

TANZANIA MEDICINES AND MEDICAL DEVICES AUTHORITY



SERVICE DELIVERY SURVEY

TO CUSTOMERS AND STAKEHOLDERS OF TMDA 2024

VOLUME 1: MAIN REPORT

JANUARY 2025



TABLE OF CONTENTS

List of tables.....	v
List of figures.....	vi
List of abbreviations	vii
Acknowledgements	viii
Executive Summary	x

SECTION ONE..... 1

1	INTRODUCTION.....	1
1.1	Background.....	1
1.2	Need for Service Delivery Survey.....	2
1.3.	Previous studies.....	3
1.4	Survey Objectives.....	3
1.5	Report structure.....	4

SECTION TWO..... 6

2	About TMDA.....	6
2.1	Quality Policy Statement.....	7
2.2	Roles and Functions of TMDA	7
2.3	Regulatory Framework.....	8
2.4	General Governance	8
	TMDA Structure.....	10
2.4.1	Director General.....	11
2.4.2	Directorate of Human and Veterinary Medicines.....	11
2.4.3	Directorate of Medical Devices and Diagnostics Control	11
2.4.4	Directorate of Laboratory services	11
2.4.5	Directorate of Business Support Services	12
2.4.6	Technical committees.....	12
2.4.7	Collaboration with other stakeholders	12
2.5	TMDA Performance Metrics.....	12
2.6	TMDA customer segments.....	13
2.6.1	Product manufacturers.....	13
2.6.2	Importers.....	14
2.6.3	Exporters.....	14
2.6.4	Distributors	14
2.6.5	Researchers.....	14
2.6.6	Health care providers:.....	14
2.6.7	Government institutions:.....	14
2.6.8	Non-governmental organizations:.....	15
2.6.9	The General public.....	15

SECTION THREE..... 16

3	SURVEY METHODOLOGY AND APPROACH	16
3.1	Overall Survey Design	16
3.2	Type of Data	16
3.3	Survey Tools.....	17
3.3.1	Primary data.....	17
3.3.2	Secondary data.....	17
3.4	Survey Units.....	17
3.5	Sampling Procedure and sample size	18
3.5.1	General Public (Households).....	18
3.6	Training of Enumerators.....	20
3.7	Data Collection Methods.....	21
3.7.1	Questionnaire Administration	21
3.7.2	Focus Group Discussions (FGDs)	22
3.8	Data Collection.....	23
3.9	Data Management.....	23

SECTION FOUR..... 24

4	DESCRIPTIVE ANALYSIS OF SDS	24
4.1	Survey Responses	24
4.2	Characteristics of the Respondents	25
4.2.1	TMDA Employees.....	25
4.2.2	Households Characteristics.....	26
4.2.3	Retailers Characteristics.....	28
4.2.4	Permit Customers	30
4.2.5	Laboratory customers Characteristics	32
4.2.6	Media	32
4.3	Social Network Analysis.....	33
4.3.1	SNA Variables and Analysis	33
4.3.2	SNA Results and Implications.....	35

SECTION FIVE..... 37

5	ANALYSIS OF THE MAJOR SDS FINDINGS.....	37
5.1	Stakeholders Perception of TMDA Service Quality.....	37
5.1.1	TMDA Employees Perception of Service Quality.....	37
5.1.2	Employees focus group discussions (FGDs)	43
5.1.3	External Customers perception of service Quality	52
5.2	Medicines & Medical Devices Usage.....	54
5.2.1	Public Trust	54
5.2.2	Expired products.....	55
5.2.3	Effort and Action taken on Expired Products.....	56
5.2.4	Adverse Drug Reaction (ADR)	56
5.2.5	TMDA measures on Falsified products	57

5.3	Public Education and Awareness	58
5.3.1	Introduction	58
5.3.2	General Public Awareness about TMDA.....	59
5.3.3	Retailers awareness about TMDA.....	61
5.3.4	Permit customers awareness about TMDA.....	62
5.3.5	Public education about consumer rights.....	62
5.4	Client Service Charter	63
5.4.1	Internal customers awareness of Client service charter	63
5.4.2	External customers awareness of Client service charter	64
5.5	Media Utilization	64
5.5.1	Media reporting on Expired products, falsified products and ADR	65
5.5.2	Media rating about TMDA Image to the general public	65
5.5.3	Information flow from TMDA to the media and involvement of Media on Public Health matters	66
5.5.4	Education on Appropriate use of medical products	66
5.5.5	Inspecting medical products	67
5.5.6	Promoting rational use of medical products	67
5.5.7	Media satisfaction with TMDA as regulator	67
5.5.8	TMDA reputation	67
5.5.9	TMDA Involvement in corporate Social responsibilities	68

SECTION SIX..... 69

6. FURTHER FINDINGS ON CUSTOMERS SATISFACTION WITH TMDA SERVICE DELIVERY...69

6.1	Introduction	69
6.2	General Public satisfaction with TMDA services.....	69
6.2.1	TMDA Customer satisfaction Indices	70
6.3	TMDA Internal Customers' Satisfaction index.....	72
6.4	TMDA External Customers' Satisfaction Index	73
6.4.1	Permit Customers	73
6.4.2	Laboratory customers	74
6.4.3	Retail Customers.....	74
6.4.4	General Public (Households).....	75
6.4.5	Media	75
6.4.2	External Customers Satisfaction Index Scores	76
6.5	TMDA Overall Customers' Satisfaction	77
6.5.1	Composite Satisfaction index	77
6.5.2	Trend in Composite Satisfaction	77
6.6	Factors Influencing TMDA Service Delivery.....	78
6.6.1	Strong and dedicated management	78
6.6.2	Motivated staff	78
6.6.3	Committed and competent staff	78
6.6.4	Strong quality management systems	79
6.6.5	Equipping staff with working tools and good working environment	79
6.6.6	Clients Service Charter	79
6.6.7	Team work, accountability and customer focus	79

6.7	TMDA Service Delivery Gaps.....	79
6.7.1	Continued General Public awareness of TMDA	79
6.7.2	Public education.....	79
6.7.3	Loop holes in surveillance	79
6.7.4	Delays in online requests.....	80
6.7.5	Clashing of Vigilance and public education activities.....	80
6.7.6	Concentration of the inspection activities at the zonal levels.....	80

SECTION SEVEN..... 78

7	SUMMARY AND RECOMMENDATIONS.....	81
7.1	Summary of Key Issues	81
7.2	Recommendations from Customers.....	82
7.3	Recommendations from Findings	83
7.3.1	Quick Wins for TMDA to improve Business processes and Maintain Corporate Image	83
7.3.2	Strategic Actions.....	85

SECTION EIGHT..... 86

8	APPENDIXES.....	86
---	-----------------	----

LIST OF TABLES

Table 1:	Selected Regions and Districts for Households Survey	14
Table 2:	Comparison of target sample size and actual data collection.....	18
Table 3:	TMDA SNA Dimensions and Attributes on Survey Responses.....	28
Table 4:	TMDA SNA Attributes on Survey	31

LIST OF FIGURES

Figure 1: Calculated Sample for the 95% confidence level with range of precision and variability.....	15
Figure 2: Example of Calculated Sample Using Simplified Fixed Population Formula.....	16
Figure 3: Employees age profile.....	19
Figure 4: Employees years of working at TMDA.....	20
Figure 5: Age profile of household respondents	21
Figure 6: Occupation profile of household respondents	21
Figure 7: Education profile of household respondents	22
Figure 8: Retailers responded on what type of businesses they conducted	23
Figure 9: Retailers duration in years on conducting current businesses	23
Figure 10: Location of retailers businesses covered in survey	24
Figure 11: Type of business of permit customers	25
Figure 12: Years of business experience for permit customers	25
Figure 13: Location of permit customers covered in survey.....	26
Figure 14: Type of media.....	27
Figure 15: Location of media covered in survey	27
Figure 16: Results of Social Network Analysis	30
Figure 31: Trend on internal and external satisfaction index	42
Figure 32: Trend of composite satisfaction index	43

LIST OF ABBREVIATIONS

ADDOS	Accredited Drugs Dispensing Outlets
CSI	Customer Satisfaction Index
FGDs	Focus Group Discussions
ISO	International Standards Organization
LGA	Local Government Authority
MAB	TMDA Ministerial Advisory Board
MIS	Management Information System
PCT	Pharmaceutical Council Tanzania
QMS	Quality Management System
SD	Standard Deviation
SDS	Service Delivery Survey
SE	Standard Error
TFDA	Tanzanian Food and Drugs Authority
TMDA	Tanzania Medicines and Medical Devices Authority
TQM	Total Quality Management
WHO	World Health Organization
ICH	International Council of Harmonization

ACKNOWLEDGEMENTS

Many institutions and individuals contributed enormously to the completion of the 2024 Service Delivery Survey. To this end we wish to extend our sincere appreciation to the teamwork, dedication, invaluable time, ideas and effort of these institutions and individuals. Thank you so much.

The SDS 2024 fieldwork would not be possible without enumerators who devoted their time and energy to administer survey tools to all groups of stakeholders in 16 regions, supervisors who managed logistics in the regions, planned for fieldwork and supervised the enumerators. We thank you so much, the opportunity cost of other activities that you could have implemented during the field work is this report that is crucial for improved TMDA services in the country. Receive our immense appreciation for your devotion to the completion of the 2024 SDS.

We wish to extend our heartfelt gratitude to Key Informants who took part in the in-depth interviews and to the general public, retailers and permit customers who responded to the questionnaires. Thank you for the time, energy and insights that you provided to inform this Service Delivery Survey. Your feedback and suggestions are valuable inputs for improving health sector commodities in the country. In the same tone we wish to extend our appreciation to other stakeholders who could not be mentioned by their names here but provided valuable inputs to this survey. Thank you so much for the level of commitment, time and your willingness to participate in the SDS.

We also wish to extend our profound appreciation to the regional authorities in the 16 regions where the surveys were conducted (Dar es Salaam, Tanga, Mtwara, Mbeya, Rukwa, Arusha, Mwanza, Iringa, Dodoma, Simiyu, Kilimanjaro, Tabora, Kigoma, Ruvuma, Kagera and Geita) and district authorities in 35 districts (Ilala, Kinondoni, Ubungo, Temeke, Kigamboni, Tanga, Mkinga, Mtwara, Masasi, Mbeya, Chunya, Sumbawanga, Nkasi, Arusha, Arumeru, Mwanza, Misungwi, Iringa, Kilolo, Dodoma, Mpwapwa, Bariadi, Meatu, Moshi, Hai, Tabora, Nzega, Kigoma, Kasulu, Songea, Peramiho, Bukoba, Kyerwa, Geita and Chato,) for their cooperation and permission to allow this survey to be conducted in their areas. The support you provided shows the extent to which you are committed to seeing TMDA services improved in the country.

Our heartfelt appreciation also goes to the resource persons from the University of Dar es salaam Business School who designed the survey methodology, planned for field work, took part in data collection, analysed the data and produced this SDS report. Thank you so much for offering the expert opinion to ensure that the 2024 SDS achieved the intended objectives.

Finally, but not in order of importance, we owe huge gratitude to TMDA Management under the leadership of Dr. Adam Mitangu Fimbo for the trust and support to the team throughout the survey period and the Government of Tanzania for the continued support to TMDA. Thank you all and may our almighty God continue to give you the necessary wisdom to carry on with the noble role you play in our country.



Dr. Diana Philemon Mwiru

Team Leader,

Department of Marketing, University of Dar es Salaam.

EXECUTIVE SUMMARY

Tanzania Medicines and Medical Devices Authority (TMDA) is committed to maintaining high level of customer and other stakeholders' satisfaction by delivering quality services. In order to achieve excellence in service delivery, customer and stakeholders' feedback is crucial as it informs the Authority on how it is progressing in service delivery. It also helps to identify weaknesses or gaps in service delivery as perceived by customers. Service Delivery Survey (SDS) is one of the ways that help organizations capture voices of customers and other stakeholders. This critical fact drives TMDA to periodically conduct service delivery surveys. This is the fifth service delivery survey to be conducted by TMDA. The survey was conducted by the team comprising of staff from the University of Dar es Salaam Business School (UDBS) and TMDA staff. The survey was conducted in that way in order to continuously build capacity of TMDA staff and the involvement of external experts ensured objectivity in data gathering and reporting of findings.

The objectives of the 2024 Service Delivery Survey (SDS) were to examine the level of customers and other stakeholders' satisfaction with services delivered by TMDA, to ascertain the general public level of awareness with TMDA and the level of compliance towards TMDA services. The survey further aimed at identifying the areas for improvement in order to enhance TMDA quality service delivery to its customers and other stakeholders.

Survey data were gathered from sixteen regions in the country namely Dodoma, Dar es Salaam, Tanga, Arusha, Kilimanjaro, Mtwara, Kigoma Ruvuma, Iringa, Mbeya, Rukwa, Tabora, Kagera, Mwanza, Geita and Simiyu. With exception of Dar es Salaam where all districts were involved, two districts were selected from each region one urban and one rural district making a total of 35 districts that participated in the survey. Data were collected from TMDA employees, general public, permit, laboratory services customers, retail customers and the media. A triangulation of structured questionnaires, Focus Group Discussions and In-depth interviews were used to collect data from respondents. KOBO TOOLBOX an online data collection software was used to gather data which was analysed using STATA analytical Tool. The SDS 2024 findings highlight priority areas that TMDA needs to focus on in improving its service delivery and customer satisfaction and public awareness with aim of protecting and promoting public health in the country.

Major findings

The major findings of the 2024 Service Delivery Survey are as follows:

1. Overall, the TMDA stakeholders are satisfied with noble services rendered by TMDA in the country. TMDA continues to fulfill the mandate for which it was established.

The Authority continues to reduce falsified products in the market through regulation, frequent inspections and market surveillance programmes with the intention to reach to a point where there will be zero falsified products in the country.

2. Employees are satisfied with the organization, with internal Satisfaction Index of 89.2%: Generally, TMDA employees are satisfied with the management, management culture and overall working conditions.
3. Employees level of satisfaction on remuneration is low, staff are not satisfied with their salary when compared with salary of workers in other similar organizations. The level of satisfaction is 47.98 percent which is below average. Further more, TMDA employees are not satisfied with their annual salary increment; the level of satisfaction with annual increment is 40.81 percent.
4. TMDA external customer satisfaction index is 74.8 percent with composite index of 82 percent.
5. External customer perception of TMDA service quality is varied. Retailers perceive service quality to be high at about 75.65 percent where as permit customers perception of TMDA services quality is 65.7 percent.
6. General Public awareness about TMDA has steadily improved from 47 percent in 2020 to 56 percent in 2024.
7. The level of public education among general public on consumer rights is 55 percent
8. Awareness about TMDA Clients' Service Charter among the general public is still very low. While awareness among TMDA staff on CSC is very high, 63.8 percent of TMDA staff adhere to CSC when delivering services while 35.3 percent reported moderate adherence to CSC when delivering services and 0.9 percent do not adhere to it.
9. TMDA Services Marketing triangle is loosely aligned with improvements needed on the internal marketing, external marketing and interactive marketing.
10. Limited resources contributes to TMDA strategic performance gap where TMDA expansion to other regions is hampered by limited resources allocated to the Authority.
11. TMDA partnership with Local Government Authority is affected mainly by limited resources where local government officials who are supposed to oversee TMDA activities in their areas do not prioritize them because they receive no funding from TMDA for extra duties they shoulder up.
12. TMDA customer segments include product manufacturers, importers, exporters, distributors (wholesalers, retailers and agents), researchers, health providers, Government institutions, non governmental organization and the General public.

Recommendations

Based on the findings the following are the recommendations from the 2024 SDS;

1. Public Education and awareness campaign should be an ongoing process this is because the composition of customers change over time, new people come in and others leave.
2. There is a need to study TMDA staff salary by comparing with other similar organizations in the industry to come up with TMDA staff salary review to be presented to MAB.
3. Training budget for staff should be increased to reflect the increased number of staff.
4. Loan budget for staff should also be increased to allow more needy staff access to the staff loan.
5. TMDA should undertake a strategic review and have a gradual strategic plan for opening offices in remote areas.
6. TMDA should engage with local government to suggest appropriate measures that will make local government officials implement TMDA mandate. Develop new guidelines and modality of support from the LGAs to be approved by the Government.
7. TMDA should consider to support facilities to dispose unfit and expired products.
8. Periodic customer feedback should be captured, analysed and shared for improved performance.
9. The online system for service delivery needs to be improved so as to remove hiccups in service delivery.
10. Improve on a few areas to ensure that TMDA services marketing triangle is well aligned.
11. Time line stipulated in the CSC should be qualified to state when the counting of days begins.
12. Recommended quick wins are:
 - Improve TMDA website customer interaction digitalize the process to allow customers provide feedback and lodge complaints online, this should include establishing stakeholders DASHBOARD.
 - Improve TMDA customer database to ensure that the addresses are current.
 - Review CSC to be more specific on timelines set.
 - Train staff on Customer Care so as to increase their empathy and how the handle customers.
 - Market TMDA laboratory services in order to generate incomes from laboratory tests.
 - Introduce TMDA week /TMDA football/ sports competition as a way to increased awareness of TMDA services in the country.

SECTION 1

INTRODUCTION

This is a report of the Service Delivery Survey (SDS) for the Tanzania Medicines and Medical Devices Authority (TMDA) for the year 2024. TMDA management appointed team of experts from the Department of Marketing of the University of Dar es Salaam Business School to support its own internal technical team to conduct the SDS as part of the planning and performance assessment. This is the main report termed **Volume 1**, which provides detailed information of the SDS from the planning to the actual implementation. There are two reports, of which Volume 2 is prepared separate to this main report (Volume 1). **Volume 2** comprises of the actual data, analysis and survey tools that were used to collect data. Therefore, reference is made to the second report (Volume 2). This is the fifth Service Delivery Survey conducted by TMDA, previous SDS were conducted in years; 2004, 2008, 2014 and 2020. The 2024 SDS is the first to be conducted by the restructured TMDA.

1.1 Background

Tanzania Medicines and Medical Devices Authority (TMDA) is a newly established semi-autonomous regulatory body under the Ministry of Health which is responsible for protecting and promoting public health by ensuring safety, quality and effectiveness of medicines, medical devices and diagnostics in the country. TMDA became operational from 1st July, 2019 following the enactment of the Finance Act, 2019 which *inter alia* transferred the functions of regulating the quality and safety of food and cosmetics from the then Tanzania Food and Drugs Authority (TFDA) to the Tanzania Bureau of Standards (TBS). Pursuant to these changes, the remaining mandates of the former TFDA have effective from 1st July, 2019 been transferred to the newly formed Tanzania Medicines and Medical Devices Authority (TMDA). TMDA is established under the Tanzania Drugs and Medical Devices Cap Act, 219 and it operates in accordance with the Executive Agency Act No. 30 of 1997 and its amendments thereof.

TMDA's functions

- (a) Regulating the importation, manufacturing, labeling, distribution, storage, promotion and sale of medicines, medical devices and diagnostics.
- (b) Inspection of manufacturing facilities, product outlets and inlets to verify compliance to the set standards and practices.

- (c) Evaluation and registration of medicines, medical devices and diagnostics before approval for use;
- (d) Issuing licenses and permits for dealing in products regulated by the authority;
- (e) Analyzing medicines, medical devices and diagnostics to determine their quality, safety and effectiveness;
- (f) Promoting rational use of medicines, medical devices and diagnostics;
- (g) Educating and providing unbiased information to the stakeholders and the general public on the regulated products.

In order to achieve its mission and vision, TMDA shall continuously strengthen registration, licensing, laboratory analysis, enforcement and inspection services pertaining to regulation of medicines, medical devices and diagnostics. The Authority continues to create public awareness countrywide through various public education programs. The Authority also implements Quality Management System (QMS) with the aim to improve organizational performance without compromising the safety, quality and efficacy of regulated products. Constant feedback from customers and other stakeholders on how the authority is performing is important. It is from this background that the current service delivery survey was conducted. The SDS was geared to assessing the overall stakeholders' satisfaction with TMDA services and captures stakeholders' voices on the gaps and areas for improvement in service delivery.

1.2 Need for Service Delivery Survey

The current Public Management agenda of the Sixth Phase Government under the leadership of Her Excellency Dr. Samia Suluhu Hassan emphasizes improved public service delivery, value for money and results. Moreover, the 2020/2025 CCM election manifesto aims to improve access to healthcare services in both urban and rural areas. In this respect, TMDA is determined to continuously keep on improving the services offered to her customers and other stakeholders. To date, TMDA and the then TFDA had commissioned four service delivery surveys in 2004, 2008, 2014 and 2020 respectively. In addition, self-assessments on the performance of TFDA were conducted in 2005, 2016 and 2019.

TMDA deals with a wide cross section of stakeholders such as product manufacturers, distributors, wholesalers and retailers; law enforcement agencies; practitioners and researchers; health care providers; Government institutions;

International institutions; NGOs; consumers and the general public as well as the media. The expectations of these stakeholders from TMDA are diverse, and their interests may at times be in conflict. The goal of TMDA is to maintain a high level of customers and stakeholders satisfaction. TMDA is also committed to improving the working environment for its internal customers, for example through internal capacity building. The Agency is also keen to strengthen the linkages with other collaborators including, but not limited to Local government Authorities.

TMDA would like to develop a roadmap that outlines quality improvement milestones that will fast track the realization of its vision. It would also like to engage her customers with a view to improving the relevance, efficiency and effectiveness of service delivery.

This SDS report is an essential input in the review of the TMDA five year Strategic Plan (2021/22 - 2025/26), preparation of the business plan, work plan and budget for the financial year 2025/26 and subsequent years, review of the current Client Service Charter and the Communication and Customer Service Strategy (2021/22 - 2025/26).

1.3. Previous studies

Monitoring service delivery is critical for a service organization to be able to obtain feedback on how it is fairing in delivering services to customers. TMDA has the culture of conducting periodic SDS to obtain feedback from customers and other stakeholders and use the feedback to improve performance. Since its existence TMDA has conducted four service delivery survey and this is the fifth survey. The first survey was conducted in 2004 followed by another one in year 2008. The third SDS was conducted in 2014 followed by another survey on 2020. The reports of these surveys provided inputs to TMDA including highlighting areas for improvement in service delivery.

1.4 Survey Objectives

The SDS examined the level of customers and other stakeholders' satisfaction with services offered by TMDA, public awareness and compliance towards TMDA services. The survey aimed at identifying the areas for improvement in order to enhance the quality of service that TMDA delivers to its customers and other stakeholders. The findings of the survey highlight priority areas that TMDA needs to focus on in improving its service delivery and customer satisfaction and public awareness with focus to protect and promote public health.

Specific objectives

The specific objectives of the 2024 service delivery survey were to:

- (a) Measure the quality of service rendered by TMMDA as perceived by its customers and stakeholders;
- (b) Assess customer satisfaction level/index for the services offered by TMMDA for both internal and external customers;
- (c) Measure the level of public awareness on TMMDA functions;
- (d) Establish the extent to which TMMDA is adhering to the service delivery standards as stipulated in its Client Service Charter;
- (e) Identify and analyze the main customer segments for TMMDA services;
- (f) Identify existing gaps in service delivery and areas for improvement;
- (g) Examine the factors that enhance or hinder service delivery to TMMDA's customers and stakeholders;
- (h) Identify priority areas that need to be addressed by the Authority with a view to improving service delivery;
- (i) Identify changes (quick wins) that TMMDA needs to embark on in order to improve its business processes and maintain its corporate image;
- (j) Identify internal capacity building areas that TMMDA needs to focus on with view to enhancing her visibility, corporate image and customers relationship management; and
- (k) Provide customer satisfaction index for each of the directorates within TMMDA as foundation for setting the performance standard;

1.5 Report structure

The remaining materials of this report is organized as follows:

Section Two: This section provides information about TMMDA. The section is organized into six sub sections, sub section one presents a brief information about TMMDA and its quality statement, roles and functions of TMMDA are presented in sub section two while regulatory framework is presented in sub section three. Sub section four highlights TMMDA general governance while sub section five presents TMMDA performance metrics. The section ends with the presentation of TMMDA customer segments.

Section Three: This presents the overall methodology and approach used in the survey. Materials in this section are organized in seven sub sections. Sub section one details the overall survey design used while sub section two presents the type of data gathered. Survey tools and units are highlighted in sub section three and four while training and field work preparations are presented in sub section five. Sub section six highlights the fieldwork and the section ends with the presentation on how data were managed.

Section four: This section presents descriptive findings which include the profile of respondents in terms age, duration of being in business, gender, location and whether employed or not.

Section five: This section presents Major findings of SDS 2024, the section ends with the findings on the extent to which different stakeholders are aware of client service charter.

Section six: This section presents further findings of the service delivery survey on customer satisfaction. Both internal and external customer satisfaction indices are presented. The section also presents the composite satisfaction indices and ends up with the external factors influencing TMDA service delivery.

Section seven: This section presents the summary of the findings and recommendations. The section is organized in three sub sections. Sub section one summarizes the key issues while sub section two presents recommendations from customers. General recommendations from the findings are presented in sub section three.

Section 8: This section presents the Appendices

SECTION TWO

ABOUT TMDA

Tanzania Medicines and Medical Devices Authority (TMDA) is an Executive Agency under the Ministry of Health (MOH). TMDA which was formerly known as Tanzania Food and Drugs Authority (TFDA) was established in 2003 after enactment of the Tanzania Food, Drugs and Cosmetics Act, Cap 219 by the Parliament. This Act was later amended in 2019 to Tanzania Medicines and Medical Devices Act, Cap 219 after the shift of responsibilities of regulating food and cosmetics to Tanzania Bureau of Standards (TBS). The change in legislative framework which was done through the Finance Act, No. 8 of 2019 also resulted into the change of name to TMDA. TMDA is responsible for regulating quality, safety and effectiveness of medicines, medical devices, diagnostics, biocidals and tobacco products. In order to improve public service delivery, TMDA is managed as an Executive Agency in accordance with the Executive Agencies Act, Cap. 245 which was also amended in 2009.

Vision

To be the leading regulatory authority in ensuring safe, quality and effective, medicines, medical devices, diagnostics and other health related products for all.

Mission

To protect and promote public health by ensuring quality, safety and effectiveness of medicines, medical devices, diagnostics and other health related products.

Philosophy

TMDA strives to offer quality regulatory services in the pursuit of protecting public health and environment by using competent and dedicated staff.

Core values

TMDA always embraces and institutionalizes values that guarantee customer satisfaction. All TMDA employees are expected to be committed to upholding the following values to define their character and personal attributes:

Transparency	Operate in a fully transparent manner and communicate openly and timely to the relevant stakeholders
Accountability	Being accountable for actions and outcomes
Quality	Strive to deliver the best services to customers with utmost professionalism
Creativity	Embrace creativity in service delivery
Teamwork	Support one another, work cooperatively and respect one another's views
Integrity	To uphold highest standards of conduct and commitment while acting in the best interest of the country
Customer focus	Always treat customers and colleagues with courtesy and be responsive, timely and proactive to meet their needs

2.1 Quality Policy Statement

TMDA is committed to provide quality services in response to customer needs and expectations. TMDA strives to balance the interests of her stakeholders without compromising quality, safety and effectiveness of medicines, medical devices, diagnostics, biocidals and tobacco products by managing the Authority with utmost professionalism. TMDA is committed to comply with the requirements of ISO 9001:2015 Standard and continually improve the effectiveness of the Quality Management System. It manages and provides resources for continuous improvement of services to ensure customer satisfaction.

2.2 Roles and Functions of TMDA

Pursuant to the *Tanzania Medicines and Medical Devices Act, Cap 219*, TMDA discharges the following functions:-

- (a) Regulating the manufacturing, importation, distribution and selling of medicines, medical devices, diagnostics, biocidals and tobacco products;
- (b) Prescribing standards of quality, safety and effectiveness for medicines, medical devices, diagnostics, biocidals and tobacco products;
- (c) Inspecting manufacturing industries and business premises dealing with regulated products and make sure the standards required are attained;
- (d) Evaluating and registering medicines, medical devices, diagnostics, biocidals and tobacco products so as to reach the required standards before marketing authorization;
- (e) Issuance of business permits for premises dealing with regulated products;

- (f) Assessing the quality, safety and efficacy of controlled drugs;
- (g) Conducting laboratory analysis for regulated products to ascertain their quality specifications;
- (h) Conducting pharmacovigilance of medical products and vigilance of medical devices, diagnostics, biocidals and tobacco products circulating on the market;
- (i) Promoting rational use of medicines, medical devices, diagnostics, biocidals;
- (j) Educating and sharing accurate and reliable information to stakeholders and the general public on regulatory matters;
- (k) Ensuring that Tobacco products circulating in the market are appropriate for the protection of public health.

2.3 Regulatory Framework

TMDA's operations are guided by the Tanzania Medicines and Medical Devices Act 2003, as amended in 2019 (Cap 219). The legislation establishes TMDA and provides the legal mandate for regulating medicines, medical devices and diagnostics. In addition, it empowers the Authority to enforce compliance and take action against violations. The Act empowers the Minister responsible for Health to issue regulations to ensure efficient and comprehensive regulation of medicines, medical devices and diagnostics. To this end the following regulations have been issued:

- Tanzania Medicines and Medical Devices (Orphan Medicines) Regulations 2018;
- Tanzania Medicines and Medical Devices (Registration of Medicinal Products) Regulations 2015;
- Tobacco Products (Regulations) (Designation of Inspections) Notice 2021;
- Tanzania Medicines and Medical Devices (Control of Drugs and Herbal Drugs Promotion) Regulations 2010;
- The Tanzania Foods, Drugs and Cosmetics (Scheduling of Medicines) Regulations 2015
- The Tanzania Foods, Drugs and Cosmetics (Good Manufacturing Practice Enforcement) Regulations 2018;
- Tanzania Medicines and Medical Devices (Registration of Premises, Importation and Exportation of Pharmaceutical Products and Raw Materials) Regulations 2015;

- Tanzania Medicines and Medical Devices (Fees and Charges) Regulations 2022;
- Tanzania Medicines and Medical Devices (Laboratory Analysis of Medical and Non-Medical Products) Regulations 2021;
- Tanzania Medicines and Medical Devices (Good Storage and Distribution Practices) Regulations 2021;
- Tanzania Medicines and Medical Devices (Pharmacovigilance) Regulations 2018;
- Tanzania Food, Drugs and Cosmetics (Clinical Trials Control) Regulations, 2013; and
- The Tanzania Food, Drugs and Cosmetics (Recall, Handling and Disposal of Unfit Medicines and Cosmetics) Regulations 2015.

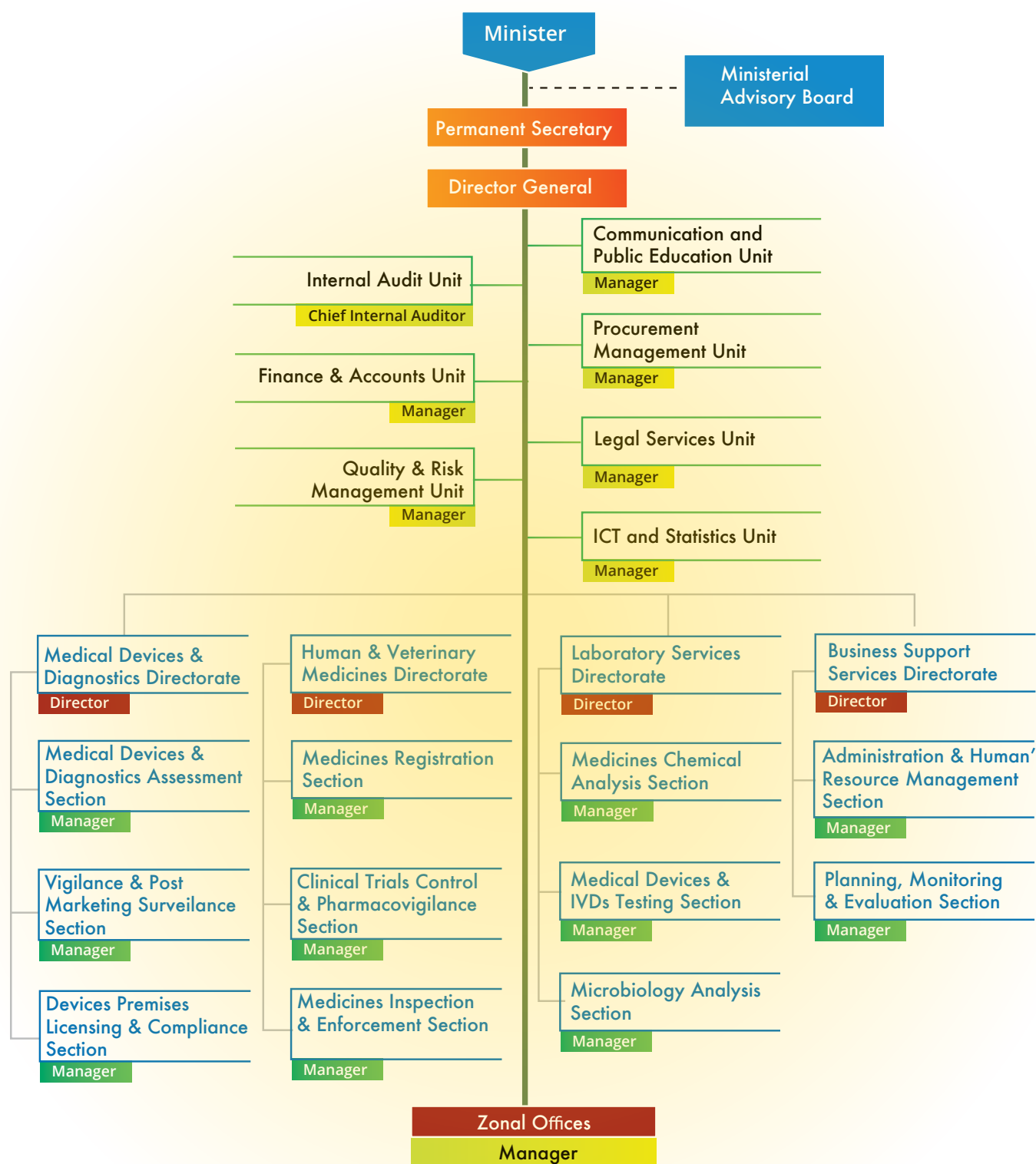
TMDA has prepared and issued guidelines to support stakeholders in complying with regulations, including guidelines on medical vigilance system; medicines registration; medical device premises licencing; and guidelines for clinical trials. The guidelines align with international standards such as standards set by the World Health Organisation (WHO) and International Council for Harmonisation (ICH).

2.4 General Governance

In terms of governance, a Ministerial Advisory Board (MAB) appointed by the Minister responsible for health oversees TMDA. The MAB advises the Minister on strategic matters including formulating policies, approving strategic and operational plans and monitoring and evaluation of performance of the Authority. The Director General, reporting to the Permanent Secretary of the Ministry responsible for health is responsible for day-to-day management and administration of TMDA and for implementation of MAB policies and decisions.

TMDA Structure

TMDA organization structure is as outlined below.



2.4.1 Director General

The Director General is the Chief Executive Officer, providing strategic leadership to the Authority. The Director General reports to the Permanent Secretary of the Ministry of Health. The Director General's office has six units (Internal Audit, Finance and Accounts, Quality and Risk Management, Public Relations and Education, Legal Services and Procurement Management Unit) and zone offices (Eastern Lake, Western Lake, Western, Northern, Southern, Eastern, Central and Southern Highlands zones). The core functions of TMDA are discharged through four directorates (Human and Veterinary medicines, Medical devices, Laboratory Services and Business Support services). The zone offices are responsible for service delivery in their respective zones.

2.4.2 Directorate of Human and Veterinary Medicines

This directorate is responsible for ensuring quality, safety and efficacy of human and veterinary medicines. The Directorate has three sections, namely; medicine registration, Clinical trials control and pharmacovigilance, medicines inspection and enforcement.

2.4.3 Directorate of Medical Devices and Diagnostics Control

This directorate is responsible for ensuring the availability of safe, effective and quality medical devices and diagnostics in the Tanzanian market. The Directorate has three sections, namely; Medical Devices and diagnostics assessment, Vigilance and Post Marketing Surveillance and Devices Premises and Licensing and Compliance section.

2.4.4 Directorate of Laboratory services

TMDA Quality Control Laboratory is established under section 14(1) of the Tanzania Medicines and Medical Devices Act, Cap. 219, to carry out analysis of regulated products. TMDA has three laboratories in Dar es Salaam, Mwanza and Dodoma. These laboratories are complemented by 25 medicines quality assurance centers which are equipped with minilab kits. The centers are stationed at ports of entries, zone offices and some regional referral hospitals across the country. Test results generated enable the Authority to make evidence-based regulatory decisions.

2.4.5 Directorate of Business Support Services

This directorate provides and enhances good management of TMDA resources and give support to all technical operations of the Authority. It is also involved in development and implementation of public education programmes and management information systems.

2.4.6 Technical committees

Cap 219 Section 13 (1) provides for establishment of technical committees to advise the Director General on technical matters. The following are technical Committees in place:

- Human Medicines Registration;
- Veterinary Medicines Registration;
- Medical Devices and Diagnostics Registration;
- Clinical Trials Control;
- Pharmacovigilance; and
- Laboratory.

2.4.7 Collaboration with other stakeholders

TMDA collaborates with various stakeholders including the Ministry of Health, law enforcement agencies, Healthcare providers, manufacturers and importers of medicines and medical devices, and international regulatory bodies and organisations. Due to limited capacity, TMDA has also delegated some of its functions to Local Government Authorities.

2.5 TMDA Performance Metrics

TMDA uses performance metrics to track its progress towards the strategic objectives set out in its strategic plan. The metrics are specific, measurable, achievable, relevant and time-bound (SMART) indicators that allow the authority to assess performance and make necessary adjustments. The performance metrics are aligned with TMDA's mandate to ensure safety, quality and efficacy of medicines, medical devices and diagnostics and they support the broader goal of promoting and protecting public health. The metrics cover the following key themes:

- Product registration and approval;
- Inspection and compliance;

- Quality assurance;
- Pharmacovigilance and risk management;
- Public awareness and stakeholder engagement;
- Operational efficiency;
- Innovation and technological adoption; and
- Collaboration and partnerships.

TMDA regularly publishes performance reports indicating annual achievements, challenges and areas for improvements. The reports track progress toward achievement of targets thus enabling the management to make necessary adjustments to ensure continuous improvement in its operations and that TMDA is on track in carrying out its mandate. The performance reports are publicly available to ensure transparency and demonstrate accountability.

2.6 TMDA customer segments

TMDA is responsible for regulating quality, safety and effectiveness of medicines, medical devices, diagnostics, biocidals and tobacco products. TMDA main responsibility is stated in the Health policy, 2007 and its mandate is stipulated in the Tanzania food, drugs and cosmetics act (TFDCA) cap. 219 as amended by the Finance Act of 2019. The act provides for the efficient and comprehensive Regulation and control of safety and quality of medicines, medical devices and diagnostics in Tanzania mainland.

Under ceteris beribus conditions external customers provide justification for existence of the organization in the society. TMDA is mandated to ensure that Tanzania population is safe and that medicine, medical devices diagnostics and biocidals circulating in the market are safe and fit for human consumption as per stipulated international standards. The segments that TMDA serves are presented in the subsections below.

2.6.1 Product manufacturers

TMDA regulates the manufacturing of medicines, medical devices and diagnostics hence manufacturers of these products are TMDA customers. These include domestic and foreign manufacturers of medicines, medical devices, and diagnostics who wish to sell products in Tanzania. TMDA regulates the manufacturers of these products to ensure that only products that meet the standards as per TMDA penetrate the Tanzania market.

2.6.2 Importers

TMDA customers also include companies that import medicines, medical devices, and diagnostics in the country. TMDA ensures that products imported and distributed in the country are safe and effective. The services that Importers and distributors obtain from TMDA include permit to import and distribute products in the country, registration of products in the country and laboratory analysis where TMDA laboratory analyses products such as medicines, medical devices and tobacco products to ensure that they meet the standards. TMDA also perform quality control test to ensure that the said products meet the national and international standards.

2.6.3 Exporters

These are companies that export medicines, medical devices, and diagnostics from Tanzania to other countries. Section 73 of the Tanzania Medicines and medical devices Act. Cap 219 gives mandate to regulate importation and exportation of medicines, medical devices, invitro diagnostics and biocidals. Therefore, exporters of the stated products must obtain special permits from TMDA.

2.6.4 Distributors

These are interdependent institutions that ensure regulated products move from the manufacturer/importer to the end users, they include wholesalers, agents and retailers. They are companies that buy and sale medicines, medical devices and diagnostics in large quantity or small quantities.

2.6.5 Researchers

TMDA regulates clinical research in Tanzania including clinical trial approvals, oversight and inspections. Hence sponsors or investigators are required to obtain TMDA approval. Therefore, organizations with intention to obtain clinical trial approvals are TMDA customers.

2.6.6 Health care providers:

TMDA helps health care providers diagnose and treat patients

2.6.7 Government institutions:

TMDA works with government institutions to regulate medicines, medical devices, and diagnostics

2.6.8 Non-governmental organizations:

TMDA works with non-governmental organizations to regulate medicines, medical devices, and diagnostics.

2.6.9 The General public

These are consumers of TMDA regulated products. They are the ultimate users of the regulated products and they close the regulated products production circle. They are the primary customers as TMDA primary objective is to ensure that these customers consume safe and effective products.

SECTION THREE

SURVEY METHODOLOGY AND APPROACH

This section presents methodology and approach that was used to conduct service delivery survey. In order to capture trends in the service delivery the study used retrospective longitudinal data. Both primary and secondary data were used in order to achieve the objectives of the survey. Primary data mainly from the general public, retailers and whole salers, manufacturers and other stakeholders were obtained. Secondary data generated from TMDA performance reports over the past four years and the 2020 service delivery survey were reviewed and data were used to obtain the trend in performance.

3.1 Overall Survey Design

The objective of this retrospective longitudinal study was to evaluate the performance of TMDA over the past four years and to ascertain the most effective approach for sustaining or improving her performance. In order to achieve the SDS objectives, a triangulation approach was used, which allows for the utilisation of multiple data collection methods. Both primary and secondary data were gathered and used to address the survey objectives. The methodology involved the use of surveys, in-depth interviews and Focus Group Discussions (FGDs) to collect data from a diverse range of stakeholders. Furthermore, desk reviews were conducted to generate data that facilitated the achievement of SDS objectives.

3.2 Type of Data

Both primary and secondary data were gathered and used to achieve survey objectives. Primary data were gathered through five structured tools dedicated for each TMDA stakeholder. Furthermore, check list questions guided focus group discussions with TMDA staff and interview guiding questions were used to generate data from TMDA top management. Secondary data were gathered through review of past TMDA performance and past SDS. The secondary data complimented the primary data especially in ascertaining TMDA performance trend and customer satisfaction levels over time.

3.3 Survey Tools

3.3.1 Primary data

Structured questionnaires, in-depth interview guiding questions, and FGDs check list questions were developed and used to gather data from TMDA stakeholders, including employees, households, Permit customers, retailers (medicines, medical devices, in-vitro diagnostics, and complimentary products), laboratory services, and the media. Five sets of structured questionnaires, one for each stakeholder group were developed and used to gather data. Check list questions were developed and used to guide the in-depth interviews and FGDs with specific TMDA stakeholders. For the indepth interviews contact information of stakeholders was obtained from the TMDA databases.

3.3.2 Secondary data

In addition to primary data secondary data were collected to achieve the objectives of the SDS. Secondary data were obtained from TMDA past performance reports, past service delivery survey reports and TMDA strategic plan. Contrasting Primary and secondary data provided a trend in TMDA service delivery over time and a picture on how TMDA is faring in service delivery over time. For example, the survey offers a comprehensive assessment of the extent to which TMDA is improving the quality of service and the work environment by comparing the customer satisfaction indices for both internal and external customers in 2024 with past indices.

3.4 Survey Units

The survey units were classified into the following categories:

Employees: TMDA has permanent and temporary employees located at the Head Office in Dodoma and eight zonal offices. All permanent employees were considered in the survey. A survey tool dedicated for gathering data from employees was developed and sent to all employees.

General Public: These are among TMDA key stakeholders they are represented by households. A data collection tool was designed and used to elicit data from the general public here in identified as "Households" based on random sampling approach.

Customers: TMDA has broad list of customers who are provided with services; hence form the core category for the SDS. Customers are heterogeneous in terms of various services they receive from TMDA; hence further breakdown was warranted

for effective service delivery survey. The following are considered core customer groups:

- Permit Customers.
- Retail Customers (Medicines & Devices).
- Laboratory Services Customers.

Media

Other Stakeholders: The remaining key stakeholders are grouped under this category and were also involved in the SDS. This category includes a wide and diverse group that include international organizations, Government public institutions, Suppliers, private institutions and other entities that interact with TMDA on its daily activities. A set of questions were sent to the selected stakeholders for them to fill.

3.5 Sampling Procedure and sample size

3.5.1 General Public (Households)

Simple random sampling was used to select households from 16 regions in Tanzania with TMDA presence. TMDA operational area is organized in eight zones namely Eastern zone, Central zone, Lake East zone, Lake west zone, Northern zone, Southern zone, Southern highland zone and Western zone. To ensure representation, two regions from each zone were involved in the survey. 16 regions were involved in the survey, for each region, two districts (one urban and one rural) were selected and involved in the survey with exception of Dar es Salaam where all districts were involved in the survey. Dar es Salaam is a special case given the volume of business dealing with products regulated by TMDA. There were nine field supervisors covering 16 regions during the field work. The selected regions and districts are shown in Table3.1.

Table3.1: Selected Regions and Districts for Households Survey

Zone	Cluster: Regions	Sub-Cluster	
		Urban	Rural
Eastern	Dar es Salaam	Ilala, Ubungo, Kinondoni	Kigamboni, Temeke
	Tanga	Tanga	Mkinga
Central	Dodoma	Dodoma	Mpwapwa
	Iringa	Iringa	Kilolo

Zone	Cluster: Regions	Sub-Cluster	
		Urban	Rural
Lake West	Mwanza	Mwanza	Misungwi
	Simiyu	Bariadi	Meatu
Lake East	Geita	Geita	Chato
	Kagera	Bukoba	Kyerwa
Northern	Arusha	Arusha	Arumeru
	Kilimanjaro	Moshi	Hai
Southern	Mtwara	Mtwara	Masasi
	Ruvuma	Songea	Peramiho
Southern Highland	Mbeya	Mbeya	Chunya
	Rukwa	Sumbawanga	Nkasi
Western	Tabora	Tabora	Nzega
	Kigoma	Kigoma	Kasulu

Since the households representing public had a large population, the assumption of normal distribution was valid and was used to determine sample size. The formula by Cochran (1963), which is widely used in surveys was used to determine sample size. Under ceteris paribus conditions the sample size is normally influenced by several factors, including the purpose of the study, population and allowable sampling error. In addition to the purpose of the study and population size, three usual criteria were used to determine appropriate sample size. The criteria are level of precision (e); confidence level (z); and degree of variability (p). The following formula was used to determine the sample size (n) of this survey.

$$n = [Z^2 \cdot P \cdot (1-P)] / e^2$$

Figure 1 presents the calculation of the sample size. The confidence level of 95%, the degree of variation of 0.5 and the level of precision of 2% were used to calculate the sample size. The estimated sample size fell within the range of 138 to 9,604. The calculated sample size was 2,401. A total of 2,400 households were targeted to be interviewed in 16 regions, with an average of 150 households per region. Two districts, one urban and one rural were selected from each region. From each district 75 households were surveyed. In each district, two wards were selected; consequently, 15 households were finally randomly selected from each ward.

Figure 1: Calculated Sample for the 95% confidence level with range of precision and variability

Confidence level	Z=95%	1.96					
Degree of Variability	p	0.5					
Level of Precision	e	0.05					
Sample Size		384	0.01	0.02	0.03	0.04	0.05
	0.1		3,457	864	384	216	138
	0.2		6,147	1,537	683	384	246
	0.3		8,067	2,017	896	504	323
	0.4		9,220	2,305	1,024	576	369
	0.5		9,604	2,401	1,067	600	384

External customers and suppliers of TMDA are fixed in number and fall under several categories. For the purpose of this study, five categories were defined to determine population and sample selection. Sample size for the external customers was based on a simplified formula for the fixed small population proposed by Yamane (1967). The formula is presented as proportion of fixed population (N), over its weighted fixed population (N) by level of precision (e) plus a unit. Finally, the sample size formula provides the number of responses that need to be obtained. The calculated sample size was adjusted with additional 30% to compensate for non-response to obtain field sample size.

$$n = N / 1 + N.e^2$$

Figure 2 below summarises examples of the calculation of the sample size based on fixed population of the TMDA customer categories and level of precision required.

Figure 2: Example of Calculated Sample Using Simplified Fixed Population Formula

Population	N	3900							
Level of Precision	e	0.05							
Calculated		363	0.01	0.02	0.03	0.04	0.05	Field Size	% Pop
Employees		382	368	331	284	237	195	254	66%
Permits		887	815	655	493	367	276	358	40%
Retails		3900	2,806	1,523	865	539	363	472	12%
Labs		1200	1,071	811	577	411	300	390	33%
Media		58	58	57	55	53	51	58	100%

3.6 Training of Enumerators

Two day training sessions were conducted at TMDA Eastern Zone Offices in Mabibo Dar es Salaam. A total number of 26 enumerators and 8 supervisors attended the two day training. The training was conducted to familiarise data enumerators and their supervisors with survey objectives and tools. The two days training sessions covered the following:

Day One: During Day One, the field researchers (supervisors and data enumerators) were oriented with the purpose and objective of the survey. The past SDS highlights were shared and presented to the Team and challenges were discussed. The training also covered data collection protocols, key procedures, and reporting structure.

Day Two: During Day Two, the field researchers (supervisors and data enumerators) were introduced to data collections tools (questionnaires) and also learnt on how to collect data using software called KOBO TOOLBOX. The training session covered practical work on testing the data collection tools using electronic devices e.g. Laptop, Notebooks, iPads, and mobile phones. The 2024 SDS survey was paper less since all tools were uploaded online. Day two ended by enumerators being given the necessary support for them ready for departure to their respective field regions. The teams left for the field on 10th November ready to start fieldwork on 11th November 2024.

3.7 Data Collection Methods

Two weeks before data collection, introduction letters were sent to Regional Administrative Secretaries (RAS) introducing the TMDA survey teams, the team leaders were also given copies of the letters. Upon arrival in the regions survey teams made courtesy visits to Regional administration blocks and obtained introduction letters to the districts. At the district level, the research teams met the district pharmacist who was the host. The team of researchers were introduced to the two Wards, one in rural and one in urban setting.

3.7.1 Questionnaire Administration

The survey involved administering in person two sets of questionnaires at ward level. The first questionnaire elicited data from facilities namely; hospitals, dispensaries, health centres, pharmacies and ADDOs. The second set of questionnaire that was also administered in person elicited data from households (general public). In every ward households selected randomly were interviewed. KOBO TOOLBOX was used to collect data and upon completion and checking for non missing data or skipping of questions the questionnaire was sent to the server for onward processing. Online questionnaires to employees, permit customers i.e manufacturers and importers and media and laboratory service customers were sent via emails and were self administered.

On daily basis, field supervisors had briefing with research teams to share any challenge and how best to move forward with the assignment.



3.7.2 Focus Group Discussions (FGDs)

Two external facilitators conducted Focus Group Discussions with selected employees at TMDA Head Office and selected zonal offices. Employees who were at the offices during the time the FGDs were conducted participated in the FGDs. The FGDs were conducted during December the time majority of staff were on their annual leave. With exception of Dar es Salaam, Arusha and Dodoma headquarters, one FGD was conducted in each zone. In Dar es Salaam and Arusha two FGDs were conducted in each region while three FGDs were conducted at Headquarters Dodoma. External expert facilitated FDGs through initial presentation and lead discussions based on well-developed themes. The FGDs were structured as follows:

- Introduction
- TMDA mission, Vision and core values
- Public awareness of TMDA
- TMDA Performance
- TMDA SWOT analysis
- TMDA working environment
- TMDA rating of teamwork
- TMDA services marketing triangle

3.8 Data Collection

Training of enumerators was followed by the field work which was conducted in 16 regions from 11th November 2024 to 22nd December 2024. There were eight teams comprising of three resource persons, one supervisor, and two data enumerators. Except for Dar es Salaam and Tanga, where there were four data enumerators and two supervisors. Each team spent one week in one region. The key activities conducted during the field work included the following:

- In person data collection from households using KOBO TOOLBOX (at ward level) and retail customers (at district level).
- Self administered employees, laboratory services, permit and media questionnaires: Employees tool was emailed to all TMDA staff, they filled the tool and returned for further processing. Soft copy questionnaires were also sent to permit customers and media for them to fill and return the filled questionnaires.

3.9 Data Management

Data collected using KOBO Collect, were saved in KOBO TOOLBOX server. After completion of data collection, data management followed as explained below:

Data Processing: Data collected through KOBO Collect were saved directly into KOBO TOOLBOX server and were checked daily to monitor the progress. The completion of data collection was followed by data processing where all five tools were downloaded into Microsoft Excel for data cleaning and coding.

Data Analysis: The five cleaned datasets were imported into statistical analysis computer software called STATA. The data analysis was conducted using STATA and summary results were compiled to produce Volume 2 of the SDS report. The Volume 2 guided production of service delivery survey report volume 1.

SECTION FOUR

DESCRIPTIVE ANALYSIS OF SDS

4.1 Survey Responses

The TMDA SDS survey revealed different levels of response among internal and external groups. Internally, employees experienced a high response rate of 96.5%, which was indicative of effective internal communication and strong engagement. Although this is commendable, the slight discrepancy (3.5%) underscores the necessity of follow-up to guarantee complete participation and obtain comprehensive feedback from all employees. This robust internal response establishes a solid foundation for comprehending the dynamics of internal service delivery and aligning operational enhancements.

The response rates were highly variable from an external perspective. The successful outreach and strong engagement of households (141.3%) and retailers (167.8%) were evident in their significant surpassing of targets. The response rate for domestic manufacturers was 84.6%, laboratory services customers was 61.5%, media 55.2% while a very low participation rate below average was from importing permit customers where only 19% of those targeted responded to the survey tool. In order to enhance future surveys, TMDA should implement targeted strategies, such as personalised outreach or incorporating surveys into regular interactions with low-response groups, while simultaneously preserving momentum with highly engaged groups. These insights will assist TMDA in refining its approach and guaranteeing that all stakeholders provide balanced and actionable feedback.

Table 4.1: Comparison of target sample size and actual data collection

TOOL	CATEGORY	TARGET	ACTUAL	% ACHIEVED
TOOL1	EMPLOYEES	254	245	96.5
TOOL2	HOUSEHOLDS	2,400	3,391	141.3
TOOL3	PERMITS	358	68	18.9
TOOL3	MANUFACTURERS	13	11	84.6
TOOL4	RETAILERS	780	1,309	167.8
TOOL5	LABORATORIES	39	24	61.5
TOOL6	MEDIA	58	32	55.2

4.2 Characteristics of the Respondents

This section presents analyses of demographic data or characteristics variables (descriptive findings) that were used in five survey tools. These factors or variables are necessary information to collaborate survey analysis with individual questions posed in the survey tools in order to get insights on various issues. The sub-section is presented under the following major headings:

- Employees' characteristics.
- Households' characteristics.
- Permit customers characteristics.
- Domestic Manufacturers characteristics
- Retailers' characteristics.
- Laboratory service customers characteristics
- Media characteristics.

4.2.1 TMDA Employees

As of year 2024 TMDA had a total of 382 employees out of which 245 employees responded to the survey (64.1%). The survey results show that respondents were 31.8% female and 68.2% male. Figure 3 shows distribution of employees by age categories. Majority of responded employees (71.8%) were below the age of 46 years, while between 46 and 55 years were 23.3% and over 55 years were 4.9%. This staff age distribution is good as it provides room for good succession plan should TMDA have a low staff turnover rate.

Figure 3: Employees age profile

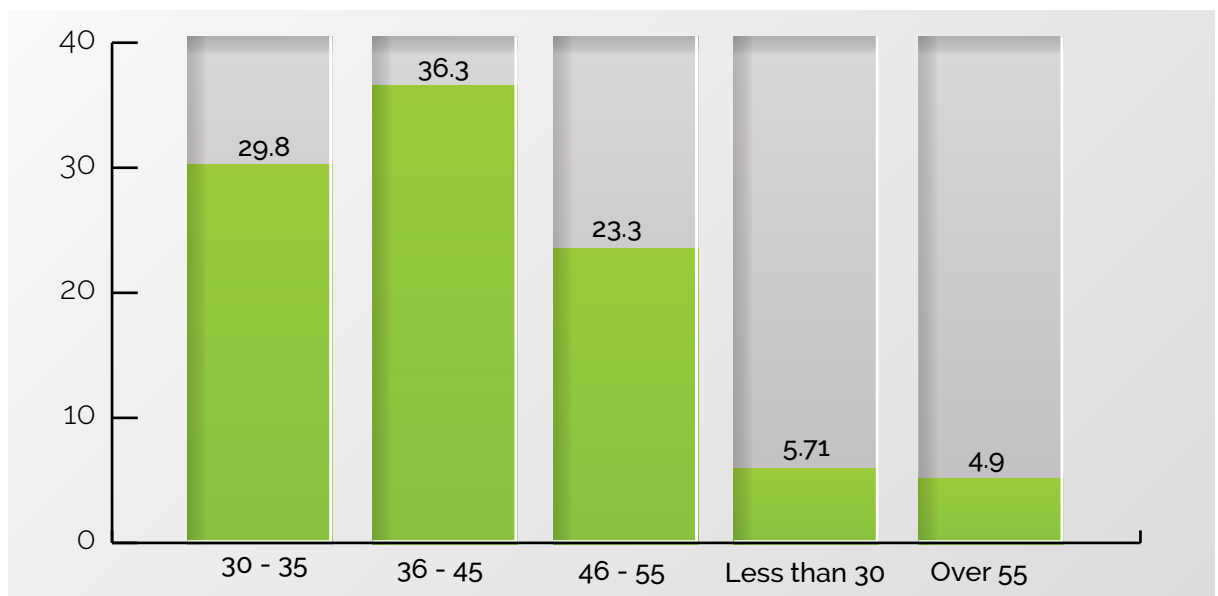
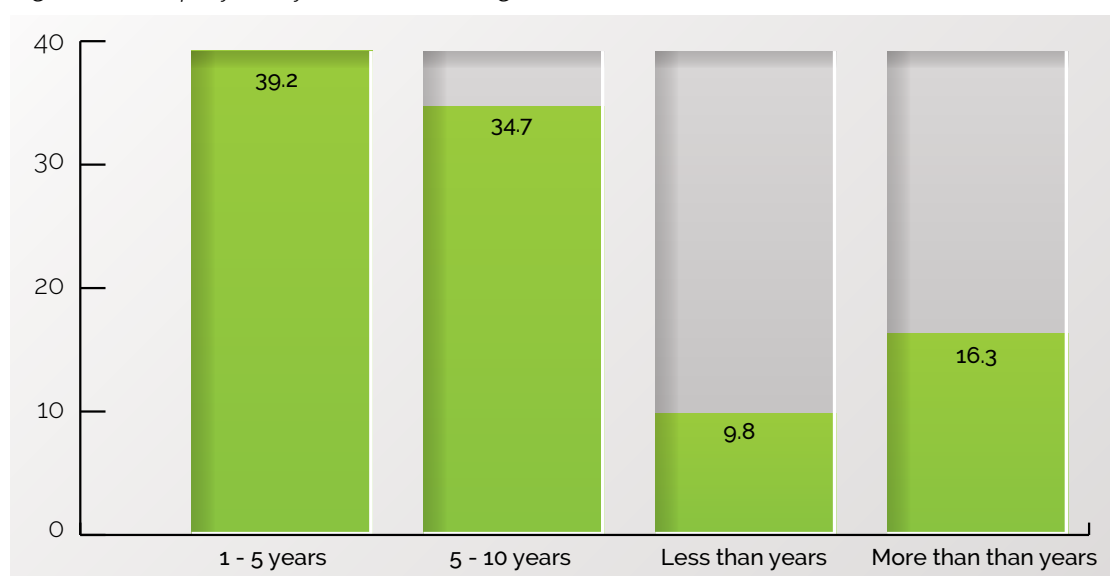


Figure 4 shows distribution of staff who responded by number of years they have worked at TMDA. The figure suggests a mixed distribution of employees work experience. The findings indicate that a good number of employees (49%) joined TMDA between one to five years and 9.8 percent are relatively new staff who joined the organization in less than a year. 16.3 percent of staff have worked with the organization for more than 15 years. The distribution of staff duration with the organization is good as it allows learning and succession plan within the organization. This pattern has slightly changed when compared with the previous SDS of 2020.

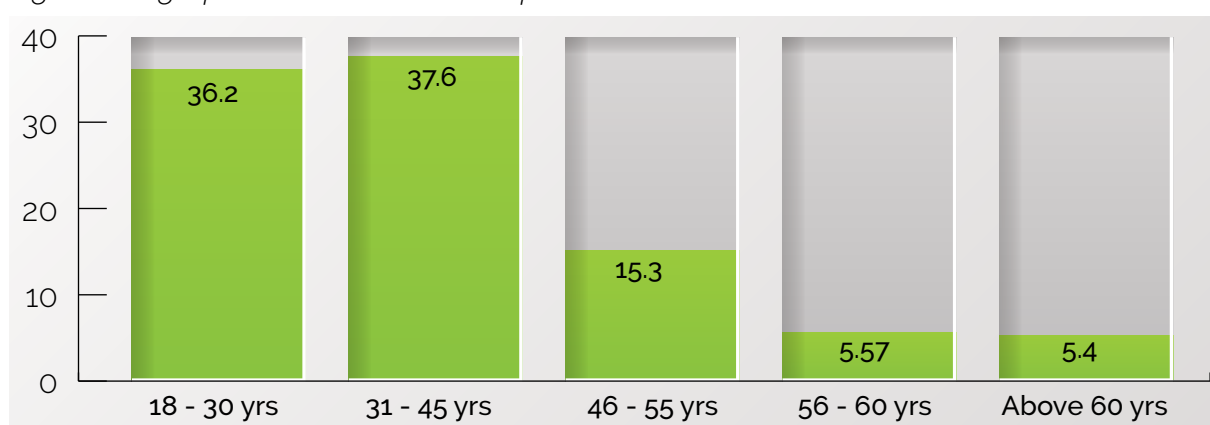
Figure 4: Employees years of working at TMDA



4.2.2 Households Characteristics

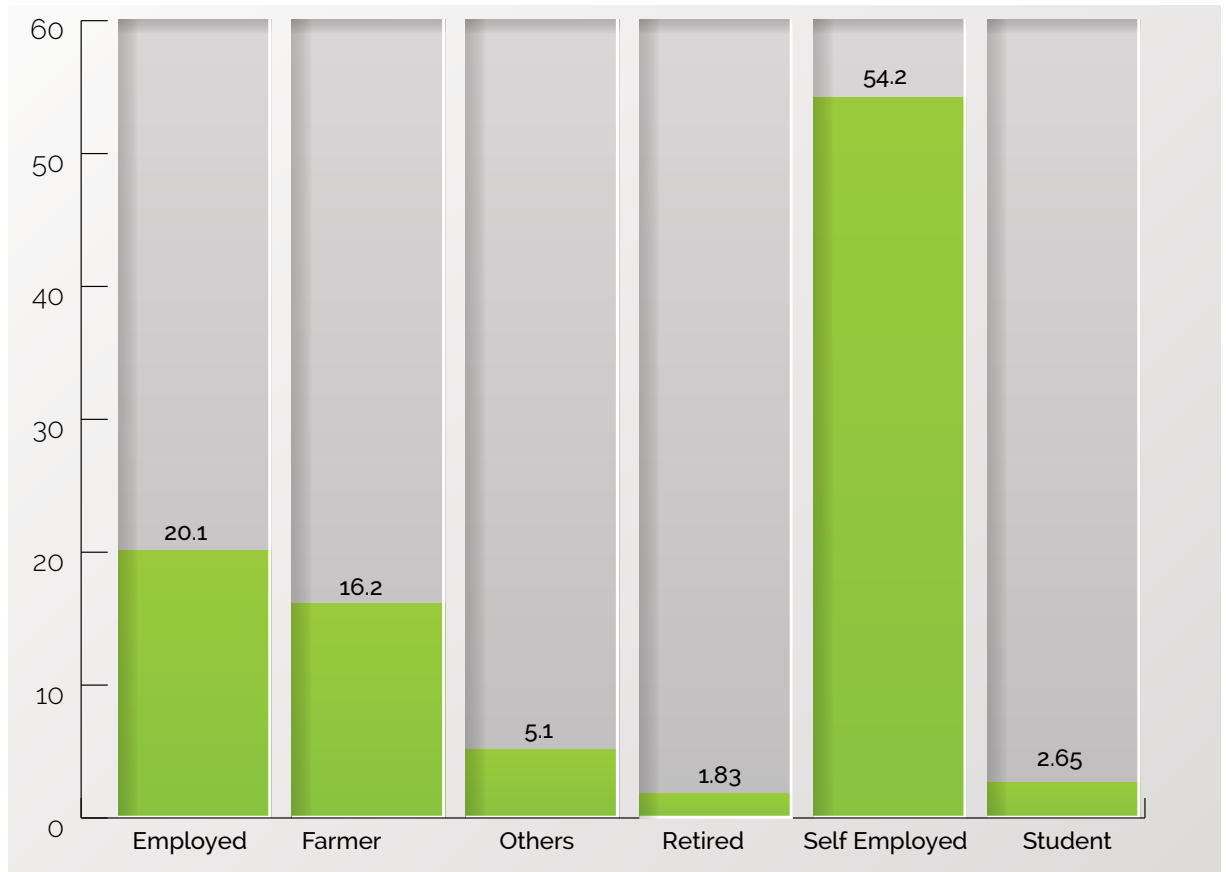
A sample of 3,391 households were involved in the SDS 2024. 35 districts were used to cluster the sampled households, which were stratified by rural and urban locations. The households were drawn from 16 regions. The survey collected and analysed data from 3,391 households. 49.1% of those who responded were females and 50.9 percent were males. As evidenced from figure 5 majority of those who responded, about 73.8 percent were aged 45 and below.

Figure 5: Age profile of household respondents



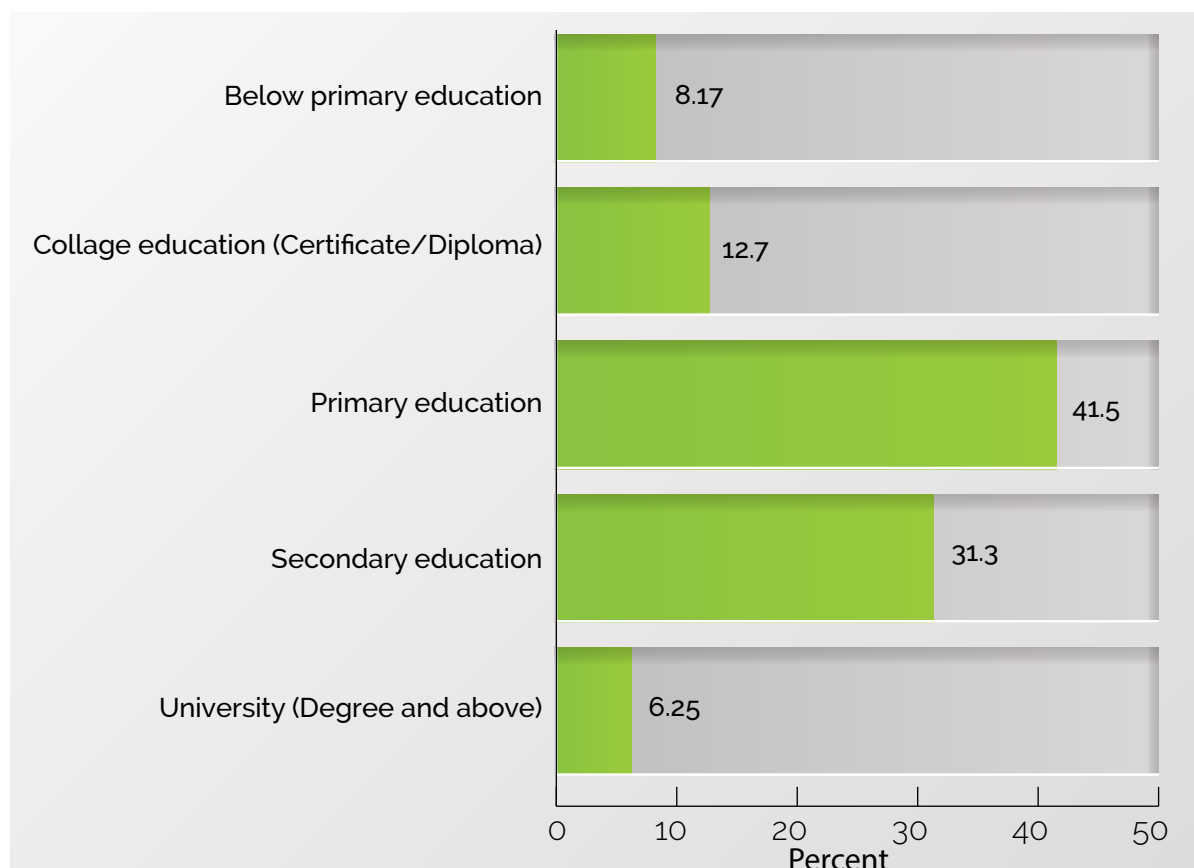
The respondents were asked to report their occupation at time of the survey of which 54.2% were self-employed, 16.2% were farmers, 20.1% were employed and the rest at 9.58% represented retired, students, livestock keepers and others (see Figure 6).

Figure 6: Occupation profile of household respondents



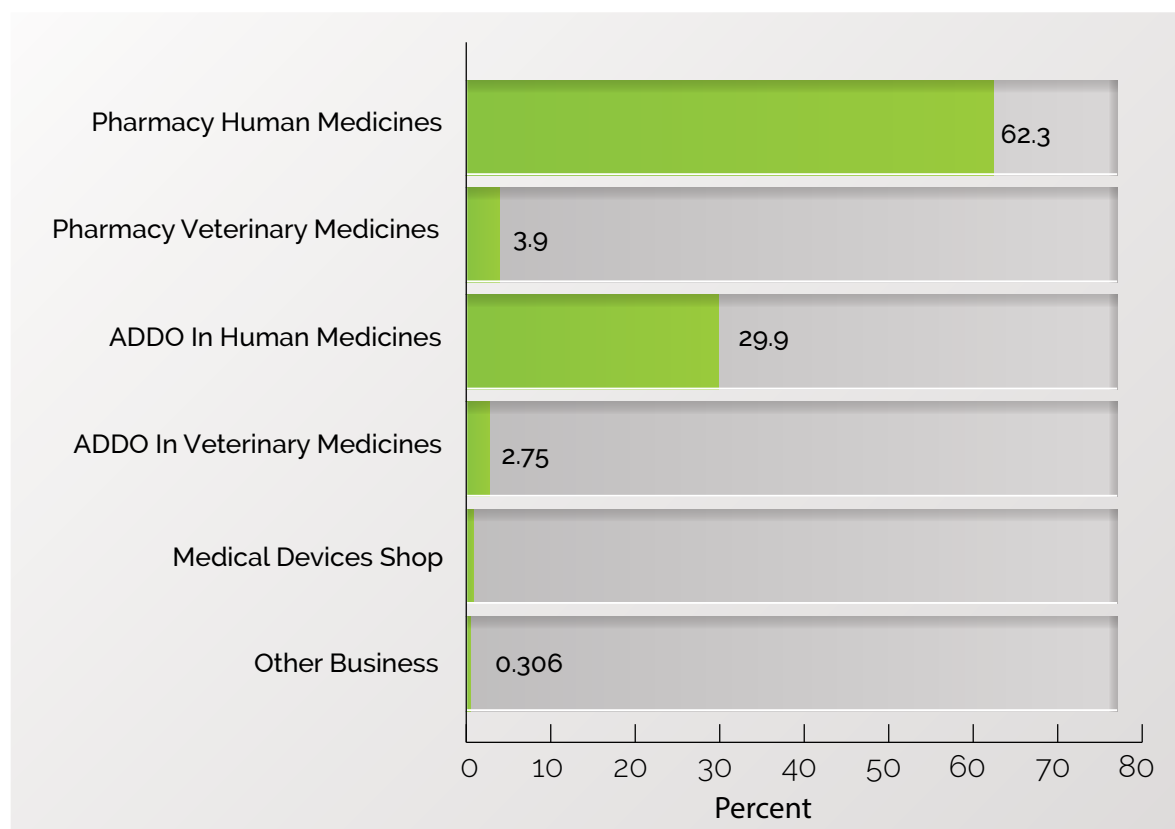
As illustrated in Figure 7, 41.5% of the respondents identified themselves as primary education leavers, 31.3% as secondary education leavers, and 12.7% as college education leavers when asked to report their educational background at the time of the survey. A small proportion of respondents, 6.25%, reported that they had completed their university education, while 8.17% reported that their education level was below that of primary school. In general, 80.97% of respondents were secondary school graduates or lower, while only 19.03% have completed college or university education. This education profile has a substantial influence on the development of the communication and education strategy for the general public.

Figure 7: Education profile of household respondents



4.2.3 Retailers Characteristics

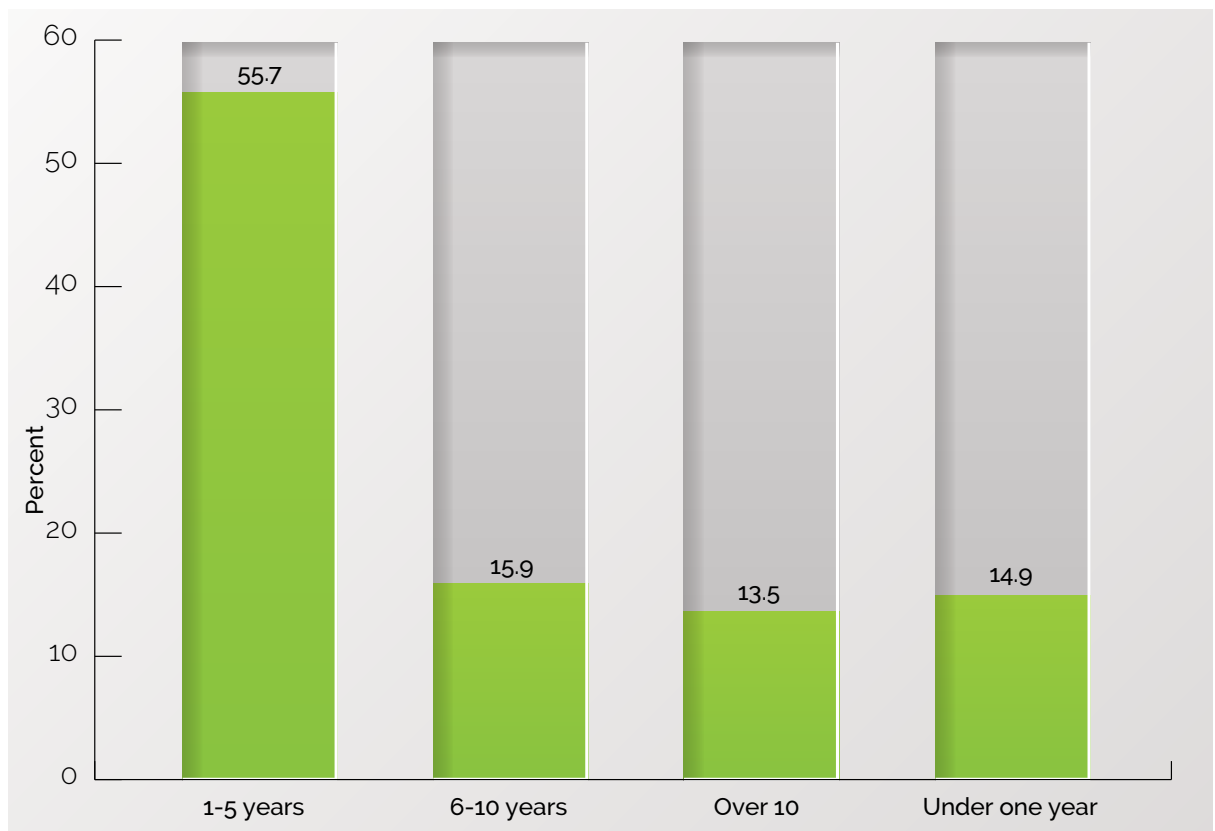
Figure 8: Retailers responded on what type of businesses they conducted



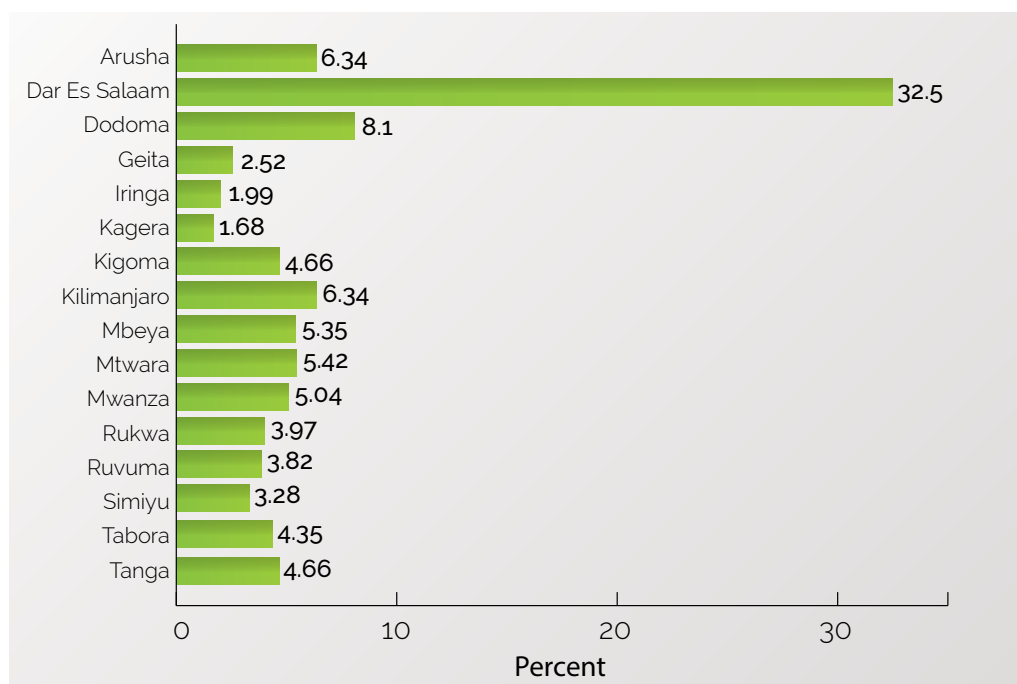
Retailers were asked about the type of businesses they conducted that linked them to TMDA functions. Majority of retailers (80.75%) were from urban areas and 19.25% were from rural areas. Figure 8 below shows distribution of the types of businesses. Significant responses were from pharmacy human medicines 62.3% and ADDO in human medicines 29.9%. Other notable proportions were on pharmacy veterinary medicines (3.9%) and ADDO in veterinary medicines (2.75%). The survey covered small proportions of medical devices shops and other regulated businesses at 1.15%.

The retailers were requested to provide information regarding the duration of their current businesses in years. The majority of retailers (55.7%) reported that their businesses were between one and five years old, while 15.9% reported that their firms were between six and ten years old, 13.5% reported that they were over ten years old, and 14.9% reported that their firms were under one year old (refer to Figure 9).

Figure 9: Retailers duration in years on conducting current businesses

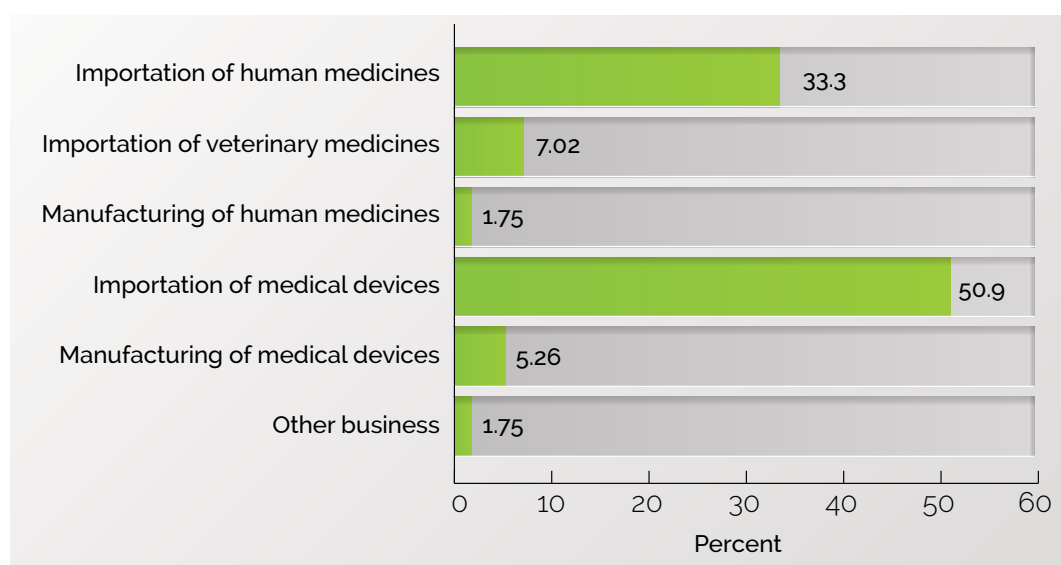


The survey encompasses retailers' business locations, as illustrated in Figure 10. There was substantial coverage in the Dar es Salaam Region, which accounted for 32.5% of the total sample. The Dodoma Region followed at 8.1%. The distribution of coverage in the sample varied between 1.68% and 6.34% for the remaining 14 regions.

Figure 10: Location of retailers businesses covered in survey

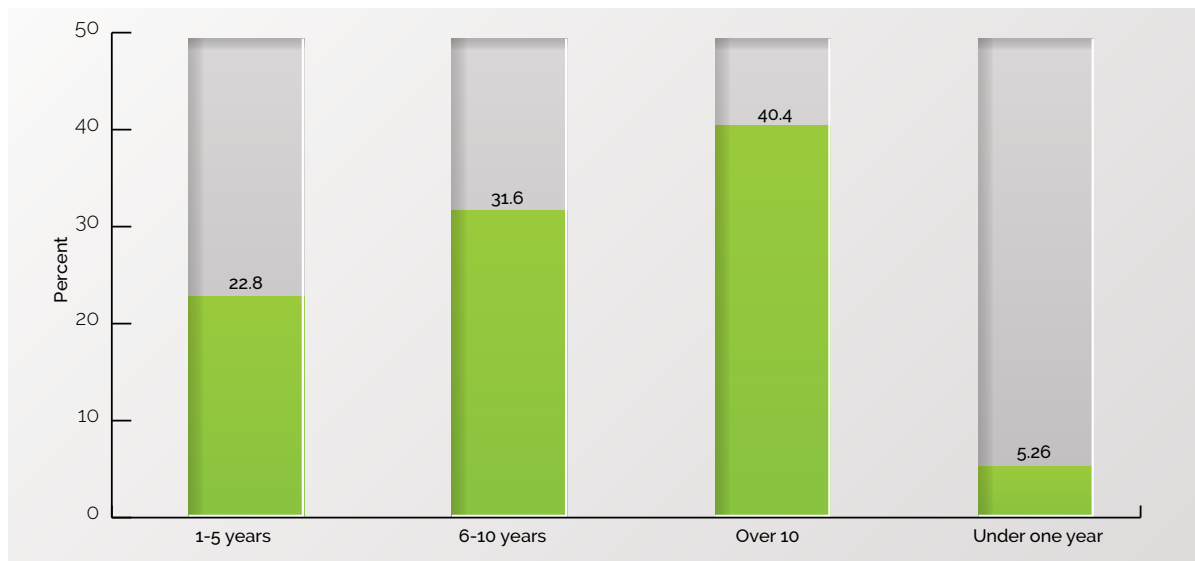
4.2.4 Permit Customers

A total of 358 permit customers were contacted, and 68 (18.99%) completed the survey tool. The response rate is slightly low when compared with the response rate in SDS of year 2020 which was 19.3%. In terms of permit respondents, the majority (50.9%) were involved in the importation of medical devices, 33.3% in the importation of human medicines, 7.02% in the importation of veterinary medicines, and 5.26% in the manufacturing of medical devices. Other businesses (1.75%) and the manufacturing of human medicines (1.75%) comprised smaller portions of the survey sample.

Figure 11: Type of business of permit customers

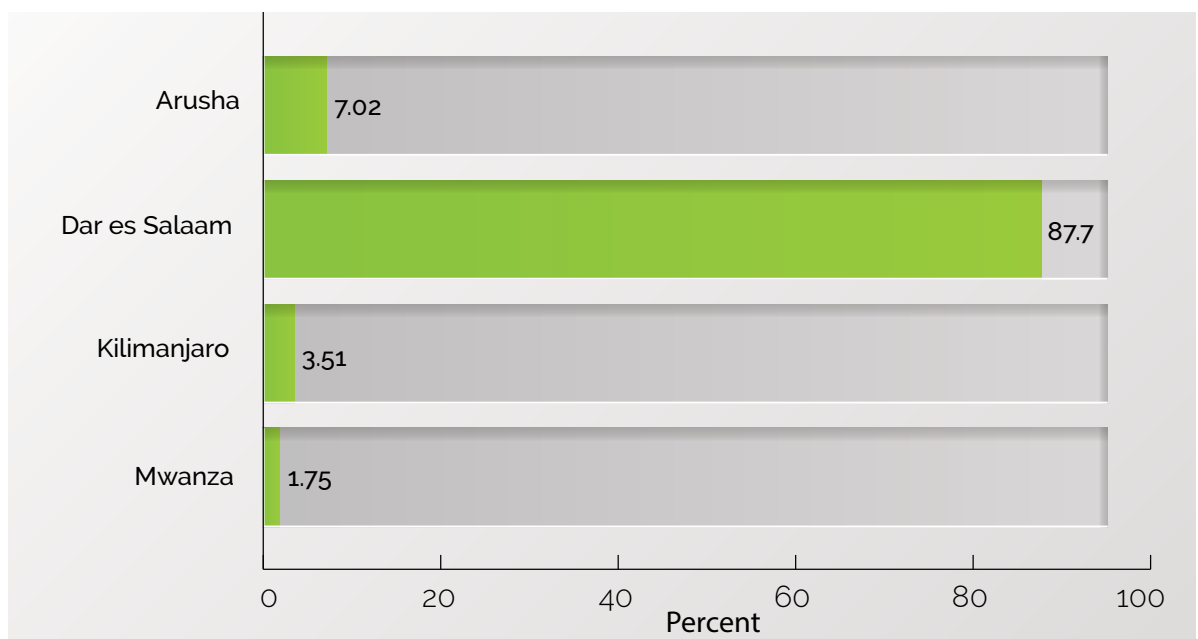
See Figure 12 for the profile of permit customers based on the duration of their businesses in years. 40.4% of the respondents have been in the business for over a decade, 31.6% have been in the business for between six and ten years, 22.8% have been in the business for between one and five years, and 5.26% have been in the business for less than one year. Consequently, the majority of permit customers surveyed have substantial business experience and have been interacting with the TMDA.

Figure 12: Years of business experience for permit customers



The permit customers who responded on the survey were located in four regions as shown in Figure 13. Majority were from Dar es Salaam region (87.7%), 7.02% from Arusha region, 3.51% from Kilimanjaro region, and 1.75% from Mwanza region.

Figure 13: Location of permit customers covered in survey



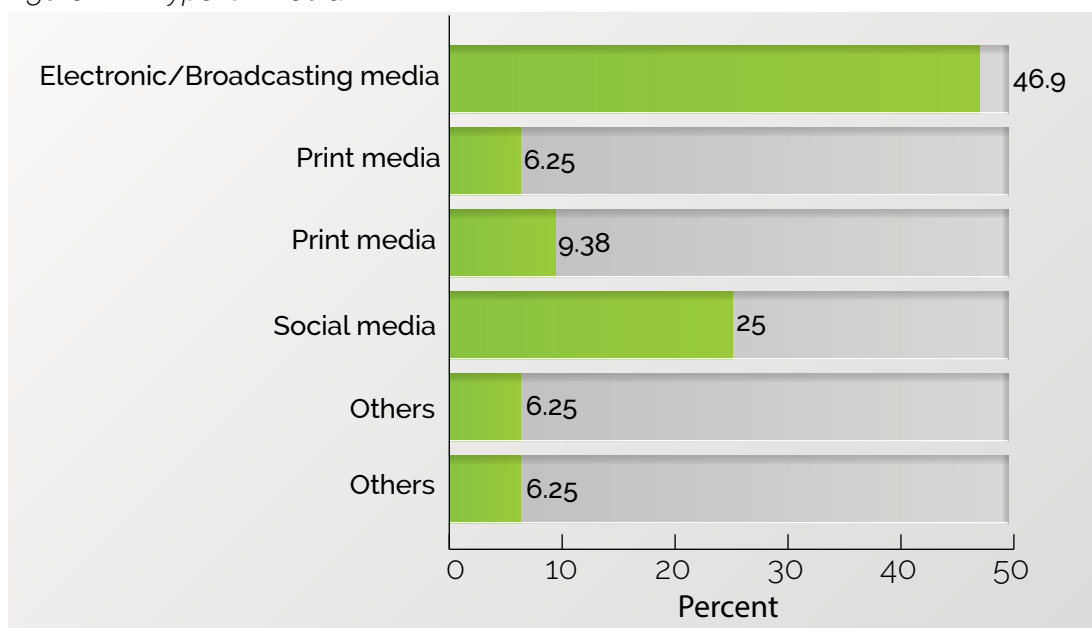
4.2.5 Laboratory customers Characteristics

TMDA laboratories analyze product samples to assess safety, quality and effectiveness of the products before allowing the products to enter the market. The laboratories are also open for other customers that bring samples for laboratory analysis on various parameters. TMDA continues to improve its laboratory services offered in its laboratories located in Dar es Salaam Mwanza and Dodoma. TMDA also has 25 minilab kits distributed to quality assurance centers at ports of entry and regional referral hospitals. 39 questionnaires were sent out to targeted laboratory service customers, 24 questionnaires were filled out and returned. 61 percent of those who filled the questionnaires were wholesalers and retailers and 39 percent were product manufacturers. 94.6 percent were from Dar es Salaam region. Respondents were asked about the nature of services they get from TMDA. The findings indicate that about 74.3 percent request services on human medicines, 23.9 percent medical devices and 1.8 percent on diagnostic agents. Respondents were further asked how frequent they interact with TMDA for laboratory services. 36.8 percent reported frequent interaction with TMDA, 41.2 percent said every quarter while 22 percent said twice a year.

4.2.6 Media

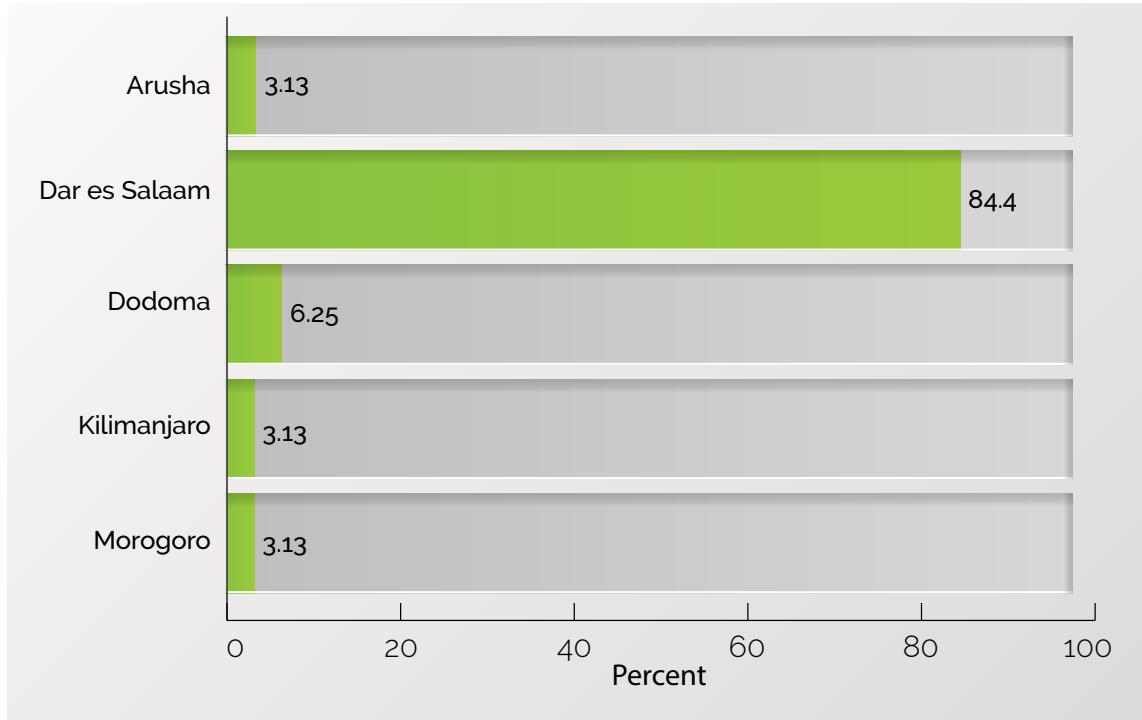
SDS 2024 covered media as key stakeholders using survey tool. A total number of 58 media were contacted for the survey and 32 responded (55.2%). Media were asked to indicate type of their media. The media responded (n=32) shows that 46.9% were electronic broadcasting media, while 25% were on social media, 15.63% were on print media, and others 12.5% on other type of media.

Figure 14: Type of media



The media who responded on the survey were located in five regions as shown in Figure 15. Majority were from Dar es Salaam Region (84.4%), 6.25% in Dodoma, and 3.13% each from Arusha Region, Kilimanjaro Region, and Morogoro Region.

Figure 15: Location of media covered in survey



4.3 Social Network Analysis

4.3.1 SNA Variables and Analysis

A Social Network Analysis (SNA) was conducted for TMDA in accordance with the responses of employees to the survey. The SNA was conducted on five dimensions: leadership, culture, attitudes, personality, and aspiration. Through the identification of patterns and relationships within employees' perceptions and interactions, Social Network Analysis is a potent instrument for analysing their responses to the TMDA's service delivery survey. TMDA is able to not only evaluate individual perceptions but also comprehend the manner in which these perceptions interact and propagate within the organisation. This approach results in more informed decision-making and targeted improvements. The responses to the survey were tied to five SNA dimensions and attributes, as summarised in Table 4.2.

Table 4.2: TMDA SNA Dimensions and Attributes on Survey Responses

Dimension	Survey Area	Attributes Question in Tool
Management Leadership	B1: Employees Satisfaction with Management Qualities	B1A: Leadership Skills B1B: Management Skills B1C: Professional Skills B1D: Communication Skills B1E: Conflict Resolution B1F: Trust Co-workers B1G: Team Work
Workplace Culture	B2: Employees Perception on Workplace Culture at TMDA	B2A: Enjoy Organization Culture B2B: Connection to Co-workers B2C: Perception on TMDA Open to Change B2D: Managers Value Feedback
Personal Traits	C1: Employees Competence and Training	C1A: Jobs Give Opportunity C1B: Availability of Tools and Resources C1C: Training Provided C1D: Management Respect Competence C1E: Job-Life Balance C1F: High Morale C1G: Adherence to Client Service Charter
Job Attitudes	C2: Employees Job Attitudes	C2A: Meaningful Work C2B: Happiness at Work C2C: Skills Utilization C2D: Work Distribution C2E: Job Responsibilities Clearly Defined C2F: Opportunities for Promotions and Career Development
Pay Aspiration	E: Remuneration	E1: Salary Against Work E2: Rewarding Overtime E3: Salary Compared with External Employees E4: Annual Salary Increase E5: Other Benefits E6: Medical Insurance

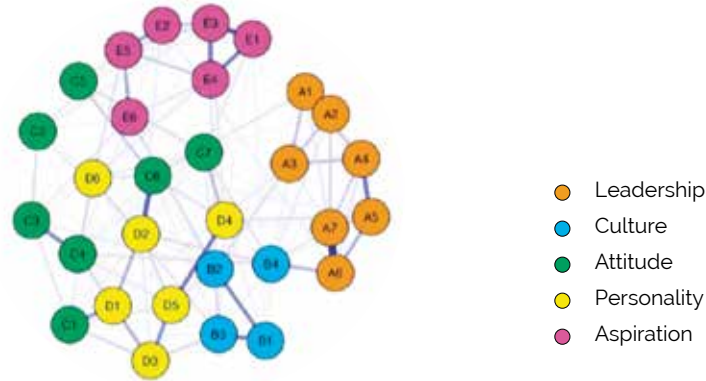
4.3.2 SNA Results and Implications

Figure 16: Results of Social Network Analysis

Summary of Network

Number of nodes	Number of non-zero edges	Sparsity
30	172 / 435	0.605

Network



Sparsity is the percentage of zero-valued edges in a network in a Social Network Analysis (SNA), which indicates the percentage of potential connections that are not present. This context employs the term “sparsity” to denote the structure of the estimated graphical model, which delineates the relationships between variables. Sparsity of 0.605 indicates that 60.5% of the potential edges in the estimated network are zero, indicating that no connection is inferred between those pairs of nodes when EBICglasso (Extended Bayesian Information Criterion with Graphical Lasso) is employed as the estimator. In contrast, this implies that 39.5% of the potential edges are present. By setting weaker associations to zero, the EBICglasso estimator performs regularisation to promote sparsity in the estimated graph, thereby simplifying the network structure and making it easier to interpret. A sparsity of 0.605 indicates that the method has chosen a network that is relatively sparse, thereby achieving a balance between model fit and parsimony.

The SNA results indicate a well-defined clustering of the five dimensions and their associated attributes. Six attributes have been identified as the core of the SNA, out of the 30 attributes that were surveyed. The TMDA social network analysis identifies six central attributes: Adherence to Client Service Charter, High Morale, Connection to Co-Workers, Happiness at Work, Work Distribution, and Job Responsibilities. Clearly defined offers critical insights into the areas that have a substantial impact on the performance and cohesion of an organisation. Table 4.3 summarises the attributes, implications, and feasible strategies that TMDA should evaluate. One of the most significant discoveries of SNA is that the employees' survey does not include any pay aspiration attributes at the network's core.

Table 4.3: TMDA SNA Attributes on Survey

Attributes	Implications	Strategy to Capitalize
Connection to Co-Workers	Connection to Co-Workers underscores the importance of fostering a collaborative and inclusive environment, as strong interpersonal relationships among staff enhance communication, teamwork, and problem-solving.	For Connection to Co-Workers, initiatives such as team-building activities, cross-functional projects, and effective communication platforms can strengthen relationships.
High Morale	High Morale reflects the overall satisfaction and emotional well-being of employees, which correlates with increased productivity, creativity, and retention.	Boosting High Morale requires recognizing and rewarding employee achievements, ensuring fair compensation, and promoting work-life balance.
Adherence to Client Service Charter	Adherence to Client Service Charter indicates the organizational alignment with its service standards, promoting trust and satisfaction among clients and stakeholders.	To enhance Adherence to Client Service Charter, TMDA should conduct regular training sessions on client service standards, align performance metrics with the charter, and ensure accountability mechanisms are in place.
Happiness at Work	Happiness at Work is a direct measure of the work environment's ability to motivate and energize employees, which can lead to reduced absenteeism and greater innovation.	Happiness at Work can be cultivated by creating a positive work environment through wellness programs, supportive leadership, and avenues for professional growth.
Work Distribution	Work Distribution highlight the need for clarity and equity in workload and role expectations, minimizing conflicts and inefficiencies.	Addressing Work Distribution entails conducting regular workload assessments, ensuring equitable task allocation, and establishing clear performance expectations.
Job Responsibilities Clearly Defined	Clarifying job responsibilities not only benefits individual employees but also enhances organizational performance. It strengthens communication, fosters collaboration, and creates a structured framework for achieving strategic goals. Organizations like TMDA can leverage this clarity to align workforce efforts with their mission, ensuring sustained growth and efficiency.	Clarifying Job Responsibilities can be achieved by developing comprehensive job descriptions, providing ongoing feedback, and offering skills development opportunities to ensure employees feel confident in their roles.

SECTION FIVE

ANALYSIS OF THE MAJOR SDS FINDINGS

5.1 Stakeholders Perception of TMDA Service Quality

One of the objectives of this service delivery survey was to measure the quality of service delivery rendered by TMDA as perceived by its stakeholders. TMDA stakeholders include external customers (Retailers, wholesalers and manufacturers), employees (internal customers), suppliers and vendors, government entities and the general public. Therefore, this specific objective aimed at capturing how these stakeholders perceive TMDA services rendered to them. Customer satisfaction is a product of customer expectations of the service and customer perception of the service delivered. Service delivered is said to be of high quality when perceived service quality exceed the expected service. The subsections below presents TMDA service quality in various dimensions as perceived by the various stakeholders.

5.1.1 TMDA Employees Perception Of Service Quality

The TMDA philosophy states that *"TMDA strives to offer regulatory services in the pursuit of protecting public health and the environment by using competent and dedicated staff"*. This philosophy pins pursuance of TMDA mission to competent employees who are among the pillars of TMDA performance of the TMDA functions. TMDA employees are internal customers to the organization. Their satisfaction is important as it directly affect how they deliver services to external customers. TMDA has been recruiting qualified staff as per available vacant positions and resources. The Authority started with 62 employees in 2003, reached 294 in December 2020 and by December 2024 TMDA had 382 employees. Employees are internal customers and their satisfaction directly influences the satisfaction of external customers. Measuring the perception of TMDA service quality started with measuring internal customer satisfaction. Employees through self-administered questionnaire and FGDs were asked to respond to several questions that covered five drivers of their performance at TMDA. The five drivers include:

- Management and culture.
- Employees' competence.
- Working conditions.
- Remuneration
- Visibility, TMDA Image and customer relationship management

TMDA Internal customers are TMDA staff in various directorates and zones who receive services from other directorates/units within TMDA. They include staff from four directorates at TMDA headquarters and staff in eight zones. Perceived internal service quality is the level of satisfaction an employee feels with services they receive from or offer to internal service providers, who could be fellow employees at same level, subordinates or superiors. TMDA staff were asked to provide their perceptions on management and culture, employees' competence and training, TMDA premises and working conditions, remuneration and TMDA visibility, TMDA image and Customer Relationship Management. The findings are provided in sub sections below.

5.1.1.1 Management and culture

TMDA staff were asked to evaluate TMDA management and culture and the extent to which they are satisfied with it. They provided their assessment on various issues that constitute management and culture. Management is important in the organization as it provides strategic leadership to the organization. Good management attracts good human resource by ensuring proper recruitment, motivation and retention of good employees. Staff were also asked to evaluate their superiors in terms of leadership and management skills, their professional skills, communication skills, ability to handle conflicts, openness to change, willingness to receiving feedback, transparency, trust to co workers and team work. Their evaluation are presented in table 5.1.

Table 5.1: TMDA staff on rating of management and culture

Variable	Satisfied (%)	Average (%)	Not satisfied (%)
Leadership and Management skills	71.43	26.79	1.63
Professional skills	82.86	16.33	0.82
Communication skills	81.23	17.96	0.82
Value feedback	76.74	21.22	2.04
Conflict resolution skills	66.54	31.43	2.04
Open to change	77.55	21.63	0.82
Transparency	77.55	22.02	0.41
Team work	76.73	21.63	1.63
Connectedness	83.27	16.73	
Valued contribution	70.20	29.39	0.41
Trust to co workers	68.98	29.79	1.22

The findings in table 5.1 indicate that TMDA staff perception on quality of management and culture is very good. TMDA staff feel that their management is accessible. From the score TMDA staff feel that they are connected and the management has the needed profession and communication skills to handle matters in their directorates. The findings also show that TMDA staff feel that their organization is transparent and open for change. They further feel the team work in the organization is high and that their contributions are valued. While overall staff perception of management is high the scores in the attributes suggest the room for improvement and hence the importance of continued learning process. There is significant improvement when these findings are compare to those of service delivery in 2020 where staff complained of lack of teamwork among staff.

5.1.1.2 Employees' competence and training

The survey sought to assess the extent to which internal marketing is implemented. To assess TMDA's internal marketing employees were asked to give their views on their jobs in terms of opportunities to learn, being given tools and resources that they need to do their jobs, the extent to which they are able to balance between personal life and job life and the overall staff morale. The findings are reported in table 5.2

Table 5.2: Employee's competence, training and morale

Variable	Agree (%)	Neutral (%)	Disagree (%)
Opportunity to learn	89.39	9.39	1.33
Availability of /equipment/tools and resources to work	81.90	11.93	6.17
Opportunity for training	78.78	16.73	4.49
Management respect to competence	82.45	16.33	1.23
Job and personal life balance	81.23	14.69	4.08
Overall employees morale	73.06	20.41	6.53

The findings indicate that overall TMDA as an organization has good internal marketing where employees not only have opportunity to learn from their jobs but the authority also provides training opportunities for her staff. The staff morale is above 70 percent which is good though there is still a room for improvement. The neutral responses could be associated with new staff who (by the time the survey was conducted) had just joined TMDA and were not in a position to provide their opinion on the above variables.

5.1.1.3 Premises and Technical working conditions

TMDA staff were also asked to provide their views on the office premises and technical working conditions. Staff were asked the extent to which they are able to access work tools and equipment, the hygiene maintenance of buildings and physical conditions and overall safety of workplace. The findings are presented in table 5.3.

Table 5.3: Employees Evaluation on Premises and Technical working conditions

Item	Satisfied (%)	Average satisfied (%)	Not satisfied (%)
Maintenance of buiding	61.23	35.52	3.27
Physical working conditions	77.14	22.04	0.82
Hygine maintenance	79.59	20.00	0.41
Safety at workplace	80.00	19.60	0.41

The findings in table 5.3 indicate that TMDA staff feel safe at work place and hygiene is highly maintained. The Physical working environment is also good. Maintenance of building scored the least among the items, this is probably due to the ongoing construction work at headquarters and some moved to new regions and were settling down during the survey period.

5.1.1.4 Remuneration

TMDA staff were also asked to state the extent to which they are satisfied with their current salary when compared with the work they perform and further compare to other similar organizations, consideration for overtime and medical insurance. Their views are presented in table 5.4.

Table 5.4: TMDA staff satisfaction with Remuneration package

Item	Satisfied (%)	Not satisfied (%)
Salary marching work performed	47.98	52.02
Model of Rewarding overtime	54.08	45.91
Salary compared to other organizations	47.76	52.24
Annual salary increment	40.81	59.18
Other benefits	58.16	41.84
Medical insurance	85.72	14.28

The findings from table 5.4 indicate relatively alarming scores on different staff remuneration. TMDA staff are not satisfied with the annual salary increase. The findings also suggest that TMDA staff, when compared with employees of other similar organizations are not satisfied and relatively their salary is not matching with

the work they do. This is an area that calls for attention of the management to see what can be done in order to argue for more pay so that at least TMDA staff pay should match with that of similar organizations in the country. The percentage of those who are satisfied with salary could be associated with number of staff who are relatively new with TMDA. Staff who stayed with TMDA for the period of less than five years they compare their current salary with what they used to get from their previous employer. Majority of TMDA staff about 85 percent are satisfied with medical insurance.

5.1.1.5 TMDA visibility, Corporate Image and customer relationship Management

The service delivery survey also intended to evaluate TMDA visibility, its corporate image and the overall customer relationship management. To achieve this TMDA staff were asked to provide their opinion on how the society acknowledge and value TMDA services. The findings are presented in table 5.5.

Table 5.5: TMDA Society acknowledgement and value

Item	High (%)	Average (%)	Low (%)
Acknowledgment by the society	71.84	25.71	2.45
Valued by society	84.90	-	4.08
Customer Service Representative display TMDA Values	71.43	26.94	1.63
CRM contribution to decreasing Customers Complaint	89.39	-	2.45
TMDA System to Resolve Customer Problems	84.08	-	4.08

The findings indicate that customer service representatives display high TMDA values. They further suggest that TMDA staff feel that the society acknowledges and values their institution. From the findings, 89.39 percent of TMDA staff interviewed were of opinion that provision of personalized services to customers is valued by the customers. They further said that customer relationship management has reduced to a large extent the percentage of customers' complaints. These findings support early findings on for example morale of staff whereby when staff feel that their services are valued they tend to be motivated and a motivated staff serve well customers.

5.1.1.6 Reflection of TMDA corporate image in communication tools

Communication plays a critical role in enhancing the image of the organization. Building corporate image does not happen over night, it is a long term process with massive investment in various areas of the organization. It entails consistent use of colours, Unique Selling Proposition (USP) and continuous improvement in quality. TMDA uses various communication tools to create awareness about its services and build corporate image. The communication tools used include website, social media, TV and radio programmes and seminars. The findings indicate that 91.02 percent of staff are of opinion that TMDA website and social media reflect TMDA corporate image. Furthermore, 85.31 percent said that the website and social media contents are updated as needed.

5.1.1.7 TMDA units alignment and corporate image

Staff were also asked the extent to which units are aligned and top management leadership in ensuring and maintaining corporate image. The findings indicate that 95.10 percent of staff feel that TMDA units are well aligned and top management takes leadership to ensure and maintain corporate image. Only 1.63 percent suggested non alignment of units. Alignment of units within the organization is important because it supports team work and quality service delivery to the customers. It is therefore, important for TMDA to keep on improving and maintaining this in order to continue gaining society legitimacy.

5.1.1.8 Availability of TMDA System to Resolve Customer Problems

The survey also sought to find out if TMDA has a system in place to address customer problems. Having a system in place to address customer complaints is important. This is because how prompt the organization is in reacting to customers complaints or problem shows the extent to which it cares for the customer and further the organization is likely to retain the customer. The findings indicate that 84.08 percent of staff acknowledges to have the system in place to resolve customer problems, while 11.84 percent said they are not aware of the system. Again the number of those who are not aware of the system could be associated with newness in the organization, where new staff had joined the Authority less than a month by the time the survey was conducted.

5.1.2 Employees Focus Group Discussions (FGDs)

As stated in the methodology and approach section this survey used triangulation approach to achieve its objective. Therefore, in addition to survey, FGDs were conducted to TMDA employees in order to gather data that could not be captured through use of structured employee questionnaire. FGDs were conducted in eight regions representing their respective zones and the TMDA headquarters. The FGDs were conducted in Dodoma TMDA headquarters, Dodoma (central zone), Dar es Salaam (eastern zone), Mbeya (southern highlands) zone, Ruvuma (southern zone), Arusha (Northern zone), Tabora (western zone) and Mwanza (Lake Zone). Three FGDs were conducted at TMDA headquarters, Two FGDs were conducted at Dar es Salaam eastern zone office, two FGDs were conducted in Arusha and one focus group discussion was conducted in each of the six remaining regions. The discussions focused on five themes namely:

1. Vision, Mission and TMDA core values
2. Public awareness of TMDA and Public education
3. TMDA staff working environment and teamwork
4. Employees evaluation on TMDA performance and areas for improvement
5. TMDA's Strengths, Weaknesses, Opportunities and Threats (SWOT analysis)



Photo: TMDA staff FGD in Northern zone, Dec 2024

5.1.2.1 Understanding TMDA vision, mission and guiding values

In their group employees were asked to state the vision, mission and core values of the organization. It was important to capture understanding of employees on this matter because by knowing the mission, employees will understand the reason for establishment of the Authority and its mandate in the country. Understanding of the vision entails employees' understanding about where they intend to go and core values are there to inculcate standardized culture of handling external customers among employees. From the discussions, it was learnt that majority of staff (with exception of a few) could not recall the mission, vision and the seven core values correctly. For employees to be able to effectively contribute to the ultimate goals of TMDA they need to understand the vision, mission and the core values of the organization.

5.1.2.2 Public awareness of TMDA and public education

The second theme for discussion was general public awareness about TMDA and the roles it plays in the country and public education. Hot discussions on this issues emerged, where some were of opinion that the general public is aware of TMDA through public education while others said there is more to be done on public education since majority of Tanzania are not aware about TMDA. The discussions further tried to look at the extent to which people in rural areas are aware of TMDA given that about 62.59 percent of population in Tanzania live in rural areas. From the groups the agreed level of public awareness about TMDA was between 50 to 60 percent. This is TMDA employees' perception on the awareness of their organization among stakeholders in the society while from the survey findings general rating of TMDA awareness is about 56 percent. As a regulatory authority, TMDA is well known to customers who use directly their services such as retailers, permit customers, the media customers, importers/manufactures of regulated products and laboratory services customers.

However, there is limited knowledge of TMDA and its functions among the general public. There exists a disparity of the level of awareness between the public at large in rural and urban areas. The FGDs revealed that TMDA continues to implement public education and awareness activities through avenues such as schools, public/community meetings/gatherings, exhibition, and other forums. Use of LGAs staff has not yielded expected results since most of the councils do not allocate budgets to support these activities in their areas. Participants of the FGds also pointed out

insufficient supply of flyers and promotional materials from head office to support public education and awareness campaigns in zones.

The other public awareness issue is on Client Service Charter. Overall the discussions revealed limited awareness of CSC among the general public, however, there is wide awareness of the client service charter amongst institutional stakeholders such as permit customers and retailers. This could be a focus area on public education and awareness initiatives. The same applies for public awareness of systems for reporting adverse drug reactions and other violations and mechanisms for providing feedback.

5.1.2.3 TMDA staff working environment and teamwork

The third theme of the focus group discussions aimed at capturing employees' opinion on working environment and teamwork. Discussions focused on assessing the physical environment in sixteen regions where TMDA has physical presence, availability of working tools and resources to perform their duties and team work among staff. Overall TMDA staff rated TMDA working environment between 85 to 90 percent. In their groups, employees said that TMDA management has done a lot in terms of ensuring good working environment for employees. They said management is listening, caring, providing equal opportunities to all and has created an environment for continuous staff development through weekly virtual training and other capacity building initiatives. There is no bias in implementation of staff development and training programs and the management has continued to fill capacity gaps in some of the relatively new areas such as the regulation of medical devices. There was a concern however on giving too much attention to pharmacists, whereas in reality each profession is important in ensuring TMDA attain its mission. In the groups staff were asked what they consider to have contributed to this good working environment. TMDA staff associated good working environment with TMDA values, the interactions existing among staff and good leadership. Specific discussions from the FGDs on the components of working environment and team work are further presented below.

5.1.2.3.1 Physical environment

Physical environment include office layout, cleanliness, accessibility and equipment and tools needed to perform work. Overall TMDA staff rated working environment to be good. They said that they have proper working space, well-kept and clean offices. With exception of headquarters where the work to finalize the building continues and Ruvuma where the zonal office is new and effort to finalize reorganization of the

office continues other zonal offices are in accessible areas and good condition. This was also substantiated with observations of the offices in all zones during survey.

5.1.2.3.2 Tools and resources

Tools and resources are part of working environment. TMDA employees collectively agreed that TMDA provides working tools and resources that are needed to support activities of the authority. While acknowledging the scarce resource in the country, they anchored effort by TMDA management to ensure that available resources are well allocated to employees to perform their duties. In the group they said that staff submit request for needed working tools in their annual work plan for resources to be allocated.

5.1.2.3.3 Working relations and teamwork

On the working relations and teamwork employees said that the working relations among staff is very good. Employees further agreed that there was good teamwork among staff in the Authority. Employees rated team work at 90 percent, this is a great improvement that needs to be commended and sustained. In the 2020 SDS among the issues that staff complained during FGDs was absence of teamwork in the authority and staff worked individually in their department with the *"it is our directorate against theirs"* mentality however, for the past four year things have changed. Management is commended for the effort made to ensure that teamwork culture is inculcated within the organization. Teamwork being among the core values of the Authority need to be sustained for TMDA overall performance. This also contributes to the improved corporate image of the Authority.

5.1.2.4 Employees' evaluation on TMDA performance and factors contributing to performance

Employees in their groups were also required to evaluate the performance of TMDA and suggest areas for improvement. Generally, TMDA employees who participated in the discussions were of the opinion that TMDA is performing well in terms of its service delivery to customers as evidenced by attaining ISO 9001:2015 Certification and achieving WHO Maturity level 3 for its competence in the regulation of medicines. Its strong reputation has made other countries to visit and learn from the authority. TMDA has developed and passed regulations, guidelines and standard operating procedures to ensure effective and efficient regulation of medicines, medical devices and diagnostics and has developed digital platforms such as the customer portal (external stakeholders) and realms (for internal customers) to ensure efficient and

timely sharing of information. The regulations, guidelines and standard operating procedures comply with international standards. Overall employees' evaluation on TMDA performance is very good, on the 5 point Likert scale where 1 is Poor and 5 is very good, TMDA employees across the eight regions that participated in the FGDs rated performance at 4. They viewed performance to be very good though they acknowledge the availability of a room for further improvement. In the discussion they pointed out indicators for good performance to include safety for regulated products being high, both internal and external customers being satisfied with TMDA services, TMDA staff reaching and in some cases surpassing their targets, working regulatory systems for medicines and medical devices being in place and running.

Employees were further asked to discuss on what they consider to be the contributors to this good performance. Employees' echoed the good performance to the following:

- Management leadership and commitment to ensure that TMDA culture is sustained.
- Skilled staff
- Improved working environment and culture of rewarding good performers.
- Staff capacity building, training staff on both long and short term courses this motivates staff
- Working culture of TMDA employees to willingly perform their duties.
- Shared core values standardize services performed by different employees in their directorates and zones.
- Presence of Client Service Charter which guides employees in providing services
- Automation of services by 90 percent where customers can access services wherever they are hence reducing customer waiting time.
- Continued streamlining processes and minimizing cumbersome procedures.
- Increased communication with stakeholders' e.g. periodical meetings with them to get their opinion on how to serve them well.
- Quality Management system in place where TMDA has attained maturity level 3
- Systems being ISO Certified in standard Operating Procedures
- Whistle blow policy has also improved on how TMDA obtain information from customers which make it easy for TMDA staff to act.

5.1.2.5 TMDA Marketing services triangle

Management were asked to provide their views on alignment of the TMDA marketing triangle. Overall, the management feel that the triangle is aligned though not perfectly. For staff at management level that participated in the FGDs pointed out the following shortcoming:

External marketing

Low understanding on procedures to import or register regulated products among external customers which sometimes could contribute to delayed importation of products or failure to get registration.

Internal marketing

Management were of opinion that there are lot of systems in place to support the authority. Among the identified systems in place are PEPMIS, ERMIS, E office, Intranet and MUSE. At zonal offices main activities performed include; issuing of export permit, GMP Inspection, Inspection of consignments at point of entry where TMDA has access to TRA –TANCIS and providing information on effects associated with use of some regulated products. They also were of opinion that issuing of export permit is performed at 100 percent, inspection of premises for GMP is at 80 percent inspection of consignment at point of entry is done at 90 percent. They argued that while there is a lot of improvement, still there are issues to be addressed on internal marketing. These include:

1. Delays on approval of funds and letters. For example Accountants in zones said they used to track the movement on request for approval online, however, without information they were removed from the system hence an accountant cannot know the level where the request is.
2. Another challenging situation with internal marketing is on RIMS an online technology which sometimes is offline.
3. Number of staff available Vs timeline set for service delivery. While they acknowledged receiving more staff in year 2024 still the number is not enough.
4. Few vehicles especially for inspections and surveillance activities which also contribute to some delays

Interactive marketing

1. The need to improve public education on awareness of TMDA and its function in the country. People get adverse reaction upon use of medicines but they do not know where to report.
2. Political interference with TMDA function where the DC or Director could summon TMDA to stop taking necessary measures on a customer whose activities fail to meet TMDA requirements.

Internal Gaps for improvement

Staff in the groups were also asked to identify internal gaps for improvement. Employees suggested the following improvement to be made:

- More funding to support TMDA activities.
- More manpower is needed to ensure that TMDA expand into other regions in the country. This should be part of TMDA strategic move.
- Budget allocated for staff loan should be increased to enable a good number of needy staff to get financial support through staff loans.
- Training budget should be increased to allow more staff attend both short and long term courses.
- Need for the state of the art Laboratory equipment to ensure that the Authority moves with the world technology in the profession.
- Training should continue to be provided to equip staff with knowledge on emerging issues surrounding TMDA regulated products.
- Regulatory Information Management Systems (RIMS) should be up and running all the time.
- Transport for inspectors sometimes could be a challenge causing some delays.
- Improvement on external customer marketing where sometimes building permits could be delayed, the standard is 7 days but permit could take up to 10 days to be issued
- Human Resource Issues should be improved. For example providing feedback on staff relating to their queries like arrears, updates on promotion etc.
- Improving communication from HR department: sometimes they promise to call to give feedback but they do not keep the promise.

- CSC should be reviewed to reflect the reality, for example days should be counted (after customer has fulfilled all the requirements) from the inspection date.
- Acknowledging ADR three days is not realistic because investigation need to be done following receipt of adverse drug reaction complaint.
- Risk associated with the work is high. Collaboration with other institutions e.g. police should be improved to ensure security of TMDA staff. Probably, issuing weapons to inspectors could be considered??

5.1.2.6 TMDA's Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis

Employees were also asked in a group to perform SWOT analysis for the Authority. Employees in their groups came up with the following evaluation.

Strengths <ul style="list-style-type: none"> ■ Strong leadership ■ Presence in 8 zones with Manpower that have skills and professionalism required to perform their duties ■ Competence in inspections and surveillance of regulated products ■ Proper systems in place ■ Availability of Guidelines e.g. Client Service Charter ■ Strong Ministerial Advisory Board ■ Good working environment ■ Availability of systems and guidelines: ISO Certified systems ■ Proper ICT systems in place ■ Automation of services ■ Teamwork ■ Strong organization culture with customer focus 	Weakness <ul style="list-style-type: none"> ■ Limited financial resources ■ Shortage of Manpower ■ Limited outreach, still at zonal level due to shortage of resources ■ Human resource issues e.g. staff promotion ■ Systems not harmonized each system working as a standalone system e.g. TRA revenue system. ■ Use of control number not yet perfected. Control number fail to go direct to the system causing some delays
Opportunities <ul style="list-style-type: none"> ■ National vision recognition of Pharmaceutical sector ■ Harmonization of Systems in the region; SADC ■ Political will to support TMDA ■ Supportive Laws and policies ■ Joint assessment/evaluation of medicines among core East African countries; Tanzania, Kenya and Uganda 	Threats <ul style="list-style-type: none"> ■ Political interference ■ Overlapping of some laws governing TMDA mandates

5.1.2.7 External factors Affecting TMDA Service Delivery

The following were factors identified by employees in their discussion groups to be influencing service delivery:

- Delegation of TMDA functions to Local government to expand coverage of her services to rural areas: As a regulating Authority TMDA is present at zonal levels, it is yet to reach out people in the districts. Districts pharmacists are mandated to perform TMDA roles, this is challenging because with no resources these pharmacists do not prioritize TMDA activities. Furthermore, TMDA has offices in 16 regions, this again is a challenge as regulated products are consumed in the entire mainland. There are also concerns on uniformity of conduct of LGA staff and transfers of trained LGA inspectors, leading to shortages of trained inspectors.
- TMDA not receiving information on regulated products activities from local government officials who have been mandated to perform TMDA functions in their areas.
- Limited awareness among TMDA stakeholders for example business people.
- Overlap of regulatory roles among TMDA, Pharmacy Councils, Government Chemist and Laboratory Authority (GCLA) and Tanzania Bureau of Standards (TBS): For example Pharmacy council of Tanzania is responsible for registration of premises and personnel and issues business license to pharmacies, ADDOs, Veterinary shops but TMDA regulates the products. If the quality of regulated products (medicines, devices and diagnostics) is compromised by virtue of personnel qualifications or premises, TMDA cannot take action to close the premises. To the general public when this happens, they perceive TMDA as not performing according to their expectations to protect consumers. In the discussions staff were of opinion that there is a need to harmonize this and give the entire mandate to TMDA for it to be able to issue license and regulate the products.
- Furthermore they suggested that regulation of cosmetics and food should be returned to TMDA.
- Another overlap is the regulation of reagents used in Medical devices which is done by GCLA while TMDA deals with control of medical devices.
- Interaction in HS codes delays regulated products to enter the country.
- Absence of company to manufacture chemicals in Tanzania.

- Limited ICT knowledge among Tanzanians: Limited knowledge on internet among stakeholders especially the general public in rural, owners of ADDOs and some pharmacies makes it difficult for provision of more services online.
- Development in technology is sometimes a challenge, business people use it to bring in the country substandard and counterfeit products.
- Anti-Microbial resistance and quality of medicines and poor storage of medicines.
- Voluntary compliance is low among ADDOs.
- Affordable Penalties instituted by TMDA to defaulting customers.

5.1.3 External Customers perception of service Quality

5.1.3.1 Retailers perception of service quality

Retailers are among TMDA external customers. Retailers included in this survey were human medicine Pharmacies, outlets selling medical devices, ADDOs and Veterinary medicine retailers. The survey intended to measure the retailers' perception of TMDA services. The perception of TMDA service quality was measured using SERVQUAL a service quality model developed first in 1988 by Parasuraman, Zeithaml and Berry. This model measures service quality by focusing on five dimensions of service quality namely: Tangibility, Reliability, Responsiveness, Assurance and Empathy. Tangibility is the visible aspects of the service organization. It captures appearance of physical facilities, equipment, communication materials and personnel. Reliability focuses on capturing the ability of the organization to perform services as promised, accurately and dependably. Responsiveness captures the willingness of employees to help customers promptly while assurance captures the knowledge and courtesy of employees and their ability to inspire trust and confidence. The last dimension which is empathy captures the ability of staff to care for customers and provide individualized attention when offering services. TMDA retail customers were asked to rate how they perceive the TMDA services along the five service quality dimensions. The findings are presented in table 5.6.

Table 5.6: Retail Perception of TMDA service quality

Service Quality Dimension	Very good	Good	Average	Poor	Very poor
Tangibility	34.00	55.54	9.93	.31	.23
Reliability	31.17	51.80	15.66	1.22	.15
Responsiveness	16.20	51.41	28.95	2.44	.99
Assurance	33.54	52.02	12.99	1.07	.38
Empathy	19.33	33.25	24.75	1.91	.76

Overall surveyed retailers rating of TMDA services were 89.54 percent on Tangibility, 85.56 percent on Assurance, 82.97 percent on Reliability, 67.61 percent on Responsiveness and 52.58 percent on Empathy dimension. The findings imply good appearance of TMDA personnel, physical facilities, equipment and quality of communication materials. They also suggest that TMDA staff are knowledgeable about the service they deliver and their ability to perform services accurately and consistently. The empathy dimension was rated the least by retailers where TMDA staff were rated at 52.58 percent on this dimension. This is the area of concern in which TMDA has to work hard to ensure that they deal with retailers in a humane way.

5.1.3.2. Permit customers perception of service quality

The survey also sought to measure permit customers perception of TMDA service quality. Majority of permit customers surveyed (96.5 percent) have been in working relationship with TMDA for more than a year. SERQUAL model of service quality was used to capture their perception of TMDA service quality and the findings are presented in table 5.7.

Table 5.7: Permit customers' perception of TMDA service quality

Service Quality Dimension	Very high (%)	High (%)	Average (%)	Low (%)	Very low (%)
Tangibility	15.60	50	23.90	9.66	.88
Reliability	8.77	35.09	45.61	10.53	-
Responsiveness	5.26	29.82	49.12	8.77	7.02
Assurance	9.68	28.07	51.76	9.65	.88
Empathy	7.02	27.20	49.12	15.79	.88

Findings in table 5.7 indicate that permit customers perception of tangibility of service is 65.60 percent, Reliability is 43.86 percent, Responsiveness is 35.08 percent, Assurance is 37.75 percent and Empathy dimension is 34.22 percent. Relatively the findings indicate low rating on four service quality dimensions except for tangibility which was rated above sixty five percent. It could be important in future to find out what is going on with this group of customers that had the lowest response rate and some called upon researchers to complain bitterly about TMDA services.

5.1.3.3 General public Perception of service quality

The survey also sought to measure the general public perception of TMDA service quality. The general public rating of services delivered by TMDA along the five dimensions are presented in table 5.8

Table 5.8: General Public Perception of TMDA service quality

Service Quality Dimension	Very good	Good	Neutral	Poor	Very poor
Tangibility	32.79	50.82	14.75	-	1.64
Reliability	26.23	59.02	9.84	3.28	1.64
Responsiveness	26.23	59.02	9.84	3.28	1.64
Assurance	24.59	57.38	14.75	1.64	1.64
Empathy	24.59	55.74	13.11	4.92	1.64

Overall the findings from table 5.8 indicate rating of services rendered by TMDA to be above 80%. This suggests that general public perceives quality of services rendered by TMDA to be high. Specifically, overall scores for each service quality dimensions are Tangibility (83.61), Reliability (85.25), Responsiveness (85.25), Assurance (81.97) and Empathy (80.33). Reliability and Responsiveness were the highly rated dimensions, followed by tangibility, then assurance and the last one was empathy. The highest scored dimensions are reliability and responsiveness. The second highly rated dimension is Tangibility, Assurance is rated number three while fourth rated dimension was Empathy. These findings suggest notable improvements in Reliability and Responsiveness dimensions of service quality and a slight improvement in empathy dimensions when compared with findings of 2020 SDS findings. These findings are quite impressive, they indicate TMDA steady improvement in service delivery from the general public's perspective.

Table 5.9: Trend on General Public's perception of TMDA service Quality

Service Dimension	2020 rating	2024 rating
Reliability	83.6	85.25
Responsiveness	77.8	85.25
Assurance	83.7	81.97
Empathy	80	80.33
Tangibility	NC	83.61

5.2 Medicines & Medical Devices Usage

TMDA regulates medicines and medical devices circulating in the market in order to protect general public health. The survey explored the status of medicines and medical devices issues from the public at large as represented by the households surveyed in 16 regions. The households' survey tool included specific theme on medicines and medical devices usage as experienced by the general public.

5.2.1 Public Trust

Customers were asked to provide their views on whether TMDA as an agency is worth trusting. Customers rating on TMDA trustfulness is 80.3 percent, furthermore 81.97

percent of those interviewed said TMDA is an ideal agency. Overall, 90.17 percent of those interviewed said that TMDA should continue to exist. This rating suggests the trust the general public of Tanzania has on TMDA, therefore, TMDA not only has constitutional mandate to exist but also has legitimacy from the general public for the roles it plays in the country. The general public was further asked about the trust they have on medicines, medical devices, veterinary and herbal products. The findings revealed high public trust on human medicines at 79.59 percent followed by medical devices at 66.39 percent. The trust for veterinary products was 37.46 percent and herbal trust was 39.87 percent. There was high neutral response for veterinary (49.42%) and herbal products (36.33%). This probably might have been contributed by few individuals keeping animals and a good number of those surveyed not using herbal medicines.

5.2.2 Expired products

The survey also intended to find out the extent to which the general public is aware of the possibility of presence of expired and counterfeit products in the market and their knowledge of where to report the matter. Ensuring that only authorized and good medical products circulate in the market requires a concerted effort of all stakeholders in the sector including consumers of these products. Consumers were therefore, asked if they have ever bought an expired product from the market. Findings indicate that 87.8 percent of those who responded had never bought an expired product from the market while 12.2 percent agreed to have bought expired product. The prevalence of expired regulated products has decreased from 16 percent in 2020 to 12.2 percent in 2024 this implies serious inspection and surveillance activities by TMDA. For those who had bought expired products they were further asked how they learnt about expired products, majority of them said, they learnt about the expired product from the label while some were informed by friends (see table 5.10).

Table 5.10: Knowledge on the Expired Product

	Frequency	Percent of responses
Expiry Date on the Label	392	92.45
Read in the Newspapers	1	0.24
Informed by Friend	24	5.66
Other Source	7	1.65
Total	424	100

5.2.3 Effort and Action taken on Expired Products

Consumers were further asked on the action they took relating to the expired products. The responses presented in table 5.11 indicate that majority of them returned the product while others threw away the product and kept quiet. Some went on consuming the product while only a few about 2.17 percent reported the matter to the Authority.

Table 5.11: Consumer Action on Expired Product

Action	Freq.	Percent
Returned the product	216	52.17
Threw the product and kept quiet	157	37.92
Consumed the product	24	5.80
Reported the matter to the Authority	9	2.17
Others	8	1.93
Total	414	100

The percentage of those who threw the product and kept quiet is alarming at about 38 percent and those who consumed the product is about 6 percent this could contribute to the continued presence of expired products in the market. The general public should be told to report the matter to relevant authority so that the products are completely removed from the shelves. But even those who returned the products which was about 52 percent there are chances of the retailer to continue selling the product to others as no action has been taken on the business premises.

5.2.4 Adverse Drug Reaction (ADR)

Consumers were further asked if they were aware of adverse drug reaction system and whether they ever had reactions following use of medical products. From table 5.12, majority of consumers about 87.4 percent were not aware of the adverse drug reaction reporting system. Furthermore about 85 percent of those interviewed never had adverse drug reaction while 12.6 percent had adverse drug reaction. Majority of those who had adverse drug reaction were diagnosed as normal reaction and about 33 percent were treated at the hospital, some were advised to stop usage of the medicine and were given alternative medicines.

Table 5.12: Are You Aware of Adverse Drug Reaction Reporting Mechanism

Are you aware of adverse drug reaction mechanism	Frequency	Percent	Cumulative Frequency
No	2963	87.38	87.38
Yes	428	12.62	100.00
Total	3391	100	

Table 5.13: Adverse Drug Reaction Prevalence

Adverse drug reaction	Freq.	Percent	Cumulative Freq.
No	2884	85.22	85.22
Yes	500	14.78	100.00
Total	3384	100	

Table 5.14: Addressing adverse drug reaction

Addressing adverse drug reaction	Freq.	Percent	Cumulative Freq.
Diagnosed Normal Reaction	172	64.18	64.18
Treated at Hospital	43	16.04	80.22
Given Injections and Drips	14	5.22	85.44
Advised to Discontinue Usage	11	4.10	89.54
Was Not Helped at Hospital	10	3.73	93.27
Diagnosed as Allergy	9	3.36	96.63
Given Alternative Medicines	3	1.12	97.75
Advised on Food, Milk, Water, and Diets	3	1.12	98.87
Diagnosed Overdose	3	1.12	99.99
Total	268	100	

5.2.5 TMDA measures on Falsified products

Consumers were also asked if they were aware about the actions that TMDA takes to protect the general public against falsified or poor quality products. The findings indicate that majority of those interviewed 55.97 percent were not aware of the actions take by TMDA to protect consumers against falsified products while 44.03 percent were aware of the actions taken. Furthermore, 98.6 percent of those who were aware of the TMDA actions in protecting consumers against falsified products considered the role to be important in protecting the health and security of citizens. Consumers were further asked to rank in order of most falsified products in the country, the findings suggest that 52.8 percent of herbal medicines are considered to be counterfeit, veterinary medicines (26.8%), 20.4 percent are human medicines, and medical devices at 4.7%. There is decrease on falsified human medicines when compared to findings of 2020 SDS.

Table 5.15: Consumers' Perception of falsified products

Regulated products	2020 (Percentage of counterfeit products)	2024 (Percentage of counterfeit products)
Human medicine	62.7	20.4
Medical devices	4.7	4.7
Veterinary products	18.8	26.8
Herbal medicine	14.4	52.8

There is an increase in falsified veterinary products and herbal medicine. There is a need for close surveillance in these products to ensure that falsified products do not penetrate the market.

Consumers were further asked if they considered the system not to be in their favour and if TMDA is doing enough to eliminate falsified products in the country. The findings indicate that 36.15 percent were of opinion that TMDA is not in favour of consumers, 30.41 percent were of opinion that TMDA is in favour of consumers while 33.44 percent were neutral. Consumers were further asked to provide their opinion if TMDA is doing enough on falsified products. The findings suggest that about 43.53 percent were of opinion that TMDA is doing enough on falsified products, 19.26 percent were of opinion that TMDA is not doing much to address the issue of counterfeit products in the country while 37.22 percent were neutral. Public education should continue to inform the general public about possibility of falsified products in the market and action to take when they encounter falsified products in the market.

5.3 Public Education and Awareness

5.3.1 Introduction

Public Education and awareness is among TMDA priorities stated in its strategic plan. TMDA strategic objective H of the strategic plan clearly stipulate that *TMDA strives to see that public education and customer services to stakeholders and the general public improved*. Ensuring quality of medicines, medical devices and invitro diagnostics is critical for the safety of the general public in the country. In order for TMDA to be able to achieve this mandate the general public needs to have a good understanding of the activities performed by TMDA for them to be in position to provide information (whistle blowing) on what is happening to the general public in relation to all activities regulated by TMDA. To measure the implementation towards strategic objective H the SDS measured the level of public education and awareness on the mandate of TMDA by the general public and the findings are discussed in the subsequent sections.

5.3.2 General Public Awareness about TMDA

To ensure that TMDA regulated products circulating in the country are of accepted quality and meet the stipulated standards, education and awareness to the general population is critical. Knowledge on the need by all stakeholders involved in the sector to comply with the law and rational use of regulated products is critical. Public education and awareness campaign are important for the general public to understand their rights as consumers and the importance of consuming safe products approved by TMDA to circulate in the market. The General public should also understand that they are part of the effort by the government to ensure that only regulated products enter the market and should have a clear understanding of the steps to take and where to report should they suspect that unapproved products penetrate into the market. TMDA has the role to provide information to the general public which in turn is expected to influence behaviour of customers, consumers and general public for them to comply with the rational use of regulated products and reporting to the relevant authority in a situation where they suspect that unapproved products have found ways in the market.

The current survey therefore, assessed the level of awareness on TMDA as an organization, its mandate and the knowledge on where to report on adverse effect as a result of consuming any TMDA regulated products. The findings are reported in table 5.16.

Table 5.16: Awareness of TMDA

Response	General Public (Consumers)/ Frequency	Percentage	Retailers Frequency	Percentage
Yes	1,898	55.97	1,309	100
No	1,493	44.03		
Total	3,391	100	1,309	100

The findings indicate that 55.97 percent of the household interviewed were aware of existence of TMDA in the country while 44.03% were not aware. The level of awareness of TMDA has improved comparing to 47% awareness level in 2020. While the improvement is commendable more public education effort need to be done to reach the entire population of Tanzania given the critical role that TMDA has on the safety and security of the general public as far as health issues are concerned. The survey further sought to find out effective communication media for TMDA to use in order to reach out the general public, out of those who are aware of existence of TMDA mainly said they learnt about TMDA from television, radio, social media, newspapers and public events. Others learnt from posters and billboards, seminars

and workshops trade fairs and exhibitions, public health campaigns in schools, colleges and brochures and leaflets. The findings imply that majority of those aware of TMDA learnt about it from television, radio and social media. More innovative tools should be considered and used, 62.59 percent of Tanzania population is in rural areas where television, radio and social media availability is limited. Therefore innovative awareness creation especially in the rural should be thought. For example, introducing TMDA annual sports month where sports competition could be organized and the winning team could be awarded a goat.

5.3.2.1 Communication Channels used by TMDA

TMDA uses different communication channels to create awareness and remind the general public about its existence in the country and its roles. The communication channels used include televisions, social media and radio broadcasts across the country. The general public were asked to state how they learnt about TMDA. The findings are presented in table 5.17.

Table 5.17: TMDA Communication channels

Communication means	Households Percentage (n=2109)	Permits Percentage (n=69)	Retailers Percentage (n= 1309)
Television	34.04	10.14	15.51
Radio	20.58	10.14	5.96
Social media	10.24	20.29	6.34
Newspaper	6.35	1.45	1.07
Public event	5.60	8.70	7.33
Posters and Billboards	4.79		1.07
Seminar and workshops	4.08		
Other sources	4.05	33.33	29.56
Trade fairs and exhibitions	3.70	7.25	5.96
Public Health Campaigns	3.51		
Brochures and Leaflets	3.08		
TMDA staff		17.39	24.37

The findings suggest Television to be the popular communication channel among the households that were aware of TMDA, majority learnt about TMDA from television followed by radio and social media. Brochures and leaflets are the least communication tools accessed by the general public. On the other hand most of permit customers learnt about TMDA from social media followed by TMDA staff. Newspapers were the least communication means where permit customers

obtained information about TMDA. Furthermore, on the side of retail customers the most popular communication channel was TMDA staff, followed by television while posters and billboards were the least popular tools. From the findings, TMDA television program should continue as it is accessed by many TMDA customers.

5.3.2.2 Knowledge on the TMDA role in the country

The survey further sought to find out if the general public knew the role of TMDA in the country. About 99 percent for those who were aware about the existence of TMDA in the country, were able to mention at least one TMDA role in the country.

Table 5.18: General Public Knowledge of the role of TMDA in the Country

TMDA role	Frequency	Percent
Conducting pharmacovigilance of medical products and vigilance	584	30.85
Inspecting manufacturing industries and business premises	528	27.89
Regulating manufacturing, importation, distribution and selling	288	15.21
Assessing the quality, safety, and efficacy of controlled drugs	227	12
Evaluating and registering medicines	91	4.81
Educating and sharing accurate and reliable information	44	2.32
Issuance of business permits	38	2.1
Promoting rational use of medicines and medical devices	19	1.01
Conducting laboratory analysis	21	1.10
Prescribing standards of quality, safety, and effectiveness	53	2.8
Total	1,893	100

5.3.3 Retailers awareness about TMDA

The survey also sought to measure the level of awareness of TMDA among retailers. The findings indicate that 100 percent of retailers interviewed were aware of TMDA in the country. This is not surprising given that at some point in their business, they could have interacted with TMDA staff. Furthermore, 92.28 percent of retailers interviewed were able to mention at least three TMDA functions while 7.72 did not know TMDA functions. The percentage of those not knowing TMDA functions is not surprising given that ADDO were included in the group of retailers and some are new hence could not recall TMDA functions. Retailers were also asked if they knew they could provide feedback to TMDA on various issues relating to the regulated products. The findings indicate that 55.92 percent knew that they could provide feedback, while 44.08 percent did not know. For those who knew about the feedback mechanism, were further the feedback method they used. The findings are provided in table 5.19.

Table 5.19: Retailers Feedback mechanism to TMDA

Feedback method	Frequency	Percentage
Special Forms	272	24.48
Hotlines	240	21.60
Social media	219	19.71
Suggestion Box	85	7.65
Email	214	19.26
Others	81	7.29
Total	1111	

Findings indicate that majority fill special forms, followed by use of hotlines, social media and emails. There are also those who use suggestion box probably for the purpose of enhancing confidentiality in reporting.

5.3.4 Permit customers awareness about TMDA

The survey intended to establish the level of permit customers' awareness of TMDA. 68 permit customers were interviewed. Out of the permit customers interviewed 97.05 percent had been in working relationship with TMDA for more than a year and could mention TMDA key functions. While only two permit customers had worked with TMDA for less than a year and could not clearly mention TMDA functions. Permit customers were also asked if they get opportunity to provide feedback to TMDA and the mechanism put in place to provide feedback. Findings indicate that 64.91 percent permit customers interviewed have provided feedback to TMDA while 35.01 percent have never provided feedback. Of those who had an opportunity to provide feedback to TMDA, 31.48 percent used special forms while 29.63 percent used hotlines, 22.22 percent used suggestion box and only 3.22 percent used social media. An interesting part of these statistics is on continued use of suggestion box to provide feedback. The continued use of suggestion box is probably linked to the anonymity associated with its use.

5.3.5 Public education about consumer rights

Households were asked if there was public education about consumer rights on regulated products. About 55.63 percent of those interviewed said that there was public education on consumer rights in relation to products regulated by TMDA while 44.37 percent of those interviewed said they have never received public education about consumer rights. These findings suggest improvement on public education and more effort should be done to reach the remaining population. Consumers are the end users of TMDA regulated products, their knowledge about

these products, their rights and where to report in case of any suspicion relating to the products is very important. When they understand the role of TMDA and their role as consumers they will serve as whistle blowers to TMDA.

5.4 Client Service Charter

One of the specific objectives of the service delivery survey was to establish the extent to which TMDA adheres to the service delivery standards as provided in its Client Service Charter (CSC). TMDA has client service charters which is a promise on how it intends to deliver services to its customers. It is important for a service oriented organization like TMDA to have client service charter that guide employees on how services are to be delivered to customers. Services are intangible and its provision could differ from one service provider to the other and from same service provider different timings. Client Service Charter therefore, offers standardized procedure on service delivery and hence minimizing deviations in service provision among employees, meeting customers' expectations and satisfying them. The charter provides for standards of service delivery expected by clients and what the Authority anticipates from its clients including what can be done if the specified standards are not met.

5.4.1 Internal customers awareness of Client service charter

To measure progress towards achieving this sub objectives, TMDA staff were asked if they were aware about TMDA Client service charter and the extent to which they deliver services to clients as stipulated in the Charter. The findings indicate that 96.3 percent of the TMDA staff were aware of the services client charter while 3.7 percent were not aware of it. The findings further show that out of those who were aware of the CSC, 98.3 percent understand what is contained in the service charter. This implies that majority of TMDA staff understand what is expected from them in terms of delivering good service to clients as promised in the charter.

The survey further sought to assess the extent to which TMDA staff deliver services according to what is stipulated in the CSC. The findings indicate that 63.8 percent of the surveyed staff said that to a large extent they adhere to the client service charter while 35.3 percent indicated moderate adherence to CSC and 0.90 percent stated low adherence to client service charter when delivering services to customers. While it is commended for the staff to have understanding of the client service charter and its content, still there is a challenge on adherence to the promises made in the charter when it comes to adhering to it when delivering services to customers.

36.2 percent of employees who said moderate and low is an alarming number for the Authority with critical mandate in the country and with the staff having the knowledge on what it requires for them to deliver good service to customers.

5.4.2 External customers awareness of Client service charter

External customers also need to understand what is contained in the CSC. This is because the charter would stipulate not only what services are to be delivered to them but also stipulate the cooperation that the external customer is expected to show for services to be delivered. External customers were asked if they were aware of TMDA CSC. 93.96 external customers surveyed said they were not aware of the CSC while only 6% were aware of the charter. This calls for more sensitization on CSC to external customers.

5.5 Media Utilization

TMDA utilizes different media to create awareness about its existence in the country and the critical role it plays in the society. For TMDA to be able to pursue its mission in the country it requires concerted effort from the general public as key stakeholders in the TMDA regulated products. Hence the general public needs to be well informed on the TMDA functions. In this SDS the electronic media tool was sent to 58 media houses/people for them to fill and return the questionnaire. Out of the 58 media people 32 responded and emailed back the filled questionnaires. The distribution of those who responded are as presented in table 5.20.

Table 5.20: Type of media

Media	Frequency	Percentage
Electronic/Broadcasting media	15	46.88
Social media	08	25.00
Print media	05	15.62
Others	04	12.50
Total	32	100

All the media people who responded to the questionnaire were aware of TMDA. Majority learnt about it through seminars and workshops while others learnt about it through Television, social media and radio. The media people were further asked if they have ever reported on TMDA activity, about 93.75% said they had reported about TMDA activities. Media people were further asked about the type of engagement they have with TMDA. The findings on the type of engagement they have with TMDA are presented in table 5.21.

Table 5.21: Type of engagement with TMDA

Type of engagement	Percentage
Public education on health issues	50
Workshops/seminars	37.50
Campaign	9.38
Inspections Activity	3.12
Total	100

5.5.1 Media reporting on Expired products, falsified products and ADR

Media houses were also asked if they have ever reported on expired products, falsified products and Adverse Drug Reaction. From table 5.22 majority of them had reported on expired and falsified products and about 25 percent reported on adverse drug reaction.

Table 5.22: Media reporting on falsified products and Drug Adverse Reaction

Response	Expired Products	falsified product	Adverse Drug Reaction
Yes	65.62	71.88	25.00
No	34.38	28.12	75.00

The findings in table 5.22 indicate that media houses have reported more on falsified products and expired products however, few cases on ADR are reported. This could be contributed by the fact that the general public is not clear on what steps to take when get adverse reactions from medicines.

5.5.2 Media rating about TMDA Image to the general public

Media houses that responded to the questionnaires were further asked to rate general public TMDA image. The findings indicate that 81.25% rated TMDA public image to be high, 3.12 rated TMDA image to be low while 15.62 percent were neutral. Media houses were further asked to rate the capacity of TMDA as a regulator, the findings indicate that 81.25 percent rated TMDA to be high in terms of capacity as a regulator while 18.75 percent were neutral. Media houses were also asked to provide their rate of satisfaction with TMDA their views are provided in table 5.23.

Table 5.23: Media satisfaction with TMDA work

Rating	Percentage
Very high	46.88
High	37.50
Neutral	18.75
Total	100

Overall there is high satisfaction with TMDA among media houses.

5.5.3 Information flow from TMDA to the media and involvement of Media on Public Health matters

Media people were required to rate the information flow from TMDA to media. Overall from the data presented in table 5.23 indicate a high level of satisfaction. They were further asked to rate the level of their satisfaction of TMDA involving them on public health matters. The response are as presented in table 5.24

Table 5.24: Rating on information flow to the media and its involvement in Public health matters

Response	Rating on Information flow to media	Media involvement on public health matters
Very high	28.12	28.12
High	37.50	43.76
Neutral	31.26	25.00
Low	3.12	3.12
Total	100	100

Overall, the findings indicate that TMDA involvement of media people on public health matters is very high and the information flow from TMDA to media is high. Having good relationship with the media is good not only for public awareness but also on reporting issues that are of great interest and or importance to the general public. Media people were also asked the extent to which satisfied with the way TMDA involve them on emerging medical products. The findings indicate that 74.63 percent are highly involved by TMDA only 6.25 said the level of involvement is low while the remaining were neutral.

5.5.4 Education on Appropriate use of medical products

The survey also sought to measure the extent to which appropriate education on appropriate use of medical products is provided to the general public by TMDA. The findings presented in table 5.25 indicate that overall TMDA provide appropriate education to the general public.

Table 5.25: TMDA Education on appropriate use of medical products

Rating	Percentage
Excellent	25.00
Very good	31.25
Good	31.25
Fair	9.38
Poor	3.12

5.5.5 Inspecting medical products

Media people were also requested to provide their views on how they consider TMDA role in inspecting medical products. 12.5 % of media people surveyed said it is excellent while 34.38 percent said it is very good, 43.75 percent said it is good, only 9.38 percent said it is fair.

5.5.6 Promoting rational use of medical products

Media people were further asked to rate TMDA on how it is fairing on promoting rational use of the medical products. The findings are presented in table 5.26.

Table 5.26: Promoting rational use of medical products

Rating	Percentage
Excellent	18.75
Very good	43.75
Good	21.88
Fair	15.62

Findings in table 5.26 indicate overall media satisfaction with TMDA promotional of rational use of medical product.

5.5.7 Media satisfaction with TMDA as regulator

The survey also sought to evaluate media overall satisfaction with TMDA as a regulator. The findings indicate that media is satisfied with the cooperation they get from TMDA. The findings further show that 81.25 percent of media houses are satisfied with TMDA as a regulator. This is an indicator that TMDA is on track to fulfill the role for which it was established.

5.5.8 TMDA reputation

Media people were also required to share their views on how they see TMDA reputation and trust by the general public. The findings indicate that 96.87 said that TMDA is trustable and a reputable organization in Tanzania while the remaining were neutral.

5.5.9 TMDA Involvement in corporate Social responsibilities

Media people were asked the extent to which they see TMDA participating in corporate social responsibilities activities. 75 percent of the media surveyed agreed on TMDA participation in CSR activities while 21.88 were neutral and 3.12 percent did not agree. The neutral response could be caused by probably the media person having not participated in TMDA CSR activities. However, 75 percent is a good indication of TMDA commitment to positively impact the society and environment through ethical practices and sustainable initiatives

SECTION SIX

FURTHER FINDINGS ON CUSTOMERS SATISFACTION WITH TMDA SERVICE DELIVERY

6.1 Introduction

The survey sought to establish the extent to which customers are satisfied with services delivered by TMDA. In service organization customer satisfaction is very important, given that services are not tangible and cannot be made available for display prior to consumption. Service communication is therefore, among challenges facing service organizations. Customer satisfaction becomes one of the major tool for communicating services to the general public. Satisfied customers talk positively about services, the positive Word Of Mouth (WOM) is a strong marketing communication tool for service organizations. A satisfied service customer who talk positively about the organization and its products, is likely to give reference to other customers and hence ensuring future business. Furthermore, satisfied customers are likely to be loyal to the organization. TMDA offers regulatory services which somehow differ from normal services in that they are regulatory services required by the law and hence customers are supposed to abide by the law however good services are likely to increase willingness among TMDA customers to comply with the regulations. Customers were therefore, asked to state the level of satisfaction with services and their assessment are presented in the subsequent sub sections.

6.2 General Public satisfaction with TMDA services

The survey sought to establish the extent to which the general public interact with TMDA on matters related to the products regulated by TMDA. People were asked if they have interacted with TMDA, out of the 3,391 household interviewed, 1,898 people are aware of TMDA existence which is 56 percent of people interviewed. Furthermore, out of 1,898 people who were aware of existence of TMDA only 61 people said they have interacted with TMDA majority of them sought general information from TMDA, registration and licensing, while other others applied for tender and laboratory services. Few provided vigilance information.

When asked on their overall level of satisfaction with quality of services that TMDA delivers, 81.98 percent said they were satisfied with the services delivered while 3.3 percent were not satisfied others were neutral. It is impressive that the level

of satisfaction is above 80 percent however, TMDA should continue to improve its services to make sure that even the 3 percent who are not satisfied become satisfied with services. Customers were further asked to rate TMDA staff on various service quality dimensions which are professionalism, integrity, empathy, fairness, courtesy, responsiveness, reliability and assurance. Their views are presented in the table 6.1.

Table 6.1: Customer satisfaction rating with TMDA service quality dimensions

Dimension	Percent
Accessibility	77
Customer care	80.3
Process	67
Staff behaviour	74.5
Confidentiality	80.3
Professionalism	90.2
Integrity	86.7
Empathy	80.3
Fairness	85.3
Courtesy	88.5
Responsiveness	77.0
Reliability	85.3
Assurance	81.9

Overall, customers TMDA rating on various service quality dimensions is above 60 percent. The highest rating is on professionalism 90.2 percent and the least rated dimension is process which scored 67 percent. The findings indicate that TMDA staff perform their duties as per their profession, this findings is commendable given the nature of services regulated by TMDA. Process was relatively rated low when compared with rating of other dimensions, while the score is above average, there is a need for TMDA to improve on process for rendering services. Unlike goods whose quality are evaluated on various dimensions, services are not tangible hence are evaluated on the bases of both the process that the customer is to go through and the outcome of the service rendered. In this case overall quality of service obtained by a customer who wants to register medicines is evaluated by assessing how the process was done and whether the customer finally managed to have the medicines registered or not.

6.2.1 TMDA Customer satisfaction Indices

This sub section of the survey report provides a summary of the customer satisfaction measurement. In its quality policy statement, TMDA declares its

dedication to adhering to the ISO 9001:2015 Standard and enhancing the efficiency of its Quality Management System on an ongoing basis. In order to guarantee customer satisfaction, it shall oversee and allocate resources for the ongoing enhancement of services. Subsequently, customer satisfaction serves as an incentive for service enhancement; consequently, its assessment is indispensable. The TMDA conducted surveys from 2004 to 2020 to assess customer satisfaction and established target sets for its strategic plans. This year, SDS 2024 implemented the identical methodology to evaluate the customer satisfaction index, as detailed in this section of the report.

Customer Satisfaction Index (CSI) is a versatile analytical tool for assessing customer satisfaction with an organisation product. CSI assists in identifying the causes of customer satisfaction, or, more accurately, dissatisfaction. It is crucial for all organisations to assess the level of customer satisfaction and its determinants. The premise of the CSI is that the total customer satisfaction is not only a reflection of satisfaction with individual factors that influence overall satisfaction, but also their importance. The overall satisfaction is more significantly influenced by the factors that are significant from the customer's perspective than those that are irrelevant.

In order to ascertain customer satisfaction levels, the literature on customer satisfaction has identified four model types. The identified models are; the Performance Model, the Rational Expectations Model, the Expectations Artefact Model, and the Disconfirmation of Expectation Model. Nevertheless, in general, numerous studies have constructed customer satisfaction indices (CSIs) by combining all of these models based on the type of information and data available at a given time. In the past, the TMDA took a straightforward approach to determine CSI by aggregating individual customer categories and incorporating them into an overall satisfaction measurement.

A CSI for TMDA offers a comprehensive assessment of internal (employees) and external stakeholders, which includes feedback from a variety of groups (general public, retailers, permit customers and the media). This facilitates the benchmarking of performance over time or against other institutions and supports evidence-based improvements in service delivery. TMDA can make strategic decisions that improve organisational effectiveness and stakeholder trust by guaranteeing that the index is theoretically sound and practically relevant.

This SDS 2024 calculated the CSIs for both internal, external, and composite categories using a weighted average method with equal weights for each category.

This methodology guaranteed that each stakeholder category accrued an equivalent proportion of the satisfaction index, regardless of the quantity of respondents in that category. The application of equal weights guaranteed that the satisfaction levels of all stakeholder groups were treated equally, irrespective of their sample sizes, thereby presenting a comprehensive perspective on overall satisfaction. Satisfaction index is a fair and impartial assessment of overall performance by employing equal weights. The method is consistent with the organization's dedication to equity and inclusivity, guaranteeing that the feedback of all stakeholder groups is equally considered in the final analysis.

6.3 TMDA Internal Customers' Satisfaction Index

TMDA's internal customers are employees; consequently, the internal customer satisfaction index was computed using responses from the employees' tool. Unlike previous surveys, the SDS 2024 implemented a comprehensive evaluation of employee satisfaction that was based on responses to all components of the survey tools. Recent surveys have employed a quantitative approach to satisfaction levels, utilising a Likert scale of 1-10 to evaluate responses regarding overall satisfaction. The 2024 SDS assessed the satisfaction levels, as "Satisfied," "Very satisfied," and "Completely satisfied."

Table 6.2: Internal customer satisfaction responses and index

QN	Satisfaction Question	Completely Satisfied	Very Satisfied / Mostly Satisfied	Moderate Satisfied / Slightly Satisfied	Total
B1A	Leadership Skills	24.1%	48.6%	20.4%	93.1%
B1B	Management Skills	20.4%	49.8%	24.1%	94.3%
B1C	Professional Skills	33.1%	49.8%	13.9%	96.7%
B1D	Communication Skills	24.5%	46.9%	18.8%	90.2%
B1E	Conflict Resolution	18.8%	47.8%	24.5%	91.0%
B1F	Trust Co-Workers	15.5%	53.5%	21.6%	90.6%
B1G	Team Work	28.6%	48.2%	16.7%	93.5%
E1	Salary Compared with Work	15.1%	35.9%	33.1%	84.1%
E2	Current Model on Rewarding	20.0%	44.1%	22.0%	86.1%
E3	Overtime	16.7%	35.5%	26.9%	79.2
E4	Salary Compared with External Employees	8.6%	32.2%	28.2%	69.0%
E5	Annual Salary Increases	21.6%	46.5%	25.7%	93.9%
E6	Other Benefits Offered	47.8%	38.0%	11.8%	97.6%
	Medical Insurance				
INTERNAL SATISFACTION INDEX					89.2%

Overall, the results in table 6.2 indicate 89.2 percent internal customer satisfaction. Though there is always a room for improvement, this score is very impressive. The level of internal customer satisfaction is also very high, more specific Staff in the directorates of medicines and medical devices are more satisfied, followed by employees in the directorate of business support services. Staff in the laboratory department scored the least satisfaction level though the satisfaction is above 65 percent.

Table 6.3: Directorate wise internal customer satisfaction indices

Directorate	Completely Satisfied	Mostly satisfied	Total
Business Support services	28.13%	56.3%	84.43%
Laboratory Services	14.6%	51.2%	65.80%
Medicines and medical devices	38%	45.4%	87.40%
Director General	28.13%	56.25	84.38%

6.4 TMDA External Customers' Satisfaction Index

The satisfaction of external customers was assessed for all external stakeholders, including Permit customers, general public as represented by the households surveyed, laboratory customers, retailers, and media. A number of specific questions were posed to each category of these external customers in order to measure their satisfaction scores. Tables 6.4 to 6.7 provide summary of the satisfaction response results and indices.

6.4.1 Permit Customers

Permit customers were asked to indicate their level of satisfaction with TMDA services rendered to them. The level of permit customers that reported to be satisfied (n=68) with TMDA services is 68 percent while 24.6% are not satisfied with TMDA services.

Table 6.4: Permit customers satisfaction responses and index

Satisfaction level	Very satisfied	Satisfied	Total
Level of satisfaction with TMDA services rendered	60.3%	7.9%	68.2%
PERMIT CUSTOMERS SATISFACTION INDEX	60.3	7.9%	68.2%

Domestic Manufacturers

Domestic manufacturers were also among permit customers that were surveyed. The targeted number of domestic manufacturers was 13. The survey tool was sent to 13 domestic manufacturers, a total of 11 domestic permit customers participated

in the survey and returned the questionnaire making a response rate of 84.6 percent. All domestic manufacturers surveyed new about TMDA and its functions. All Manufacturers had working permit from TMDA and new about TMDA and its function. Majority of them about 92.6 percent had over ten years working relationship with TMDA. Of the manufacturers surveyed all said that it is not easy to get a permit from TMDA. While all firms interviewed said they are aware of feedback provision mechanism, majority of them about 86 percent said it takes indefinitely for TMDA to acknowledge receipt and about 89 percent of those interviewed said that TMDA did not use the customer feedback to improve its performance. About 67 percent said that TMDA services meet their expectations.

6.4.2 Laboratory customers

Laboratory service customers were asked to score how satisfied they are with the laboratory services they received from TMDA. The findings show that of the 24 laboratory customers that responded to the questionnaire about 88 percent are satisfied with TMDA laboratory services. Laboratory customers were also asked to state the extent to which they are satisfied with parameters related to TMDA laboratory capacity. Overall, the satisfaction scores with laboratory parameters ranged between 71.7% and 78.8% with an average of 76.5%. Issuance of laboratory still continue to be below average.

Table 6.5: Scores on laboratory service variables

Variable	Mean	SE
Handling of samples	7.88	.4912
Issuance of laboratory results	7.17	.4463
Existence of laboratory tools	7.74	.4824
Application of modern laboratory technology	7.71	.4615
Laboratory results are credible	7.76	.4476

6.4.3 Retail Customers

Retail customers were asked to rank their level satisfaction with services rendered to them by TMDA and TMDA as an institution. The findings (n=1,309) show that retail customers overall satisfaction is 87%. There is an increase in the level of satisfaction with TMDA services among retailers in the country when compared with 78 percent reported in service delivery survey of 2020. The level of satisfaction was high among retailers of pharmacy veterinary medicines (94.1%), followed by medical devices retailers (90.9%), pharmacy human medicine satisfaction level was ranked third at 88.8 percent, ADDO human medicine was ranked fourth with the score of 83.16

percent and ADDO veterinary medicine was the last ranked at 75 percent followed by ADDO human medicines.

Table 6.6: Retailers satisfaction responses and index

Satisfaction level	Very satisfied	Satisfied	Total
Level of satisfaction with TMDA services rendered	69.4%	17.7%	87.0%
Retailers Satisfaction Index	69.4%	17.7%	87.0%

6.4.4 General Public (Households)

About 3,391 household were surveyed in the 16 regions, of which 50.9 were male and 49.1 were female. Out of those survey, 56 percent were aware of TMDA and had interacted with the authority. Households were asked to rate their level of satisfaction with services offered by TMDA. The level of satisfaction on various service dimensions is as presented in table 6.7. Overall, the satisfaction scores with performance parameters ranged between 67.22% and 82.0% with an average of 76.97%. The lowest score was on the process of getting services and the highest score was on quality of service.

Table 6.7: Households satisfaction responses and index

Quality dimension	Score in percentage
Accessibility	77.05
Customer care	80.32
Quality of service	82.00
Process of getting service	67.22
Staff behavior	75.41
Confidentiality	80.33
Household satisfaction index	77.1

Evaluation of service quality by a customer is made by using two dimensions namely the outcome of the service and the process through which one had to go about in order to obtain the service. It is therefore important for TMDA to improve on the process through which the general public needs to go through in order to obtain services.

6.4.5 Media

About 55 percent of the media contacted responded to the survey questionnaire. Media were asked to score their overall satisfaction with TMDA services. Out of these 93.75 percent have interacted with TMDA in public education on health issues, campaigns, workshop and seminars and inspection activities. Media were

asked to state the areas that they have ever reported in relation to TMDA services. The reported cases are presented in Table 6.8.

Table 6.8: Media reporting on TMDA matters

Variable	Percentage of reporting
Expired product	65.62
Falsified products	28.12
Adverse Drug Reaction	25

Overall, media satisfaction with TMDA services was 84.38 percent. They also indicated 83.75 percent satisfaction on the education provided by TMDA on appropriate use of medical products

Table 6.9: Media satisfaction index with TMDA services

Attribute	Percentage score
Overall satisfaction with TMDA	84.4
Provision of information to media	65.6
Involvement of media to public health matters	71.9
involvement of media on emerging medical products	65.6
TMDA use of information from media	59.4
MEDIA SATISFACTION INDEX	69.4

6.4.2 External Customers Satisfaction Index Scores

The external customer satisfaction index was determined by aggregating the satisfaction indices of four external stakeholders/customers: public (households), permit customers, retailers, and media houses who engaged with TMDA. Utilising an equal weighting approach, the external customer satisfaction index was determined to be 74.8%, which is approximately 75% for SDS 2024.

Table 6.10: External customers' satisfaction index

Stakeholder category	Satisfied	Very satisfied	Total
Households	12.8%	64.2%	77.1%
Permits	5.7%	60.0%	65.7%
Retailers	17.7%	69.4%	87.0%
Media	31.9%	37.5%	69.4%
Laboratories	12.0%	62.8%	74.78%
External Customers Satisfaction Index	16.0%	58.8%	74.8%

6.5 TMDA Overall Customers' Satisfaction

6.5.1 Composite Satisfaction Index

Similar to the the past SDS (2004-2020), the SDS of 2024 also calculated the composite satisfaction index of TMDA by combining the CSIs of internal and external customers, as outlined in the previous section of the report. The overall customer index employs an equal weight approach, similar to the indices for internal and external. The use of equal weight to calculate the composite satisfaction index is justified when the objective is to guarantee that all stakeholder categories are assigned equal weight in the analysis. In situations where each category represents a distinct group with a unique perspective, and the organisation values their input equally, regardless of the sample size, this approach is particularly relevant.

Consequently, the composite satisfaction index is a 50/50 combination of the internal satisfaction index (89.2%) and the external satisfaction index (74.8%). TMDA's composite satisfaction index on SDS 2024 is 82% (see Table 6.9).

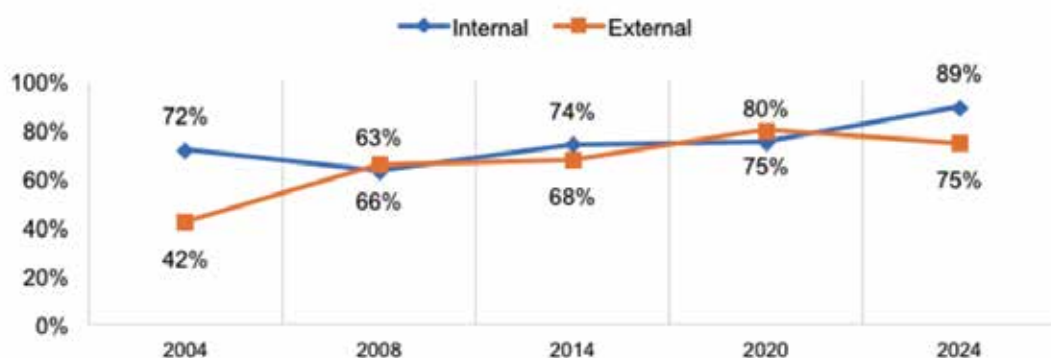
Table 6.9: Weighted Composite Index

CSI Element	CSI Score	Weight	Weighted CSI
Internal Customer Satisfaction Index	89.2%	50%	44.6%
External Customer Satisfaction Index	74.8%	50%	37.4%
Composite Satisfaction Index			82.0%

6.5.2 Trend in Composite Satisfaction

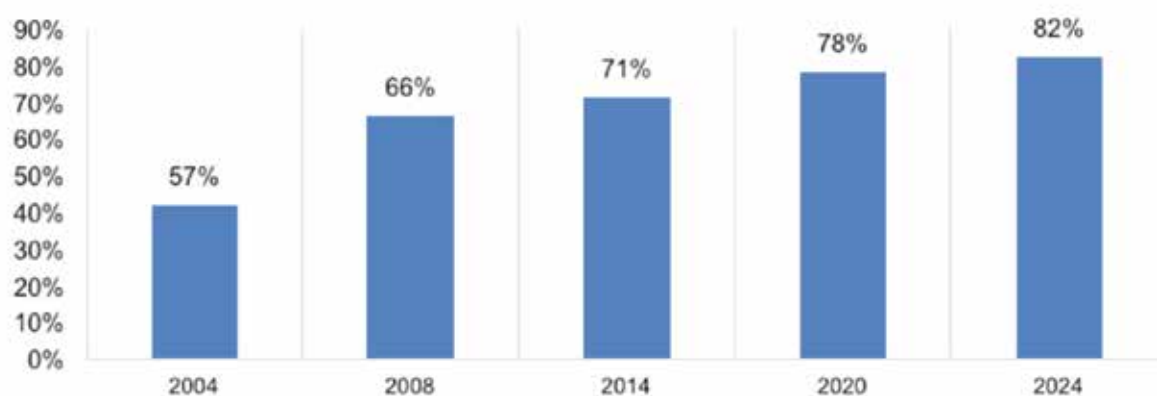
Figure 17 illustrates the trend comparison of the internal and external satisfaction index for the five TMDA service delivery surveys conducted. The internal satisfaction index has demonstrated a consistent upward trend, rising from 72% in 2004 to 89% in 2024. Additionally, the external satisfaction index increased from 42% in 2004 to 75% in 2024. The external satisfaction index has remained at 75% between SDS 2020 and SDS 2024.

Figure 17: Trend on internal and external customers' satisfaction indices



For each survey period from 2004 to 2024, Figure 18 illustrates the trend in the TMDA overall CSI. The trend indicates that TMDA has substantially enhanced its overall customer satisfaction level from 42% in 2004 to 82% in 2024. One of the primary factors that contributed to the increased composite satisfaction index between SDS 2020 and SDS 2024 was the improvement in internal satisfaction index suggesting improvement in internal customer satisfaction over time suggesting a direct effect of internal customer satisfaction over external customer satisfaction.

Figure 18: Trend in composite satisfaction index of TMDA



6.6 Factors Influencing TMDA Service Delivery

6.6.1 Strong and dedicated management:

Staff pointed out that strong and dedicated TMDA management that cares for staff is contributing to improved performance. Findings indicate that excellent leadership that value staff contributes to improved performance. When asked staff said that they feel valued and treated equally, there are no groups no favouritism.

6.6.2 Motivated staff:

TMDA staff also pointed out that they feel valued by the management this motivate staff to increased performance and improved quality of services they render to customers.

6.6.3 Committed and competent staff:

TMDA staff also pointed out that staff commitment to delivering quality service and competence have contributed to improved quality of services rendered. Competent Staff coupled with well-developed standard operating procedures (SOPs) and adherence to SOPs contribute to improved performance.

6.6.4 Strong quality management systems:

In order to provide quality services TMDA has instituted strong quality management systems.

6.6.5 Equipping staff with working tools and good working environment:

TMDA staff also pointed out that availability of working tools and good working environment have contributed to improved performance.

6.6.6 Clients Service Charter:

Clients Service Charter standardizes service offered which in turn contributes to improved performance. TMDA staff strive to follow guidelines provided in the CSC though not a hundred percent but the move is to improve service delivery as per CSC.

6.6.7 Team work, accountability and customer focus:

Staff also said that team work among staff who are accountable and focused to deliver good service have contributed to improved performance.

6.7 TMDA Service Delivery Gaps

The survey also sought to establish existing gaps in TMDA service delivery. The findings pointed out to the following gaps in service delivery.

6.7.1 Continued General Public awareness of TMDA

There is a need to continue educating the general public about TMDA services. Changing in general public composition from time to time necessitate this activity to be a continuous one.

6.7.2 Public education

There is limited public education on TMDA regulated activities. It is important to provide education to the general public who are the key stakeholders on activities regulated by TMDA and reporting system on falsified products, adverse drug reaction and other suspicious issues relating to mandates of TMDA.

6.7.3 Loop holes in surveillance

Surveillance on medicines and medical device is yet to reach 100 percent more effort need to be done to improve this.

6.7.4 Delays in online requests

The other gap that was pointed out by those interviewed is the delay in response for online request. TMDA has improved in its operations where some services are rendered online. However, delayed response remains to be the challenge where it takes longer for one to get response on the service requested.

6.7.5 Clashing of Vigilance and public education activities

There is need to harmonization vigilance activities and public education to avoid clashes.

6.7.6 Concentration of the inspection activities at the zonal levels

TMDA is able to conduct inspections and surveillance services in 8 zones where it has offices. Given the critical nature of TMDA functions, inspections and surveillance should be done at all councils and municipalities because a lot of dubious activities/ business happen at councils where sometimes by the time TMDA receives the information a lot of damage would have happened. Gradual expansion is important to make sure that TMDA presence is felt everywhere in the country.

SECTION SEVEN

SUMMARY AND RECOMMENDATIONS

7.1 Summary of Key Issues

Service delivery survey is vital especially to service organization, given the need to optimize resources utilization for results. Organization needs to institute service strategy that guide the delivery of services to its customers. Service organization need to achieve intended objectives through satisfaction of external customers. It is therefore important to continuously track the level of internal and external customer satisfaction with services rendered by the organization. Satisfied internal customers provide good services to external customers that lead to their satisfaction and ultimate achievement of organizational objectives.

The overall objective of this SDS was to examine the level of stakeholder's satisfaction with services offered by TMDA and identify areas for improvements. The key findings of SDS 2024 are:

1. Employees' perception of quality of services is good, they are happy with working environment and management and culture.
2. Employees are satisfied with the organization with internal Satisfaction Index of 89.2%: Generally, TMDA employees are satisfied with the management, management culture and overall working conditions.
3. While Employees are satisfied with working environment, they are not satisfied with salaries in general and annual salary increment especially when compared to other organizations with similar roles in the country.
4. External customer perception of TMDA service quality is varied. Retailers perceive service quality to be high at about 75.65 percent where as permit customers perceive quality of TMDA services to be 65.7 percent.
5. TMDA external customer satisfaction index is 74.8 percent with composite index of 82.9 percent.
6. TMDA customer segments include product manufacturers, importanrs, exporters, distributors who include wholesalers, retailers and agents, researchers, health providers, Government institutions, non governmental organization and the General public.

7. General Public awareness about TMDA has improved from 47 percent in 2020 to 56 percent in 2024.
8. The level of public education among general public on consumer rights is 55 percent that is of those surveyed 55 percent had received public education on consumer rights.
9. Awareness about TMDA Clients' Service Charter among the general public is still very low. While awareness among TMDA staff on CSC is very high. Furthermore, 63.8 percent of TMDA staff adhere to CSC when delivering services while 35.3 percent reported moderate adherence to CSC when delivering services and 0.9 percent do not adhere to it.
10. TMDA Services Marketing triangle is loosely aligned with improvements needed on the internal marketing, external marketing and interactive marketing.
11. Based on the findings of the survey the following quick wins are proposed:
 - Improving the TMDA website customer interaction digitalize the process to allow customers provide feedback and lodge complaints online, this should include establishing stakeholders DASHBOARD.
 - Improve TMDA customer database to ensure that the addresses are current.
 - There is also a need to review CSC to be more specific on timelines set.
 - Customer Care Training of Staff so as to increase their empathy and how they handle customers.
 - Market TMDA laboratory services in order to generate incomes from laboratory tests.
 - Introduce TMDA week /TMDA football/ sports competition

7.2 Recommendations from Customers

Households

- TMDA is available in cities and regional headquarters, there is a need for them to make efforts to reach at district and villages so that to assess the situation for themselves.
- Improve inspections on regulated products to identify counterfeit products.

- Public education should be provided countrywise including to the general public in villages.

Retailers

Retailers recommended the following:

- The first recommendation is on the disposal of expired medicines and medical devices. At the moment the disposal is done by the facilities themselves to dedicated dumping sites under the supervision of the TMDA official.
- The request continues where customers are of opinion that the role should be assumed by TMDA at agreed fees.

Permit customers

Permit customers recommended the following:

- Clarity on what is required from permit customers should be improved to minimize delays which could be caused by inability of the customer to fulfill the requirements as a result of unclear instructions which at the end of the day contributes to delayed permit and/or missed business opportunity.
- Payment using control number should be improved to avoid missed business opportunities.
- Improve information sharing with customers, especially on new developments in the area.

7.3 Recommendations from Findings

7.3.1 Quick Wins for TMDA to improve Business processes and Maintain Corporate Image

7.3.1.1 TMDA Improve Website Customer Interaction.

TMDA still uses manual forms in PDF to let customers provide feedback and complaints. Customers have to print, fill and submit forms manually. Digitalize the process, online capturing of data and automatic tabulation for management actions.

7.3.1.2. TMDA to put stakeholders DASHBOARD

TMDA to put stakeholders DASHBOARD on its website where users can query the information such as how many employees per zone, how many complaints received over the last five years etc.

7.3.1.3 TMDA to improve its databases.

Four Service Delivery Surveys have been conducted and this report presents the sixth service delivery survey still the same problem is recurring. There is no readily available databases on external customers. For example, in this SDS Research teams were told about presence of significant number of Laboratory Service Customers. At the end of the day no addresses were provided. Same applies to other customers, "Retailers", "Permit Customers", where online TOOLS bounced back due to wrong or changed email addresses.

7.3.1.4 Review of Client Service Charter

From the findings it is evident that time line set does not include the time spent in addressing queries. Customers think that the counting start when they submit request for a service from TMDA. It is therefore important for TMDA to set realistic and achievable with timeline being counted upon submission of complete documents required. Time set should consider issues like server being down etc.

7.3.1.5 Training on customer care to staff

This is important for employees to be able to improve their empathy, responsiveness and overall customer service delivery

7.3.1.6 Introduce TMDA week

As part of increasing awareness about TMDA to the general public TMDA could introduce "TMDA Week" this could be celebrated every regions where TMDA has presence. Use of celebrities in the health sector to inform people about TMDA and motivate the general public to be keen on the quality of TMDA regulated product circulating in the country.

7.3.1.7 Use and Choice of the media

While media play crical role in creating awareness choice of the media to use is important. It is important for TMDA to choose media that have wide coverage. For example use of local radio where majority of the population are attracted to listen.

7.3.1.8 Marketing of TMDA laboratory services

Effort should be done to market TMDA services that could be offered to other organizations/people at a price. For example laboratory services that are available to the general public but little is done to market it. Staff who participate in Public education should be staff with marketing acumen.

7.3.1.9 Introduce TMDA football/ sports competition

TMDA could introduce community sports month/week where people in the communities could compete and the winning teams/individuals be given goat. TMDA staff could then use the opportunities of population gathering to watch sports to create awareness about the organization and what it does in the society.

7.3.2 Strategic Actions

- **Gradual expansion:** TMDA should strategically plan for increased coverage by having a strategic expansion schedule that will show steady increase in number of zones/mini offices in the country.
- **Public awareness and education about TMDA:** While there is an increase in Public awareness and education compared to previous SDSs public awareness and education about TMDA should be an on going activity since composition of the population change from time to time due to deaths, new births, population relocation etc.
- **Local government support:** There is a need to strategize on how TMDA could engage local government to support them in implementing its activities especially those related to surveillance. Mode of Local government support to TMDA should be well thought and financial implications should be considered for planning purposes especially on part of LG.
- **Disposal of expired medicine and medical devices:** Facilities requested TMDA to assume responsibility of disposing expired products at their costs.

SECTION EIGHT

APPENDIXES

List of Annexes:

1. Survey Tools.

References.

1. Clients' Service Charter, 4 th Edition June 2020, Tanzania Medicines and Medical Devices Authority.
2. Cochran, W.G (1963): Sampling Techniques, 2nd Edition, New York: John Wiley and Sons, Inc.
3. Finance Act No 8 of 2019 (Online Document), the United Republic of Tanzania, June.
4. Service Delivery Survey for the Tanzania Medicines and Medical Devices, December 2020
5. Strategic Plan 2021/22 – 2025/26, Revised Edition, Tanzania Medicines and Medical Devices Authority, April 2021.
6. Taarifa ya Utendaji Kazi 2018/2019, Tanzania Medicines and Medical Devices Authority.
7. Yamane, Taro (1967): Statistics, An Introductory Analysis, 2nd Edition, New York: Harper and Row.

