	2	29	-	29	-
2004/2005	10	159	-	159	-
2005/2006	9	117	-	117	-
2006/2007	9	132	-	132	-
2007/2008	9	128	-	128	-
2008/2009	10	319	-	319	-
2009/2010	16	451	-	451	-
2010/2011	26	776	-	776	-
2011/2012	22	1,131	-	1,131	-
2012/2013	14	533	-	533	-
2013/2014	22	329	-	329	-
2014/2015	20	453	-	453	-
2015/2016	25	1,251	-	1,251	-
2016/2017	32	2,770	-	2,770	-

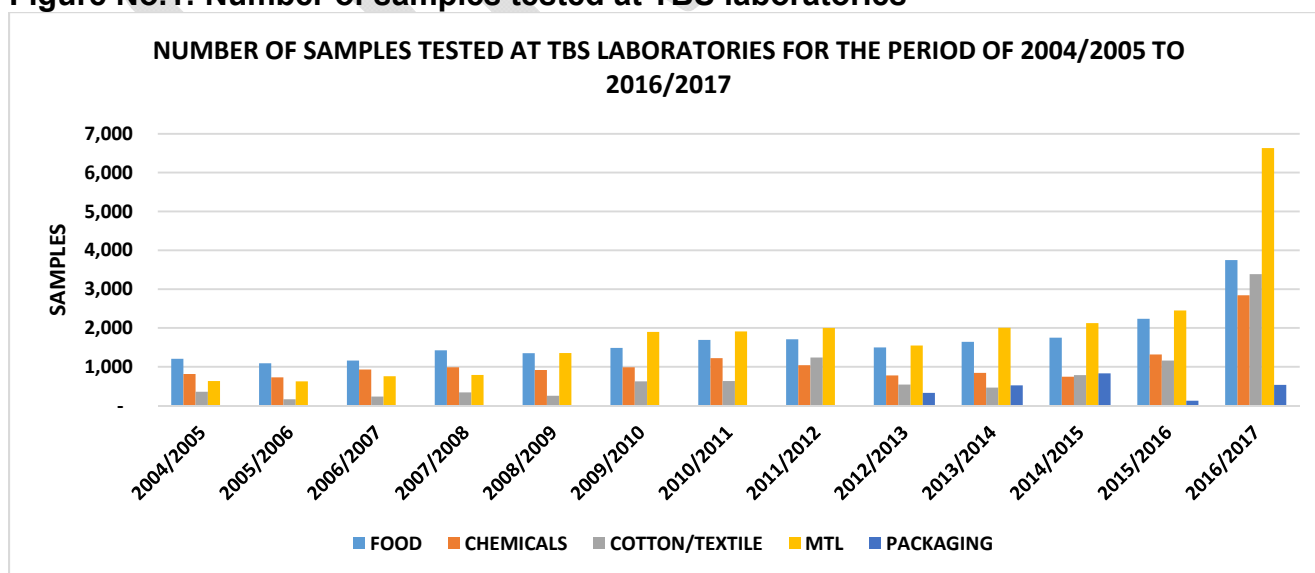
## 2.4. Testing and Calibration

The Testing and Calibration Directorate continued to provide testing and calibration services to Tanzania industrialists.

During the year 2016/2017, the directorate received 17,135 samples for testing and 5,774 calibration requests, bringing a total of 22,909 samples tested and equipment calibrated in the year under review. The figure was higher than that of the previous year (2015/2016) whereby 13,615 samples and equipment were tested and calibrated.

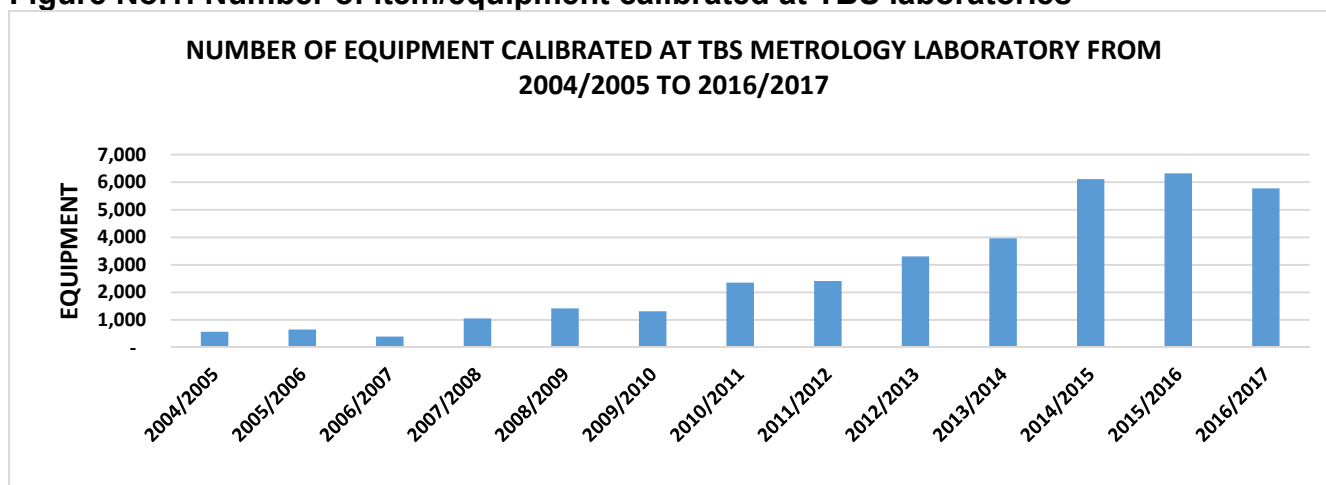
The increase in samples received during the year was mainly due to; increase of surveillance inspections as a result of increased number of staff, strengthening of quality control of imports at entry points which lead to the increase of destination inspections (DI), establishment of zonal offices and new border posts; and new equipment procured under EDF 10 project increased scope and pace of testing.

**Figure No.1: Number of samples tested at TBS laboratories**





**Figure No.1: Number of item/equipment calibrated at TBS laboratories**



## 2.5. Information Centre

During the period under review a total of 181 finalized Tanzania Standards were edited. Other activities included preparation of WTO/TBT notifications, supervision of TBS LAN and WAN re-installation project, provision of training to TBS designated officers on the use of the [www.tradebarriers.org](http://www.tradebarriers.org) trade portal and uploading of Non-Tariff Measures (NTMs) on the East Africa Community portal, attending both internal and external enquiries and maintaining the National Enquiry Point. During the year 2016/2017, TBS sold a total of 1,281 standards. The standards were both national and international.

## 2.6. Financial Performance

### 2.6.1. Long Term Liability

As at 30<sup>th</sup> June 2017 TBS had no long-term liability.

### 2.6.2. Financial results in 2016/2017

#### 2.6.2.1. Balance sheet

During the financial year 2016/2017, TBS net current assets decreased by 3.53 percent from TZS 17,681.1 million in 2015/2016 to TZS 17,057.6 million in 2016/2017. The decrease was mainly attributed to the unsettled invoices. Likewise, during the year under review TBS net worth increased by 3.76 percent from TZS 61,876.3 million recorded in 2015/2016 to TZS 64,204.2 million as at 30<sup>th</sup> June 2017.

**Table 4 – Summary of assets and liabilities (TZS mil.) as at 30<sup>th</sup> June 2017**

YEAR	CURRENT ASSETS	CURRENT LIABILITIES	NET CURRENT ASSETS	NET WORTH
1998/1999	174.4	176.0	(1.6)	329.3
1999/2000	133.5	87.0	46.5	656.3
2000/2001	414.0	76.7	337.3	916.4
2001/2002	521.7	67.9	453.7	1,089.7
2002/2003	542.4	72.4	470.0	1,095.1
2003/2004	734.6	114.1	620.5	1,473.3
2004/2005	1,136.5	16.7	1,119.4	2,150.8
2005/2006	1,389.5	39.4	1,350.1	2,687.7
2006/2007	1,982.5	171.6	1,810.9	3,189.2
2007/2008	2,292.5	267.7	2,024.9	7,997.8
2008/2009	3,482.6	670.1	2,812.5	8,813.5
2009/2010	3,676.8	429.5	3,247.3	9,431.0
2010/2011	6,906.6	219.2	6,687.3	12,401.9
2011/2012	8,814.9	735.6	8,079.3	33,348.4
2012/2013	9,218.5	512.9	8,705.6	34,867.5
2013/2014	10,068.6	858.6	9,210	39,684.1
2014/2015	12,256.3	933.3	11,323	42,634.5
2015/2016	18,379.4	698.4	17,681.1	61,876.3
2016/2017	19,608.7	2,551.2	17,057.6	64,204.2

### **2.6.2.2 Surplus/deficit**

During the financial year ended 30<sup>th</sup> June 2017, TBS recorded an accumulated surplus of TZS 31,944.10 million compared to the accumulated surplus of TZS 17,907.50 million recorded during the year 2015/2016. The increase in accumulated surplus was mainly due to access to TANCIS which strengthened quality control of imports at entry points.

### **2.6.3. Income**

The major sources of TBS income during the year under review continued to be Government subvention and internally generated income.

#### **2.6.3.1. Government subvention**

Government subvention increased by 13.0 percent from TZS 6,107.4 million in 2015/2016 to TZS 6,907.9 million in 2016/2017. The increase in government subvention was mainly due to recruitment of several new staff. Government subvention accounted for 14.7 percent of TBS total income, and was used for personnel emoluments.

#### **2.6.3.2. Internally generated funds**

During the year under review TBS internally generated income increased by 72.48 percent, from TZS 23,254.6 million in 2015/2016 to TZS 40,109.2 million in 2016/2017, accounting for 85.31 percent of total income. The increase in income was mainly due to access to TANCIS which strengthened quality control of imports at entry points. This led to penalties to importers who violated import procedures.

### **2.6.4. Operating costs**

The operating costs increased from TZS 22,665.0 million in 2015/2016 to TZS 32,976.5 million in 2016/2017. An operating surplus of TZS 14,036.6 million was recorded in 2016/2017 compared to TZS 6,697.1 million which was recorded in 2015/2016. The increase in operating surplus was mainly attributed to access to TANCIS which strengthened quality control of imports at entry points.

### **2.6.5. Prospects**

TBS has continued with efforts to diversify its resource base with a view to sustaining the upward trend of internally generated income. These efforts have resulted in the increased net worth and working capital. In the future TBS will strive to sustain newly commenced income earning activities related to standards work including continued access to TANCIS which strengthen quality control of imports at entry points which lead to compliance with importation procedures. Also it will strive to sustain and widen the scope of accreditation.

## **2.7. Human Resources Development and Staff Welfare**

During the year 2016/2017, TBS did not recruit new staff because employment permits were not granted to any government institution due to verification programme of all public servants to identify the ghost workers.

During the year under review, 60 short courses were offered to different TBS employees while 27 employees attended various long-term courses sponsored by TBS and other donors. Main areas of training were ISO: 9001:2015 Quality Management System, Open Performance Review Appraisal System, National Standardization Strategy and Business Plan, ISO 14001:2015 introduction, implementation and internal auditors,

training on PVoC programme, Total Quality Management and ISO 9001:2015/14001/22000/27000 and Six Sigma (TQM) at the National Institute For Micro Small & Medium Enterprises, Hyderabad, training on customer care services and training on records keeping according to laws, regulations and government guidelines.



***The Minister for Industry, Trade and Investment, Hon. Charles Mwijage (second from left, seated), poses with members of the Bureau's Workers' Council, after inaugurating it. He is flanked by the Chairman of the TBS Board of Directors, Prof. Makenya Maboko (on his right) and the TBS Director General, Prof. Egid Mubofu (on his left).***

Regarding long term training, on-going courses included post graduate programmes at Master's degree level in Engineering Management, Business Administration (Corporate Management), Oil and Gas Management, Renewable Energy, Life Sciences (Sustainable Agriculture), Public Health and Food Safety and Master of Science in Physics. Other programmes included Diploma in Secretarial Studies and Computing and Information.

With regard to staff welfare, the Bureau continued to provide paid lunch and tea to all employees during working days and

medical facilities in compliance with the NHIF Act No. 8 of 1999 (Cap 395 R.E 2002). All staff are members of the National Health Insurance Fund (NHIF) where medical costs are covered under this scheme. Only health services which are not covered by NHIF are covered by the Bureau. The Bureau's safety management system delivers a safe working environment by continuous and effective assessment.

Furthermore, the relationship between the Bureau and its employees continued to be good. Employees' complaints raised during the year were resolved mainly through the use of consultative meetings involving the management, trade union and employees through the Workers' Council. As a result, a healthy relationship continued to exist between management and trade union.

### **3. PLANNED ACTIVITIES**

Tanzania Bureau of Standards will continue to formulate policies and strategies in order to enhance the efficiency of its operations and upgrade its capability in rendering standardization, quality management and systems services including accreditation, as well as widening its resource base and increasing its ability for self-sustainability.

TBS will therefore continue with efforts to modernize its laboratories through accreditation, purchase of equipment, improving the testing conditions and providing appropriate training to laboratory staff.

TBS intends to widen the scope of accreditation to include testing of liquefied petroleum gas (domestic gas) for chemistry laboratory and testing of leather and leather products, latex gloves, safety boots and female condom for textile and

leather laboratory. Further, the Bureau intends to extend the scope of accreditation to include yeast/moulds in black tea, nutritious flour and maize flour and *listeria monocytogens* in milk products in the Microbiology section and aflatoxin B1, G1, B2, G2 and total aflatoxin and heavy metals by HPLC and ICP MS techniques respectively, pesticides residue by GC MS/MS, vitamin A in fortified flour and C in fruit juices in the Chemistry section of the Food laboratory. TBS also intends to extend the scope of accreditation to include calibration of energy metres, air and liquid flow metres for Metrology laboratory; and to acquire soil testing equipment and hardened concrete content analyzer for the Building and Construction Laboratory.

At the corporate level, TBS will continue participation in the national, regional & international meetings/workshops.

Future plans will also include opening of more upcountry offices at border areas, establishment of other zonal offices, modernization of standardization infrastructure and testing of samples.

At the time of reporting, plans were underway to open zonal offices in Dodoma, Mbeya and Mtwara, while more borders were identified and put into consideration for opening up operating offices.

In addition, TBS activities will be geared at supporting Small and Medium Enterprises (SMEs) through TBS and Trade Mark East Africa.