CUSTOMER SATISFACTION SURVEY

TANA WATER WORKS DEVELOPMENT AGENCY

NOVEMBER 2019

SURVEY REPORT

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EXECUTIVE SUMMARY

Tana Water Works Development Agency draws its mandate from Water Act 2016. It serves both rural and urban population by developing water supply infrastructure and sewerage infrastructure. It does this through stakeholder engagement and mainstreaming of cross-cutting issues.

Most TWWDA projects are funded by international partners on development. The national government chips in resources in way leave acquisition and payment of staff allowances during infrastructure development.

The Agency serves 31 sub-counties within 5 Counties of Nyeri; Kirinyaga; Embu; Tharaka Nithi and Meru of which out of the total area, 84% is covered by rural population, 40% is arid to semi-arid. 37% of the population gets water from supply schemes served by TWWDA.

The overall objective of this customer satisfaction survey was to get feedback on services offered by the Agency.

The category of respondents targeted included the TWWDA employees; and representatives of various partner institutions such as WSPs, County Government, similar Agencies and key informants (users).

Data collection was done using a structured questionnaire that included a ten point likert scale questions and open ended questions for comments. Direct Interview was conducted after questionnaires were filled to enhance

comments, particularly for respondents who did not provide comments in the questionnaire.

A response rate of 83% was realized from those who completed and returned the questionnaires. Out of the targeted 10 WSPs, 4 did not fill their questionnaires. A questionnaire that was submitted to the National Treasury was not returned. According to Brick and Kalton, 1996, a response rate of 60% for non-weighted sample segment is acceptable to infer reliable results. In few instances, it was noticed that some respondents were more comfortable with direct interview while others preferred self-administration of questionnaires.

The Overall Satisfaction Index was arrived at as an average score of individual survey parameters under investigation. The overall Customer Satisfaction Index (CSI) was at 77.9%. The Parameters that scored below the index were: Handling Challenges (71%); System Improvement (61.2%) and Conflict Resolution (77%).

Comparing the performance (77.9%) versus expectation (79.6) of satisfaction levels, a small difference of 1.7% was realized; meaning the respondents had no over expectations in the expansion of infrastructure beyond what currently exists – they are accepting the situation the way it is. Only 27% of respondents agreed that things have improved in the last 3 years.

Satisfaction lagers/ trailers were:

1. System Improvement (61.2%)

2. Land and Way leave Acquisition (59%)
3. Knowledge management (59%)
4. Regular Sensitization (65%)
5. Resource Mobilization (66%)
6. Team building (56%)
7. Regular training (57%)

Conclusions & Recommendations were:

No	Conclusions	Recommendations
1	Old Infrastructure	Replace with new technology
2	Increasing population	Increase infrastructure coverage
3	Delay in works due to resistance	Use accommodative procedures in way-leave & project targeting
4	Unstructured usage of data	Adopt information driven by data
5	Perceived unfair targeting and political interference	Inclusion of community & stakeholders in regular and structured sensitization & awareness
6	Lack of immediate land for new infrastructural development	Quick and procedural acquisition of land/ way-leave
7	Lack of funds to cover all components of development in time	Mobilize more resources from government and other partners
8	Need for structured training program to staff	Have a proactive training timetable spread across the year

SECTION I: INTRODUCTION

1.1 Background

Tana Water Works Development Agency (TWWWDA) is one of the eight Water Works Agencies created under the Ministry of Water and Sanitation following the enactment of the Water Act (2016). TWWDA covers 31 Sub counties of Nyeri, Kirinyaga, Embu, Tharaka-Nithi and Meru covering an area of 19,169km2 with a population of 4,238,469 (2009 census).The estimated figure for 2015 is 4,537,000 projected from the 2009 population census with 16% urban and 84% rural. 40 per cent of the area is either arid or semi-arid. About 80 per cent of the residents live in the rural areas. Currently, 37 per cent of the population receives their water from water supply schemes that were inherited from the Ministry of Water and Sanitation.

The mandate of TWWDA is derived from water act 2016 which is to increase access to safe, adequate and sustainable water and sewerage Infrastructure to both the rural and urban populations within the area of its jurisdiction. To achieve this mandate, the Agency:

- Develops Water Supply Infrastructure
- Develops Sewerage Infrastructure
- Enriches Stakeholder Engagement
- Ensures Progressive Mainstreaming Of Cross Cutting Issues
- Enhances Institutional Capacity

VISION

An Innovative and Resourceful Institution in development of bulk water and sewerage works

MISSION

To develop sustainable National Public Water and Sewerage Works that enhances socio-economic growth for stakeholders

CORE VALUES

TWWDA upholds the following core values;

Competence: TWWDA strives to uphold high level of capability and innovativeness in all its activities.

Teamwork: TWWDA strives to value and promote team spirit

Quality: TWWDA strives to emphasize on excellence to comply and exceed the set standards

Integrity: TWWDA shall be honest and fair in all its undertakings

Customer Focus: TWWDA shall provide customer driven exceptional service that meets and exceeds customer's expectations

Good Governance: TWWDA shall practice good corporate governance in its services

Sustainable Development: TWWDA shall endeavor to develop utilities that meet the needs of the present generation without compromising the ability of the future generations to meet their own needs.

VALUE PROPOSITION

TWWDA has embedded the culture of performance through adoption of best practices, continual enhancement of human capital and structured upward mobility

MANDATE

i. Development, maintenance and management of National Public Water Works
ii. Operate Water Works and provide water services as a Water Service Provider as mandated by section 68 (b) of the Water Act 2016.
iii. Provide reserve capacity for purposes of providing water services as per section 68 (c) of the Water Act 2016.
iv. Provide Technical Services and Capacity Building to County governments and WSPs as may be requested.
v. Provide Technical Support to Water Cabinet Secretary in the discharge of their functions.

1.2 Aim of the Consultancy

The aim of the consultancy was to:

1. Obtain stakeholders feedback on how they rate the services offered by TWWDA;
2. Evaluate and determine customers satisfaction and expectations on the Agency's services of providing efficient and economical water and Sanitation Services, and
3. Check on Customers and Stakeholders perception towards the Agency. (NB: The stakeholders included employees, water service

Providers, County Governments within the Agency's jurisdiction area, other Water Sector Institutions and, among others.)

1.3 Approach

For the purpose of this assignment, both qualitative and quantitative approaches were used. The following were the envisioned steps in realization of these survey objectives:

i. The survey objectives were confirmed with TWWDA, through appointed contact persons, who also gave inputs into the contents and direction of questionnaire.
ii. Appropriate sample design, was agreed on to be derived from a list of customers and stakeholders provided by TWWDA contact person for the survey.
iii. Data was collected by enumerators and then analyzed across various segments using survey tool that captured both qualitative and quantitative data.
IV. Comments and suggestions of respondents that included emerging issues and desirers that were not in the questionnaire were also captured, collated and interpreted to fit the reporting parameters.

1.4 Expected Deliverables

The customer satisfaction was assessed using a satisfaction index as a measure; determine emerging issues on services based on respondents' awareness and respondents' perception on service(s) attributes.

All the data that emerged from the survey and other sources were aggregated. An analysis was done which culminated into a report,

presented in prose with computer generated charts, graphs and Tables. These were presented in form of a report.

SECTION II APPROACH AND METHODOLOGY

2.1 Approach

2.1.1 Customer Reach and Entry Point

Initiation of all data collection was done either through phone calls or email address or both with TWWDA contact persons. Phone calls were mainly used to book appointments with respective respondents and agree on mode of getting feedback from customers on survey parameters, with regards to their perception on TWWDA service delivery. For instance, to initiate data collection at TWWDA, client contact person was called to agree on time and date of data collection. An email communication was also sent to that effect to formalize data collection process. TWWDA prepared introduction letter to introduce the consultant which were used by consultant enumerators 'when delivering questionnaires to respondents. Holistically, communication with customers for purpose of this survey was on the basis of direct face – to face interaction. The questionnaires were self-administered and collected by enumerators after an agreed time. The enumerators were also available for consultations during the data collection exercise.

2.1.2 Information Gathering

Information about the survey parameters were gathered using questionnaires that requested both quantitative and qualitative information. Subsequent to identification of respondent and agreement on suitable approach to getting survey feedback, questionnaires were

delivered to respondents. the administration of the questionnaires were two faceted, where a responded would self-administer the questionnaire and hand it over for forwarding to consultant or have the enumerator take them through the questionnaire as they give response to each question.

2.2 Methodology

2.2.1 Sampling Technique

Purposive sampling was used to choose respondents. Purposive sampling is a non-probability sampling technique. Non-probability sampling focuses on sampling techniques where the respondents that are investigated are based on judgment.

The type of assumption used by consultant in this TWWDA customers satisfaction survey is that the customers units do not share same or similar traits/characteristics (termed maximum variation). The ability of consultant to compare findings in such a survey with respondents from varied conditions/units depends on triangulation approaches considered for both qualitative and quantitative data to deduce generalized but reliable recommendations.

$H_{o:}$ *If it has not been perceived here; it has not been perceived there*

If the above hypothesis is true, the quantitative and qualitative data obtained in the survey are comparable and can be used to support the findings of the survey.

Respondents within each unit were considered to be equally likely to provide information on required survey parameters. The equal chance provided in each unit was important as a condition of independence of response. Practically this means that what we get from any respondent does not affect response from the other. Mathematically speaking, covariance between the two is zero. This simplified computation for the survey results.

It is noteworthy to mention that this survey technique can also be used as a component of other complex sampling methods. It is considered as a fair way of representing a population such as that of TWWDA customers as this allows the consultant to report on the response rate of the survey since the target population is known.

2.2.2 Desk/ Documents Review

The desk review enabled the consultant understand all the survey components and its implementation. At this stage, the information gaps were identified and addressed jointly together with representatives from TWWDA. Key issues reviewed at this stage were: vision, mission, mandate, and service point activities related to TWWDA customers. The consultant was aware that information on TWWDA services was of specific importance to its customer satisfaction.

2.2.3 Preliminary Activities (Mobilization and Planning)

The preliminary activities involved contract signing, resource mobilization, familiarization with the TWWDA and communication with TWWDA about the assignment kick off. This step enabled both TWWDA and the consultant to get complete understanding of specific required activities. The consultants asked for clarification on steps and outcomes of the survey. The consultant was briefed by client on their policy and philosophical viewpoint of the survey as a whole. The consultant proposed a meeting with the client to:

1. Determine the level of participation of consultant and TWWDA representative
2. Discuss and agree on the scope and duration of work
3. Confirm understanding of the objectives of the assignment
4. Agree on proposed approach and methodology
5. Agree on expected outputs and set deadlines for their submission
6. Agree on the report structure.

2.2.4 Data Collection Tools

During review, the consultants met with the client to discuss the efficacy of data collection instruments to be used for gathering relevant data. The client provided their comments and suggestions to be included in the final data collection tools. This was agreed to form basis of all survey parameters. A draft questionnaire was submitted to client for verification,

validation and approval within a timeframe, thereafter, the consultant proceeded with data collection.

The customer questionnaire captured satisfaction levels among factors for qualitative data. There were also open ended questions in form of reasons for response and comments/suggestions on TWWDA service delivery improvement. These together with qualitative information filled by TWWDA customers formed the basis of suggestions for improvement in the survey report.

2.2.5 Data Collection, Entry and Analysis

Data coding and entry was done concurrently with data collection. After which the consultant embarked on analysis of the data, comments and observations obtained from the survey. The consultant carried out data coding, framework development for data entry and analysis of data collected in MS Excel and SPSS Platforms. After analysis the consultant came up with an overall satisfaction index (SI).

2.2.6 Reporting

The consultant presented a report to TWWDA on the results of the entire survey exercise. This was done in hard-bound and soft copies of the report. The report was prepared in MS word platform, while tables and pie charts were drawn in MS excel platform.

2.3 Satisfaction Index

Satisfaction index is a single numerical figure that measures the extent to which the respondents are satisfied. It is used to measure the responses to one or more questions (factors) that ask about the same idea. The index is obtained through SPSS statistical software using the principle of weighted average method as follows:

The frequencies (tallies) for different satisfaction levels were obtained and then multiplied by the respective weights for every factor under investigation to obtain the variable. The sum of the product obtained was then divided by the sum of tallies for every factor to obtain a mean score within a Likert scale of **1-10.** This mean score is then multiplied by index interval; in this case **10** for a range of 0 to 100 to enable presentation of results in percentages. The underlying notion is summarized as follows:

$I \sum_{i}^{n} x_i$ Where;

$n = number\ of\ (agreement)\ levels$

$I = index\ interval\ given\ as\ 100/n$

$\sum x_i = mean\ score$

Note: SPSS is used to do all these in one step.

the mean score itself is stable and not affected when various regions (subgroups) of composite interest groups have varying population such as having different number of respondents in different departments or section

based on TWWDA structure; so long as the method for picking sample size is consistent across the subgroups. Therefore, the weighted composite index derived as average of mean scores from different subgroups will be the same as an index obtained directly without subdividing the subgroups so long as the same respondents are retained in the analysis. In this case, the main reason for collecting data within subgroups was therefore to get a clearer picture of their contribution to the composite index. The index can then be tracked over time thus forming a useful trend.

2.4 Itinerary of Deliverables

Our Work Plan for the survey followed an activity based process. A summary of this process model: The following Itinerary of Deliverables was used during the survey

Table 2.1: Itinerary of Deliverables

No.	Description	Period	
		From	**To**
1.	Letter of Award	29/7/2019	29/7/2019
2.	Contract Signing Meeting	15/8/2019	15/8/2019
3.	Contract Signing	15/8/2019	15/8/2019
4.	Signing of meeting Minutes	19/8/2019	19/8/2019
5.	Submission & Receipt of signed Minutes	19/8/2019	20/8/2019
6.	Submission of Data Collection Tool & Schedule	06/9/2019	06/9/2019
7	**Data Collection**		
a.	Data Collection at WASREB	06/9/2019	06/9/2019
b.	Data Collection at Min. of Water and Sanitation	06/9/2019	06/9/2019
c.	Data Collection at WSTF	06/9/2019	06/9/2019
d.	Data Collection at AWWDA	06/9/2019	06/9/2019
e.	Data Collection at Water Resources Authority	11/9/2019	11/9/2019
f.	Data Collection at Inspectorate of State Corporations	11/9/2019	11/9/2019

No.	Description	Period	
		From	To
g.	Data Collection at Public Service Performance Management Unit	11/9/2019	11/9/2019
h.	Data Collection at KEWI	11/9/2019	11/9/2019
i.	Data Collection at National Water and Storage Authority	11/9/2019	11/9/2019
j.	Data Collection at County Government of Nyeri	13/9/2019	13/9/2019
k.	Data Collection at TEAWASCO	13/9/2019	13/9/2019
l.	Data Collection at NYEWASCO	13/9/2019	13/9/2019
m.	Data Collection at Coast Water Works Development Agency	23/9/2019	23/9/2019
n.	Data Collection at IMETHA	24/9/2019	24/9/2019
o	Data Collection at Meru County Government	24/9/2019	24/9/2019
p.	Data Collection at Nithi Water and Sanitation Company (NIWASCO)	24/9/2019	24/9/2019
q.	Data Collection at Tharaka Nithi County Government	24/9/2019	24/9/2019
r.	Data Collection at Embu Water and Sanitation Company Ltd (EWASCO)	24/9/2019	24/9/2019
s.	Data Collection at Embu County Government	24/9/2019	24/9/2019
t.	Data Collection at Kirinyaga Water and Sanitation Company (KIRIWASCO)	24/9/2019	24/9/2019
u.	Data Collection at Kirinyaga County	24/9/2019	24/9/2019
v.	Data Collection at Tanathi WWDA	24/9/2019	24/9/2019
w.	Data Collection at Northern Water Works Development Agency	25/9/2019	25/9/2019
x.	Data Collection at Lake Victoria South WWDA	26/9/2019	26/9/2019
y.	Data Collection at Lake Victoria North WWDA	26/9/2019	26/9/2019
z.	Data Collection at Rift Valley WWDA	27/9/2019	27/9/2019
8.	Report Writing	30/9/2019	31/10/2019

SECTION III SURVEY FINDING

3.1 Response Rate

Response rate is a ratio between respondents who completed and returned survey questionnaires to those who were actually given the survey questionnaire. It is also known as completion rate or return rate. The consultant's approach in obtaining respondents was participatory, collaborative and inclusive. The survey targeted both key customers and partners as provided by TWWDA. The institutions were visited for data collection and response rate was as depicted in Table 3.1 and Figure 3.1 below.

Table 3.1: Response Rate

Name	Targeted	Achieved	Response (%)
The Ministry of Water and Sanitation	1	1	100
Water Works Agencies	7	7	100
Water Service Provider Companies	10	6	60
TWWDA Employees	11	11	100
Water Sector Institutions	5	5	100
National Treasury	1	0	0
Inspectorate of State Corporations	1	1	100
Performance Management Coordination Unit	1	1	100
Average Response Rate (%)			**83**

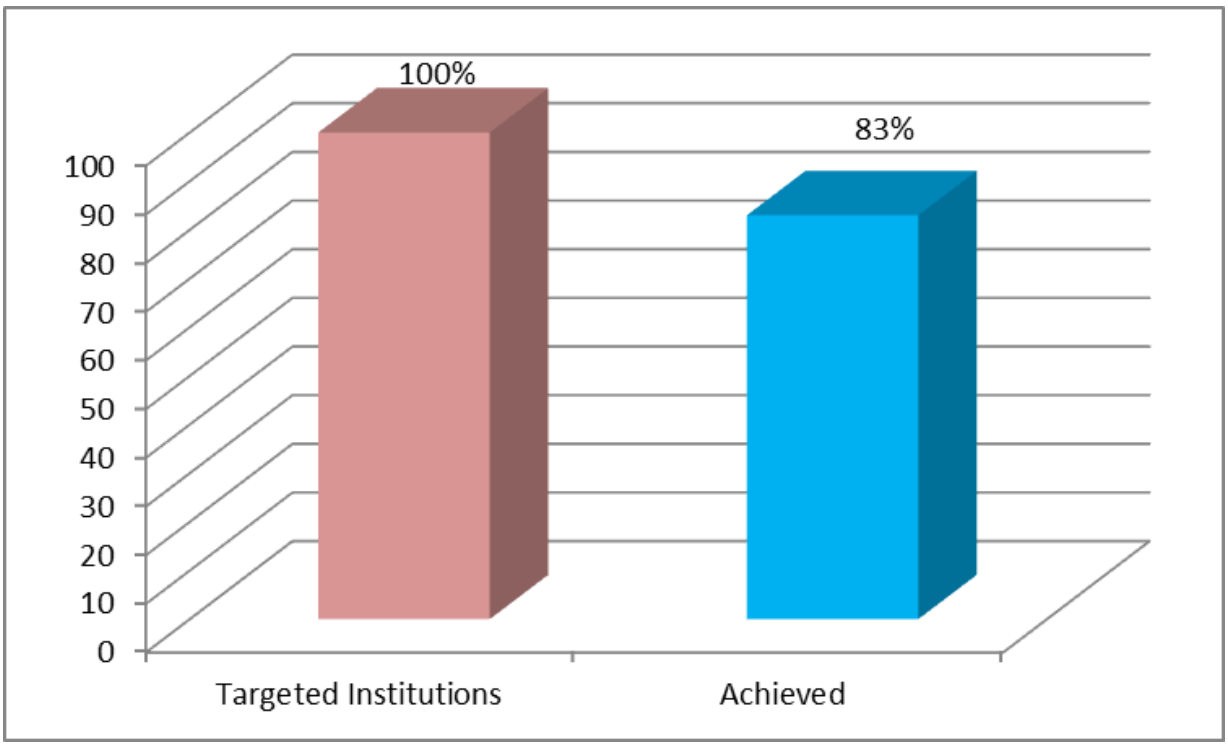

Figure 3.1: *Response Rate*

Average response rate for TWWDA customer satisfaction survey was 83%. According to *Visseret Al (1996)*, response rate is not a measure of survey accuracy. It can however help know if particular sensitivity or difficulty is affecting completion or return of survey instruments. Indeed, from the targeted WSPs, response was obtained from six out of ten institutions; there was no response from National treasury. *Keeteret Al (2006)* confirmed that there are instances where low response rate, as low as 20%, could still yield more accurate results than did surveys with higher response rates. Brick and *Kalton, (1996)* proposed a minimum standard of 60% response rate for non-weighted sample segment and 80% for weighted segment; they concluded that weighting samples reduces errors associated with non-responsiveness. In a separate study, *schaefer and dillman (1998)* postulated that multimode approach in administering survey questionnaires would

increase response rate. For instance, sending a questionnaire by email, then follow up with a phone call and may be booking appointments to collect the questionnaires or filling the questionnaire on phone for potential non responsive targets.

This study built on understanding that TWWDA customers and stakeholders views and opinions on service delivery was key to improvement of services at TWWDA. These institutions were identified and formed part of respondents for the customer satisfaction survey.

3.2 Customer Satisfaction Index

An overall customer satisfaction index (CSI) for TWWDA was established as **77.9%.** Scores per selected data collection parameters were as depicted in Table 3.2 below:

Table 3.2: Overall Customer Satisfaction Index

No	Parameter	Score (%)
1	Handling Challenges	71.0
2	Quality Management Process	78.7
3	System Improvement	61.2
4	Staff Management	78.5
5	Conflict Resolution	77.0
6	Stakeholder Involvement	85.3
7	Reliability of Supply	93.7
Average		**77.9**

Figure 3.2: *Overall Customer Satisfaction Index*

3.2.1 Handling Challenges

The average score for "Handling Challenges" was 71%. "Timely completion of projects" scored the highest with 95.0% followed by "Increased Water Coverage" 84.0% next was "Improved automation level" 67.0% next was "Enhanced Staff capacity building" with 63.0% followed by "Increased Sewerage coverage" 61.0% and finally "Reliable water storage" came last with 56.0% as shown in Table 3.3 and illustrated in Figure 3.3 below

Table 3.3: Handling Challenges

No	Parameters	Score (%)
1	Increased Water Coverage	84
2	Increased Sewerage coverage	61
3	Reliable water storage	56
4	Improved automation level	67
5	Enhanced Staff capacity building	63
6	Timely completion of projects	95
	Average	**71**

The challenge cited by respondents included the ability to have structures in place to reach all people who are in need of water and sewerage services. The scale for need of water and sanitation is huge in the area. There is no one size-fits-it-all solutions, as variability of challenges are experienced from place to place and from time to time. Sustainability of water works with minimal resources is one of the greatest challenges that need to be looked at urgently since population of the area is also growing to surpass the existing infrastructure.

Water and sanitation infrastructure is costly in up-front capital. Other costly areas are operations and maintenance making it difficult to fund it to reach all marginalized communities. The delay in repairing structures that are not working is a failure on sustainability due to low coverage.

Water and sanitation are intertwined and thus need for integration for a satisfactory impact. These can only be achieved by adequate resources and built capacity to the satisfaction of TWWDA customers.

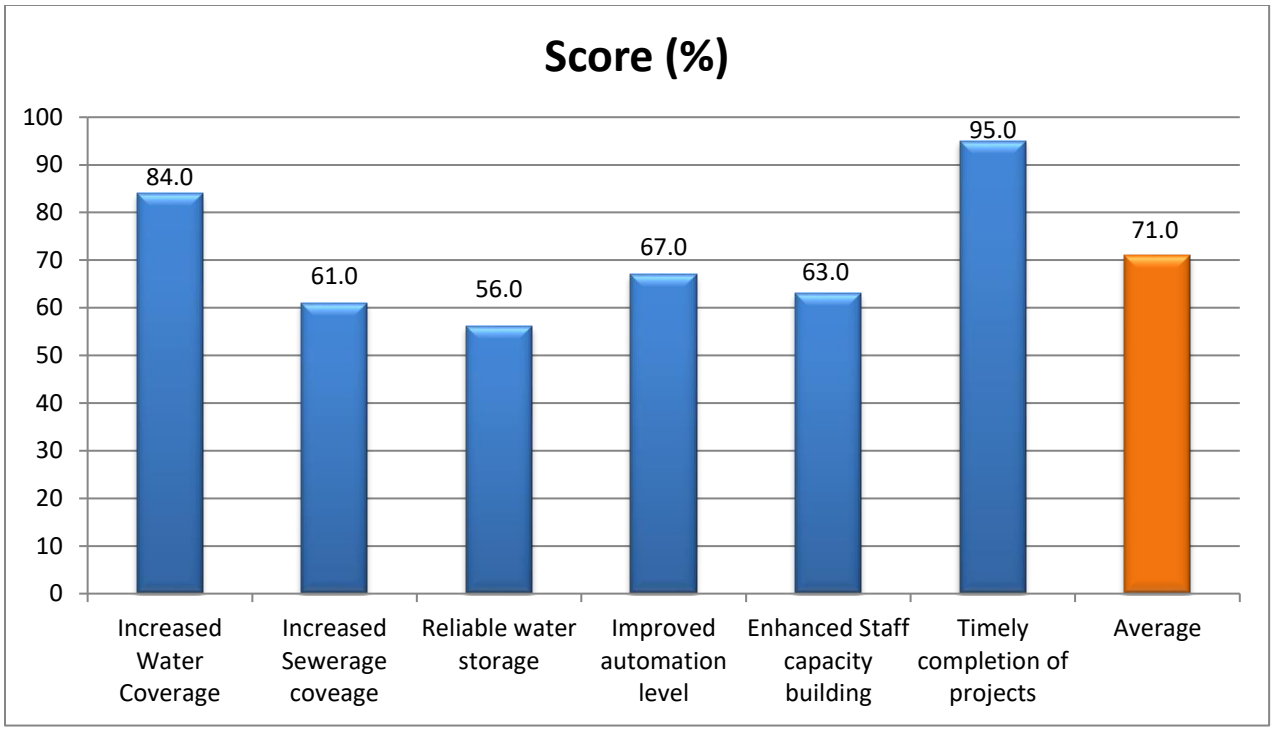

Figure 3.3: *Customer Satisfaction Levels per Parameter*

Respondents Comments

- In terms of infrastructural development, the institution has depended mostly on development partners funding and minimum government counterpart funding
- More budgetary allocation is needed to improve automation level

3.2.2 Quality Management Process

The average score for "Quality Management Process" was 78.7%. "Adherence to corporate governance" scored the highest with 97.0% followed by "Relation with development partners" 93.0%, then followed by "Funding from development partners" 84.0% next was "Risk management" with 80.0% followed by "Land & way leaves acquisition" & "Knowledge management" both with 59.0% as shown in Table 3.4 and illustrated in Figure 3.4 below

Table 3.4: Quality Management Process

No	Parameters	Score (%)
1	Funding from development partners	84
2	Land & way leaves acquisition	59
3	Adherence to corporate governance	97
4	Knowledge management	59
5	Relation with development partners	93
6	Risk management	80
	Average	**78.7**

Quality at TWWDA is achieved through a set of activities that are undertaken to ensure compliance and specifically sustainability of water works infrastructure and safety of water.

The quality process at TWWDA in general includes:

i. Planning
ii. Data collection
iii. Control
iv. Documentation
v. Evaluation
vi. Reporting

The purpose of quality management process is essentially error control to ensure accurate and reliable production to help TWWDA to achieve desired goals.

Possible outcomes of poor quality management process are:

- Reported cases of illness among water users
- Lack of safety in operating the water infrastructure

These hazards can be eliminated by having a written quality assurance and quality control policy. This serves to assure both consumers and regulators

that the water works system or infrastructure in place produce safe and quality water.

The benefits of implementing quality assurance and control measures include:

- Public health protection
- Protected source waters
- Well maintained treatment & distribution system
- Management of costs
- Informed communication with the public
- Environmental protection

TWWDA must show leadership in managing quality process at all times by committing to continually improve the performance of the waterworks. There must also be collaboration and consultations with other agencies, particularly for aspects that extend to responsibilities beyond TWWDA; In this case implementation would require collaboration and consultations.

Some of the issues reported by respondents that would require the attention of TWWDA are:

- Checking variations in raw water quality
- Major spills
- Open/ uncovered reservoirs
- Algel blooms
- Soil erosion
- Inadequate mixing
- Equipment malfunctions
- Power failures
- Human, animal, bird access

- Aged pipes/ systems
- Emergency response
- Training of personnel in record keeping & reporting
- Awareness & sensitization to the public
- Adequate financing

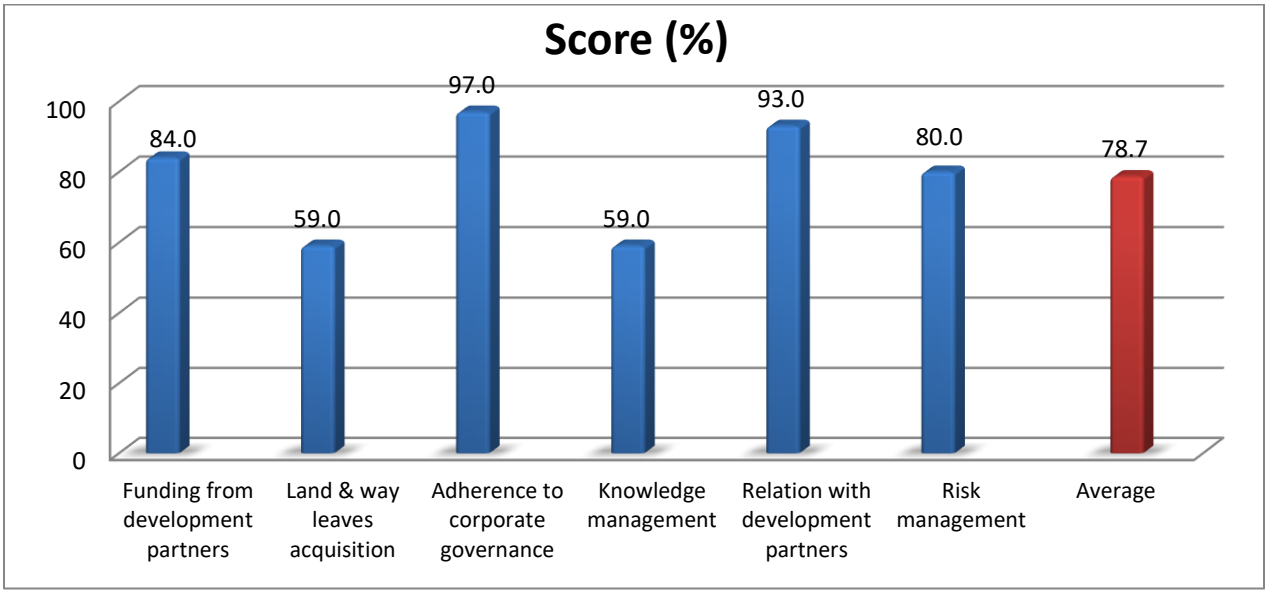

Figure 3.4: *Quality Management Process*

Quality Management Process Comment

- There is need for knowledge transfer through mentoring

3.2.3 System Improvement

The average score for "System Improvement" was 61.2%. "Staff retention" scored the highest with 74.0% followed by "Use of technology" 72.0% , then followed by "Resource mobilization" 66.0% followed by "Team building" 53.0% next was "Alternative financing" at 52.0%,and finally "Meter collection" came last with 50.0% as shown in Table 3.5 and illustrated in Figure 3.5 below

Table 3.5: System Improvement

No	Parameters	Score (%)
1	Use of technology	72
2	Meter collection	50
3	Resource mobilization	66
4	Staff retention	74
5	Team building	53
6	Alternative financing	52
	Average	**61.2**

The purpose of system improvement is to ensure water supply system sustainability. A sustainable system is one that can meet performance requirements over the desired long-term.

This sustainability aspect of system improvement is much more than just complying with regulations but also meeting long terms users demands in the area.

The target of system improvement would be to:

- Meeting service expectations
- Satisfy future demands
- Adhere to regulatory requirements
- Meet capacity that include: technical institutional and financial for current and long term requirements

TWWDA need to periodically evaluate present and future plans, processes, skills and services to seek to identify options and solutions that will

promote sustainability in every effort of system improvement that they employ.

Some of the challenges to system and system improvement as reported by respondents include:

1. Changing regulations
2. Possible legal liability
3. Financial distress
4. User/ provider resistance

TWWDA can solve such challenges by looking into the following possible areas of solutions:

- Having adequate skilled staff
- Meet WASREB requirements
- Adhere to prudent latest technology
- Look for alternative financing
- Work within relevant legal frameworks

Lack of sufficient resources and particularly financial resources to maintain water systems' infrastructure is a major setback particularly in the ever increasing population. The population equation also affects staffing in addition to infrastructure capacity.

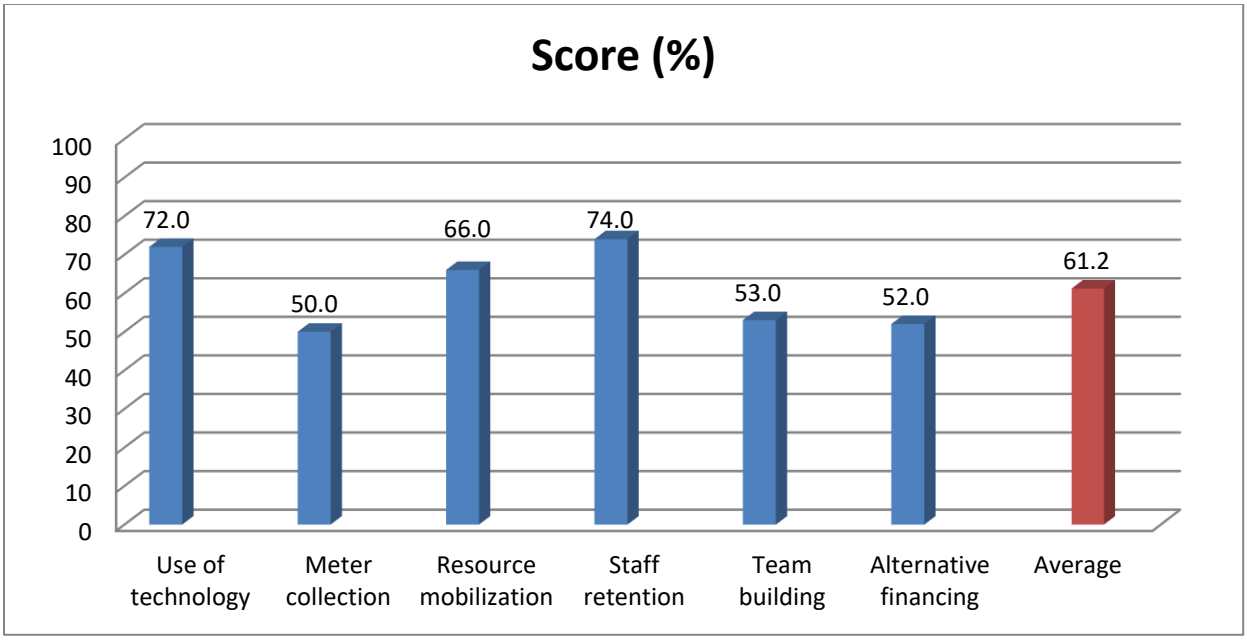

Figure 3.5: *System Improvement*

System Improvement Comments

- Alternative financing through Public Private Partnerships should be encouraged
- Although use of technology is well embraced, more focus is required on improvement transfer e.g. hardwires & software of current trends
- Staff welfare should be enhanced to motivate and retain workforce

3.2.4 Staff Management

The average score for "Staff Management" was 78.5%. "Collaboration with state actors" scored the highest with 97.0% followed by "Compliance with regulations & policies" 96.0%, then followed by "Mobilization of community sense of ownership" 80.0% next was "Handling litigation" at 77.0%, next was "Marketing strategy" at 65.0%,and finally "Career progression" came last with 56.0% as shown in table 3.6 and illustrated in figure 3.6 below.

Table 3.6: Staff Management

No	Parameters	Score (%)
1	Career progression	56
2	Collaboration with state actors	97
3	Marketing strategy	65
4	Handling litigation	77
5	Compliance with regulations & policies	96
6	Mobilization of community sense of ownership	80
	Average	**78.5**

At management level, it is important to focus on all important operational areas rather than reactively moving from one problem to the next. This is basically achieved through continual improvement in management and maximization of resources to improve performance.

The Staff culture at TWWDA should be ready to self-evaluation of operations and identify where to begin improvement efforts. This will help the top managers to gain more insights or comprehensive picture of what other junior staff are going through at TWWDA.

TWWDA should set clear expectations for everyone per department. Improving individual or departmental performance through measurable indicators are some of the structures that TWWDA may focus on. The other is teamwork that builds momentum and natures a change-ready mindset among employees.

TWWDA needs to benchmark with other similar agencies on the issues of staff management, career progression, compliance and even strategies employed in the market, including collaborations and mobilization of

ownership. This way TWWDA will not only garner significant trust of its staff on how it is handling people issues but also significant buy-in in creating momentum to continue advancing process improvements and activities related to TWWDA strategic goals.

There should never be a discrepancy between employee achievements or performance and leadership players. This gap can be narrowed when there is a training program for the employees and on the other side, a succession plan to address pending turn-over of the executive team. TWWDA should adhere to employee and leadership that is committed to its mission and vision and are happy enough to make customers/ stakeholders happy too at service levels.

Some of the areas mentioned to be looked at by TWWDA are:

- Service coverage
- Disruption of service
- Training coverage
- Knowledge management
- Leverage technology
- Team work
- Communication
- Complaints handling

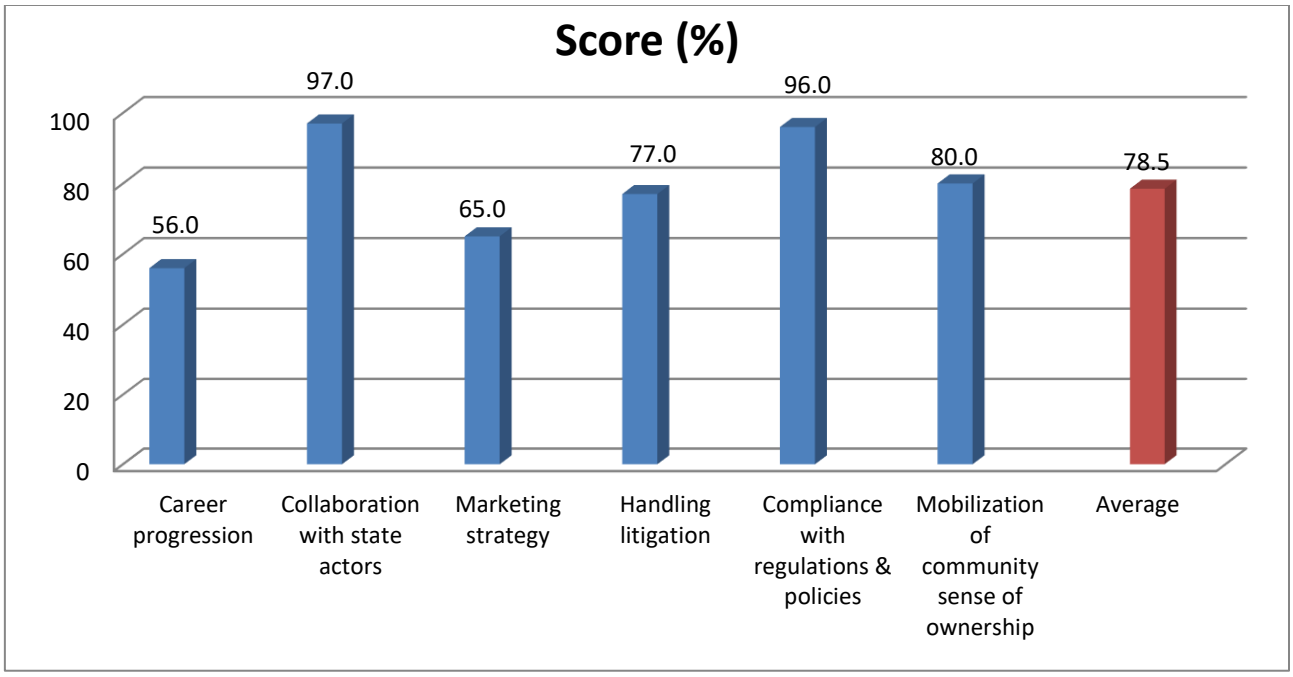

Figure 3.6: *Staff Management*

3.2.5 Conflict Resolution

The average score for "Conflict Resolution" was 77.0%. "Offer quality services" scored the highest with 90.0% followed by "Accountability and transparency" 89.0%, then followed by "Information sharing" with 84.0% followed by "Timely communication" 77.0%, next was "Regular sensitization" at 65.0%,and finally "Regular training" came last with 57.0% as shown in Table 3.7 and illustrated in Figure 3.7 below.

Table 3.7: Conflict Resolution

No	Parameters	Score (%)
1	Accountability and transparency	89
2	Information sharing	84
3	Timely communication	77
4	Offer quality services	90
5	Regular training	57
6	Regular sensitization	65
	Average	**77.0**

To solve water conflicts, there is need for a close working relationship between stakeholders and the communities around TWWDA area of operation. Conflict on water by communities mainly occurs when the demand, in terms of usage is higher than the supply. TWWDA would then need to engage the communities and see how either the supply can be increased over a period of time or decrease demand to provide for equitable usage. Target on areas such as agricultural usage and on technological usage can help decrease demand.

Good governance is the responsibility of all stakeholders that work with TWWDA. Common measures to promote and monitor transparency & accountability would culminate in the creation of non-conflict interactions between various institutions and also the users. Some of the areas of lack of transparency are:

Unfair targeting of services & investment

Compromised professionalism

Incomplete works

Political interference

This can be sorted by removing conflict of interest in oversight and strengthening corporate governance of all stakeholders. This will also stop hindrance by lack of coordination due to fear entrenched in favored interests.

Sharing good practices, lessons learned and useful experiences, by agencies and WSPs is important to enhance the understanding of what is happening on

the ground. Part of the feedback in sharing can also be used in capacity building and enhancing institutional framework to the satisfaction of all stakeholders hence fostering harmony.

Therefore, there is need for clear and timely communication practices to contribute to the success of information gathering; this may involve media and civil groups to avoid dissemination of negative, unpleasant or unwelcome information that might lead to conflict.

Stakeholders can also be directly sensitized by TWWDA with an aim to enhancing awareness and building capacity and increasing transparency in water works activities. Sensitization and capacity building information can also be shared in the agency website. TWWDA would also need training to handle such responsibilities related to their duties at the agency. TWWDA should find it necessary to organize Training programs for water works operators so as to be acquainted with provision of a range of water quality services to the interest of all stakeholders in particular the regulators.

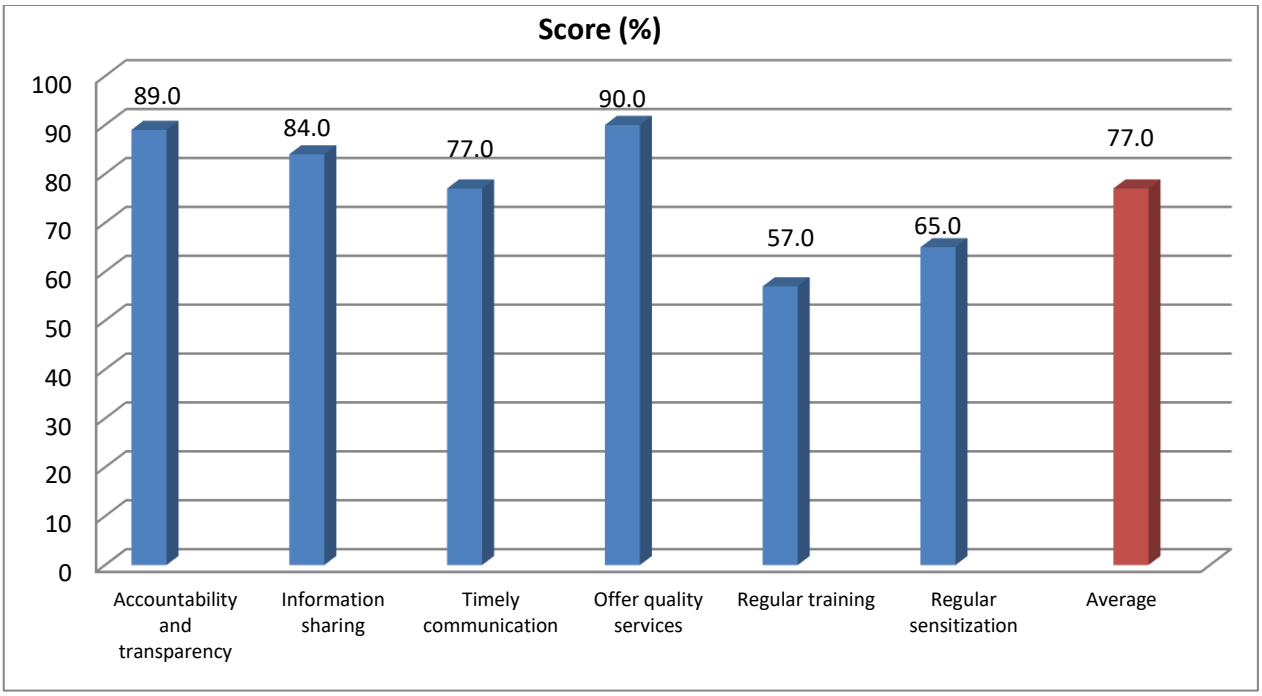

Figure 3.7: *Conflict Resolution*

Conflict Resolution Comments

- Before commencement of any project, serious public participation is undertaken
- Regular training is required to equip staff with relevant and latest skills/technology and improve competency level

3.2.6 Stakeholder Involvement

The average score for "Stakeholder Involvement" was 85.3%. "Organization's reputation" scored the highest with 97.0% followed by "Public participation forums" 91.0%, then followed by "Institutional Capacity" with 84.0% followed by "Water supply infrastructure" 83.0%, next was "Sewerage infrastructure" at 79.0%,and finally "Stakeholder engagement" came last with 78.0% as shown in Table 3.8 and illustrated in Figure 3.8 below.

Table 3.8: Stakeholder Involvement

No	Parameters	Score (%)
1	Public participation forums	91
2	Organization's reputation	97
3	Water supply infrastructure	83
4	Sewerage infrastructure	79
5	Stakeholder engagement	78
6	Institutional Capacity	84
	Average	**85.3**

Stakeholder involvement in TWWDA should be in form of bottom-up approach. This ensures that plans take into consideration local needs, experiences and interests. Things to look at would be:

Cultural differences

Preferred water users

Climatic conditions/ weather conditions

Stakeholder engagement would be more preferred to the public participation because the former allows groups or individuals who can affect or affected by TWWDA plans and projects to be involved in the decision making process. It is a more focused approach as it underlines the deeper, more personalized stakes at hand in decision making.

The place of public participation would be to draw lessons learnt from other sector players - looking for new ideas.

Stakeholder participation in the case of TWWDA would include relevant County departments; NGOs, CBOs, FBOs, involved in the implementation process, private sector, WUAs, WSPs, WRUAs, International Development partners and relevant National Government ministries.

TWWDA reputation lies on how it integrates stakeholder participation into its strategies and service delivery plan to show its commitment to the same. This would position TWWDA as well placed in a manner to continue to play a key role as an enabler for success of water works activities.

The most significant aspect of stakeholder involvement is the continuity of water supply and waste water treatment for all infrastructure existing and those in the pipeline dream.

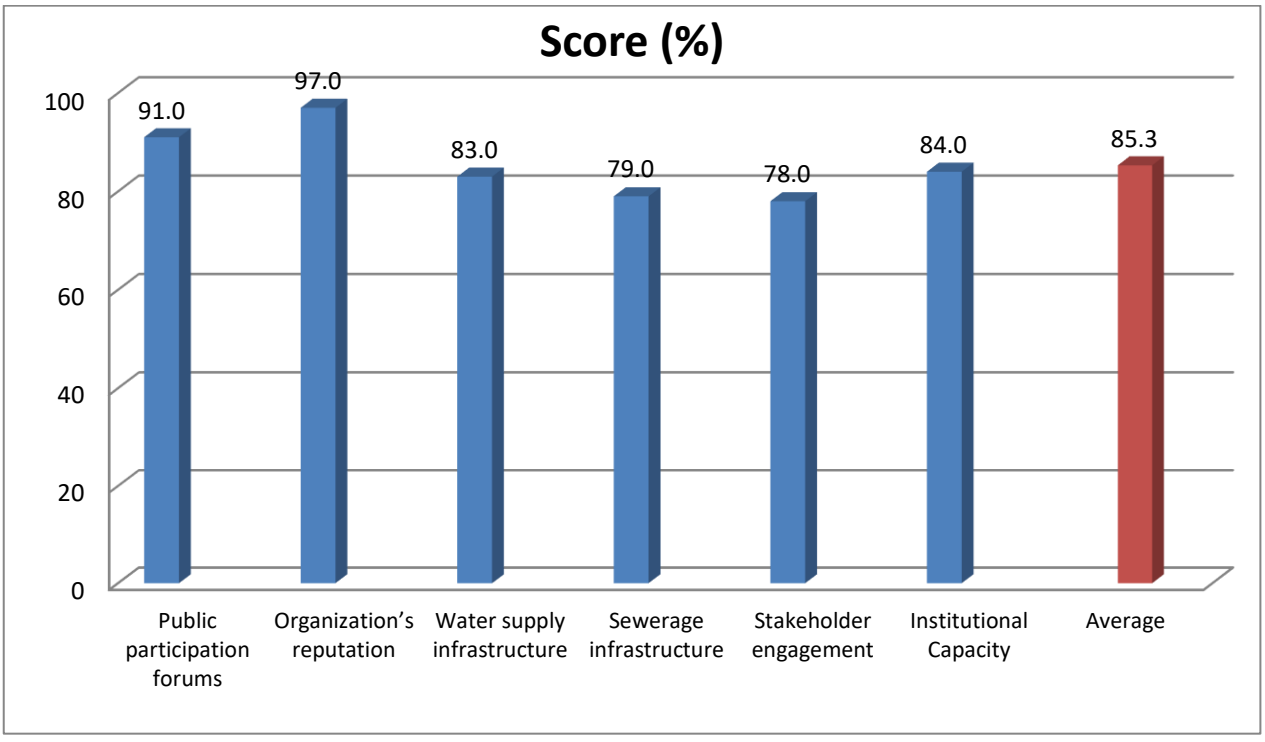

Figure 3.8: *Stakeholder Involvement*

3.2.7 Reliability of Supply

The average score for "Reliability of Supply" was 93.7%. "TWWDA Vision, Mission, Core Values" scored the highest with 97.0% followed by "TWWDA Courtesy" 94.0%, and finally "Handling customer complaints" came last with 90.0% as shown in Table 3.9 and illustrated in Figure 3.9 below

Table 3.9: Reliability of Supply

No	Parameters	Score (%)
1	Handling customer complaints	90
2	TWWDA Courtesy	94
3	TWWDA Vision, Mission, Core Values	97
	Average	**93.7**

In terms of TWWDA operations, reliability of water supply system is shown by level of shortages emanating from failures of system's physical components. It is a probability that can be enhanced by increasing facilities, storage and capacity of pumping and pipelines. Time period of failure also affects reliability in that if it takes too much time before failure is re-instated then a capacity is lost to satisfy demand volume.

Failure may not be predictable, thus it is a random risk that TWWDA has to deal with in handling reliability factor through frequent repairs and maintenance.

TWWDA need to have data and knowledge of interfailure times and repair duration. This way, it will be possible to determine which facilities need to be expanded or added to the system to increase reliability.

When supply is not reliable, customers often complain. This calls for reliability in handling customer complains. Customers should be encouraged to forward complaints & suggestions on reliability either in person or through any acceptable method and be acknowledged within a period of time. While all complaints need to be treated in confidence, those who complain on reliability should be encouraged to identify themselves so as to lend credence to their complaints for actions to be taken.

TWWDA need to record all complaints including prompt action or follow up taken and use the same records for internal performance and processes evaluation and monitoring. The complaints should also be used for measuring quality of service and also form basis for revised targets for improvement and benchmarking.

In the spirit of courtesy, any achievements, challenges and lessons learnt should be given as feedback to customers. For instance, an achievement in the expansion of infrastructure to keep face with a complaint on reliability of supply due to population growth. This will not only enable TWWDA to achieve its vision and mission but also resonate well with its core values of: Competence; Teamwork; Quality; Integrity; Customer Focus; Good Governance and sustainable development to the satisfaction of all customers.

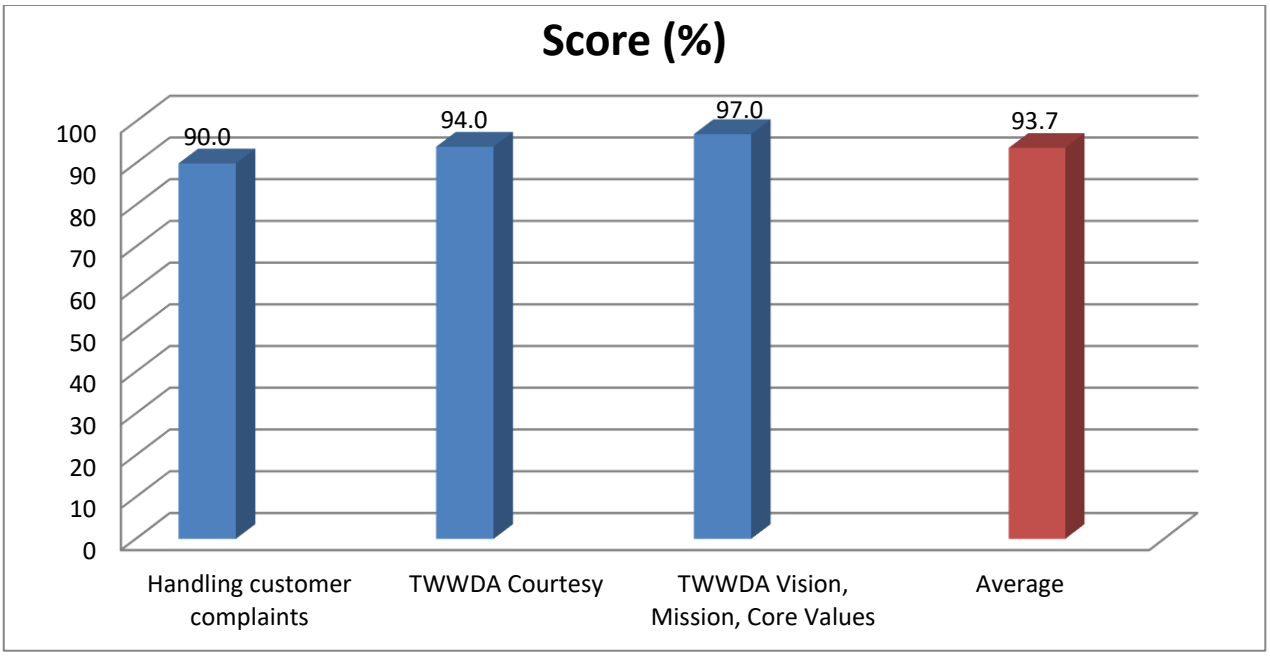

Figure 3.9: *Reliability of Supply*

Reliability of Supply Comments

- Enhance sustainability in WSPs in financing rehabilitation works, finance last mile connectivity projects in WSPs

General Comments

- Facilitate access to information
- Provide more laptops to technical officers
- Enhance stakeholder awareness and enhance career progression
- Work on staff team building and knowledge sharing
- Team building activities and enhancement of personnel emoluments
- Staff involvement to communicate on the required standards

3.3 Performance vs Expectation

Table 3.10: Performance (P) vs Expectations (E)

No.	Parameter	Performance (%)	Expectation (%)
1	Handling Challenges	71.0	82.0
2	Quality Management Process	78.7	89.0
3	System Improvement	61.2	62.0
4	Staff Management	78.5	77.0
5	Conflict Resolution	77.0	86.0
6	Stakeholder Involvement	85.3	90.0
7	Reliability of Supply	93.7	71.0
	Average	**77.9**	**79.6**

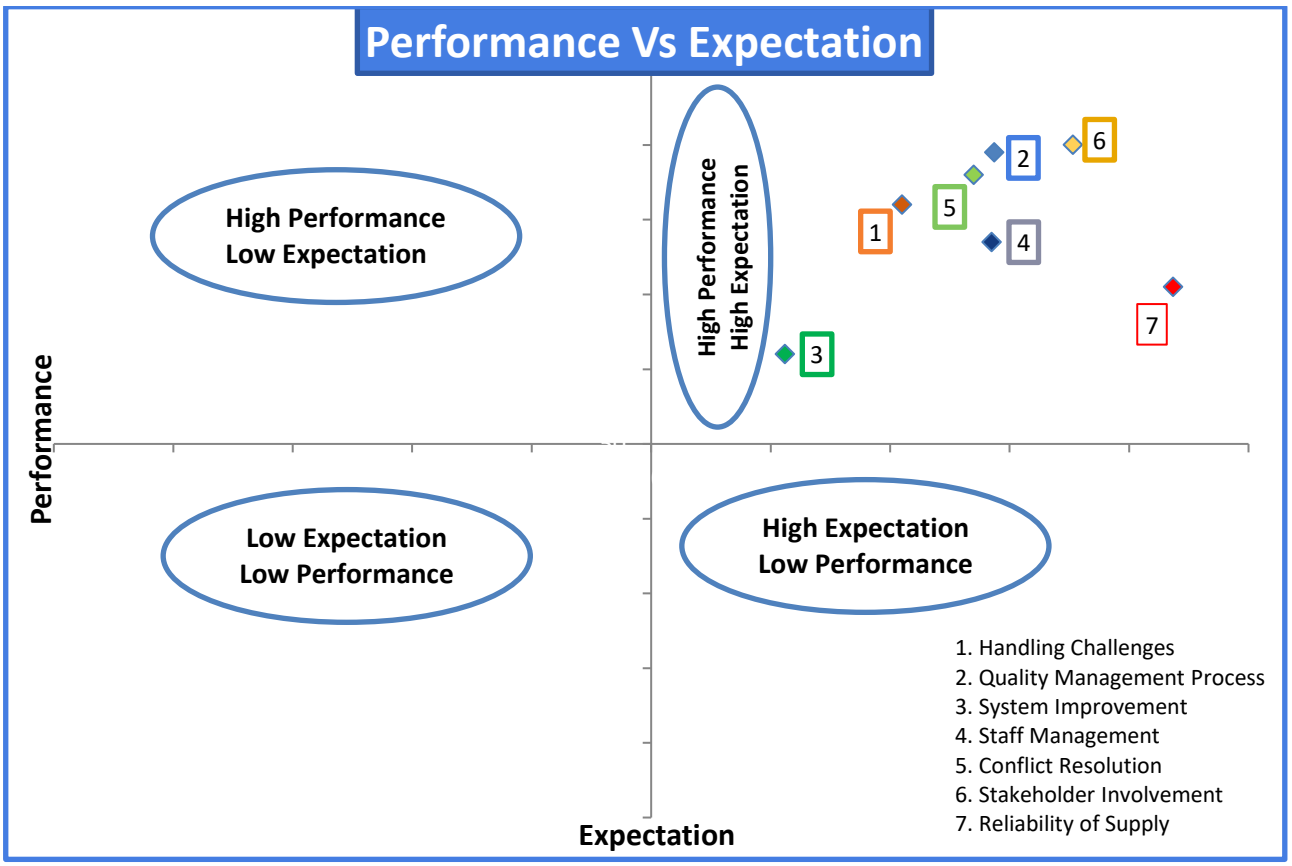

Figure 3.10: *Performance (P) vs Expectations (E)*

3.4 Gender Distribution

Among the respondents who participated in the interview, 91% were male and 9% were female, as shown in Figure 3.9 below.

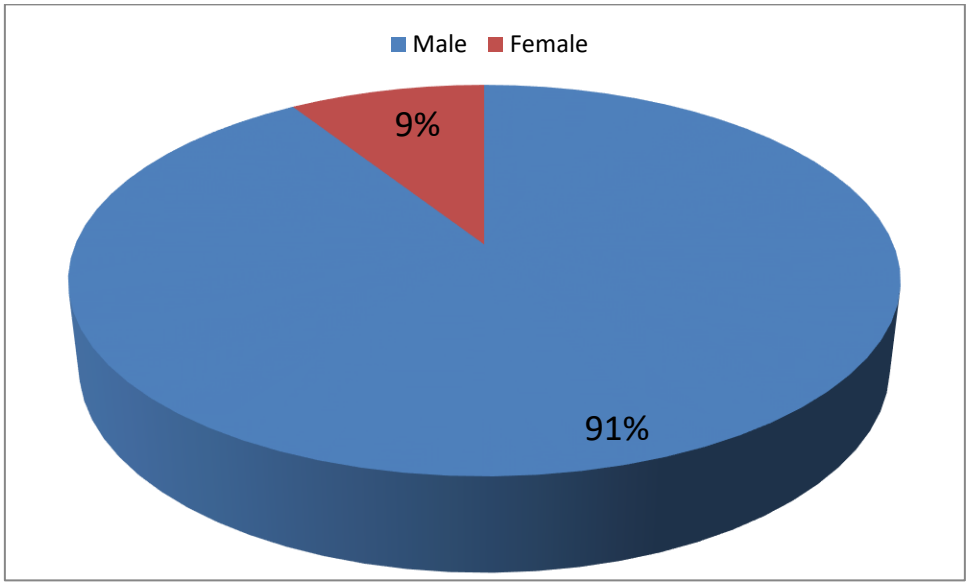

Figure 3.11: *Gender Distribution*

3.5 Age bracket

As shown in the figure below, 46% of the respondents interviewed are aged between 35 - 44 years, 27% for those between 25-34 years and those with 55 years and above at 18%, and least was those in the bracket of 45 – 54 years at 9% as shown in the Figure 3.10 below.

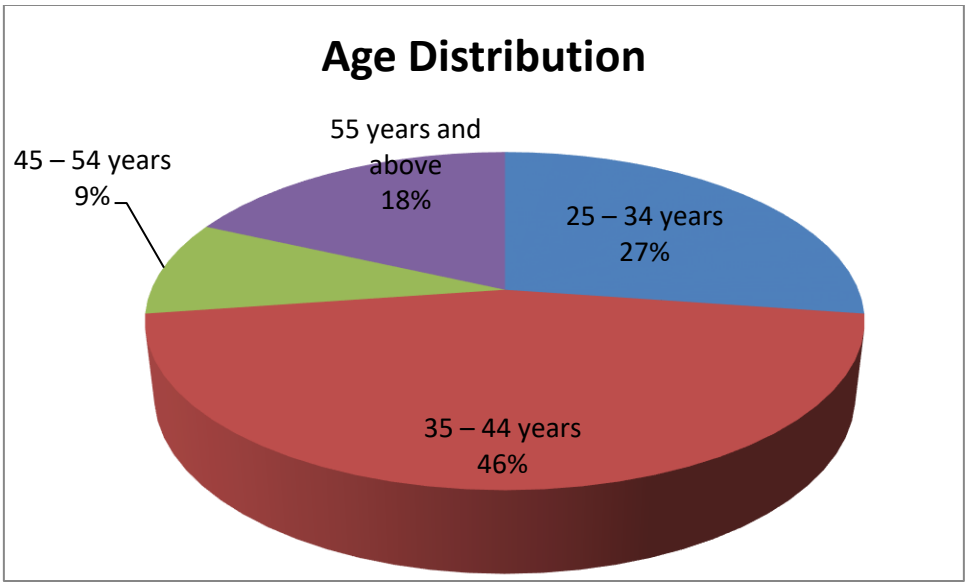

Figure 3.12: *Age Distribution*

3.6 Interaction with TWWDA

Among the respondents, 82% had interacted with TWWDA for more than 10 months, while 18% hand interacted with TWWDA for 7 – 12 months.

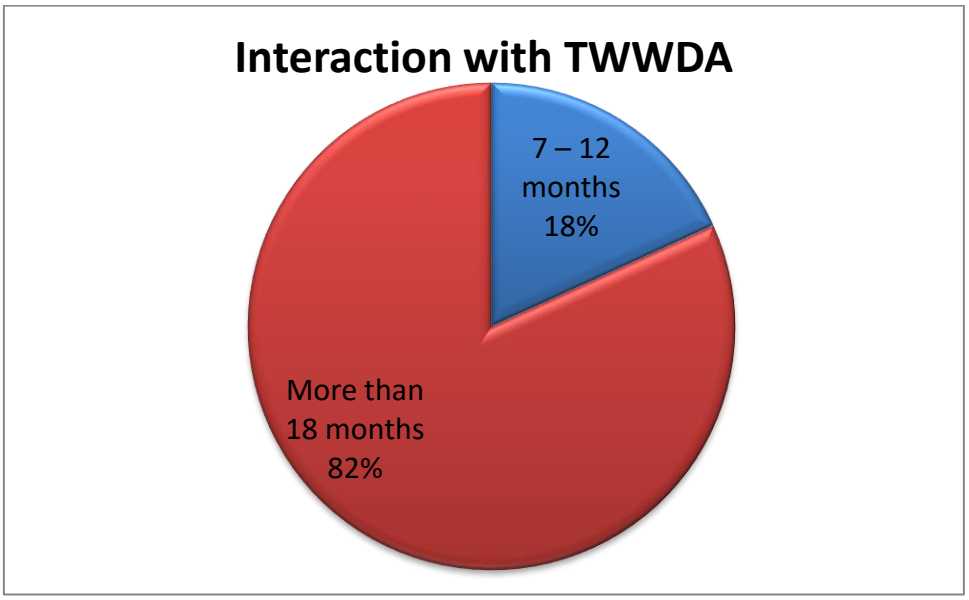

Figure 3.14: *Interaction with TWWDA*

3.7 Expected time to continue interacting with TWWDA

We sought to know how long the respondents intended to continue interacting with TWWDA. 40% would continue interacting with Tana Water for more than 10 years, 30% 5 – 10 years, 20% 2 – 5 years and 10% would continue the interaction for less than 1 year, as shown in figure 3.12 below.

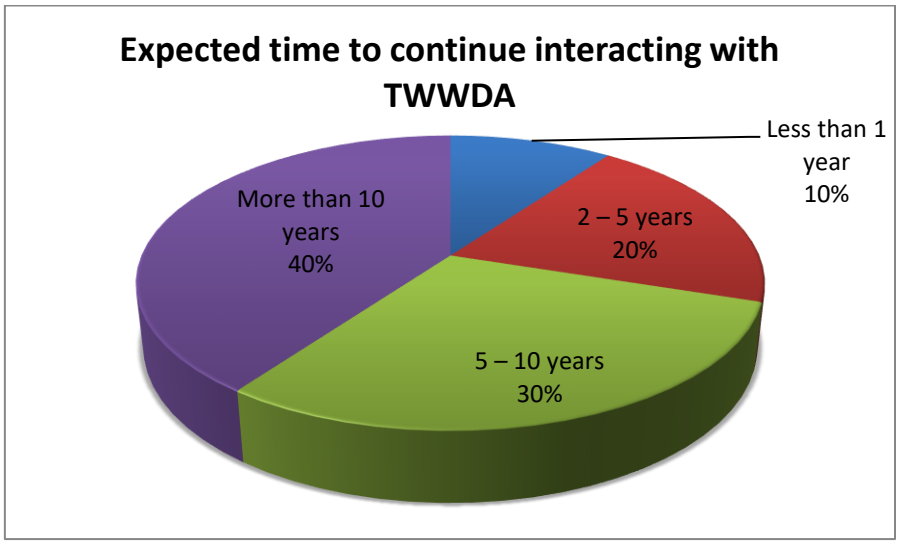

Figure 3.14: *Expected time to continue interacting with TWWDA*

3.8 Change at TWWDA

We sought to find out the extent things have improved at TWWDA for the last 3 years. The response was as shown in Figure 3.13 below.

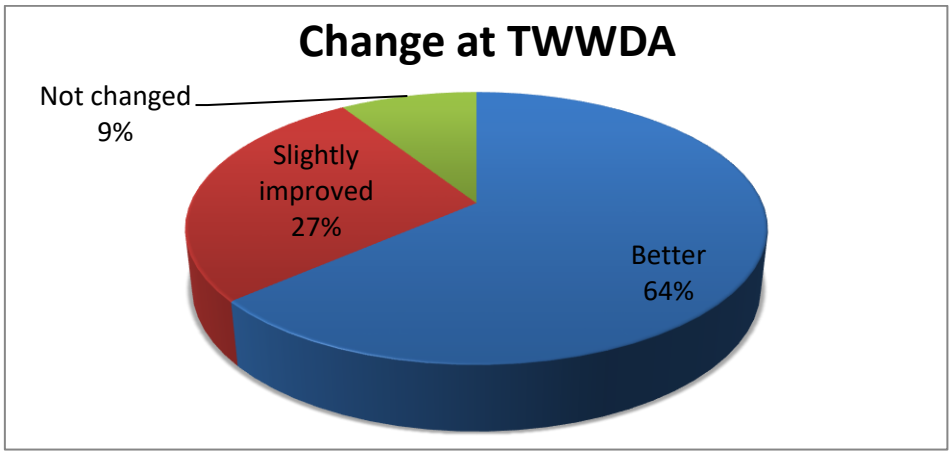

Figure 3.15: *Change at TWWDA*

SECTION IV CONCLUSION AND RECCOMENDATIONS

4.1 Conclusion

Currently the agency is using old technology and infrastructure that does not guarantee sustainability in terms of resource utilization. This makes it difficult to meet the water needs of the ever rising population in the area. Infrastructure coverage is reported to be low and obsolete leading to high costs of repair & maintenance. Some of the infrastructure that is currently in use has been in operation since 1960's.

Improper way-leave acquisition is a risk that is associated with legal liability. There should be a proper way-leave acquisition framework to avoid hostility from the community and court injunctions that delay work in progress.

There should be a structured way of cascading recorded data to help in decision making. This would be technical data such as: inter-failure time; repair duration. It will also inform how & what knowledge is being transferred to various partners and the community. This knowledge can be used by staff to improve on services and also during awareness and sensitization of the community/public.

Need for water is dictated by different uses and interests. When demand is increasing and the supply is constant, interests such as political interference in allocation of infrastructure for particular water use can also be perceived as

unfair targeting. Regular & structured sensitization can prevent stalling works by dissatisfied community.

It takes too long to make decision on land purchase or way-leave acquisition. Development partners only fund equipment components of water infrastructure. When land is not acquired procedurally, it leads to legal liability on the Agency; again without land, no infrastructural works can proceed. Human resource; those implementing the project are willing to work at a fee, so if there is no money to pay them, no work can continue. These challenges, to some extent erode confidence of development partners for future support.

This is necessary to build momentum and synergy in complying with various procedures and processes; including old and new policies. For instance, mobilization of ownership and significant buy-in with community and other stakeholders such as County government, NGOs, CBOs, FBOs, WUAs, WSPs, WRUAs and the National Government.

The staff skills need to be improved continuously through a structured training program. This will instill proactive approach for known performance issues and enable realization of TWWDA pipeline dream in infrastructure development and other related delays in service delivery.

4.2 Recommendations

1. Adopt latest technology in operations and infrastructure development.

2. Establish a way-leave acquisition policy to avoid conflict with law and community.

3. Have a knowledge management policy to preserve institutional memory.

4. Have scheduled and regular sensitization program to avert perception of unfair targeting and political interference. This should also help receive regular feedback from community & partners.

5. Have a policy for land; human capital and funding resources for smooth project implementation.

6. Work with County governments and other partners to identify and profile areas of common operation to avoid any duplication.

7. Have a structured training program for staff spread for a whole calendar year to improve on their skills.

APPENDIX: QUESTIONNAIRE

SATISFACTION SURVEY QUESTIONNAIRE NO. _____

Introduction

Envag Associates (K) Limited is carrying out a **Customer Satisfaction Survey** on behalf of the **Tana Water Works Development Agency (TWWDA)**. TWWDA will use the findings of this study to improve service delivery. We are therefore kindly requesting you as a valued respondent to fill all sections of this questionnaire and return it to Envag Associates Officer, who will also be available for any assistance. All questions should have only one answer. Do not indicate your name. Please note further that your response will be treated as confidential

1. Sex

Female [ ] Male [ ]

2. Age bracket

18 -24 years [ ] 25 -34 years [ ] 35 -44 years [ ] 45 -54 years [ ] 55 years and over [ ]

3. Which one of the following best describes your relationship with Tana Water (TWWDA)

a) Employee [ ] Indicate Department: _____

b) Water Service Provider [ ] Indicate Area: _____

c) Stakeholder [ ] Name of Institution: _____

4. How long have you been with TWWDA as indicated in Three (3) above.

a) Less than 6 months [ ] b) 7-12 months [ ]

c) 13 – 18 months [ ] d) More than 18 months [ ]

5. How long do you expect to continue being with TWWDA as indicated in Three (3) above.

a) Less than 1 years [ ] b) 2-5 years [ ]

c) 5-10 years [ ] d) More than 10 years [ ]

6. To what extent have things changed at TWWDA in the last 3 years?

a) Better [ ] **b)** Slightly Improved [ ] **c)** Not changed [ ] **d)** Bad [ ] **e)** Worse [ ]

7. Please indicate the extent to which you are satisfied with the following statements about TWWDA.

(D.K = Don't Know)

No	Parameters	Satisfied ← Dissatisfied										D.K
		10	9	8	7	6	5	4	3	2	1	0
a	Handling of Challenges											
b	Increased water coverage											
c	Increased Sewerage Coverage											
d	Reliable water storage											
e	Improved automation level											
f	Enhanced staff capacity building											
g	Timely completion of projects											
Comment:												
		10	9	8	7	6	5	4	3	2	1	0
a	Quality management process											
b	Funding from development partners											
c	Land & way leaves acquisition											
d	Adherence to corporate governance											
e	Knowledge management											
f	Relation with development partners											
g	Risk management											
Comment:												
		10	9	8	7	6	5	4	3	2	1	0
a	System improvement											
b	Use of technology											
c	Meter collection											
d	Resource mobilization											
e	Staff retention											
f	Team building											
g	Alternative financing											
Comment:												
		10	9	8	7	6	5	4	3	2	1	0
a	Staff management											
b	Career progression											
c	Collaboration with state actors											
d	Marketing strategy											
e	Handling litigation											
f	Compliance with regulations & policies											
g	Mobilization of community sense of ownership											
Comment:												
		10	9	8	7	6	5	4	3	2	1	0
a	Resolution of conflicts											
b	Accountability and transparency											

No	Parameters	Satisfied ← Dissatisfied										D.K
		10	9	8	7	6	5	4	3	2	1	0
c	Information sharing											
d	Timely communication											
e	Offer quality services											
f	Regular training											
g	Regular sensitization											
Comment:												
		10	9	8	7	6	5	4	3	2	1	0
a	Involving stakeholders in planning											
b	Public participation forums											
c	Organization's reputation											
d	Water supply infrastructure											
e	Sewerage infrastructure											
f	Stakeholder engagement											
g	Institutional Capacity											
Comment:												
		10	9	8	7	6	5	4	3	2	1	0
a	Reliability of water supply											
b	Handling customer complaints											
c	TWWDA Courtesy											
d	TWWDA Vision, Mission, Core Values											
Comment:												

8. Provide any suggestions that can be used to advice TWWDA to improve on their service delivery.

_____

_____

_____

THANK YOU FOR TAKING TIME TO FILL IN THIS QUESTIONNAIRE

FOR OFFICIAL USE ONLY:

Name of Enumerator _____ Date _____