THE UNITED REPUBLIC OF TANZANIA

NATIONAL AUDIT OFFICE

PERFORMANCE AUDIT REPORT ON THE MANAGEMENT OF CONSTRUCTION OF HEALTHCARE FACILITIES

AS IMPLEMENTED BY

THE PRESIDENT'S OFFICE - REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

REPORT OF THE CONTROLLER AND AUDITOR GENERAL OF THE UNITED REPUBLIC OF TANZANIA

MARCH, 2021

THE UNITED REPUBLIC OF TANZANIA

NATIONAL AUDIT OFFICE

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LIST OF ABBREVIATIONS AND ACRONYMS

AQRB	Architects and Quantity Surveyors Registration Board
CC	City Council
CEmONC	Comprehensive Emergency Obstetric and New Born Care
CHMTs	Council Health Management Teams
DC	District Council
DH	District Hospital
DHFF	Direct Health Facility Funding
DMO	District Medical Officer
ERB	Engineers Registration Board
GoT	Government of Tanzania
GPS	Global Positioning System
HC	Health Centre
HF	Health Facility
HFGC	Health Facility Governing Committee
HSSP	Health Sector Strategic Plan
LGAs	Local Government Authorities
MDAs	Ministries, Departments and Agencies
MoFP	Ministry of Finance and Planning
MoHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
PO-RALG	President's Office – Regional Administration and Local Government
PPE	Personal Protective Equipment
PPR	Public Procurement Regulations
PPRA	Public Procurement Regulatory Authority
RAS	Regional Administrative Secretary
RHMTs	Regional Health Management Teams
RSs	Regional Secretariats
SDGs	Sustainable Development Goals
TAEC	Tanzania Atomic Energy Commission
TARURA	Tanzania Rural and Urban Roads Agency
TDS	Tanzania Development Vision 2025
WHO	World Health Organisation

DEFINITION OF TERMS AND TERMINOLOGIES

Force Account	A process where works are carried out by a public or semipublic departments or agencies by using its personnel and equipment or in collaboration with any other public or private entity (*PPRA Guideline for Carrying Out Works Under Force Account, 2020, 5)*.
Tests after Completion	Means the tests (if any) which are stated in the Specification and which are carried out in accordance with the Special Provisions after the Works or a Section (as the case may be) are taken over under Clause 10 [Employer's Taking Over *(Fidic, 2017,7)*
Cost overrun	The difference between the actual and estimated costs as a percentage of the estimated cost, with all costs calculated in constant prices. Actual costs are defined as the accounted costs actually spent, as determined at the time of project completion (*Lee, Jin-Kyung. (2008), "Cost Overrun and Cause Journal of Urban Planning and Development, Vol. 134, No.2, 59- 62. 22)*.
Quality Control	A visual examination and/or destructive analysis intended for making sure of the quality (physical testing) and the conformity with the standards in force of materials proposed by a provider or a contractor *(Dictionary of Civil Engineering, Jean Paul Kurtz, 2004, 1021)*.
Building Design	Is the process of providing all information necessary for construction of a building that will meet its owner's requirements and also satisfy public health, welfare, and safety requirements *(Building Design and Construction Handbook, Frederick S. Merritt)*.
Design	The design includes all the paper works (principle and working plans, detailed estimate, location and block plan, quantitative survey pilot, preliminary estimate, drawings, structural analysis etc.) where all necessary information is included, allowing to lead to the construction of a private or public work, whatever its nature and importance *(Dictionary of Civil Engineering, Jean Paul Kurtz, 2004, 361)*.
Cost control	Is a process where the construction cost of the project is managed through the best methods and techniques so

that the contractor/builder does not suffer losses when carrying out the construction activities *(Harris, F and McCaffer, R., 2002. 5th ed.; Modern Construction Management, Granada Publishing Limited, 8 Grafton Street, London W1X 3LA).*

PREFACE

The Public Audit Act No. 11 of 2008, Section 28, authorizes the Controller and Auditor General to carry out Performance Audit (Value for-Money Audit) for the purpose of establishing economy, efficiency and effectiveness of any expenditure or use of resources in the Ministries, Departments and Agencies (MDAs), Local Government Authorities (LGAs) and Public Authorities and other Bodies. The Performance Audit involves enquiring, examining, investigating and reporting on the use of public resources, as deemed necessary under the prevailing circumstances.

I have the honour to submit to Her Excellency, the President of the United Republic of Tanzania, Hon. Samia Suluhu Hassan and through her to the Parliament of the United Republic of Tanzania a Performance Audit Report on the Management of Construction of Healthcare Facilities.

The report contains findings of the audit, conclusions and recommendations that have focused mainly on improving the effectiveness of management of construction of Healthcare Facilities in the country on areas such as planning for construction of healthcare facilities; execution of the construction work of healthcare facilities in designated time and cost; quality of healthcare facilities as per pre-defined standards and specifications; and performance evaluation by PO-RALG to LGAs on the management of construction of Healthcare Facilities.

The President's Office – Regional Administration and Local Government Authorities as the main audited entity was given the opportunity to scrutinize the factual contents in order to comment on the draft report. I wish to acknowledge that the discussions with the President's Office – Regional Administration and Local Government were very useful and constructive.

My office intends to carry out a follow-up audit at an appropriate time regarding actions taken by the audited entities in relation to the recommendations of this report.

In completion of the assignment, the office subjected the report to the critical reviews of Dr. Robert Mahimbo Salim a retired Regional Medical Officer from Iringa Regional Commissioner's Office and Dr. Daniel Adam Mbisso from Ardhi University who came up with useful inputs for improving the output of this report.

This report has been prepared by Eng. Pendael L. Ulanga - Team Leader, Mr. Sayi E. Sayi-Team Member, Mr. Jonas L. Lufunga – Team Member under the supervision and guidance of Ms. Asnath L. Mugassa - Audit Supervisor, Mr. George C. Haule – Assistant Auditor General and Mr. Jasper N. Mero– Deputy Auditor General.

I would like to thank my staff for their assistance in the preparation of this report. My thanks are also extended to the audited entity for their fruitful interaction with my office.

Charles E. Kichere
Controller and Auditor General
Dodoma, United Republic of Tanzania
March, 2021

EXECUTIVE SUMMARY

Healthcare Facilities are buildings equipped with resources for the provision of healthcare services to meet the demands of different categories of patients[1]. In Tanzania, Healthcare Facilities include: Clinics/Village Health Services, Dispensary Services, Health Centre Services, District (Council) Hospitals, Regional Hospitals and Referral/Consultant Hospitals. These facilities can either be general or specialized[2].

The management of construction of Healthcare Facilities covers all project construction stages starting from planning, designing, procurement, execution, completion, operation and maintenance. It is important to properly manage all these stages so that project objectives are achieved within the required cost, time and specified quality.

The Government had made a number of efforts towards reducing costs for the construction of Healthcare Facilities (Buildings) such as using Force Account approach rather than engaging contractors. PO-RALG through LGAs procured all construction materials and supervision of construction under District Council Engineers[3].

The overall objective of the audit was to assess whether the President's Office – Regional Administration and Local Government (PO-RALG) through Local Government Authorities (LGAs) have constructed Healthcare Facilities with regard to needs, Time, Cost and Quality.

The Audit covered a span of five fiscal years starting from 2015/16 to 2019/20 in order to establish a performance trend and come-up with well-informed analysis. The key methods used for data collection included interviews, document reviews and physical observations of the selected ongoing and completed Healthcare Facilities.

[1] https://www.imedpub.com/scholarly/health-facilities-journals-articles-ppts-list.php
[2] https://www.imedpub.com/scholarly/health-facilities-journals-articles-ppts-list.php
[3] The National Health Policy 2017 Sixth Draft Version

Main Audit Findings

333 out of 447 of Constructed Healthcare Facilities in the Country Experienced Delay in Completion

The Audit noted that 333 out of 447 equivalent to 74% of constructed Healthcare Facilities in all phases (I-VII) including District Hospitals were not completed within the planned time throughout the country. The analysis showed that 67 out of 68 of Constructed District Hospitals, which is equivalent to 99%, delayed in completion. The extent of delays in completion of Constructed Healthcare Facilities ranged from 12 to 40 months.

Similarly, the analysis done in respect to the visited 14 LGAs showed that 33 of 35, which is equivalent to 94% of Healthcare Facilities delayed in completion. The delays ranged from 2 to 36 months. Despite extension of time for the completion given to LGAs ranging from 2 to 3 months for Health Centres and District Hospitals respectively, until the time of this audit the Healthcare Facilities were not yet completed.

Among the main causes of delays in completion were the delay in the disbursement of project funds, delay in the supply of material from the factories or suppliers, eruption of diseases which forced labourers to be absent from construction site, lack of technical personnel, inadequate fund set aside for construction of Healthcare Facilities and adverse rain season. On the other hand, the time allocated for the project implementation was unrealistic as it did not take into consideration the aspect of mobilization time and curing time for some stages of construction.

402 out of 447 Healthcare Facilities projects in the Country delayed in Commencement of Construction

The Audit noted that 402 out of 447, equivalent to 90% of Healthcare Facilities projects in the country delayed in commencing construction. The maximum time of delay was noted in 67 out of 68 District Hospitals funded by Government. In these districts, the project implementation took up to 14 months to start from the date when the funds were received. Major cause of delay in commencement was due to the absence of reserved areas

for building healthcare facilities in most of LGAs, which caused tensions in the process of spotting the areas where the buildings had to be built.
Other causes included lack of awareness of selected committees for construction of Healthcare buildings using Force Account; lack of funds set for mobilisation and lack of time set for procurement process prior to commencement of construction of Healthcare Facilities.

Lack of Quality Control Mechanism for ongoing Construction of Healthcare Facilities

The Audit noted that PO-RALG lacked adequate quality control mechanism for managing quality of construction of Healthcare Facilities. The Audit Team noted that 34 of 35 visited Healthcare Facilities, 97% of Healthcare Facilities from 14 visited LGAs did not conduct tests for construction Materials.

Failure to conduct tests was due to lack of funds set for testing as such funds were not included in the schedule of materials as well as in the LGAs' plans. The other reason given by LGAs was limited time for conducting tests due to limited time for the implementation of construction of Healthcare Facilities provided by PO-RALG. Hence, there was no assurance of quality for the constructed Healthcare Buildings. Thus, there is risk that the majority of constructed Healthcare Facilities might experience either early deterioration or dilapidation.

The Audit noted that PO-RALG did not allocate funds for supervision at the Regional Secretariats and LGAs from the financial year 2015/16 to 2019/20, despite the fact that majority of Healthcare Facilities are located 45-200 km away from LGAs centre. As a result, most of the LGAs did not manage to allocate fund for supervision leading to inadequate supervision of ongoing construction. PO – RALG informed the Audit Team that supervision funds were not allocated to LGAs, because LGAs were instructed to use Councils' own source for supervision of the projects during the orientation meeting conducted prior to the implementation of construction project. However, the Officials did not provide evidence to justify if this instruction was disseminated to LGAs.

The Audit further noted shortage of staff by average of 75% of (District, City, and Municipal) Engineers in respective LGAs. This was due to the

establishment of TARURA, which hired LGAs' Engineers. It was further noted that construction projects in some LGAs, with shortage of engineers and supervisors, were managed by Technicians from different disciplines.

67 out of 68 Constructed District Hospitals and Health Centres were not completed within the planned cost

The Audit noted that 67 of 68, equivalent to 99 % of the constructed District Hospitals in the country were not completed within the planned cost of TZS 1.5 Billion. It was noted that 67 District Hospitals were given additional flat rate fund amounting TZS 300 Million so as to complete the outstanding works. Inspite of the additional funds, the Audit Team observed that 100 % of District Hospitals in all 14 visited LGAs were not completed. This implies that additional funds might be needed in order to complete the intended scope of the projects.

Similarly, cost overrun of the visited Health Centres ranged from TZS 0.674 to TZS 137 Million which is equivalent to 1% to 34 % respectively. However, all these projects noted with cost overruns were not yet completed until the time of this audit. This means that there was a risk that more funds would be required to complete the Construction of Healthcare Projects. Therefore, there were delays in completion of Healthcare Facilities due to deficit of funds and the Healthcare Facilities would not be used at the intended time as well as not being able to serve the intended purpose. Hence, Value for Money will not be realised.

Major factors contributed to cost overrun included inadequate planning prior to budgeting for construction of Healthcare Facilities by PO-RALG and absence of cost and quality control mechanisms in the respective LGAs.

LGAs did not have Functioning Mechanism for Proper Documentation and Accounting of Procured Construction Materials

The Audit noted that LGAs lacked functioning mechanism for proper documentation and accounting of procured construction materials. This was evidenced by weaknesses related to inadequate management of the procurement of construction materials. The Audit noted that LGAs did not adequately adhere to the payment procedure and documentation of procured construction materials. It was noted that 30 out of 35 (equivalent

to 86%) of the visited Healthcare Facilities lacked Local Purchase Order (LPO) for procured construction materials. As a result, the Audit Team noted that payment made without having supporting documents in the visited Healthcare Facilities amounted to ***TZS 3,940,167,794/-***.

The Audit is of the view that, this was caused by lack of effective mechanism for proper documentation of procured materials and payments made, weak internal controls and inadequate knowledge of procurement procedures by LGAs' officials.

Inadequate Design of 4 out of 7 Buildings of Healthcare Facilities by PO-RALG

The Audit noted that, PO-RALG did not adequately design Healthcare Facilities. 100% of the visited Healthcare Facilities had major changes in layout, structures, and variations of measurements and dimension specifically for X-rays, Theatre, Mortuary and Laundry Buildings. Similarly, the Audit Team noted that the provided design and schedule of materials for Healthcare Facilities lacked specification of aluminium glazing leading to inconsistency in construction especially for X-Ray control room and theatre building operation rooms. Inadequate designs were due to inadequate need analysis of Healthcare Facilities to be constructed in respective LGAs and non-involvement of key stakeholders and experts such as radiology experts.

PO-RALG Allocated Flat Rates Funds For Construction Of Healthcare Facilities In The Country.

The Audit revealed that PO-RALG allocated funds for construction of Healthcare Facilities at Flat rates regardless of the different on topographical locations where TZS 1.5 Billion were allocated for construction of 68 District Hospitals in 25 regions. Similarly, 179 Health Centres received TZS 400 Million and 106 Health Centres received TZS 500 Million. These Health Centres were situated in 25 regions with different topography. This was because PO-RALG assumed that, topography of the site and material cost ware the same in the country, there could be checks and balances in high and low cost in respective LGAs to some of items.

Contrary, the Audit noted differences in foundation especially plinth height ranged from 2.0 metres to 5.5 metres which led to cost increase for construction of Healthcare facilities from 1 to 34%. This was due to lack of adequate analysis resulted from inadequate design. This led to 99% and 70% of District Hospitals and Health Centres respectively, not completed until the time of this audit.

Lack of Supporting Evidenced for Payment Made Costing TZS (3,940, 167,794.00)

The Audit noted that 21 out of 35 equivalent 60 % of visited Healthcare Facilities lacked supporting evidence for the payment made amounting to ***TZS 3, 940, 167, 794.00***. However, the Audit also noted that there were payments made for procured construction materials and local *fundi's* which had no evidence or justification.

Despite of payment which lacked evidences, the Audit further noted that construction funds were utilised by 100%, but the ongoing Healthcare Facilities were not completed until the time of the Audit. This was due to shortage or deficit of funds for completion of outstanding works, however the shortage of funds could not be justified.

PO-RALG did not Adequately Monitor and Evaluate Performance of LGAs

The Audit noted that PO-RALG did not adequately monitor and evaluate the Performance of Regional Secretariats and LGAs on the construction of Healthcare Facilities. This is because the Ministry lacked monitoring and evaluation plan.

A few conducted monitoring and evaluation reports did not address critical issues related to the construction of Healthcare Facilities. Further, PO-RALG did not conduct follow-up of the issued recommendations to LGAs. As a result, the problem related to delays, cost overrun and unsatisfactory quality kept on occurring every year.

Main Audit Conclusion

The Audit Office acknowledges efforts made by the President's Office – Regional Administration and Local Government (PO-RALG) in improving

Healthcare Facilities in the country. However, PO - RALG needs to enhance management of the construction of Healthcare Facilities to attain intended objective for delivery of quality healthcare services, while at the same time realizing value for money of the funds spent.

The Audit concludes that the PO-RALG through Local Government Authorities (LGAs), to some extent, is not effective in managing the construction of Healthcare Facilities with regards to needs, time, quality and cost. The Ministry has not managed to ensure that the constructed Healthcare Facilities meet the prescribed quality standards to facilitate the provision of quality of intended healthcare services.

Audit Recommendations

The President's Office – Regional Administration and Local Government to:

1. Ensure adequate need assessment for the construction of Healthcare Facility uses the result to review the existing design, planning and budgeting. The analysis should also include identification of needed resources and required specifications for effective implementation of the construction of Healthcare Facilities;

2. Prepare, integrate and mainstream plans and budgets for management of construction and rehabilitation of Healthcare facilities into their budget. The budget should take into consideration all project key items such as but not limited to preliminary works, actual needs and functional requirements of the respective Healthcare Facilities and supervision activities in management of Healthcare Facilities at the level of Regional Secretariats and LGAs;

3. Develop coordination mechanism to allow the involvement of key stakeholders to provide their inputs during planning and designing of Healthcare Facilities. The developed mechanisms should enable stakeholders to provide their inputs on specifications required to meet the intended use for each Healthcare Facility building component;

4. Prepare realistic program of work and schedule of materials and ensure LGAs adhere to the same in order to control the completion time and cost respectively. The time allocated for projects should take into consideration the time required for design, mobilization, procurement process and construction time including recommended curing period for concrete works;

5. Provide for equitable allocation of resources both financial and recommended technical personnel for effective management of construction and operationalisation of Healthcare Facilities under their jurisdictions at both Regional Secretariats and LGA Levels;

6. Develop quality control mechanism to be used by LGAs during the implementation of construction of Healthcare Facilities. The developed mechanism should enable LGAs to conduct quality test of construction materials and works, proper documentation and accounting for procured construction materials;

7. Ensure that staff involved in the management of construction of Healthcare Facilities are well equipped with knowledge on use of Force Account, procurement and contract management principles;

8. Plan and budget for routine monitoring and evaluation of performance of Regional Secretariats and LGAs. The plan should include development of tools and reporting format that will enable PO-RALG to capture all key project element related to time, quality and cost; and

9. Develop a mechanism to coordinate and share the monitoring results with stakeholders. The mechanism should enable PO-RALG to address the challenges faced by LGAs in relation to the management of construction of healthcare facilities at all levels in the country.

10. Develop the Maintenance Plan for the constructed Healthcare Facilities in the country. The Maintenance Plan should indicate the required Human Resources, budget, type of maintenance, maintenance schedule and method for the maintenance

CHAPTER ONE

INTRODUCTION

1.1 Background of the Audit

The management of construction of Healthcare Facilities covers all project construction stages starting from planning, designing, procurement, execution, completion, operation and maintenance. It is important to properly manage all these stages so that project objectives are achieved within the required cost, time and specified quality.

Healthcare facilities are buildings used for the provision of healthcare services to meet the demands of different categories of patients[4]. In Tanzania, healthcare facilities include: Clinics/Village Health Services, Dispensary Services, Health Centre Services, District Hospitals, Regional Hospitals and Referral/Consultant Hospitals. These facilities can be either general or specialized[5]. Healthcare Facilities normally are equipped with medical equipment that are necessary for diagnosis and treatment of diseases.

Between 2015 and August 2019, the government of Tanzania constructed and rehabilitated a total of 419 Healthcare Facilities, equivalent to 8.3% of all Healthcare Facilities in the country (consisting of 350 Health Centres and 69 District Hospitals)[6]. Efforts were made with the intention of reducing the costs of constructing the Healthcare Facilities (Buildings) through the use of Force Account Approach instead of engaging contractors. This Force Account approach has been reported to reduce costs of construction especially for those Healthcare Facilities executed under PO-RALG through LGAs, whereby the procurement of all materials and supervision of construction work are done by LGAs (under Council Engineers)[7].

[4] https://www.imedpub.com/scholarly/health-facilities-journals-articles-ppts-list.php
[5] https://www.imedpub.com/scholarly/health-facilities-journals-articles-ppts-list.php
[6] Kapologwe *et.al,* 2020
[7] The National Health Policy 2017 Sixth Draft Version

1.2 Motivation for the Audit

The audit is motivated by both materiality of healthcare facilities in terms of its importance and amount of fund spent for the construction of healthcare facilities as detailed below:

1.2.1 Significant High Amount of Funds Spent on the Construction of Healthcare Facilities

According to the President's speech of 20th February, 2020, **TZS 293.705 Billion** was spent on maintenance or rehabilitation of Healthcare Facilities done to 22 LGAs, including procurement of medical equipment at the cost of **TZS 68.706 Billion**[8]. He also pointed out that 23 regional and zonal referral hospitals were rehabilitated with a total cost of **TZS 89.5 Billion**. He added that, the Government spent **TZS 102.9 Billion** for the construction and procurement of medical equipment of Mloganzila and Benjamin Mkapa Hospitals. Referral hospitals in several regions, namely: Geita, Katavi, Njombe, Simiyu and Songwe were constructed at a cost of TZS 58 Billion. These efforts contributed to an increased number of Health Facilities from 7014 in the year 2015 to 8446 Health Facilities in the year 2019[9]. As such, effective management of construction of healthcare facilities is important to ensure the achievement of value for money spent.

1.2.2 *Its Importance in Safeguarding People's Health*

Further to that, the audit is of high significance since it facilitates the promotion of National Health Policy of 2003 (as amended in 2017) with the objective of ensuring a healthy society with improved social well-being ready to contribute effectively to the national development. Therefore, this area is important in safeguarding people's health as well as ensuring that there is socio-economic development. This is because effective management of construction of Healthcare Facilities will ultimately improve timely access to health services in the country.

[8] President's speech delivered during his meeting held with the Members of Medical Association of Tanzania (MAT) on 20th February, 2020

[9] www.ikulu.go.tz/ or http://blog.maelezo.go.tz/

1.2.3 *Its Contribution in Supporting the Nation in Attaining United Nation's 2030 Agenda for Sustainable Development Goals (SDGs)*

This area apart from being among the National Audit Strategic Areas for Performance Auditing, it is also directly supporting 1 of 17 United Nation's 2030 Agenda Sustainable Development Goals. The SDGs Goal Number 3 under Target Number 3.8 emphasised on achieving universal health coverage including access to quality essential healthcare services and access to safe, effective, quality and affordable healthcare services.

In view of that, to achieve the SDGs Goal Number 3, the Government planned to construct, rehabilitate, renovate or refurbish healthcare facilities with prescribed standards and quality. Therefore, improvement in the management of construction of Healthcare Facilities directly support and promote the attainment of Sustainable Development Goals targeted to ensure healthy lives and well- being for all at all ages.

(i) Inadequate Access to Quality Healthcare Services and Number of Healthcare Facilities providing surgical services

While target number 3.1 of the Tanzania Development Vision (2025), is to attain access to quality primary healthcare for all, there were reported weaknesses in the provision of quality healthcare services. For instance, a healthcare services research conducted by Kapologwe *et. al.*, 2020 reported that, there is inadequate access to quality healthcare services as a result of shortage of number of Healthcare Facilities providing surgical services in the country[10]. The report indicated that only 22.2% of Health Centres in the country provided safe surgical services.

It was further reported that limited access to quality healthcare services was linked to lack of constructed Healthcare Facilities to meet the Universal Health Coverage (UHC)[11]. Therefore, the Government planned to construct 350 Health Centres and 69 District Hospitals to ensure the provision of safer surgical services to patients within a walking distance of at least 5 Kilometres from their residency[12].

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[10] Kapologwe et al. BMC Health Services Research paper (2020)

11 World Health Assembly Resolution 68.15

[12] Kapologwe et al. BMC Health Services Research paper (2020) and MMAM 2007-2017

Therefore, the Controller and Auditor General decided to conduct performance audit in this area to assess whether construction of healthcare facilities were effectively executed within planned cost, time and as per the prescribed quality standards.

1.3 Design of the Audit

1.3.1 Audit Objective

The main objective of the audit was to assess whether the President's Office – Regional Administration and Local Government (PO-RALG) through Local Government Authorities (LGAs) have constructed Healthcare Facilities with regard to needs, time, cost and quality.

Specific Objectives of the Audit

In order to address the main audit objective, four specific audit objectives were used. These specific objectives were set to assess whether:

(a) Planning for the construction of Healthcare Facilities has effectively been done;
(b) Construction of Healthcare Facilities has been completed on time and within the planned cost;
(c) Quality of Healthcare Facilities met the pre-defined Specifications/Standards; and
(d) PO-RALG evaluates performance of LGAs on the management of construction of Healthcare Facilities.

In order to clearly operationalise the above objectives, more specific audit questions and sub audit questions were prepared as provided in ***Appendix 2***.

1.3.2 Audit Scope

The main audited entity was President's Office Regional Administration and Local Government (PO-RALG). This is because PO-RALG is responsible for overseeing the performance of LGAs regarding the construction of Healthcare Facilities in their respective areas. LGAs are directly involved in the construction of Healthcare Facilities (building works) carried out within their areas of jurisdiction. In managing the construction works, LGAs

are responsible for establishing needs, design, construct, inspect, supervise and maintain the constructed Healthcare Facilities.

The audit mainly focused on the management of construction works for Healthcare Facilities in the country. The Audit, in addition, covered the whole construction process from planning and budgeting, design, procurement of construction materials, implementation of the projects, closure and commissioning of constructed Healthcare Facilities by PO-RALG through the respective LGAs in the country. Also, the Audit focused on coordination, supervision and monitoring and evaluation of the construction of Healthcare Facilities to ensure that construction works were of high quality and used as intended for serving people.

With regards to planning and budgeting, aspects such as needs assessment, engineers' cost estimates, material estimates, adequacy of coordination with key stakeholders, and availability of skilled professionals engaged in the implementation of projects were covered. Also, in the design aspect, the audit looked into the adequacy of drawings, specifications and extent of adherence to design standards. In the implementation of construction projects, the key aspects of time, cost and quality of the projects were assessed. Furthermore, for closure and commissioning, the audit focused mainly on identification and rectification of defects and commissioning of the completed works.

The Audit Team focused on the newly constructed and rehabilitated Healthcare Facilities. This was because PO-RALG named all interventions of construction works as rehabilitated projects irrespective of whether they were new construction or rehabilitation works.

The Audit Team covered a span of five fiscal years (i.e. from 2015/16 to 2019/20) in order to establish a performance trend and come-up with well-informed analysis which enabled the Audit Team to draw sound and logical conclusion based on the performance trend. Also, it was within this period whereby most of Healthcare Facilities were constructed in the country.

1.3.3 Sampling, Methods for Data Collection and Analysis

Various methods for sampling, data collection and analysis were used by the Audit Team as presented below:

(a) Sampling Techniques Used in the Audit

Purposive and random sampling methods were used to select Regions, LGAs and Healthcare Facilities. All 27 Regions in the country were grouped in seven geographical zones namely; Lake, Southern, Northern, Eastern, Western, Southern Highland and Central Zones. All zones had equal chance of being selected because constructions of Healthcare Facilities were executed in all zones.

The Audit Team selected one region from each zone, whereby regions were randomly sampled since all regions had equal chance of being selected. This was because all regions had one or more constructed District Hospital(s). The identified regions for data collection included Mbeya, Geita, Pwani, Rukwa, Ruvuma and Singida. The selected Regions had at least one District or Council Hospital and at least four Health Centres. Then, from each region, two LGAs were selected whereby at least one LGA had District Hospital and two Health Centres.

Then, purposive sampling was used to select two (2) LGAs from each selected Region; whereby LGAs which received considerable amount of funds for the construction of healthcare facilities and the one with higher number of constructed Healthcare Facilities were selected. Also, LGAs which had no District Hospital were selected randomly in respect to the number of constructed Health Centres. These selected LGAs included; Geita DC, Bukombe DC, Arusha CC, Longido DC, Mkuranga DC, Kibaha DC, Nkasi DC, Sumbawanga DC, Songea DC, Namtumbo DC, Mbeya CC, Mbeya DC, Mkalama DC and Manyoni DC. The selected LGAs also had at least one Health Centre.

Table 1.1: Regions and LGAs Visited During the Audit

Zones	Regions covering respective zone	Selected Region	LGAs with District or Council Hospital	Selected LGA
Lake Zone	Mwanza, Simiyu, Mara, Geita, Shinyanga, and Kagera	Geita	Geita DC	Geita DC and Bukombe DC
Northern Zone	Arusha, Kilimanjaro, Manyara and Tanga	Arusha	Longido DC	Arusha CC and Longido DC
Southern Zone	Mtwara, Ruvuma nd Lindi	Ruvuma	Namtumbo DC	Songea DC and Namtumbo DC
Central Zone	Dodoma, Singida and Tabora	Singida	Mkalama DC	Manyoni DC and Mkalama DC
Western Zone	Kigoma, Katavi and Rukwa	Rukwa	Sumbawanga DC	Sumbawanga DC and Nkasi DC
Eastern Zone	Dar es Salaam, Pwani and Morogoro	Pwani	Kibaha DC	Kibaha DC and Mkuranga DC
Southern Highlands Zone	Iringa, Njombe, Mbeya and Songwe	Mbeya	Mbeya DC	Mbeya CC and Mbeya DC

***Source**: Auditors' Analysis, 2020*

(b) Methods for Data Collection

Both qualitative and quantitative data were collected so as to provide strong and convincing evidence regarding the performance of PO-RALG and LGAs in managing the construction of Healthcare Facilities in the country. The Audit Team used different methods to collect data and information from the audited entities and other stakeholders.

These methods included interview, document review and observation as detailed below:

(i) Documents Review

The Audit Team reviewed documents from PO-RALG, 7 Regional Secretariats, 14 LGAs and 35 Healthcare Facilities (7 being District Hospitals and 28 Health Centres), so as to get comprehensive, relevant and

reliable information on the performance of LGAs in managing the construction of Healthcare Facilities.

The reviewed document from the audited entities were those falling within the period under the audit (i.e. from 2015/16 to 2019/20). The reviewed documents included Planning Documents, Performance Reports, Progress Reports and Monitoring and Evaluation Reports. Reviewed documents and reasons for reviewing them are as shown in ***Appendix 3***.

(ii) Interviews

Interviews were conducted with officials from PO-RALG, 7 Regional Secretariats, 14 LGAs, 35 selected Health Facilities and Health Committees in order to gain insights and clarification on the information regarding the management of the construction of Healthcare Facilities in LGAs. Furthermore, the interviews were used to validate information from the reviewed documents. The list of interviewed officials is as presented in ***Appendix 4***.

(iii) Observations

In order to come up with meaningful conclusion regarding the management of Construction of Healthcare Facilities, observations were made specifically for the selected Healthcare Facilities. Observation was made through visual inspection whereby various items in the constructed buildings were inspected to assess:

(a) Quality of constructed works;
(b) The size/quantity of the material used; and
(c) Workmanship.

The observation was made on items such as foundations, wall, roofing, beams, columns, Services (i.e. Water, ICT and Electricity), finishing in general (i.e. floors, tiles, windows, painting). During the observations, notes were taken on the observed situation of various structures of the buildings. Equally important, pictures were taken on the observed structures and building as a whole.

Observation exercises were guided by the Architectural and Structural Drawings in order to allow the Audit Team to verify the work done and conclude whether or not the work was done as planned.

(c) Methods for Data Analysis

Quantitative data collected through interviews and document reviews were analysed using excel spreadsheet. Quantitative data were analysed by organizing, summarizing and compiling data using different statistical methods for data computations. The analysed data were then presented in tables and graphs.

Qualitative data were described, compared and related so that they can be explained in order to bring into a finding as compared to audit objective. The analysis was geared towards gathering and understanding categories such as events, descriptions, consistencies or differences so as to develop a theory or conclusion from the collected data.

Depending on the number of interviews and documents reviewed, information was transformed into quantitative data by going through interview transcripts/documents to see how many of them included a positive or negative statement about a certain issue, or how many made similar statements. Calculations were made, expressing the percentage of investigated documents or interview transcripts that included a particular type of statement.

Data were then entered on a spreadsheet and used to explain and answer the 'why' questions. Simple pie-charts /graphs were used to describe and compare the proportion under each main theme identified.

1.3.4 Assessment Criteria

In order to assess the performance of PO-RALG and LGAs in managing the construction of Healthcare Facilities, assessment criteria were drawn from different sources such as Policies, Legislations, Guidelines, Standards, Good Practices and Strategic Plans of PO- RALG.

Below are the assessment criteria for each specific audit objective (refer to ***Appendix 5*** for details on the criteria used under each audit sub-objective):

(a) Existence of problem(s) on the Management of Construction of Healthcare Facilities in the country

PO-RALG is required to ensure that the newly constructed and refurbished buildings of the Healthcare Facilities are within the required quality and standards *(Health Sector Strategic Plan – IV, 2015-2020) Section 6.3 "Direction 6).*

LGAs are required to manage Building Works in order to ensure that the constructed buildings are of the desired quality and safe for use (Local Government *(Urban Authorities) Act, No. 8 of 1982, Section 59 (u)).*

(b) Planning for Construction of Healthcare Facilities by PO-RALG and LGAs

PO-RALG and LGAs are required to prepare designs and schedule of materials to be performed satisfactorily in terms of quality and quantity of premises i.e. Healthcare Facilities *(National Essential Healthcare Interventions Package–Tanzania 2013).*

PO-RALG is required to ensure that premises are located and attention given to; size, shape of the site, topography, drainage, soil conditions, utilities availability, natural features, orientation of the site (North, South, East, West), vegetation, trees and plantings *(Basic Standards for Health Facilities Level I and II of 2015 chap 6(6.1)).*

PO-RALG and MoFP need to allocate adequate funds and disburse them timely as per approved budget for Rehabilitation and Construction of Healthcare Facilities *(HSSP-IV 2015-2020 section 6.3.1 direction 6.3 pg. 60).*

PO-RALG and LGAs are required to set aside budgets for the management of building works *(National Construction Industry Policy of 2003. Section 8.1.1 (c)).*

(c) Construction of Healthcare Facilities within the Planned Time, Quality and Cost

LGAs are required to conduct regular inspections to buildings in their respective areas of jurisdiction in order to ascertain if the construction work is being carried-out in accordance with the approved building designs and standards. This includes inspections to building works for the purpose of enquiring on the execution of works being carried out as planned *(The Local Government (Urban Authorities) Act No. 8 of 1982 and the Local Government (Urban Authorities) (Development Control) Regulations* of 2008).

Engineers, Artisans and other experts from respective LGAs are required to supervise the projects to meet the required quality. Engineers from Regional Secretariats are also required to make sure that the intended quality of the implemented projects is attained *(Letter with Ref. No. AD.296/303/01/1/82 issued on 21st September 2017 from PO-RALG to Regional Administrative Secretariat (RS).*

The Inspection Team must have inspection tools such as Checklists, Offence Book, Stop Order Book, Penalty Notice, Cameras, Field Notes, GPS, PPEs, Measuring Tapes etc. *(The Engineers Registration Act (Cap. 63) The Engineering Works, Services and Projects Monitoring Regulations, 2015, page 5).*

LGAs are required to have qualified personnel to carry out and supervise the construction works *(Public Procurement Regulation of 2013 Regulation 167).*

Construction works to be executed by qualified Local *Fundi* (Artisan) who have knowledge and experience on the construction of buildings, the executed works meet the required quality and timely completed *(PO-RALGs' Directives issued on August 2017 regarding use of Force Account Method).*

PO - RALG and LGAs are required to ensure availability of equipment, human resources and funds for the implementation of construction projects in LGAs *(The Local Government Laws (Miscellaneous Amendments) Act No. 13, 2006; section 20 (f) page 14).*

Project Manager in collaboration with Health Facility Governing Committee (HFGC) is required to document all ongoing activities for future references whenever needed *(The directive Issued by PO-RALG 2017 Regarding the use of Force Account method, require LGAs to ensure the completed healthcare Facilities are within the required quality).*

(d) ***Completion and Commissioning***

PO-RALG, through LGAs, CHMTs, and RHMTs, is required to ensure that, completed Healthcare Facilities are fully equipped and adequately staffed before the construction of new Healthcare Facility begins *(HSSP-IV 2015-2020 Section 6.3.1 page. 61).*

MoHCDGEC, through PO-RALG, is required to issue Health Facilities Standard Guidelines on the infrastructure in order to guide LGAs in a more balanced development of infrastructure, to ensure that Healthcare Facilities are constructed and rehabilitated to meet accreditation standards *(HSSP-IV of 2015-2020 Section 6.3.1 page. 60).*

The technical department is required to officially hand over the completed project to the user department for commissioning with all project records. (*PPRA's Guideline for carrying out Works under Force Account sub clause 28.4", of May 2020).*

(e) Coordination and Supervision by PO - RALG

PO-RALG is required to oversee the implementation of plans and coordinate the national level resource allocation for infrastructures development and maintenance in the country. Also, PO-RALG is required to oversee and coordinate preparation of plans and budgets which are done by LGAs and assess their implementation status *(The Functions and Organisation Structure of the Prime Minister's Office, Regional Administration and Local Government (PO-RALG) (Approved by the President On 12th February, 2015) President's Office- Public Service Management)*

PO-RALG is required to have a better overview of specific needs and constraints and anticipated renovations, replacements of equipment as part of the star rating activities. *(HSSP-IV of 2015-2020 section 6.3.1 page 60)*

PO-RALG is required to ensure that an appropriate organizational framework, upon which the roles and responsibilities of all institutions supporting the development and performance of the construction industry, is clearly defined and the activities of these institutions are effectively coordinated and implemented. *(The National Construction Industry Policy, 2003 Paragraph 8.1.14)*

(f) Monitoring and Evaluation of LGAs' Performance in the Management of Healthcare Facilities

The sector Ministries to undertake monitoring and evaluations of their performances *(The Local Government Laws (Miscellaneous Amendments) Act No 13, 2006 page. 14 (c))*

PO-RALG (through the Sector Coordination Division) is required to coordinate critical interfaces with Central and Sector Ministries, Departments and Agencies, Non-State Actors (NSAs), RSs and LGAs. It is also required to provide technical backstopping, capacity building, supportive supervision, monitoring and evaluation of central and sector ministries' programme, project and other related activities of respective sectors that are implemented in RSs and LGAs *(The Functions and Organisation Structure of the Prime Minister's Office, Regional Administration and Local Government (PO-RALG) (Approved by the President On 12th February, 2015) President's Office-Public Service Management)*

PO-RALG is required to facilitate the development, review, implementation and monitoring of performance reporting frameworks in RSs, LGAs and Affiliated Institutions. It is required to develop and install M&E System, Strategies and Plans and monitor their implementations in RSs, LGAs and Affiliated Institutions. (PO-RALG's Strategic Plan 2013-2018; *(The Functions and Organisation Structure of the Prime Minister's Office, Regional Administration and Local Government (PO-RALG) (Approved by the President On 12th February, 2015) President's Office-Public Service Management)*

PO-RALG is also required to supervise professionalism of personnel relating to the particular sector in the LGAs; ensure quality assurance in the performance of the functions of technical personnel relating to the sector

in the Local Government Authorities; undertake monitoring and evaluation of the technical personnel's performance of their performance *((Local Government Laws (Miscellaneous Amendments) Act, 2006 Section 20(2))* PO-RALG is supposed to introduce Monitoring System of Healthcare Facilities and provide actual implementation status in order to have a better overview of specific needs, constraints and anticipated renovations, and rehabilitation of Healthcare Facilities *(HSSP-IV Section 6.3.1 page. 60)*

1.4 Data Validation Process

The President's Office – Regional Administration and Local Government was given the opportunity to go through the draft report and comment on the information and figures presented. PO-RALG confirmed on the accuracy of the information and figures presented in this audit report.

The information was also crosschecked and discussed with experts in the field of management of construction of healthcare facilities in order to confirm the validity of the information and facts presented in the audit report.

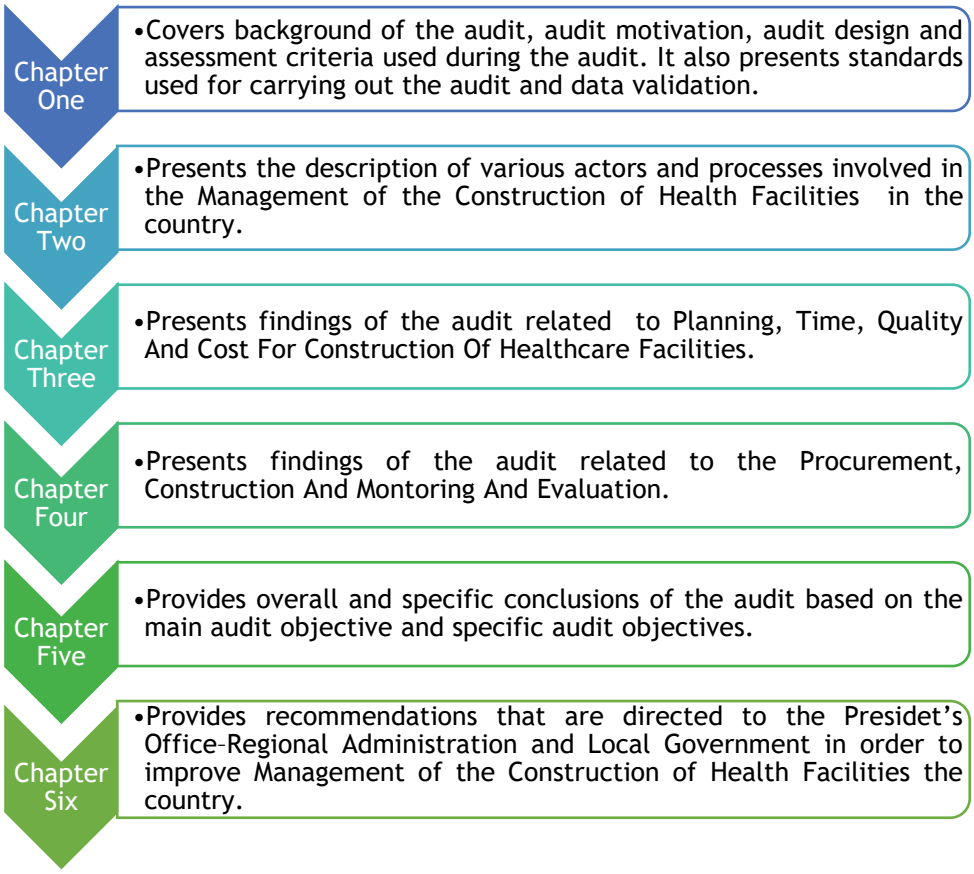
1.5 Standards used for the Audit

The audit was done in accordance with the International Standards for Supreme Audit Institutions (ISSAIs) on performance audit issued by the International Organization of Supreme Audit Institutions (INTOSAI).

These standards require that audit is planned and performed in order to obtain sufficient and appropriate evidence so as to provide a reasonable basis for the findings and conclusion based on audit objectives.

1.6 Content and Structure of the Audit Report

Parts of this report are presented as follow:



CHAPTER TWO

SYSTEM FOR MANAGING CONSTRUCTION OF HEALTHCARE FACILITIES

2.1 Introduction

This chapter describes the system for managing construction of Healthcare Facilities in the country. It includes policies and laws governing the construction of Healthcare Facilities, roles and responsibilities of key actors in the management of construction activities in Healthcare Facilities, and processes for managing the construction of Healthcare Facilities in the country.

2.2 Governing Policies and Legislations

2.2.1 Policies

(i) The Construction Industry Policy, 2003

The policy recognises construction industry as a fundamental economic sector which permeates other sectors. This is because it transforms various resources such as construction materials, financial and human resources into constructed physical economic and social infrastructure necessary for socio-economic development.

The policy objective is to formulate and enforce the application of appropriate building regulations and standards. Section 8.1.2(c) of the policy requires all procuring entities to develop the capacity of its staff in project management and contracts administration so as to ensure efficient, transparent and effective management of construction projects. Also, under Section 8.2.1, the policy directs the Minister responsible for construction to accelerate the formulation and regularly update regulations and standards and ensure that are widely used in the construction industry.

It also requires all government entities to ensure transparency and accountability in the procurement, design and contract administration. The government entities are also required to promote the optimum use of

low cost and local building materials, innovative technologies and practices. Further, Section 8.1.9 (c) of the Policy requires PO-RALG to facilitate and ensure that the design, construction and refurbishment of buildings (Healthcare Facilities) take into account the special needs of the aged and disabled.

(ii) The National Health Policy, 2003 (as amended in 2017)

The policy envisages the country to achieve high quality of livelihoods for its citizens, peace, stability and unity, good governance, a well-educated society serving at all levels, and a competitive economy capable of producing sustainable growth and shared benefits by 2025. Its overall objective is to ensure that all households have access to essential healthcare and social welfare services that meet expectations of the population, adhere to quality standards through efficient channels of service delivery.

Section 1.2 of the Policy requires the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) in collaboration with PO-RALG to ensure availability and development of health sector professionals, mobilization and management of funds, equipment, infrastructure, implementable health plans and provision of quality healthcare services, which are accessible to all people.

Further, Section 8.3.2 requires the Ministry of Health, Community Development, Gender, Elderly and Children to develop guidance detailing the roles and responsibilities of stakeholders in managing structures (infrastructures) and their interactions. It also requires the Ministry of Health, Community Development, Gender, Elderly and Children through implementing Ministry, for this case PO-RALG, to ensure adequate mobilisation, management and timely disbursement of funds.

2.2.2 Legislations

(i) The Public Health Act No 1 of 2009

The Public Health Act of 2009 recognises the healthcare facilities being amongst the requirements for the provision of healthcare services. Section 66(1) of this Act requires PO-RALG to ensure that, prior to the construction of buildings or premises for the provision of healthcare services; plans,

sections and specifications of the building site are submitted to LGAs for scrutiny on compliance with public health requirements and approval.

Further, it requires that buildings in the health facilities to be free from obstruction to light, free circulation of air around the building or premises, accessible for solid, gaseous, hazardous and liquid waste removal and fire and rescue services. It requires also buildings to have satisfactory ventilation and size of rooms. Also, sub clause 66(2) insisted that no buildings or premises or their parts be occupied until certificate of occupancy has been granted.

(ii) The Local Government (District Authorities) Act, 1982

The Act provides for frameworks of land use and planning including Healthcare Facilities planning and buildings guidelines. It also gives mandate to LGAs to ensure quality of constructed building within their respective areas by inspecting buildings to check if such structures meet the buildings standards. It also requires LGAs to coordinate all activities related to building work including healthcare facilities and conduct regular inspections of ongoing buildings works.

Further, it requires LGAs to formulate planning, supervision and monitoring committees in their areas; that will be responsible for planning, monitoring, and supervision of construction of buildings, maintenance, elevations and alignments of buildings according to respective guidance.

(iii) The Architects and Quantity Surveyors (Registration) Act, 2010

Clause 34(2) restricts any public, private institution or organisation to provide services in architecture or quantity surveying or approve architectural or quantity surveying designs or documents, unless its key officer responsible for taking or approving managerial or technical decisions is registered with the Architects and Quantity Surveyors Registration Board (AQRB). Since the construction/rehabilitation of Healthcare Facilities involved Architects and Quantity Surveyors, PO-RALG and LGAs were also expected to comply with this requirement.

(iv) The Engineers (Registration) Board Act, 1997 (As amended in 2007)

Clause 9 of this Act requires LGAs to ensure that inspections of building works are carried-out by the Inspector, Inspection Team for the purpose of ensuring that the works are being executed, under the supervision of recognized professional Engineers, in accordance with the approved plans and specifications. Construction of Healthcare Facilities requires engineering expertise, PO-RALG was also expected to ensure that the supervision team is composed with professional engineers.

(v) The Atomic Energy Act No 7, 2002

It requires the Tanzania Atomic Energy Commission (TAEC) to take necessary enforcement action in the event of violations of safety requirements. The actions include closure of any radiation related services or radiation premises and advises on substandard premises, i.e., Healthcare Facilities. The Commission is mandated to inspect any radiation practices or radiation premises and, where there is a breach of safety standards, to order closure of such practices or premises or take action for locking the premises.

2.2.3 Regulations and Guidelines

(i) The Public Procurement Regulations, 2013

Regulation 276 (d) requires Procuring Entities (i.e. LGAs) to maintain all information, documents and studies related to building works. Likewise, Regulation 5(2) (c) requires LGAs to ensure works are completed on time in accordance with the Procuring Entity's priorities so as to achieve economy and efficiency. Moreover, Regulation 69(3) requires PO - RALG and LGAs to accurately forecast requirements of a practicable work with a particular reference to services or activities already programmed in the annual work plan and included in the annual estimates.

(ii) The Engineering Works, Services and Projects Monitoring Regulations, 2015

The Regulations require inspection Team from LGAs to have inspection tools such as Checklist, Offence Book, Stop order Book, Penalty notice, Cameras, Field notes, GPS PPEs, measuring Tapes etc. while doing the inspections of buildings.

(iii) Basic Standards for Healthcare Facilities Level I and II of 2015

Chapter 6 (6.1) of the Basic Standards for Healthcare Facilities requires PO-RALG to ensure premises are located and attention must be given to size, shape of the site, topography, drainage, soil conditions, utilities available, natural features, orientation of the site (north, south, east, west), vegetation, trees and plantings.

(iv) The Force Account Directives Issued by PO – RALG on 7th August 2017

According to this guideline, Projects Manager in collaboration with Health Facility Governing Committee (HFGC) is required to document all ongoing activities for future references whenever needed. It also directs LGAs to ensure that all construction works are executed by qualified local *fundi* (artisan) who have knowledge and experience on building construction so as to have quality and timely completion of executed works.

2.2.4 Goals and Objectives

National Development Vision 2025

Section 4.2(ii) of National Development Vision 2025 focused in ensuring availability of competence and competitiveness in infrastructure investments. It further directs the highest priority of government interventions in health sector and requires involvement of community in enhancing development of Healthcare facilities.

National Five Year Development Plan (FYDP) 2016/17-2020/21

Section 4.3.3 of the National Five Years Development Plan of 2016/17-2020/21 provides key targets and their related interventions that were to be achieved by 2020. These included equipping District, Regional and Referral Hospitals with modern equipment. Likewise, the FYDP provides health sector interventions whereby the Government set targets to eliminate physical barrier resulting from lack of access to better health services at different levels of service delivery, by 2021 such as to:

(a) Construct 8,734 Dispensaries and 2,751 Health Centres, 29 District Hospitals for new Districts, Five Regional Hospitals for new regions and Zonal Hospitals in (Southern, Western, Eastern and Lake Zone); and
(b) Construct Regional Satellite Blood Bank in five Big Results Now Regions (BRN) namely Kigoma, Mara, Mwanza, Simiyu and Geita.

Moreover, according to the plan by 2021, it was expected to complete the construction of 2 storey X-ray building at Mbeya Referral Hospital, new ward and rehabilitation of existing buildings at Kibong'oto Infectious Centre as well as renovating/rehabilitating and equipping 21 Regional Hospitals.

2.2.5 Strategies and Plans

Health Sector Strategic Plan IV (HSSP-IV) 2015-2020

Section 6.3, Strategy 6 of Health Sector Strategic Plan, requires PO-RALG to ensure that newly constructed and refurbished healthcare buildings are of quality and standards for future accreditation. PO-RALG and funding agencies also are required to allocate adequate funds and disburse timely as per approved budget for rehabilitation and construction of Healthcare Facilities. Likewise, PO -RALG was required to introduce monitoring system of Healthcare Facilities to track actual status so as to provide a better overview of specific needs, constraints and anticipated renovation, and rehabilitation of Healthcare Facilities.

Moreover, under Section 6.3.1 of the plan, PO-RALG, through Regional Secretariats and LGAs, is required to ensure that completed Health

facilities are fully equipped and adequately staffed before the construction of new ones (HFs) begins. Under the same Section 6.3.1, the Ministry of Health, Community Development, Gender, Elderly and Children through PO - RALG is required to review the Health Facilities' standards of infrastructure guideline to guide LGAs in a more balanced infrastructure development. In doing so, this will ensure that Healthcare Facilities are constructed and rehabilitated to meet the accreditation standards.

National Essential Healthcare Interventions Package –Tanzania 2013

The National Essential Healthcare Interventions Package –Tanzania *(*NEHCIP-TZ) required PO-RALG and LGAs to prepare specific inputs to be performed satisfactorily in terms of quality and quantity of premises, i.e., Healthcare Facilities.

PO-RALG's Strategic Plan 2016/17-2020/21

PO-RALG has a strategy to strengthen health service delivery in the country by 2020/21. The target was to ensure that Regional and District Health Services are coordinated annually and programmes for health in the Regional Secretariats and LGAs coordinated by June 2021.

2.3 Roles and Responsibilities of Key Actors

2.3.1 Roles of Key Actors

PO-RALG, Regional Secretariats and LGAs are key actors responsible for managing construction of Healthcare Facilities in the Country. Their specific roles are briefly explained below:

(a) Roles of PO-RALG

This is a Ministry responsible for the management, coordination, monitoring and evaluation of construction works of Healthcare Facilities. Also, PO-RALG prepares structural and architectural drawings which are approved by the Ministry of Health, Community Development, Gender, Elderly and Children; whereby schedule of materials, cost estimates and specifications are prepared and then disseminated to the respective Regional Secretariats and LGAs. Further, PO-RALG plays the administrative

and advisory roles to the Regional Secretariats (RSs) and Local Government Authorities (LGAs) on matters related to management of construction of Healthcare Facilities.

The functions of PO-RALG are predominantly carried out by the Division of Health, Social Welfare and Nutrition Services and the Division of Infrastructure Development. According to PO - RALG Strategic Plans of 2016-2021, the roles of these two (2) Divisions are as detailed below:

Roles of the Division of Health, Social Welfare and Nutrition Services

The four Sections under the Division are Social Welfare Services, Regional Health Services, District Health Services and Nutrition Services Sections.

Roles of the Division as performed by Regional and District Health Services Sections in relation to the management of construction of Healthcare Facilities are:

(i) To interpret National Policies and Guidelines related to health and social welfare sector development and financing strategies;
(ii) To coordinate health sector projects;
(iii) To coordinate and undertake follow up to Regions and LGAs for policies and regulations compliance;
(iv) To coordinate and update country data on health services for RSs and LGAs;
(v) To coordinate and advise RSs and LGAs to enhance community participation and ownership in managing healthcare services;
(vi) To coordinate capacity building and provide administrative support to RSs and LGAs; and
(vii) To receive and consolidate projects and programme reports based on the living MoUs.

Roles of the Division of Infrastructure Development

The Division of Infrastructure Development (DID) coordinates, supports and facilitates a National overview of infrastructure maintenance and development within the LGAs in collaboration with the RSs.
The roles of DID underlying to management of construction of Healthcare Facilities are:

(i) To interpret national policies and strategies related to infrastructure development for implementation by RSs and LGAs;
(ii) To conduct research on appropriate technologies, preparing and disseminating operational guidelines and methodologies on management and implementation of housing infrastructure;
(iii) To oversee plans and coordinate the national level resource allocation housing infrastructure development and maintenance;
(iv) To coordinate capacity building and provide technical support and expertise to build up LGAs competence in all aspects of infrastructure development and maintenance issues;
(v) To facilitate and coordinate feasibility studies, design and impact assessment on infrastructure in LGAs;
(vi) To strengthen housing infrastructure data management system in LGAs;
(vii) To conduct training needs assessment for RSs and LGAs' engineers on infrastructures development;
(viii) To advise on the use of affordable construction/building materials and technology;
(ix) To coordinate the establishment of testing laboratories in RSs and LGAs;
(x) To monitor adherence of set standards in construction/building design and construction;
(xi) To conduct Monitoring and Evaluation of urban infrastructure development and maintenance in LGAs;
(xii) To consolidate and analyse progress reports from RSs and LGAs; and
(xiii) To oversee and advise on planning and implementation of low cost houses, housing infrastructure and maintenance in LGAs;

(b) Roles of Regional Secretariat

The Regional Secretariat works on behalf of PO - RALG at the regional level. According to the Local Government (Urban Authorities) (Development Control) Regulations of 2008, Regional Secretariats are responsible for provision of advice and guidance to Local Government Authorities on the management of construction of Healthcare Facilities. Regional Secretariats are also responsible for monitoring and evaluation of LGAs activities related to the management of construction of Healthcare Facilities and provide technical support.

Regional Secretariats, through their respective Health and Social Welfare Sections, support the management and provision of health services in their

respective regions. In order to accomplish this, Regional Secretariats play the following roles:

(a) Facilitate translation of Health Policies, Guidelines and Standards as set out by the Ministry of Health, Community Development, Gender, Elderly and Children for interpretation and implementation by LGAs, and conduct monitoring on compliance of health policies, laws and subsequent regulations accordingly;
(b) Facilitate provision of technical assistance to enable LGAs to develop Comprehensive Health Plans and conduct monitoring and evaluation on the implementation of plans and advise relevant authorities on allocation of resources to the LGAs;
(c) Facilitate provision of assistance to LGAs in identifying capacity gaps and develop capacity building measures of their staff for improved quality service delivery in their facilities/areas; and
(d) Coordinate the allocation, distribution and utilization of all health resources (human, financial, material) while ensuring equity.

Likewise, Regional Secretariats are responsible for overseeing and compiling LGAs plans and analyse the submitted reports in order to forward the same to PO – RALG being the responsible Ministry for managing the construction of Healthcare Facilities in the Country.

(c) Roles of Local Government Authorities

The Local Government (District Authorities) Act, 1982, first schedule (44) and The Local Government (Urban Authority) Act 1982, schedule (44) respectively describe the roles of LGAs in the management of the construction of Healthcare Facilities. The roles are building, equipping and maintaining healthcare facilities or grant sums of money in respect to those activities afore mentioned.

In addition to the above roles, LGAs have the mandate to make their own by-laws for the management of construction of Health Facilities while at the same time ensures quality control of built structures in their area of jurisdiction. By-laws are additionally required to prescribe conditions on how new constructions and rehabilitation of Healthcare Facilities (Dispensaries, Health Centres, and Hospitals) should be undertaken. The Construction of Healthcare Facilities in LGAs are carried out through

several Departments namely; Procurement; Constructions and Works; and Health Welfare and Nutrition Services.

2.3.2 Roles of Other Stakeholders

Management of the construction of Healthcare Facilities involves other stakeholders such as sector Ministry, Regulatory and Professional Bodies and academic Institutions. The roles and their responsibilities are described below:

(a) Sector Ministry

The Ministry of Health, Community Development, Gender, Elderly and Children

This is the sector Ministry trusted with role of formulation of Policies, Acts and Guidelines specifically in Health sector. The Government of Tanzania assigned roles to the Ministry of Health, Community Development, Gender, Elderly and Children vide Government Notice No.144 of 22nd April, 2016 and the National Health Policy of 2009 as amended in 2017.

The roles of the Ministry of Health, Community Development, Gender, Elderly and Children includes to develop guidance and standards of healthcare service delivery at various levels, plan for development of healthcare infrastructure in the country; conduct joint inspection of healthcare services in the country jointly with other Ministries and LGAs. Other roles include to oversee extra ministerial development parastatal and projects under the Ministry, to coordinate and provide healthcare facilities' standards in collaboration with PO - RALG and other government bodies (MDA) and to oversee the implementation of healthcare projects implemented in LGAs through PO - RALG.

(b) Regulatory and Professional Bodies

Architect and Quantity Surveyors Registration Board

According to the AQRB (Registration) Act, of 2015, AQRB has the role of monitoring the professional conducts of the registered Architects and Quantity Surveyors, who are responsible for ensuring that all building

projects registered under AQRB are managed by registered Architects and Quantity Surveyors. To oversee and monitor professionals involved in the construction specifically Architects and Quantity Surveyors.

Engineers Registration Board

The role of Engineers Registration Board is to register the appropriate categories of Engineers and engineering consulting firms, projects and ensure that works are executed in accordance with the conditions stipulated in the contract and standard construction procedures. ERB also, has a role to ensure that professional conducts are maintained and adhered to by registered Engineers.

In addition to the above roles, ERB has a role of monitoring firms and engineering activities in the Local Government Authorities by conducting evaluation of engineering activities. These engineering activities include various construction works such as buildings, road works, water, electrical works etc.

Contractors Registration Board

According to the Contractors Registration Board Act, the roles of CRB include registration of contractors, regulating the activities as well as the conduct of contractors. It is also responsible for inspecting any construction site, installation, erection or alteration works for the purpose of verifying and ensuring that the works are being undertaken by registered contractors; and that the works comply with all governing regulations and laws of the country.

In addition, its role is to take legal action against unregistered contractors who undertake construction; installation, erection or alteration works against governing regulations and laws.

(c) Academic Institutions

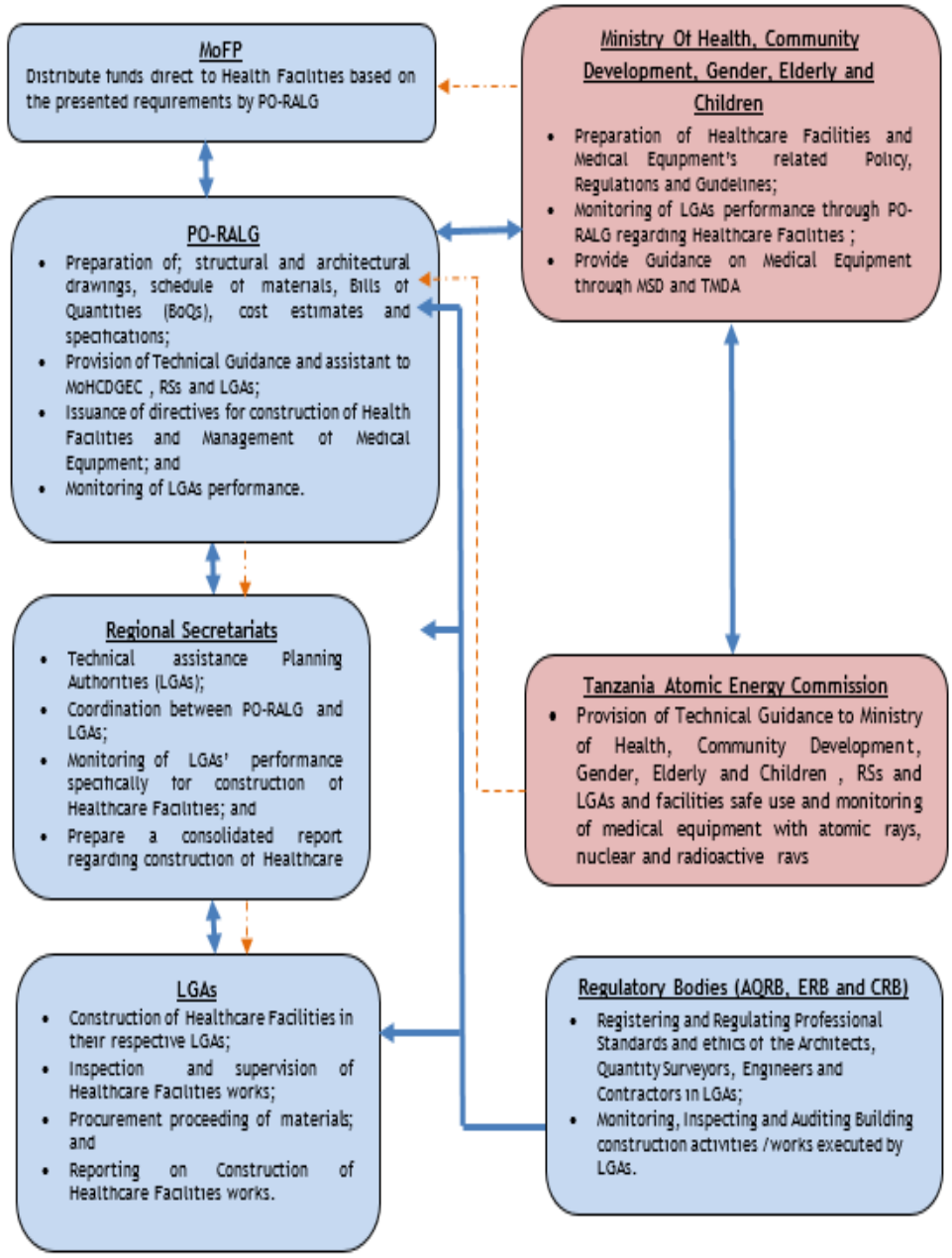
These are academic institutions that conduct researches and provide consultancy services with regards to engineering works and in particular building works. These include Mbeya University of Science and Technology (MUST) through its College of Health Science and Technology, and College

of Architecture and Construction Technology. Also, Ardhi University (ARU), University of Dar es Salaam (UDSM) and Dar es Salaam Institute of Technology (DIT) provide consultancy services and advice on the design and supervision of construction of Healthcare Facilities.

According to their objective statements in construction industry, they are playing a background role through training engineers (Civil), Architects and Quantity Surveyors. Likewise, the academic institutions provide consultancy and technical services on the construction projects from design to commissioning of the engineering projects including project monitoring services and contract management.

Figure 2.1 below summarizes roles and responsibilities in respect to each of the above mentioned key actors.

Figure 2.1: Relationship between Key Actors on the Management of Construction of Healthcare Facilities (Buildings)



***Source**: Interviews and Reviews of Relevant Legislations of Respective MDAs*

Bottom and top reporting between both actors

Provision and registration of professionals for execution, inspection and supervision of Healthcare Facilities

One direction Technical assistance through ministries regarding safety on the use of Medical Equipment's with nuclear, atomic and radioactive rays which are harmful to humans

2.4 Process for Managing Construction of Healthcare Facilities

The processes for managing the construction of Healthcare Facilities include; *planning, Procurement of construction materials and labour contracting, project supervision and execution of works, Payments to labourers, Inspection and Audits; and Completion and Closure*. Force Account project cycle components can be explained as follows:

Planning Stage: PO-RALG carries out needs assessment to establish requirements of each Healthcare Facility to be constructed, rehabilitated, and/or renovated. Then PO-RALG prepares typical drawings which include; structural drawings, architectural drawings, schedule of materials and specifications. Thereafter, the prepared documents are disseminated to the lower level (LGAs) for implementation.

LGAs also have to plan for implementation of the construction of Healthcare Facilities whereby appointment of Healthcare Facilities Governing Committees, Project Managers or Supervisors and delegation of procurement functions are done. After the appointment of Project Manager and Healthcare Facilities Governing Committee, they hold a meeting with an objective of determining scope of the work and prepare Procurement Plan for the construction materials and Local *Fundi (s)*/ Artisan.

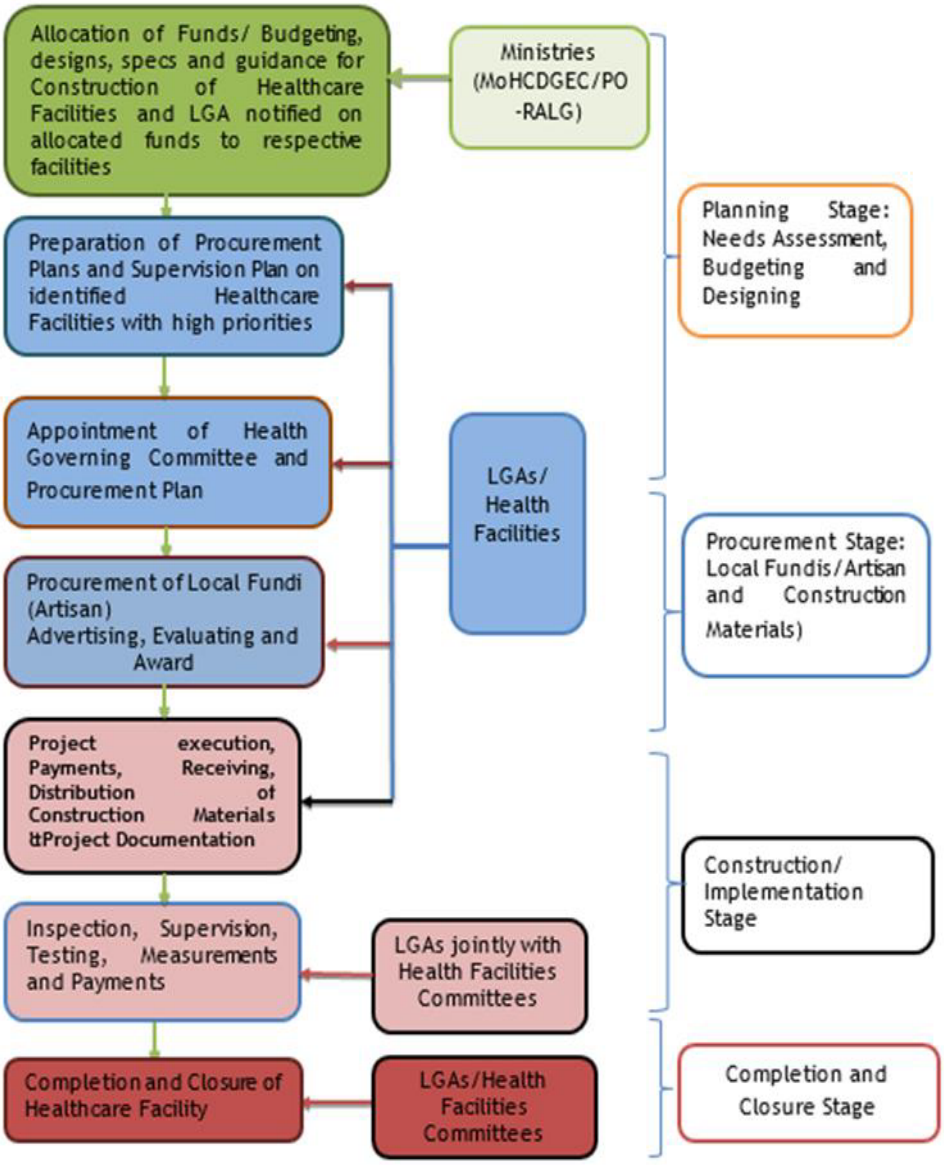
Procurement Stage: At this stage several activities are carried out by LGAs, just after the preparation of Procurement Plans in line with Annual Procurement Plan of the Council. Also, there must be set strategies for the procurement of construction materials, Local *Fundi* (Artisan) and labourers who are responsible for constructing Healthcare Facility.

***Implementation Stage*:** At this stage different construction activities are carried out such as actual construction, project record keeping, supervision of construction work, inspection, procurement of construction materials, testing for quality of executed works. Likewise, payments to labourers, inspections and audits are carried out.

Completion and Commissioning Stage: Upon completion of construction of Healthcare Facilities, the inspection and acceptance is carried out by both LGAs and Healthcare Governing Committee. The inspection and acceptance activities include; final inspection and identification of snags for completed works, preparation and issuance of completion certificates, and conducting necessary assessment on retention funds as stated in the agreement.

A detailed process for the management of construction of Healthcare Facilities is as shown in **Figure 2.2**.

Figure 2.2: Process for Managing Construction of Healthcare Facilities and Responsible Key Players and Stage of Project Management



***Source**: The Guidelines for Use of Force Account of (PPRA), May 2020, Interviews with PO-RALG responsible Officials for Management of Construction of Healthcare Facilities*

2.5 Resources for the Management of Construction of Healthcare Facilities

The Management of Construction of Healthcare Facilities requires both financial and human resources. The Division of Health, Social Welfare and Nutrition Service at PO-RALG has been conferred with the role of managing the construction of Healthcare Facilities in the country.

In order to perform its roles and duties, resources are normally allocated for the management of the construction of Healthcare Facilities in the country as detailed below:

2.5.1 Financial Resources

Financial resources are among the inputs for the management of construction of Healthcare Facilities. The construction of Healthcare Facilities is financed by both the Government and Development Partners. The funding is done directly to Health Facilities through LGAs by Direct Health Facility Funding (DHFF). Funding of activities in the Division of Health, Social Welfare and Nutrition Services at PO – RALG is as shown in Table 2.1.

Table 2.1: Planned and Allocated Budget for the Period 2015/16 - 2019/20

Financial Year	2015/16	2016/17		2017/18	2018/19	2019/20
Development Partners						
Planned (TZS) Billion	2.146	33.088		58.509	38.272	20.437
Actual (TZS) Billion	1.592	32.097		57.323	29.347	4.116
Percentage (%)	**74**	**97**		**98**	**77**	**20**
Government of Tanzania						
Planned (TZS) Million	133.188	58.833		101.000	148.640	131.000
Actual (TZS) Million	55.793	38.157		65.707	68.007	88.917
Percentage (%)	42	65		65	46	68

***Source**: PO-RALG Strategic Plans and Annual Plans /Budgets 2016-2022*

Table 2.1 indicates that 98% of planned fund from the Development Partners (DPs) was received in 2017/18, while it was only 20% of the planned fund which was received by PO-RALG in 2019/20. Furthermore,

there was a significant increment of funding for the construction of Healthcare Facilities from TZS 178.01 Billion in 2017/18 to TZS 202.74 Billion in 2019/20.

Likewise, funds for supportive supervision of the construction of Healthcare Facilities were allocated at PO-RALG for fiscal year 2017/18-2019/20. However, for the fiscal year 2015/16 and 2016/17, supervision costs were not set aside. It should be noted that construction using force account for Health Facilities started in the financial year 2017/18. The allocated funds are as detailed in **Table 2.2**.

Table 2.2: Allocated Funds for Construction of Healthcare Facilities and Supportive Supervision

FY	Phase	Construction, rehabilitation or renovation of Healthcare Facilities (TZS in Billion)	Procurement of Medical Equipment (TZS in Billion)	Supportive Supervision - at Ministry Level (PO-RALG) (TZS in Billion)	Construction Supervision cost at LGAs Level (TZS in Billion)	Total Budgeted funds in respective FY (TZS in Billion)
2015/16		-	-	-	-	-
2016/17		-	-	-	-	-
2017/18	i-iv	136.42	40.20	1.39	-	178.01
2018/19	V	3.50	1.40	0.20	-	5.10
2019/20	vi-vii	175.39	27.11	0.24	-	202.74
TOTAL		**315.31**	**68.71**	**1.83**		**385.85**

Source: *Evaluation Report on Implementation of Healthcare Facilities, 2018/19*

Table 2.2 shows the allocated funds for the construction and supportive supervision of Healthcare Facilities. The construction funds for phase I-VII was amounting to TZS 315.31 Billion while supportive supervision was TZS 1.83 Billion. The Table also shows that for 2015/16 and 2016/17, there were no funds allocated for both construction and supervision because the construction of Healthcare Facilities by use of force account started in

financial year 2017/18. Despite PO-RALG had supportive supervision funds, LGAs did not have supervision funds for ongoing construction activities. This led to inadequate supervision of ongoing and completed Healthcare Facilities in the country as explained in sub-sequent chapters of this report.

2.5.2 Human Resources

Human Resources are among of the key resources needed to ensure effective Management of Construction of Healthcare Facilities. The Division of Health, Social Welfare and Nutrition Service alongside with the Division of Infrastructure Development (DID), are required to have enough resources for coordination, Monitoring and Evaluation and Supervision during the planning for the construction of Healthcare Facilities in the country. For instance, the Division of Health, Social Welfare and Nutrition Services had only one (1) project coordinator for managing construction and rehabilitation of Healthcare Facilities in the country. Whereby, the DID is involved in supporting this division which had 77% of the available staff as shown in **Table 2.3**.

Table 2.3: Human Resources at the Division of Health, Social Welfare and Nutrition Services and the Division of Infrastructure Development

Fiscal Year	Directorate of Health, Social Welfare and Nutrition Service			Division of Infrastructure Development (DID)		
	No. of Technical Staff Required	Actual No. of Technical Staff Available	%age Staff available	No. of Technical Staff Required	Actual No. of Technical Staff Available	%age Staff available
2015/16	26	20	77	22	17	77
2016/17	47	42	89	22	17	77
2017/18	47	54	115	22	17	77
2018/19	47	51	108	17	12	71
2019/20	54	48	89	17	12	71

***Source**: PO-RALG Approved Organisation Structure, Staff List, 2020*

Table 2.3 indicates that the Division of Health, Social Welfare and Nutrition Service in year 2019/20 had 48 out 54 staff (equivalent to 89%) of available staff for managing the construction of Healthcare Facilities. However, PO-RALG had only one staff responsible for coordinating the Rehabilitation and Construction of Healthcare Facilities. This implies that

there is a need of having the adequate number of staff for managing Healthcare Facilities. Likewise, the DID had 12 out 17 staff (equivalent to 71 %) as supporting staffs for managing construction of Healthcare Facilities.

2.6 Allocated Fund for Construction of Healthcare Facilities

Funds for the construction of Healthcare Facilities are contributed by different Development Partners and the Government of Tanzania. The Ministry of Finance disbursed donated funds from the World Bank or other Development Partners and the Government of Tanzania to the respective LGAs. Such funds for the purpose of constructing/rehabilitating Healthcare Facilities are then released directly to the Accounts of Healthcare Facilities in the respective LGAs.

The plan for the improvements of Health Sector Infrastructures of August 2019, indicated the budget in respect to the number of buildings to be constructed and the respective cost at each level of Health Facility in the country as indicated in **Table 2.4**.

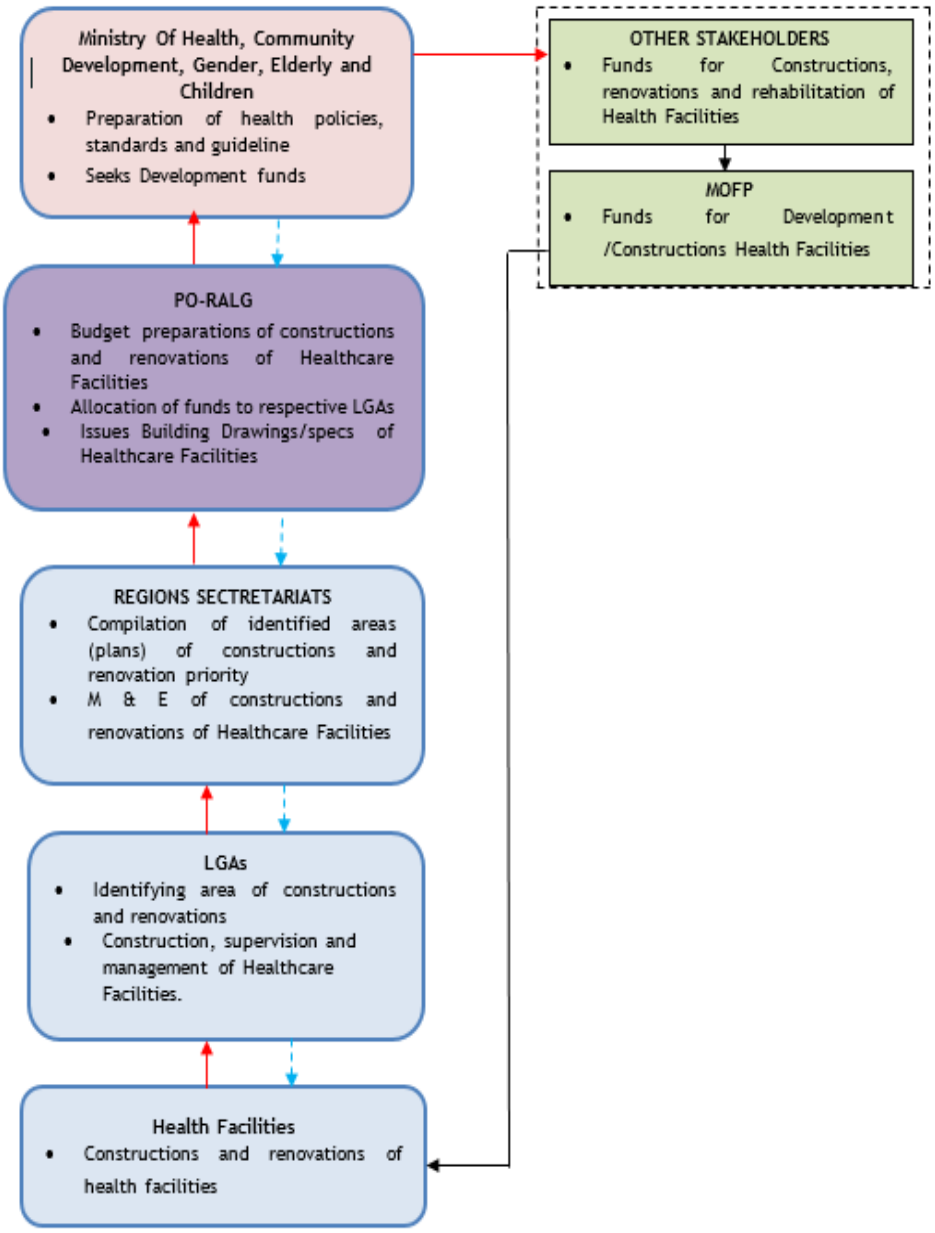
Table 2.4: Budget and Number of Healthcare Facility Buildings

Type of Health Facility	Number of Buildings to be constructed	Construction Cost (TZS)
Dispensary	2 Buildings, latrines, clean and waste water system	271,096,536
Health Centre	12 Buildings, including waste water system	1,045,621,224
District Hospital	29 Buildings, clean and waste water system, ICT and electricity	6,668,716,117

Source: *HSSP-IV (2015-2020)*

More details of funding processes are as described in ***Figure 2.3***.

Figure 2.3: Funding and Reporting on Construction of Healthcare Facilities



***Source**: Interviews and Reviews of Relevant Legislations of respective MDAs*

***Legend**: Flow of funds and reporting on implementation of Healthcare Facilities*

	Funds for construction, renovation and rehabilitation of Healthcare Facilities
	Follow ups monitoring by respective Ministry, Regions and LGAs on construction of Healthcare Facilities in their area of jurisdiction
	Reporting on implementation of construction, renovation and rehabilitation of Healthcare Facilities

CHAPTER THREE

FINDINGS ON PLANNING AND CONTROL OF TIME, QUALITY AND COST OF CONSTRUCTION OF HEALTHCARE FACILITIES

3.1 Introduction

This chapter presents findings on the extent to which PO-RALG has effectively managed the construction of Healthcare Facilities (Buildings) in the country. Equally, the findings have focused on assessing whether PO-RALG, through LGAs, has been planning for the construction of Healthcare Facilities economically, effectively and efficiently and asses on whether the construction is done on time, within the planned cost and meets the predefined qualities. Below are the findings:

3.2 Extent of the Problem on the Management of Construction of Healthcare Facilities

To what extent do the problems of Delays, Cost Overrun and Substantial Work are common to the constructed Healthcare Facilities?

The extent of the problem of management of construction of Healthcare Facilities was measured in three project deliverable aspects namely time, cost and quality. The findings for each aspect are as detailed below:

3.2.1 74% of Constructed Healthcare Facilities in the Country Experienced Delays in Completion

What is the extent of delay in completing Healthcare Facilities' projects in LGAs?

The Audit Team noted that there were delays in completion and commencement of construction of Healthcare Facilities(Health centres and District Hospitals) contrary to the requirement of Regulation No. 5 (2) (c), of the Public Procurement Regulation 2013. The Regulation requires LGAs to ensure that construction of building works is completed on time so as to achieve economy and efficiency. The extent of delays is as described below:

(a) 74% of Constructed Healthcare Facilities Experienced Delays in Completion

PO-RALG was expected to ensure that LGAs completed the construction of Healthcare Centres and District Hospitals within 3 months and 6 months respectively. Evidence drawn from PO-RALG's Healthcare Facilities Project Implementation Reports (2015/16 to 2019/20) and analysis of Healthcare Facilities Database, indicated that 74 % of constructed healthcare facilities in the country were not completed within the planned time. These delays were noted for all projects implemented in all phases (Phase I-to Phase VII) in the Country. The summary of the delay for each category is as indicated in **Table 3.1** below:

Table 3.1: Percentage of Healthcare Facilities Delayed in Completion

Healthcare Facility Category	Total Number of Healthcare Facilities Constructed (A)	Number of HFs not Completed in Time (B)	% of Healthcare facilities that were delayed = (B/A)*100
District Hospital	68	67	99
Health Centre	379	266	70
Total	447	333	74

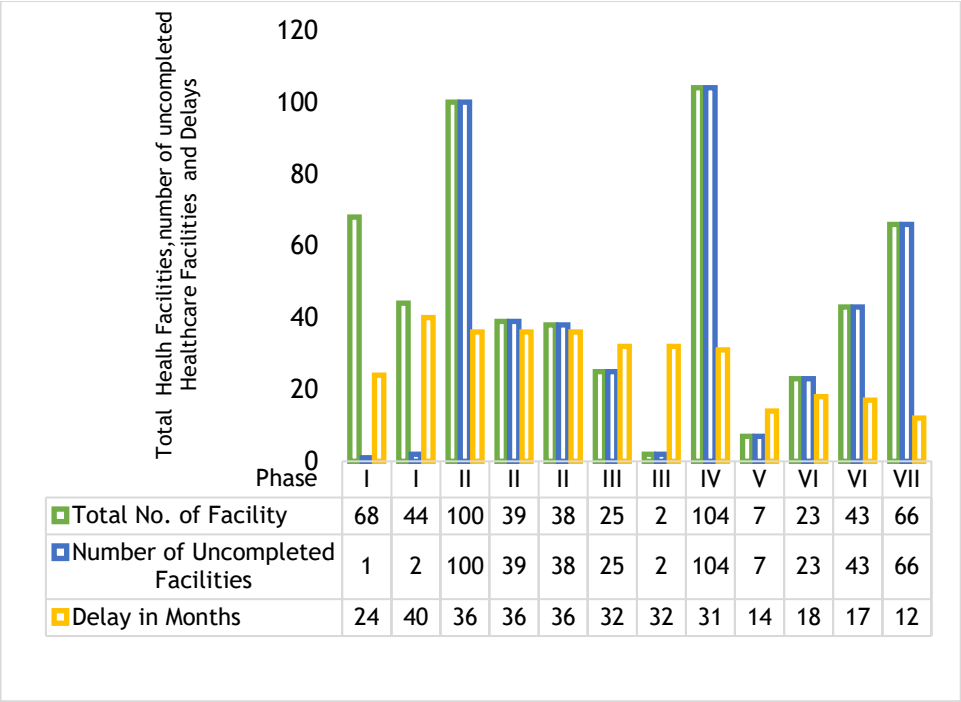
***Source**: PO-RALG's Healthcare Facilities Project Implementation Reports (2015/16 to 2019/20 and Healthcare Facilities Progress Reports 2020*

Table 3.1 above indicates that 333 out of 447 which is equivalent to 74 percent of Healthcare Facilities in the country were not completed in time. Similarly, 99 percent of District Hospitals and 70 Health Centres were not completed in time. This was noted through review of Healthcare Facilities data of Projects implementation reports (2015/16 to 2019/20).

The analysis shows that only 112 of 379 Health Centres were completed in time. The analysis further indicates that 1 out of 68 District Hospitals was completed in time. The implication of such analysis is that 99 percent of constructed District Hospitals delayed in completion. Despite extension of time by 2 months for Health Centres and 3 months for District Hospitals respectively as revealed through the interviews held with PO-RALG officials, nevertheless the Health Centres and District Hospital were not completed until the time of this audit. The extension of time was evidently

noted from interviews held with PO-RALG Officials. The analysis of the overall extent of delays in the country are as shown in **Figure 3.1** and for further detailed analysis presented in ***Appendix 6***.

Figure 3.1: Extent of Delays in Completion of Health Centres and District Hospitals



Phase	I	I	II	II	II	III	III	IV	V	VI	VI	VII
Total No. of Facility	68	44	100	39	38	25	2	104	7	23	43	66
Number of Uncompleted Facilities	1	2	100	39	38	25	2	104	7	23	43	66
Delay in Months	24	40	36	36	36	32	32	31	14	18	17	12

***Source**: Auditors' Analysis of Extract from PO-RALG's Progress Report of June 2020*

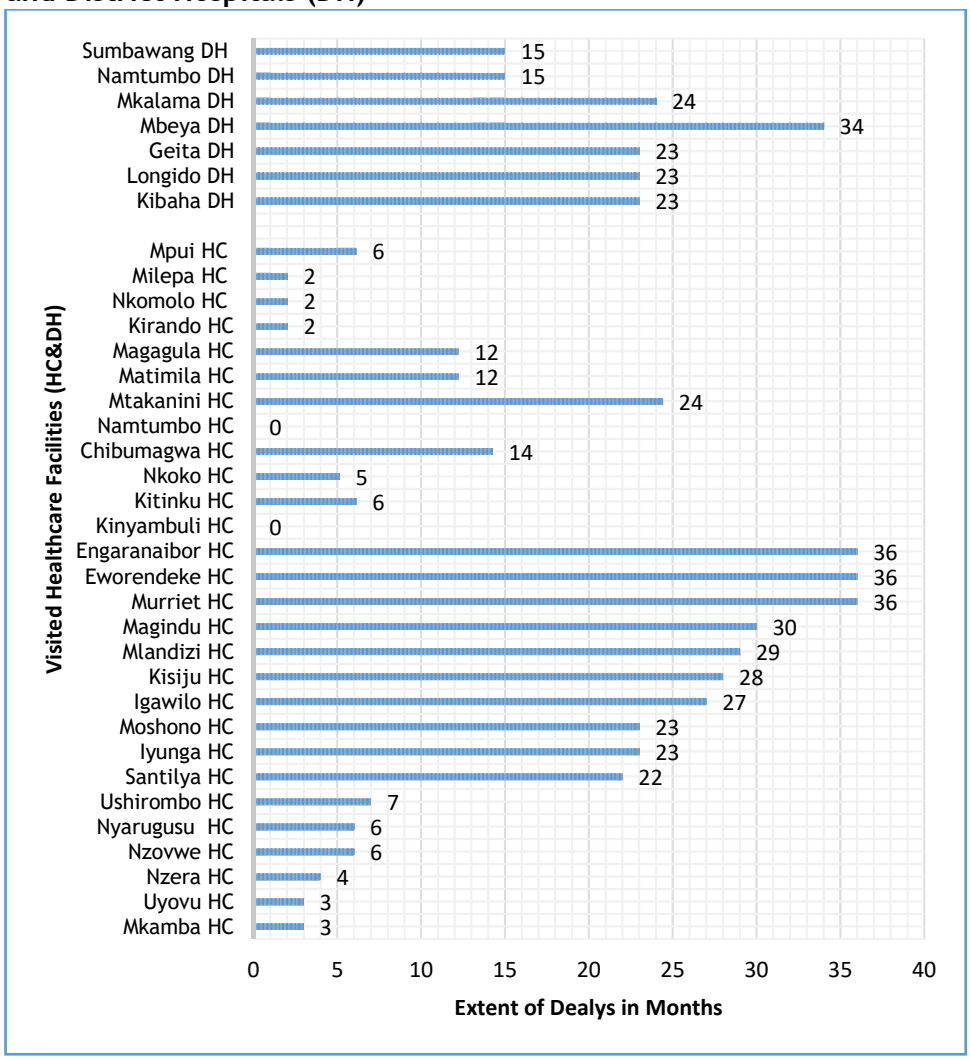
Figure 3.1 shows that the extent of delays in completion of constructed Healthcare Facilities in the country were ranging from 12 to 40 months. The maximum delays were ranging from 31 to 40 months. These can be seen in phase I and IV with a total of 311 out of 420 Healthcare Facilities as per database availed by PO-RALG to Auditors, which is equivalent to 74 percent of delayed Healthcare Facilities. Similarly, the minimum delays can be seen in phase VII, whereby completion of 66 Healthcare Facilities was delayed for 12 months.

Further, through the interviews held with PO-RALG Officials, it was revealed that LGAs requested extension of time of 2to 3 months

respectively. Despite the extension, until the time of this audit the Health Centres and District Hospital were not yet completed.

Furthermore, the Audit Team analysed the extent of delays for the visited Healthcare Facilities and noted delays of 2 to 36 months until the time of this audit as detailed in **Figure 3.2.**

Figure 3.2: Extent of Delay for the Visited Healthcare Centres (HC) and District Hospitals (DH)



***Source**: Progress Reports of June 2020 and Health Facilities Project Correspondences*

Figure 3.2 shows that there were delays of maximum of 36 months for the visited Health Centres. The maximum delays were noted in Murriet Health Centres, Eworendeke and Engaranaibor both from the Arusha Region.

Similarly, the analysis shows that 33 of 35 visited Healthcare Facilities equivalent to 94 percent were delayed in completion. This implies that only 2 out of 35 visited Healthcare Facilities were completed by June 2020.

Likewise, the analysis reveals that all 7 visited District Hospitals equivalent to 100 percent and 26 out of 28 equivalent to 93% of the visited Health Centres were not completed in time respectively (For a more detailed analysis see ***Appendix 7***).

From the interviews held with the officials from the visited LGAs, such delays were due to underestimated times for completion of Healthcare Facilities, whereby the noted delays ranged from 2 and 36 months respectively. Furthermore, failure to include mobilisation period in the construction/project time was another reason for delays as some of the Healthcare Facilities were constructed 45 to 200 kilometres from the Council Headquarters. This actually made the transportation of construction materials, as an aspect of mobilisation, to be a time consuming activity.

Through interviews conducted in LGAs, it was revealed that the factors that contributed to delays in completion of Healthcare Facilities include the following: delay of disbursement of funds, delay of supply of materials from the factory, inadequate fund set aside for construction of Healthcare Facilities and in some areas, they experienced adverse rain seasons. On the other hand, inadequate supervision due to significant shortage of technical personnel for supervision of construction activities was among the factors for delays. The delays in completion of Healthcare Facilities consequently resulted into delay in using the facilities for the delivery of healthcare services as intended to the communities. Hence, value for money was not realised from the constructed Healthcare Facilities due to delay in getting the expected service as planned.

For instance, through the site observation conducted at Engaranaibor Health Centre in Longido DC, the Audit Team observed the uncompleted Mortuary Building which was found to be at ring beam level as of 13th

September 2020. It was further revealed that the construction started earlier on 01st January 2018 and was expected to be completed on 30th April 2018. However, until the date of the Audit Team's visit 13th September 2020, it was at ring beam level with two courses as shown in **Photo 3.1**:

Photo 3.1: Showing Uncompleted Mortuary Building at Engaranaibor Health Centre in Longido DC as captured by Auditors on 13 September, 2020

(b) 402 out of 447 Healthcare Facilities Delayed in Commencement of Construction

Regulation number 5(2) (c) of Public Procurement Regulations, 2013 requires Procuring Entities for this case LGAs to ensure construction works are completed on time and in accordance with the procuring entity's priorities so as to achieve economy and efficiency.

However, review of PO – RALG's Healthcare Project Progress Report of 2019/20 revealed a delay in commencement of construction of 402 out of 447 equivalents to 90 percent of constructed Healthcare Facilities. Table 3.2 shows the extent of delays in commencement of construction of Healthcare Facilities. For more detailed analysis, see ***Appendix 8***.

Table 3.2: Extent of Delays in Commencement of Construction Healthcare Facilities

Phase/Batches of the projects	Total Number of Healthcare Facilities(HFs)	Moth from which fund for construction was received in HFs	Actual Start Date for Construction of Healthcare Facilities	Accumulated time from funding time to commencement of constructions of HFs(months)
I	44	Oct -2017	January 01,2018	3
II	139	Dec -2017	Jan 01, 2018	1
IV	114	Jun-2018	July 01, 2018	1
68 Hospital 2018 (GoT)	67[13]	Dec-2018	Jan 15, 2019	14
32 Health Facilities GF2019	32	June-2019	Aug 01, 2019	2
7 Health Facilities June 2019 - December 2019	7	June-2019	Aug 01, 2019	2
TOTAL	**402**			

***Source**: Progress Report on Implementation Status of construction of Healthcare Facilities from LGAs, 2019/20*

Table 3.2 indicates that commencement of 402 out of 447 (equivalent to 90 percent) constructed Healthcare Facilities was delayed. The delay in commencement ranged from 1 to 14 Months. The maximum time of delay in the commencement was noted in 67 District Hospitals funded by the Government, which took 14 months to start from the date the fund was received.

Through the interviews held with officials from PO-RALG and LGAs, it was revealed that untimely commencement of newly built healthcare facilities was due to; absence of reserved areas for building healthcare facilities in

[13] Except one District Hospital namely Katoro District Hospital, Other 67 District Hospitals had delay in commencement to construction for 14 months.

most of LGAs which caused tensions to emerge in the process of spotting areas on which the buildings had to be built. Other reasons included the following: lack of awareness on using Force Account among selected members of committees for construction of Healthcare buildings and non-allocation of time for mobilisation and planning for procurement process prior to commencement of construction of Healthcare Facilities.

As a result, there were delays in commencement of construction activities which resulted in delays in completion of Healthcare Buildings.

3.2.2 Existence of Completed Healthcare Buildings with Unsatisfactory Quality

To what extent the completed healthcare projects in LGAs meet the quality requirements?

According to "Direction 6 under Section 6.3 of Health Sector Strategic Plan – IV, 2015-2020), PO-RALG is required to ensure that the newly constructed and refurbished Healthcare Facilities' Buildings are within the required quality and standards. Therefore, the Audit Team expected that the constructed Healthcare Facilities by LGAs were to meet the prescribed quality, specifications and standards. However, through site visits/ observations, the Audit Team noted that an average of 34 out of 35 visited constructed Healthcare Facilities equivalent to 97% had quality weaknesses. Among the aspects that contributed to unsatisfactory quality of constructed Healthcare Facilities include:

(a) Inadequate Quality Tests for Construction Materials Conducted During Construction

According to Health Sector Strategic Plan – IV, 2015-2020 Section 6.3 requires PO-RALG to ensure that, the newly constructed and refurbished Healthcare Facilities Buildings are within the required quality and standard. Through document reviews as well as the interviews held with PO-RALG and LGAs' Officials, the Audit Team noted that LGAs did not adequately conduct tests for construction materials. **Table 3.3** indicates construction materials' tests in the respective visited LGAs (For more details, see ***Appendix 9***).

Table 3.3: Tests of Construction Materials for Visited LGAs

Anticipated Tests	Number of visited Healthcare Facilities conducted Test	Number of visited Healthcare Facilities which did not conduct Tests
Concrete	1	34
Sand – Cement Block	3	32
Re-bars	1	34
G.I.S(IT5)	-	35
Sand	1	34
Aggregates	-	35
Water	-	35

***Source**: Project Correspondence 2020 and interviews with Officials from LGAs*

Table 3.3 indicates that 34 of 35 selected and visited Healthcare Facilities equivalent to 97 percent did not conduct tests for Concrete, Re-bars and Sand, while 32 of 35 visited Healthcare facilities did not conduct sand – cement block tests whereby 100 percent of LGAs did not conduct tests for roofing sheets, aggregates and water during construction of healthcare facilities. Concreted tests were done at Igawilo HC in Mbeya City Council and Sumbawanga District Hospital in Sumbawanga District while reinforcement bars tests were only conducted at Kibaha District Hospital (Disunyara) in Pwani Region.

Interviews held with PO-RALG and LGAs' officials revealed that only sand cement blocks were tested in all ongoing and completed Healthcare Buildings. However, as it is indicated in **Table 3.3**, 3 out of 35 Healthcare Facilities carried out tests for sand cement blocks. This is equivalent to 9 percent of the selected and visited LGAs.

The reasons provided by the interviewed officials for not conducting tests were due to lack of funds set for testing as such funds were not included in the schedule of materials, and limited time for conducting tests due to limited time for construction of Healthcare Facilities. **Table 3.4** shows the type of quality tests required with their testing duration.

Table 3.4: Type of Quality Tests Required with their Testing Duration

Type of Test(s)	Period Required For Test/Strengthening (days)	As referred to:
Compressive strength of concrete cubes	7 - 28	BS 1881 Part 116: 1983
Curing of block	7	BS 6073, 1981. Concrete block: BSI
Curing of block Wall	7	BS 6073, 1981. Concrete block: BSI
Plastering	7	BSI-BS 5492: 1990
Slump test	Instantly	BS 1881: Part 102:1983
Sieve test on aggregate	Instantly	BS 812: Part 103:1:1989
Moisture content of aggregates	Instantly	BS 812: Part 109: 1990
Relative Density and water absorption	Instantly	BS 812: Part 2: 1975
Aggregate Crushing Value (ACV)	Instantly	BS 812: Part 110: 1990
Ten Percent Fines Value	Instantly	BS 812: Part 110: 1990
Aggregate Impact Value	Instantly	BS 812: Part 110: 1990
Allowable Stresses In Masonry	7	ANSI Standard Building Code Requirements for Masonry (A41.1)

***Source**: Building Standards and Codes (BS/AASHTO and ANSI)*

As indicated in Table 3.4, testing of concrete could take 7 - 28 days. Curing also had maximum of 7 days before proceeding with next activity. The Auditors are of the view that, lack of quality control mechanism contributed to inadequate quality of the constructed Healthcare Facilities. As a result, there were no quality assurance of the constructed Healthcare Buildings. This could lead to early deterioration or dilapidation of the completed Healthcare Buildings.

In response to this, the interviewed officials from PO-RALG indicated that time allocated was adequate as quality tests to be conducted were those which were no expected to take long time.

(b) Lack of Quality Control Mechanism for Construction of Healthcare Facilities

It was expected that PO-RALG and LGAs would have quality control mechanism for construction of Healthcare Facilities by use of Force Account Method in the country. PO-RALG had no clear picture on quality of constructed and ongoing Healthcare Facilities. Likewise, the directive of PO-RALG issued vide letter with Reference No. AD.296/303/01/1/67 on the use of Force Account of August 7, 2017, did not include quality control mechanism.

Through the interviews, PO-RALG officials indicated that they trusted the committees established during execution of projects. Despite the comment by the interviewed officials from the selected and visited LGAs that the committees had no skills and knowledge for supervising the ongoing building works, the interviewed PO-RALG officials viewed the committees as the quality control mechanism for the Force Account projects.

(c) There is Risk of Completed Healthcare Buildings with Regard to Durability, Quality and Life Span

The Local Government (Urban Authorities) Act, No. 8 of 1982, Section 59 (u)) requires LGAs to manage Building Works in order to ensure that the constructed buildings are of the desired quality and safe for use. However, the Audit Team noted risks of quality, durability and life span of the completed Healthcare buildings due to the following:

(i) Limited Time for Curing of Constructed Healthcare Buildings

The Audit Team noted that, among the factors that contributed to inadequate quality of ongoing and completed Healthcare Facilities was due to limited time for curing of Healthcare building works. This was revealed through the interviews held with officials from the selected and visited LGAs. The reason provided was due to the set time for completion of construction of Healthcare Facilities as they were required to be completed within 90 days throughout the country. This limited the time required for curing to attain the recommended strength as per best practice.

For instance, the planned time for completion was 90 days, whereby curing of executed works was supposed to take 7 to 28 days, which equals to waiting time for attaining strength of executed works. However, during the construction this was not done. The reason for lack of enough curing time was due to failure to include this aspect within the 90 days of executed works. This contributed to inadequate quality of the completed Healthcare Buildings. As a result, some of completed buildings were found to have severe defects as described below:

(ii) Presence of Completed Healthcare Buildings with Defects

Through site visits, the Audit Team observed the presence of defects in 33 out of 35 visited ongoing and completed healthcare buildings. These defects included vertical crack through both sides of walls, horizontal crack, peeling-off paints, broken Ceiling/PVC, broken tiles, laboratory testing platform tiles, poor quality of X-ray room, worn out theatre flush doors and heaved and deflected external doors (Mkamba HC, Kibaha DH and Nyarugusu HC). More details are provide in ***Appendix 13***. **Photo 3.2** (3.2a & 3.2b) below presents an example of crack in one of the visited Health Centre:

Photo 3.2(a): Showing Horizontal Cracks through Wall at Eworendeke HC in Longido District. Picture was taken on Oct 13, 2020

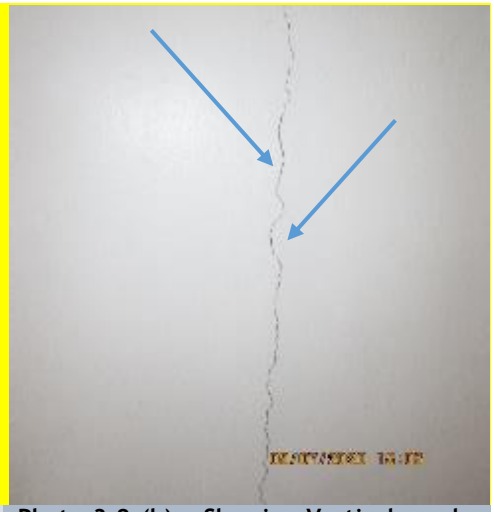


Photo 3.2 (b): Showing Vertical cracks through walls thickness at Santilya Health Centre in Mbeya District Council. Picture taken on July 7, 2020

3.2.3 67 out of 68 of Constructed District Hospitals in the Country and 11 out of 28 Visited Health Centres had Cost Overrun

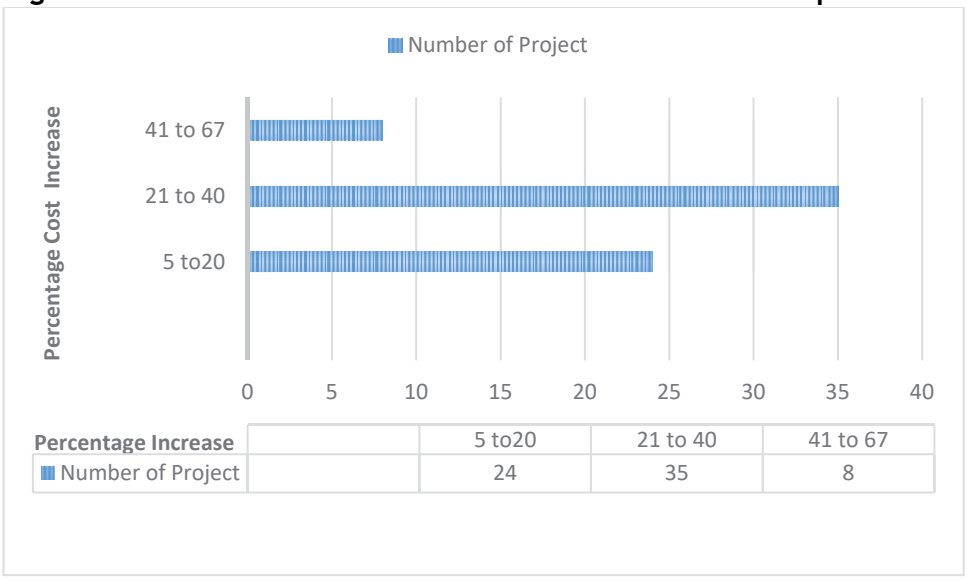
To what extent the projects have cost overrun?

According to Construction Industry Policy, 2003; clause 7.2 (d), P O-RALG and LGAs are required to ensure efficient and cost effective of the constructed facilities, and such facilities are to be in line with the best practice in order to guarantee value for money. However, the Audit Team noted weakness regarding to cost overrun for the construction and rehabilitation of healthcare facilities as described below:

(a) Ongoing and Completed Healthcare Facilities had Cost Overrun

Through the review of Healthcare Facilities Implementation Status Report of 2019/20 in the country, the Audit Team noted that 67 out of 68 District Hospital implemented projects were not completed within the planned budget cost of TZS 1.5 Billion. Further, there was an additional amount of TZS 300 Million which was requested for completion of construction of the District Hospitals. This implies that 99% of the District Hospitals were not completed within the budget. The additional amount varied from one District Hospital to another as presented in **Figure 3.3** below:

Figure 3.3: Increase in Cost for Constructed 68 District Hospitals



Source: *Auditors' Analysis on the Implementation Status Report of 2019/20*

Figure 3.3 indicates that the cost increase was not uniform and ranged from 5 to 67 percent of their original contracts sum. In 35 out of 68 District Hospitals which is equivalent to 52 percent, cost increase ranged from 21 to 40 percent whereby 24 ranged from 5 to 20 percent. This implies that 67 out of 68 District Hospitals had cost overrun. More details are as provided in ***Appendix 10***.

Through the review of LGAs' reports related to procurement of materials, labour costs, supervision costs and transport cost, the Audit Team noted weaknesses regarding cost overrun.

Further, analysis was conducted in projects implemented in the 14 visited LGAs and were found to have cost overrun as presented in the T**able 3.5** below**.**

Table 3.5: Cost Overrun for the Visited Health Centres in Respective LGAs

Region	LGAs	Heath Centres	Total Fund Received From PO-RALG (in Million TZS)	Cost Established as per Audit Analysis From Given Payment Voucher (in Million TZS)	Cost Overrun (in Million TZS)	Cost overrun in %
Arusha	Arusha CC	Moshono HC	400	444.391	44.390	11
Pwani	Mkuranga DC	Kisiju HC	400	425.735	25.734	6
		Magindu HC	500	571.035	71.034	14
Geita	Geita DC	Nyarugusu HC	400	400.674	0. 674	1
	Bukombe DC	Ushirombo HC	500	533.326	33.326	7
Mbeya	Mbeya CC	Iyunga HC	400	537.000	137.000	34
		Nzovwe HC	500	634.000	134.000	27
Singida	Mkalama DC	Kinyambuli HC	400	400.944	0.944	1
Ruvuma	Songea DC	Matimila HC	400	449.656	49.656	12
		Magagula HC	400	472.316	72.316	18
Rukwa	Nkasi DC	Kirando HC	400	407.971	7.971	2

***Source**: Projects documents (Payment Vouchers) and Cashbooks from the selected and visited LGAs of fiscal year 2017/18-2019/20*

Table 3.5 indicates that 11 out of 28 visited Health Centres in seven (7) regions had cost overrun. As indicated in **Table 3.5**, the cost overrun ranges from TZS (0. 674 to 137) Million equivalent to 1 to 34% respectively. The highest cost overrun was 34% noted in Iyunga Health Centre - Mbeya City Council while the minimum cost overrun was 1% noted in Nyarugusu HC in Geita DC and Kinyambuli HC in Mkalama DC. All these projects with cost overrun have not been completed until the time of this audit.

During the interviews with the officials responsible for financial management, it was revealed that the reason for cost overrun was due to inadequate planning by PO-RALG and LGAs, whereby the substructure plinth height was under designed and the cost of the following items were not included**;** water supply system to each building in the District Hospital, electricity supply and ICT infrastructure as detailed in **Section 3.3.2** of this report**.**

3.3 Ineffective Planning System for Managing Construction of Healthcare Facilities

Do PO-RALG and LGAs have effective planning system for management of construction of Healthcare Facilities?

Effective planning system for management of construction of Healthcare Facilities must include: need assessment or analysis of needs (construction, renovation and rehabilitation) of Healthcare Facilities, detailed designs (architectural, structural and services), foul water and storm water designs, budgeting and cost estimates against needs in respect to design and quality standards.

However, the Audit Team noted that PO-RALG had ineffective planning system for the management of construction of Healthcare Facilities as indicated by the weaknesses described below:

3.3.1 Inadequate Needs Assessment Conducted by PO-RALG Prior to Designing, Planning and Budgeting

Does PO-RALG effectively conduct needs assessment prior to designing and budgeting for the construction of Healthcare Facilities?

According to the Construction Industry Policy, 2003; Section 8.1.9 (c), PO-RALG is required to facilitate and ensure that the design, construction and

refurbishment of buildings (Healthcare Facilities) take into account the community needs.

However, the Audit Team noted weaknesses related to need assessment, design and budgeting for construction of Healthcare Facilities:

(a) Inadequate Needs Assessment Prior to Designing for Healthcare Facilities

The Audit Team noted that PO-RALG did not conduct adequate need analysis or assessment prior to design and budgeting for construction of Healthcare Facilities. The need analysis could have been used as an important input for designing and budgeting prior to construction of Healthcare buildings.

Although the interviewed PO-RALG officials pointed out that the Ministry engaged experts in designing, planning and budgeting prior to construction of Healthcare Facilities, the Audit Team noted that, PO-RALG did not adequately conduct need analysis evidenced by the followings:

(b) Inadequate involvement of Stakeholders during the Designing of Healthcare Facilities

It was expected that PO-RALG would coordinate and engage other stakeholders prior to designs. However, the Audit Team noted that, the Ministry engaged experts from the Ministry of Health, Community Development, Gender, Elderly and Children and PO-RALG. Other key experts from TAEC and Utility Authorities such as TANESCO and Water, were not engaged during the design stage.

Through the analysis of engagement letters, it was found that PO-RALG engaged experts on April 08th to 11th April 2018 for preparation of drawings for Healthcare Facilities, however key stakeholders such as TAEC, TANESCO and Water Authorities etc. were not invited.

The Audit Team conducted the analysis of the invitation letter, it was indicated that 2 Civil Engineers and 4 architects were involved for preparing the drawings. Despite the experts' engagement, there were no reports prepared after designing of Healthcare Facilities. List of experts

involved in preparation of drawings for Healthcare Facilities is provided in **Table 3.6.**

Table 3.6: List of Experts involved in the Preparation of Drawings for Healthcare Facilities

Letter of Invitation	Date of Letter	Work Station	Name of the Experts	Profession
N/A	N/A	PO – RALG	Dr. SYS	Dentist
N/A	N/A	PO – RALG	Arch.SI	Architect
N/A	N/A	PO – RALG	Eng. LM	Civil Engineer
N/A	N/A	PO – RALG	Arch. JR	Architect
		PO – RALG	Eng. HM	Engineer ICT
AH.161/164/01	08 Apr 2018	Muhimbili National Hospital	Mr. AR	Ophthalmic Nurse
AH.161/164/10	Feb 08, 2018	Morogoro Region Referral Hospital	Dr. NR	Gynaecologists
AH.161/164/01	March 29, 2018	Muhimbili National Hospital	Sr. UAM	Emergency Medicine Nurse
AH.161/164/01	March 29, 2018	RAS -Singida	QS. AK	Electrical Engineer
AH.161/164/01	April 04, 2018	RAS - Dodoma	Sr. RSM	Paediatric Nurse
Kumb. Na. AH. 161/164/02	18/04/2018	MoHCDGEC	Arch. M	Architect
Kumb. Na. AH. 161/164/02	18/04/2018	MoHCDGEC	Arch. AAI	Architect
Kumb. Na. AH. 161/164/02	18/04/2018	MoHCDGEC	JEB	Environmental Health
Kumb. Na. AH. 161/164/02	18/04/2018	MoHCDGEC	Eng. VM	Biomedical Engineer
Kumb. Na. AH. 161/164/02	18/04/2018	MoHCDGEC	GAM	Radiologist
Kumb. Na. AH. 161/164/02	18/04/2018	MoHCDGEC	AM	Laboratory Scientist

Letter of Invitation	Date of Letter	Work Station	Name of the Experts	Profession
Kumb. Na. AH. 161/164/02	18/04/2018	MoHCDGEC	Eng.AIM	Civil Engineer
N/A	N/A	Benjamin Mkapa Hospital	Sr. SK	Theatre Nurse
Kumb. Na. MDH/MH/159/VOL .VII/10	17/04/2018	Singida Region Office	QS. AK	QS
Kumb. Na. AH. 161/164/01	18/04/2018	Ubungo MC	QS. BK	QS
Kumb. Na. AH. 161/164/01	18/04/2018	Bagamoyo DC	Eng. EC	Electrical Engineer

***Source**: Invitation Letters to experts who were involved in preparing Drawings of Healthcare facilities from PO-RALG of 2018*

Table 3.6 shows a list of staff invited for the preparation of Healthcare Facilities drawings whereby 2 Civil Engineers, 4 Architects and 2 Quantity Surveyors were involved. Despite the involvement of experts there were neither design reports nor design reviews and approvals for prepared drawings. Despite experts' involvement in the designs, the Audit Team noted the following weaknesses:

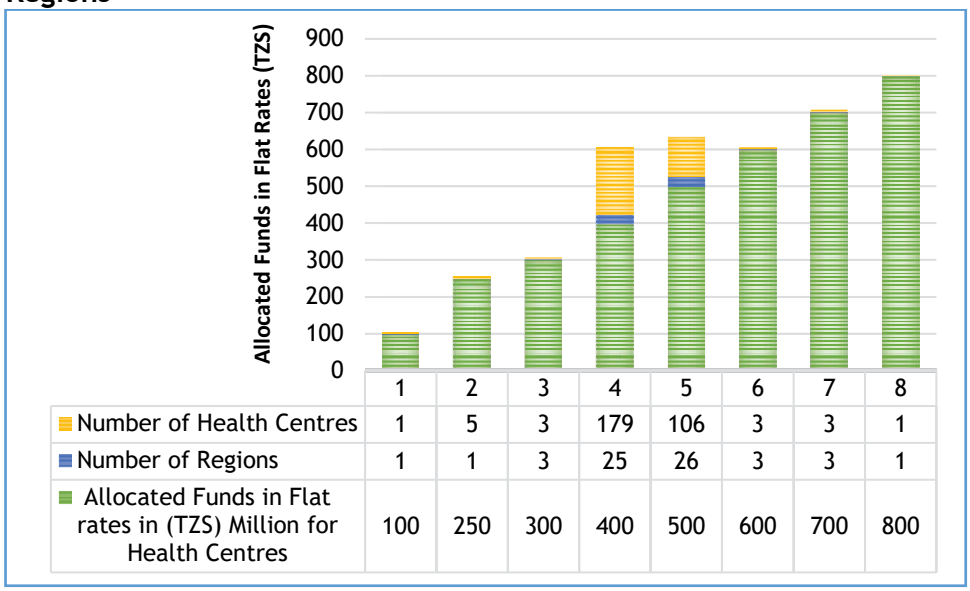
(i) Allocation of Flat Rate Fund to Different Healthcare Facilities with Different Site Conditions

The Audit Team noted that PO-RALG allocated funds for construction of Healthcare Facilities at flat rate regardless of the difference on topographical location. Reviews of PO-RALG's Progress Report on Status of Implementation of 301 Health Centres, showed that the allocated funds were flat rates ranging from TZS 100 Million to TZS 800 Million to different categories of Healthcare Facilities.

Likewise, TZS 1.5 Billion were allocated for construction of 67 District Hospitals in 26 regions. The flat rate disbursed did not consider topographical location whereby design of buildings' foundations could have taken into account the topographical situations that differed from one project to another. The detailed information about the funds allocated to

various healthcare facilities is presented in ***Appendix 11***. **Figure 3.4** presents the summary showing flat rate fund allocated to various Regions.

Figure 3.4: Summary of Disbursed Funds at Flat Rates to Various Regions



	1	2	3	4	5	6	7	8
Number of Health Centres	1	5	3	179	106	3	3	1
Number of Regions	1	1	3	25	26	3	3	1
Allocated Funds in Flat rates in (TZS) Million for Health Centres	100	250	300	400	500	600	700	800

***Source**: PO-RALG's Progress Report on Status of Implementation of 302 Health Centres, 2019*

Figure 3.4 shows that flat rate amount of fund allocated for construction of healthcare facilities/buildings in different locations across the country. For example, 179 Health Centres located in 25 different Regions in the Country, each one was allocated with TZS 400 Million for construction of Health Centres. Allocation of flat rate amount of fund in different location clearly implies that PO - RALG assumed that the topography of the site and material cost ware the same in all 25 regions.

This led to inadequate cost estimates by PO-RALG including preparation of standard and typical drawings, flat rate per item and the assumption that building foundations details were the same throughout the country.

However, during the site visits in 14 visited LGAs, the Audit Team noted differences of the topography of the site used for construction of Healthcare Facilities. The noted differences were specific to the foundation especially plinth height. The differences ranged from 2.0 to 5.5 metres (range variation of 0.2metres to 4.5 metres) as described in **Table 3.7**.

These differences in the visited LGAs resulted into cost increase for construction of Healthcare facilities ranging from 1 to 34% as shown in table 3.5. This indicates that the same typical building design cannot be constructed using the same price for area locations with different site conditions. However, lack of adequate analysis resulted into under design and because of lack of documentation of changes, the Audit Team could not establish the actual cost of additions made on site.

Interviewed PO-RALG officials indicated that allocation of flat rate fund was done based on the assumption that there would be checks and balances as there could be high cost in a certain area as well as very cheap items. However, the Audit Team is of the view that the reason provided were not technical and did not conform with the best practice as it could not portray the actual situation. Hence, this led to 99% and 70% of uncompleted District Hospitals and Health Centres respectively in the country up to the time of this audit.

3.3.2 PO-RALG Prepared Inadequate Design for Healthcare Facilities

Does PO-RALG ensure that adequate design for Healthcare Facilities are prepared and approved accordingly?

The Basic Standards for Health Facilities Level I and II of 2015 chap 6(6.1), requires PO-RALG to ensure that Healthcare Facilities' premises are located and special attention given to; size, shape of the site, topography, drainage, soil conditions, utilities available, natural features, orientation of the site (north, south, east, west), vegetation, trees and plantings. However, the Audit Team noted the following weaknesses:

Lack of Design Reviews

Despite the involvement of experts from PO – RALG in preparation of drawings, the Audit Team noted that the designs of Healthcare Facilities were not thoroughly reviewed by PO-RALG. This was evidently depicted from the following incidences as explained below:

(a) Incidences of Under Designed Healthcare Facilities

The Audit Team noted the incidences of under designed healthcare buildings as a result of inadequate need analysis. The weaknesses associated with under design are as follows:

(i) Design Provided Less Foundation Wall Depth Compared to the Actual Situation at Site

The Audit Team expected PO – RALG to design Healthcare Facilities Buildings which reflected the actual site condition and topography in respective LGAs. However, through reviews of Health Facilities' drawings, the Audit Team noted variations of dimensions for visited Healthcare Facilities compared to drawings issued by PO – RALG to LGAs.

Likewise, interviews held with PO-RALG official revealed that the prepared drawings were typical and standard which did not reflect the actual site condition and topography of specific areas in the respective LGAs. This implies the foundation details were not captured during design. Responding to this, officials from PO-RALG pointed out that all drawings prepared were normal standard drawings. LGAs, being users, were supposed to customise them according to the circumstances at the construction site. The officials also pointed out that it was not possible for PO-RALG to design individual drawings for each LGA.

Moreover, the interviews held with LGAs' officials and through the site verification by the Audit Team, variations of foundations for erected buildings compared to original drawings were noted. This was because PO - RALG did not conduct geotechnical or soil investigation prior to design. PO-RALG officials pointed out that geotechnical or soil investigation was not done due to the urgent need to get the project implemented

In that regard, therefore, the Audit Team conducted site visit and noted that the actual foundation wall depths differed with the size indicated in the drawings. For instance, 100% of the visited Healthcare Facilities had variations in depths of foundations. **Table 3.7** presents the variations noted in the selected and visited healthcare buildings in the respective LGAs:

Table 3.7: Variations in Foundation Wall Depths for Visited Healthcare Facilities

Name of LGA	Number of Healthcare Facilities	Average Plinth depth as per design drawings (m)	Range of Maximum Plinth depth verified at site (m)	Range of Variation of Depth (m)
District Hospitals				
Mbeya DC	1	1	2.7	1.7
Kibaha DC	1	1	2.8	1.8
Longido DC	1	1	2.5	1.5
Geita DC	1	1	2.5	1.5
Mkalama DC	1	1	2.6	1.6
Namtumbo DC	1	1	2.2	1.2
Sumbawanga DC	1	1	2.0	1.0
Health Centers				
Mbeya DC	1	1	2.7	1.7
Mbeya CC	3	1	2.2-3.5	1.2-2.5
Kibaha DC	2	1	1.0-2.2.	0.0 -1.2
Mkuranga DC	2	1	2.0-2.2	1.0-1.2
Longido DC	2	1	2.2-2.5	1.2-1.5
Arusha CC	2	1	3.5-4.0	2.5-3.5
Geita DC	2	1	2.2-2.8	1.2-1.8
Bukombe DC	2	1	2.0-2.2	1.0-1.2
Mkalama DC	1	1	2.6	1.6
Manyoni DC	3	1	2.5-5.5	4.5
Namtumbo DC	2	1	2.0-2.5	1.0-1.5
Songea DC	2	1	1.0-2.0	0.0-1.0
Sumbawanga DC	2	1	1.2-2.3	0.2-1.2
Nkasi Dc	2	1	1.0-1.5	0.0 -0.5

***Source**: LGAs / Healthcare Facilities Project Documents (Drawings) and Physical Verifications of visited Healthcare Facilities.*

Table 3.7 shows deviation of foundation/ plinth depth or substructure as compared to original drawings was ranging from 0.2 to 4.5m. The maximum extra foundation depths of 5.5m was found at Chibumagwa Health Centre in Manyoni DC. On the other hand, depth varying from 2.5 to 3.5m were found in Arusha City Council.

More than 2m depths of foundations were observed at Nzovwe Health Centre and Igawilo HC in Mbeya region, Chibumagwa HC in Manyoni DC and Murriet HC in Arusha. The increase in this depth indicates increase of quantities of materials used for that particular substructure.

The increased depths require more materials such as fill materials, concrete or sand cement blocks, plastering as well as painting works. This was due to inadequate needs analysis and inadequate design as well as failure to take actual needs of the Healthcare Facilities.

However, the Audit Team could not analyse the cost variations of materials due to lack of documented addition quantities. This implies that PO-RALG did not use detailed soil information from respective LGAs prior to detailed design of Healthcare Facilities. Depths were physically observed as shown in **Photo 3.3** below.

Photo 3.3 provides examples of observed healthcare buildings that experienced the variation of foundation wall/plinth depth.

Photo 3.3(a): Showing 5.5m deep substructure at Chibumagwa Health Centre in Manyoni DC. Photo taken by Auditors on 19th November, 2020

Photo 3.3(b): Showing 3.5m deep substructure capture at Murriet Health Centre in Arusha CC. Photo taken by Auditors on 19th October, 2020

(ii) Omission of Important Building Components in the Design of Healthcare Buildings

Through review of drawings and site visit made by the Audit Team, it was noted that PO - RALG did not include all necessary building components in the drawings issued to the respective LGAs. Officials from PORALG also acknowledged that the drawings for Healthcare Facilities included service drawings for water and sewage system, but soak way pit and septic tanks drawings were omitted for the reason that there were already standard drawings for soak way pits. The omitted items included external works

(Soakaway and Septic tanks, external water supply and ICT provisions) as described below:

(a) Non-inclusion of Soak Away and Septic Tanks

The Audit Team expected PO-RALG during planning for construction of Healthcare Facilities to include clean and waste water system. However, the Audit Team noted that healthcare building drawings missed septic and soak away items. This was evidently acknowledged through interviews held with officials from PO-RALG, LGAs and site visits made in seven regions.

Through site observations, 100 % of the visited Healthcare Facilities did not have detailed drawings of septic tank and soak ways. The reasons provided by PO-RALG was because of re-scoping of the scope of work due to lack of funds and inadequate designs.

For instance: Kibaha District Hospital, Longido District Hospital and Geita District Hospital had only one unit of Septic tank and Soak away. This was because of lack of need assessment and inadequate designs. As a result, the completed Healthcare Facilities delayed in use as intended due to lack of Septic tank and Soak away pit.

(b) Omission of External Works Connection of Water and Electricity from Outside of Healthcare Buildings

It was expected PO-RALG to design Health Centres and District Hospitals with complete details of services like; water supplies and electrical connection from external source in the respective LGAs.

However, through reviews of schedule of materials and drawings of the visited constructed Healthcare buildings, it was revealed that service work like water and electricity were provided inside the building only. The reviewed drawings for all 35 visited Healthcare Facilities did not have component for connection of water and electricity from the main supply to the facilities and connection around various buildings within the facilities.

This was also confirmed through interviewed officials from the visited LGAs. Omission of water and electricity installations was a challenge to the

Healthcare Facilities as they were then required to find additional fund to cover for the cost of this task. However, the selected and visited LGAs did not provide documents indicating the additional cost on this regard.

(c) Non-inclusion of Information and Communication Technology (ICT) Installation Components for the Council Hospitals

The Audit Team noted that in all 7 visited District Hospitals, component for installation of ICT infrastructure was not included in drawings and Schedule of Materials. This was evidently noted through reviews of District Hospital Drawings.

Through interviews held with officials from the visited LGAs, the Audit Team noted that ICT infrastructures were compulsory for the constructed District Hospitals because all payments operations are done through ICT systems. Due to its importance 1 of 7 District Hospital (Mbeya District Hospital) decided to install ICT infrastructures using other sources of funds.

However, the additional cost spent for installation of ICT at Mbeya District Hospital was not availed to Auditors to establish the extent of additional cost due to lack of documentation of additional costs.

(d) Absence of Specifications of Glass Materials for X-ray Rooms

The Audit Team noted that, PO - RALG did not indicate the specification of glass materials for X-ray room and building in the drawings and schedule of materials of constructed Health Centres. This was so despite the fact that the required finishing materials for the X-ray room were those which can sustain the radiation coming out from the X-ray machines. For instance, hardwood doors and transparent windows were used. This was due to non-involvement of radiology experts (TEAC).

As a result, in 19 out of 35 visited constructed Healthcare Facilities, incorrectly installed the windows for X-ray control rooms or not installed waiting for PO-RALG and TAEC to provide specifications on type of glass materials to be used. For instance, at Iyunga Health Centre in Mbeya CC, the Audit Team observed that X- ray control was not yet functioning as the specification was not yet provided by PO-RALG.

The Audit Team further noted that, 13 out of 14 visited LGAs used normal aluminium glass in other windows of the X-ray room that are not well known to be good proof of radiation.

The reasons provided by the interviewed council engineers from 14 visited LGAs for the use of normal window glasses was because of lack of specifications from PO-RALG as well as lack of knowledge in interpreting the drawings by LGAs' local *fundis*. For instance, Mbeya City Council said they decided to use normal aluminium glass window because the building health facility has been positioned at the higher level where the radiation cannot reach easily.

Further, the reviewed TAEC Inspection Report of **31st May 2020** pointed out the unsatisfactory constructed premises for X-ray rooms in various inspected Healthcare Facilities in the country. Amongst the mentioned problem(s) for closure were unsatisfactory premises, inadequate shielding of the door frames and the overlaps (architraves), inadequate facility and incomplete X-rays examination room. Consequently, these Healthcare Facilities were prohibited on using X-rays which affected the delivery of the required healthcare services.

Furthermore, the Audit Team noted that 33 of 35 which is equivalent to 94% of Healthcare Facilities selected and visited in 14 LGAs procured and fixed X-ray doors which were out of specification or substandard. This implies that only 2 Healthcare Facilities (Geita District Hospital and Namtumbo HC) managed to procure and fixed the required X-ray doors. The comparison of X-ray shielded and unshielded doors are shown in **Photo 3.4.**

Photo 3.4: Comparison X-rays (Radiology Buildings) doors

Photo 3.4a: X-ray door installed at Geita District Hospital, Photo was taken by Auditors on 26th October, 2020

Photo 3.4b: X-ray doors installed at Magindu HC in Kibaha, Photo was taken by Auditors on 05th October, 2020

This was due to inadequate preparation of specifications by PO-RALG and lack of coordination of TAEC, the institution which, is responsible for enforcement and inspection and specification of radiology premises. As a result, PO - RALG did not manage to provide technical guidance on specification of X-ray rooms construction materials to the respective LGAs.

The Audit Team also noted improper shielding of X-ray room doors, non-uniformity of X-ray rooms, X-ray rooms improperly fixed windows. This was due to inadequate design and specification. Which led LGAs to decide type of materials to be used which resulted into inconsistencies. ***Photo 3.5 (3.5(a) &3.5 (b))*** below provide examples of weaknesses in the radiology rooms or buildings.

Photo 3.5(a): ***Showing improperly used x-ray shield in radiology room at Iyunga. Photo was*** **taken by Auditors on** ***7th*** **July, 2020** ***at Mbeya CC***

Photo 3.5 ***(b)*****:** ***Showing improperly fixed door which overlaps at Nzovwe. Photo was taken by Auditors on 7th July, 2020 at Mbeya CC***

(e) Non Consideration of Dimensions of Doors Opening that are Compatible to User Appliances

It was expected PO-RALG to design Healthcare Facilities by considering user appliances compatible to dimensions such as size, width, length and heights. This was not the case to Mortuary Buildings, Laundry Buildings and X-ray Buildings (doors) in all 14 selected and visited LGAs in seven regions. There is risk of demolition of doors to suit the height and width of procured equipment and machines.

For instance, the Audit Team observed physical demolition of completed building door openings to suit the intended use: The example of design discrepancies rectified by modifications and demolitions are as detailed in **Table 3.8**.

Table 3.8: Observation of Design Discrepancies

Type of Health Facility building	Type of Modifications	Discrepancies
Mortuary	Demolition of doors to suit the size, height and width of refrigerators	These was due inadequate designs (under design). Inadequate coordination and involvement of experts engaged during design
X-rays	Modification of door openings in terms of doors, height and width to suit the prefabricated X-ray room doors	Non consideration of sizes of user appliances in options of prefabricated special X-ray doors (See Pictures)
Laundry	Demolition of doors to suit height, width of Washing and drying machines	Inadequate design by non-consideration of sizes of machines to be installed after.

***Source**: Auditors' Analysis of Observation from Visited Healthcare Facilities*

Table 3.8 above shows design discrepancies due to lack of consideration of user appliances. This was due to inadequate consideration of compatibility of machines, refrigerators and prefabricated special doors which require special attention and special specification prior to design. PO-RALG Officials acknowledged that the washing machines delivered to the healthcare centres had large capacity and size contrary to the expected size of the machines to be delivered, as per specifications given to MSD by PO - RALG and mortuary cabinets delivered to the healthcare centres were expected to be in two pieces, each piece containing 3 bodies. However, these cabinets were delivered as one piece as expected. Officials from PO-RALG indicated that these variations in size has led to demolition of mortuary and laundry in order to be able to fit equipment/machines of much larger size.

The emerged challenge encountered was due to inadequate needs analysis and lack of experts' involvement, such MSD, during the planning stage to enable the design to adequately consider size of the recommended machine and other user appliances. Modification and demolitions to suit the dimension of the procured doors and window(s) are presented in **Photo 3.6.**

Photo 3.6: Modifications and Demolished doors to suit the dimension of washing and drying machines captures at Ushirombo HC in Bukombe District. Photo was taken by Auditors on 02nd November, 2020

As a result, demolition of completed doors may lead to weakening the structure in terms of quality as well as reducing its life span and durability.

(iii) PO-RALG Used Unapproved Drawings

AQRB Act 2010, clause 34 (3)20, prohibits public or private institutions or Organisations to provide services in architecture or quantity surveying or approve architectural or quantity surveying designs or documents, unless its key officer responsible for taking or approving managerial or technical decisions is registered with the Board.

However, the Audit Team noted that, disseminated drawings by PO-RALG to the respective LGAs were not approved as required by AQRB Act No 4 of 2010, clause 34 (3) 20.

Moreover, through reviews of drawings published in website *www.tamisemi.go.tz*, the Audit Team noted that the published drawings were not approved as required by Health Public Act of 2009. This was acknowledged by the interviewed PO-RALG officials regarding weaknesses of unapproved drawings. The reason provided was high demand for the need of construction of Healthcare Facilities from the responsible Ministries' or higher levels.

As a result, PO-RALG published and disseminated unapproved drawings for construction of Health Centres and Hospitals. The Audit Team also witnessed this through site verifications whereby working drawings were not approved by the respective Ministries, Authorities or Designers as required. This created a room for the implementers (LGAs) to make several unapproved and undocumented changes.

For instance, major undocumented changes observed in Mbeya Region (Mbeya City Council) at Igawilo Health Centre whereby 300mm thick ground beam or plinth beam was changed to 200mm thick. Likewise, undocumented and unapproved changes were made on reinforcement bars from 16mm diameter to 12mm diameter as well as 8mm diameter to 6mm diameter reinforcement. This resulted from the use of unapproved drawings, frequent changes of designs and directives from PO-RALG and the Ministry of Health during the supervision led to inconsistences of constructed healthcare buildings.

The absence of approved drawings provided loophole of changes without consent from PO-RALG. This led to non-compliant to design and drawings issued by PO-RALG. However, PO-RALG officials explained that the drawings were approved by the Ministry of Health, but the officials did not provide evidence to justify this statement.

3.3.3 Inadequate Planning and Allocation of Funds for Managing Construction of Healthcare Facilities

Does PO-RALG Plan and allocate funds for effective management of construction of Healthcare Facilities in LGAs?

According to National Construction Industry Policy of 2003; Section 8.1.1 (c), PO-RALG and LGAs are required to set budgets for the management of building works, healthcare facilities being among them. It was expected that PO-RALG would set funds for supervision coordination and monitoring the construction of healthcare facilities in the country. The Audit Team reviewed progress reports and found the following:

(a) Inadequate Planning for Supervision and Coordination of Healthcare Facilities Construction Activities

The Audit Team noted that PO - RALG received a total of TZS 1.83 Billion for supportive supervision of constructed Healthcare Facilities in the country for financial year 2017/18-2019/20 as shown in **Table 3.9.**

Table 3.9: Budget Breakdown for Construction of Healthcare Facilities

FY	Phase	Construction, rehabilitation or renovation of Healthcare Facilities (in Billion TZS)	Procurement of Medical Equipment (in Billion TZS)	Supportive Supervision - by (PO-RALG) (in Billion TZS)	Supervision cost at LGAs Level (in Billion TZS)	Total FY (in Billion TZS)
2015/16		-	-	-	-	-
2016/17		-	-	-	-	-
2017/18	i-iv	136.42	40.20	1.39	-	178.01
2018/19	v	3.50	1.40	0.20	-	5.10
2019/20	vi-vii	175.39	27.11	0.24	-	202.74
	Total	**315.31**	**68.71**	**1.83**		**385.85**

***Source**: Evaluation Report for Construction of Healthcare Facilities, 2018/2019*

Table 3.9 indicates that TZS 385.85 Billion was allocated for construction of Healthcare Facilities in the country, procurement of medical equipment and supportive supervision. It was further noted that, TZS 315.31 of TZS 385.85 Billion equivalent to 82% was allocated for construction, renovation and rehabilitation of Healthcare Facilities. Likewise, TZS 1.83 Billion was set for supportive supervision of Healthcare Facilities by PO-RALG.

Although funds for supportive supervision were allocated, there were no supervision reports for construction of Healthcare Facilities besides the implementation reports regarding status of constructed Healthcare Facilities. Through interview held with PO-RALG officials, it was revealed that inadequate supervision was due to inadequate number of staff.

However, through reviews of quarterly reports of financial year 2015/16-2019/20, the Audit Team noted that the report did not cover the management of Healthcare Facilities. This was due to lack of staff and low

priorities set by PO-RALG for monitoring and supervision of construction of Healthcare Facilities. As a result, there were several inconsistencies and undocumented changes.

(b) Lack of Supervision Funds Set for RSs and the Respective LGAs for Financial Year 2015/16-2019/2020

Table 3.9 above indicates that PO-RALG allocated a total of TZS 315.31 Billion for phase one to seven of construction, rehabilitation and renovation of Healthcare Facilities in the country. However, PO-RALG did not allocate funds for supervision at RSs and LGAs levels. The reason provided through the interviews held with PO-RALG officials was the assumption that the construction site would be close to LGAs, and thus no need for allocating fund for supervision.

Likewise, lack of supervision funds was pointed out during interviews held with RSs and LGAs officials respectively. Lack of supervision funds for financial year 2017/18 to 2019/20 contributed to inadequate supervision resulting to inadequate quality of the completed Healthcare Facilities.

Consequently, the completed and ongoing healthcare facilities were inadequately supervised. This led to inadequate quality of the executed Healthcare Facilities construction activities.

(c) Preliminaries and Transportation Costs Were Not Budgeted by PO-RALG

Preliminary items are items that facilitate construction of work but do not form part of the completed structure of the building. Preliminary items include water, security, electricity power for the work and cost for construction of temporary store for storage of construction material at the site etc. These are necessary to facilitate timely completion of work.
The audit noted that PO-RALG did not include these items in the budget as detailed in **Table 3.10**.

Table 3.10: Breakdown of Budget for Construction of Healthcare Facilities

Level of Healthcare Facilities	Material Cost (in Million TZS)	Labour Cost (20) % of Material Cost (in Million TZS)	Transportation 0.5% of Material Cost (in Million TZS)	Preliminary Cost (in Million TZS)	Total (in Million TZS)
District Hospital	5,547.48	1,109.50	27.74	0	6,684.72
Health Centre	871.35	174.27	0	0	1,045.62
Dispensary	225.90	45.18	0	0	271.08

Source: *PO-RALG's Engineer's Cost Estimates of construction of Health Facilities*

Table 3.10 indicates budget for construction of healthcare facilities covered material cost, labour and transportation cost. It also shows that TZS 27.74 Million was allocated for transportation cost of material for District Hospitals only, whereby Health Centres and Dispensaries had no transport cost.

It also indicates that preliminary items were not budgeted for all categories of Healthcare Facilities. Interviews held with officials from the visited LGAs revealed that, because of the importance of preliminary activities, LGAs used the project fund for construction of temporary store for storage of construction materials. Example of the constructed temporary material store is as indicated in **Photo 3.7:**

Photo 3.7: Erected Temporary Stores for Storage of Construction Material in Mbeya District Hospital. Photo was taken by Auditors on 09th July 2020

Non-inclusion of preliminary and material transportation cost was said to increase construction cost. This increased cost was because there was no way during implementation of the project to proceed without having a place to store construction materials as well as transporting the same without incurring costs. But the costs incurred on these items were neither documented nor reported as one of the items that increased construction cost. Such omission limited auditors to further scrutinize the justification for the increased cost.

(d) Inadequate Planning of Human Resources for Implementation of Construction Work in the country

PO-RALG had ineffective plan for deployment of staff responsible for construction Management of Healthcare Facilities. According to the letter with Ref. No. AD.296/303/01/1/82 dated 21st September 2017 from PO-RALG to Regional Administrative Secretary (RAS), Engineers, Artisans and other experts from the respective district were required to supervise the projects and ensure the required quality were met. On the other hand, Regional Secretariat Engineers were required to make sure that the intended quality of implemented projects were attained.

Likewise, Engineers Registration Board Act Cap 63 published vide Government Notice No 273 of 2015 clause 9, directs inspection of building

works to be carried out by the Inspector, Auditor or Inspection Team for the purpose of ensuring that the Works are being executed, under the supervision of recognized professional Engineers, in accordance with the approved plans, specifications and building consent.

Through the letter with Ref No.CCD.129/215/01/137 dated 09th May 2019, the Audit Team noted that PO-RALG lodged a request of 31 % of required Engineers and 33% of Procurement Specialist respectively in the fiscal year 2018/19. However, until the time of this audit there was still insufficient number of key professionals to manage construction of healthcare infrastructures in the country. The letter further indicated shortage of qualified personnel when compared to the number of available staff in the country as shown in **Table 3.11.**

Table 3.11: Extent of the Shortage of Key Professional Staff for Supervising Project in the Country

Profession	Required Staff	Available	Gap in No	Gap in Percent	Requested for Employment	Percentage of request against gap
Engineers	859	213	646	75%	200	31%
Procurement Specialists	1338	734	606	45%	200	33%
Internal Auditors	748	466	282	38%	100	35%

***Source**: Auditors' Analysis and Letter Ref CCD.129/215/01/137 dated 09th May 2019*

It can be seen that, 31% of Engineers against shortage was requested for employment position. This is equal to 200 out of 646 shortage of Engineers in the country. On the other hand, 33 % of Procurement specialists was requested for employment equals to 200 out of 606 staff shortage specialised in Procurement discipline. However, this implies that PO-RALG has inadequate plan for human resources responsible for the management of construction of Healthcare Facilities in the respective LGAs.

Inadequate Number of Engineers at Regional Secretariats

PO-RALG's report of 2019/20 indicated shortage of 5 of 26 Regional Engineers. This was equivalent to the shortage of 19% of Regional Engineers in the country. On its part, the Audit Team noted that **1** of 7 visited regions had a registered engineer. It was also noted that 2 of 7 Regional Engineers were not Civil Engineer while 2 of 7 were Civil Engineers. Among the three (3) available engineers, only 1 of them was registered professional

Engineers equivalent to 14%. This implies that 86% were unregistered Engineers practicing construction in the respective LGAs. **Table 3.12** shortage number of Regional Engineer in the country.

Table 3.12: Shortage of Regional Engineers in the Visited LGAs

Region	Required No of Engineers Required (Number)	Number of available Region Engineers (number)	Deficits	Available of Professions	Registration Status with respective Board (Registered/Not Registered)
Mbeya	2	0	2	-	N/A
Pwani	2	1	1	Architect	Not Registered
Arusha	2	1	1	Civil	Registered
Geita	2	0	2	Civil	Not Registered
Singida	2	1	1	QS/Arch	Not Registered
Ruvuma	2	0	2	Nil	N/A
Rukwa	2	0	2	Nil	N/A

***Source**: Analysis of Statistics from the respective Regional Engineer's Personnel Emolument*

On the other hand, the Audit Team noted shortage of staff by 81% of (District, City, and Municipal) Engineers in respective LGAs. Reasons provided through interviews held with officials from the visited LGAs was the establishment of TARURA which hired Engineers from the respective LGAs. This left LGAs with shortage of Engineers. As a result, LGAs had been hiring Engineers from TARURA. This led to inadequate supervision loop hole to both TARURA as well as LGAs. The reason behind is that the hired Engineer from TARURA could not be full time on site as he/she was also responsible for other duties of the original Employer (i.e. TARURA). As the result, LGAs left with/without Engineers as detailed in **Table 3.13**.

Table 3.13: Extent of Shortage of Engineers in the Visited LGAs

LGA	No. of required Staff	Available number of staff				Gap	No. Registered Staff	Gap in %age
		Eng	QS	Arch	Technicians /Auxiliary	Shortage		
Mbeya CC	26	2	2	0	5	17	1	65
Mbeya DC	10	0	0	1	2	8	0	80
Mkuranga DC	10	0	0	1		3	0	30
Kibaha DC	10	1	0		1	2	0	20
Longido DC	8	0	0		1	7	0	88
Arusha CC	6	1	0	1		4	1	67
Geita DC	12	0	0	0	0	0	0	100
Bukombe DC	8	1	0			7	0	88
Mkalama DC	12	1	0	1	2	8	0	67
Manyoni DC	12	1	0		-	9	1	75
Namtumbo DC	17	0	0	1	2	14	0	82
Songea DC	12	1	0	0	1	10	0	83
Sumbawanga DC	12	2	0	0	3	5	0	75
Nkasi DC	22	0	0	1	10	11	0	50

***Source**: Auditors' Analysis of Personnel Emoluments of respective LGAs and staffing level of 2019/20*

Table 3.13 indicates that the shortage of Engineers in the respective LGAs ranged between 20%-100% due to establishment of TARURA which hired LGAs' Engineers. This left LGAs without Engineer. As a result, the quality control of executed healthcare building works was not managed in the respective LGAs. Hence, there was inadequate quality control, close supervision and inspection of ongoing Healthcare Facilities.

The availability of Engineers could have provided guidance to the local *fundi's* (Artisan) on how quality of work can be attained at different stages of construction work regarding mixing of concrete ratios, mortar and curing of completed works.

CHAPTER FOUR

FINDINGS ON THE PROCUREMENT AND IMPLEMENTATION OF CONSTRUCTION OF HEALTHCARE FACILITIES

4.1 Introduction

This chapter presents findings which address three audit objectives related to procurement of construction materials, construction implementation stage and monitoring and evaluation of Healthcare Facilities in the country. The chapter also provides the findings related to quality of constructed Healthcare Facilities and performance of PO-RALG in evaluating the performance of LGAs.

4.2 Ineffective Planning for Procurement of Construction Materials

Do Plans for procurement of construction materials in place and effectively followed?

LGAs were expected to have plans prior to procurement of construction materials including mechanism for documentation. LGAs were also expected to adhere to their plans and documentation systems. The Audit Team noted weaknesses associated with procurement of construction materials as explained below:

4.2.1 LGAs Lacked Functioning Mechanism for Documentation of Procured Construction Materials

Is there a functioning mechanism to ensure that procured construction materials are properly documented and accounted for?

The Public Procurement Regulation Number 276(d) of 2013 requires Procuring Entity / (LGAs) to provide information, documentation and activities related to building works. Similarly, Public Procurement Regulation (PPR) number 277(b) of year 2013, requires Projects Manager in collaboration with Health Facility Governing Committee (HFGC) to document all ongoing activities for future references whenever needed.

Therefore, PO - RALG was expected to ensure LGAs develop plan for procurement and documentation mechanism for all procured construction materials. The mechanism was expected to include; Healthcare Facilities Governing Committee inspection, proper system for documentation of procured construction such as ledger books, Local Purchase Order, delivery notes, issue voucher and documentation for accounting of issued materials. The Audit Team noted the followings:

Lack of Local Purchase Order for Some of Procured Construction Materials in LGAs

The Audit Team noted that 30 out of 35, which is equivalent to 86% of the visited Healthcare Facilities had not yet developed plan for procurement of construction materials. Reasons for not having a plan for procurement materials was due to the funding methods used as Direct Health Facilities Fund (DHFF) whereby the materials were directly procured by Healthcare Facilitates Governing Committee(s). These Committees lacked knowledge of procurement, documentation and accounting.

The Audit Team further noted that LGAs were not adhering to the documentation procedures of construction materials as required by PPR No.277 (b). Through the review of procurement files and payment vouchers for construction of Healthcare Facilities, the Audit Team noted the gaps for documentation of purchased construction materials' records. For instance, lack of LPOs of procured construction materials for the visited LGAs as there was no evidence or procurement document as detailed in **Table 4.1**:

Table 4.1: Purchased Construction Material without LPOs

Region	LGA	Name of health facility	Number of Purchases	Number of purchase made without PO/ LPO	% of Material purchased without use of PO/LPO
Arusha	Longido DC	Longido Council Hospital	72	0	0
		Engarenaibor HC	33	17	52
		Eworendeke HC	92	67	73
	Arusha CC	Moshono HC	54	12	22
		Murriet HC	68	27	40
Geita	Bukombe DC	Ushirombo HC	97	12	12
		Uyovu HC	33	16	48
	Geita DC	Geita DH	85	4	5
		Nzera HC	37	2	5
		Nyarugusu HC	43	0	0
Pwani	Kibaha DC	Kibaha DH (Disunyara)	62	1	2
		Magindu HC	92	3	3
		Mlandizi HC	42	0	0
	Mkuranga	Kisiju HC	30	30	100
		Mkamba HC	9	9	100
Mbeya	Mbeya CC	Igawilo Council Hospital	20	0	0
		Iyunga HC	40	5	13
		Nzovwe HC	53	2	4
	Mbeya DC	Mbeya DH	94	3	3
		Santilya HC	62	1	2
Singida	Mkalama DC	Mkalama DH	73	13	18
		Kinyambuli HC	24	24	100
	Manyoni DC	Kintinku HC	16	13	81
		Nkonko HC	20	19	95
		Chibumagwa HC	17	15	88
Ruvuma	Namtumbo	Namtumbo DH	113	1	1
		Namtumbo HC	49	38	78
		Mtakanini HC	42	6	14
		Matimila HC	46	0	0

Region	LGA	Name of health facility	Number of Purchases	Number of purchase made without PO/ LPO	% of Material purchased without use of PO/LPO
	Songea DC	Magagula HC	33	2	6
Rukwa	Sumbawanga DC	Sumbawanga DH	80	20	25
		Milepa HC	42	30	71
		Mpui HC	19	4	21
	Nkasi DC	Nkomolo HC	15	6	40
		Kirando HC	29	29	100

Source: *Procurement Documents and Payment Vouchers from Selected and Visited LGAs*

Table 4.1 indicates that 30 out of 35 (equivalent to 86%) of the visited Healthcare Facilities conducted procurement of construction materials without LPO. It was further that the missing LPOs ranged from 1% to 100%. Mkamba HC and Kisiju HC both found in Mkuranga DC had 100% as well as Kirando HC found in Nkasi DC had procurement without LPOs.

The interviewed officials from LGAs indicated that unreliable networks from purchase system, lack of electricity and Purchase Order book were the limiting factors. As a result, the executed procurements were not substantiated whether the documents presented the number of purchases and received materials.

This was due to lack of procurement documentation mechanism/system set by LGAs to ensure adherence to PPA, of 2011 and directives issued by PO-RALG No. AD.296/303/01/1/67 on the use of Force Account of August 7, 2017. As a result, there were procurements made without LPO for 30 out of 35 visited Healthcare Facilities.

Lack of Supporting Evidenced for Payment Made Costing TZS (3,940, 167,794.00)

Through interviews held with officials from the respective visited LGAs, the Audit Team noted that the allocated funds to the respective LGAs were utilised by 100%.

However, the Audit Team noted that there were payments made for procured construction materials and local *fundi's* which had no evidence. Through analysis of payments from each Healthcare Facility, the Audit Team found that payments of **TZS 3, 940, 167, 794.00** were made without supporting records. The payments made without evidence are detailed in **Table 4.2**.

Table 4.2: Missing Payment Records for the Visited Healthcare Facilities

Region	LGAs	District Hospital	Total Fund Received From PO-RALG (in Billion TZS)	Established actual cost From Given Payment Voucher (in Billion TZS)	Payments with Lack of evidences (in Million TZS)
DISTRICT HOSPITALS					
Geita	Geita DC	Geita District Hospital (Nzera)	1.800	1.540	259,936,045
Arusha	Longido DC	Longido District Hospital	1.800	1.559	240,504,434
Pwani	Kibaha DC	Kibaha District Hospital (Disunyara)	1.800	0.957	843,041,318
Singida	Mkalama DC	Mkalama DH	1.800	1.552	248,283,559
Ruvuma	Namtumbo DC	Namtumbo DH	1.800	1.580	219,949,644
Sumbawanga	Sumbawanga DC	Sumbawanga DH (Mtowisa)	1.800	1.410	390,488,523
		Sub Total (A)	**10.800**	**8.598**	**2,202,203,523.0**
HEALTH CENTRES					

Region	LGA	Heath Centres	Total Fund Received From PO-RALG (in Million TZS)	stablished actual cost From Given Payment Voucher (in Million TZS)	Payments with lack of Evidence (in Million TZS)
Arusha	Longido DC	Engarenaibor HC	400	336	64,068,767
		Eworendeke HC	700	445	255,288,531
	Arusha CC	Murriet HC	700	416	284,097,843
Pwani	Mkuranga DC	Mkamba HC	400	101	299,891,194
	Kibaha DC	Mlandizi HC	400	388	11,855,558
Geita	Geita DC	Nzera HC	500	372	128,046,478
	Bukombe DC	Uyovu HC	400	317	83,376,540
Singida	Manyoni DC	Nkonko HC	400	219	180,920,020
		Kintinku HC	500	497	3,022,640
		Chibumagwa HC	400	192	208,477,220
Ruvuma	Namtumbo DC	Namtumbo HC	400	376	24,215,823
		Mtakanini HC	400	384	16,029,450
Rukwa	Sumbawanga DC	Milepa HC	400	315	85,451,032
		Mpui HC	200	87	14,530,500[14]
	Nkasi DC	Nkomolo HC	500	422	78,692,675
		Sub Total (B)	**6,700**	**4, 867**	**1,737,964,271**
		TOTAL (A+B)	**17,500**	**13,465**	**3,940,167,794**

Source: *Auditors' Analysis and Payment Vouchers from Selected and Visited LGAs for FY 2017/18-2019/20*

Table 4.2 indicates that the payments of amounting to **TZS 3.940** Billion lacked evidences for 21 out of 35 visited Healthcare Facilities. This implies that fund was neither accounted nor documented for the unjustified payment with missing evidences. Through interviews held with officials from the respective visited LGAs, it was further noted that all funds were 100% utilised except for Mpui Health Centre. However, there were missing evidences on payments made availed to auditors for further scrutiny. The

[14] Until the time of Audit , there was balance of TZS 98,304,771.00

reason provided by the respective LGAs' officials was due to poor documentation during shifting to the new offices. The Audit Team is of the view that poor documentation of records and payments made with missing evidence as well as inadequate internal controls could be among the reasons behind the observed lack of evidences.

As a result, there was no justification to the payments made which led to questionable expenditures for the constructed Healthcare Facilities. However, the Audit Team further noted that the constructed Health Facilities were found uncompleted until the time of this audit. This was due to shortage or deficit of funds for completion of outstanding works whereby the shortage of funds could not be justified. This was acknowledged by the interviewed officials from the respective LGAs whereby they could not justify funds expenditures and shortages.

4.2.2 Absence of Functioning Mechanism to Ensure Procured Construction Materials Meet the Required Quality

Is there functioning mechanism to ensure that procured construction materials meet required quality as specified in schedule of materials?

PO-RALG was expected to ensure LGAs have functioning mechanism for ensuring procured materials meet the specification as indicated in the schedule of materials. However, the Audit Team noted that mechanism used by LGAs was not functioning well as indicated by construction materials which were not as per specification and in the schedule of materials. This is contrary to Construction Industry Policy, 2003. Para 8.1.3 (c) which requires PO-RALG in collaboration with LGAs, the private sectors to formulate standard guidelines for procurement and project delivery arrangements.

Through review of Projects files (Payment Vouchers, LPO, issue Voucher, Ledger Book), the Audit Team noted that LGAs did not adhere to specifications and standards provided by PO-RALG. Non adherence was evidenced by variations from the specifications for the procured construction materials as detailed in **Table 4.3**.

Table 4.3: Deviation of Procured Construction Materials from Specifications and Schedule of Materials

Name of visited Healthcare Facility	Description of material	Stated Specification in Schedule of Materials	Specification and standard of procured materials	Deviation	Implication
Igawilo HC	Re-bars	16mm	12mm	From specification and Design	Could Impair durability and Quality of the building
	Re-bars	12mm	10mm	From specification and Design	

***Source**: PO-RALGs Schedule of Materials, Drawings and LGAs Procurement documents (Delivery notes, Store Ledger, Issue Vouchers and Profoma Invoice)*

Table 4.3 shows specification of procured materials which differs with those specified in the schedule of materials provided by PO-RALG.

Through interviews with officials from the visited LGAs, the variation was due to overdesign by PO-RALG whereby they decided to change size of reinforcement. However, the changes made were not documented and approved. The changes made on specification of materials could affect or impair the durability and quality of the building.

The Audit Team further conducted analysis for the visited District Hospitals in the respective LGAs and found variations of specifications for the procured materials from what was indicated in the schedule of materials. Procured materials which were found with inadequate specifications prepared by PO-RALG and procured materials out of specifications are as shown in ***Appendix 12***.

Through document reviews (schedule of materials, drawings, store lodgers and issue vouchers) and site observations, the Audit Team noted weaknesses of procured construction materials. Among them were due to inadequate specifications provided in the PO-RALG Schedule of Materials. For instance, Timber, reinforcement and cement were not specified in terms of type and quality. This led to inconsistences during procurement of construction materials in the respective LGAs.

4.3 LGAs Did Not Efficiently Construct Healthcare Facilities as per Standards and Specifications

Does PO-RALG ensure LGAs are efficiently constructing Healthcare Facilities as per the prescribed standards and specifications?

According to HSSP-IV Section 6.3.1 Page No. 60, PO-RALG is required to introduce monitoring system of Healthcare Facilities and actual status to have a better overview of specific needs, constraints and anticipated renovation, and rehabilitation of Healthcare Facilities. It further requires PO-RALG to issue Health Facilities' Standard guideline on the infrastructure in order to guide LGAs in a more balanced development of infrastructure, to ensure that Healthcare Facilities are constructed and rehabilitated to meet accreditation standards.

It was expected PO-RALG, through LGAs, was able to ensure the completed Healthcare Facilities met the required quality and specifications. However, through document reviews (Schedule of materials, drawings, PO-RALG's directives on the use of Force Account), site observations and interviews conducted in the visited LGAs, the Audit Team noted the following weaknesses:

4.3.1 PO-RALG Lacked Mechanism to Ensure Constructed Healthcare Facilities Meet the Required Quality, Specifications and Standards

Does PO-RALG have mechanism to ensure that Healthcare Facilities in the respective LGAs are constructed with the required quality, specifications and Standards?

In order to ensure that LGAs construct Healthcare Facilities that meet the required quality, specifications and standards, PO-RALG is expected to have disseminated mechanisms such as guidance, monitoring tools, health governing committees for supervision, quality control plans and Inspection and supervision checklist and Plans. Contrary to this, interviews held with officials from PO-RALG, indicated that; PO-RALG had no such mechanisms in place to ensure Healthcare Facilities were constructed as per prescribed quality, specification and standards.

This was due to lack of knowledge on key aspects of construction of Healthcare Facilities through the use of Force Account by PO-RALG and the respective LGAs.

It was also noted that the Healthcare Facilities were built without close follow-ups or monitoring participation from PO-RALG on ensuring standards, specifications and quality were met. Through reviews of schedule of materials, payment vouchers and procurement documents the Audit Team noted that there were deviations of construction materials' specification, size, type and dimension of different building elements. **Table 4.4** shows deviations of construction materials from specification.

Table 4.4: Deviations of Construction Materials from Specifications

LGA	Name of Health Facility	Description of Materials	Original Specification	Changes made/ Procured Materials
Mbeya CC	Igawilo HC	Re-bars	16mm	12mm
		Re-bars	12mm	10mm
		Ground Beam	300mm thick	200mm thick
Mkuranga DC	Mkamba HC	Flush Doors	Flush Door	Aluminium and External flash door which deflected
		Doors	External Doors	Flush Doors
Arusha CC	Murriet HC	Plinth Depths	1.0m	3.5m Depth
Geita DC	Nyarugusu HC	Flush Doors	Solid Flash Doors	Plywood flush doors at theatre
Bukombe DC	Ushirombo HC	Laundry Doors	External Doors	Extension of Doors
Mkalama DC	Mkalama DH	Laundry Doors	External Doors	Extension of Doors to suit user appliances
Manyoni DC	Kintinku HC	Roofing Sheets	28 Gauge IT 5 resin coated	26 Gauge G.I.S painted
Namtumbo HC	Mtakanini HC	Roofing Sheets	28 Gauge IT 5 resin coated	26 Gauge G.I.S painted
Sumbawanga DC	Milepa HC	Roofing Sheets	28 Gauge IT 5 resin coated	26 Gauge G.I.S painted
Nkasi DC	Nkomolo HC	Roofing Sheets	28 Gauge IT 5 resin coated	26 Gauge G.I.S painted

***Source**: Drawings, Schedule of Materials, Procurement Documents and Site Observation*

From **Table 4.4** above it can be seen that, there were deviation of specifications for construction materials including, doors, re-bars and roofing sheets. This was because of lack of close supervision and inspection to ensure all procured materials were as per specifications and standards.

As a result, there was doubtful quality assurance of the ongoing and completed Healthcare Facilities which led to leakage of roof during rains.

Incidences of Non Compliances to the Drawings and Schedule of Materials for Healthcare Facilities' Buildings

According to Basic Standards for Health Facilities Level I and II of 2015 chap 6(6.1), requires PO-RALG to ensure premises to be located and attention must be given to; size, shape of the site, topography, drainage, soil conditions, utilities available, natural features, orientation of the site (north, south, east, west), vegetation, trees and plantings.

The audit noted that, LGAs did not construct Healthcare Facilities as per drawings by changing items. The reasons provided was due to over designed and overestimated several items of the Healthcare Buildings by PO-RALG. These changed items included; Reinforcement steel bars, Iron Sheets and Timber. Through site visit and document reviews, the Audit Team also noted significant variation between quantities and dimension indicated in drawings and specifications respectively as well as the dimension of actual building constructed on site. Through site observation for ongoing Healthcare Facilities, the Audit Team found surplus materials such as Cement, Galvanised Iron Sheet (IT5), reinforcement steel, timber, PVC pipes and Paints. The surplus materials are as shown in **Photo 4.1 (4.1a&4.1b)** below, this was resulted from overdesign and overestimations.

Photo 4.1: Surplus Construction Materials remained on site due to Overestimation by LGAs during Procurement and poor storage at site

Photo 4.1a: Surplus Material abandoned on site, photo was taken by the Auditor on 02nd October, 2020 at Kibaha District Hospital in Kibaha DC

Photo 4.1b: Surplus materials at Geita District Hospital and Nzera HC. Photo was taken by the Auditor on 26th October, 2020

The Audit Team observed surplus construction materials due to overdesign and over estimates. For instance, in Geita District Hospital (Nzera), there were 222 Roofing sheets that remained on site, 72 Timber, Tiles and PVC pipes. Similarly, materials on site were observed in Kibaha District Hospital (Disunyara) with poor storage as seen in photo 6a. The poor storage led to corrosion, rusting and deterioration of surplus materials which could not be used in future. For instance, cement was found set due to poor storage and aging period. This implies waste of tax payers' fund.

Moreover, other evidence of overdesign and noncompliance to the drawings found during site visit for ongoing construction of Healthcare Building was a change of dimension of structural members during implementation. For instance, dimension of ground beam, column of constructed at Igawilo District Hospital were 300mm while the actual height was 200mm. Similarly, reviewed drawings indicated that beam could be constructed using 4 steel bars of 16mm diameter, while actual provided was 6 steel bars of 12 mm diameter contrary to drawings.

Through interviews held with Council Engineers from the visited LGAs, the Audit Team noted that, the dimension provided by PO - RALG was for the design of multi-storey building while actually a single storey building was the one constructed. However, the changes made were not documented by the respective LGAs. **Photo 4.2** below shows the changes made due to over designs. Photo 4.2 (4.2(a) & 4.2(b) below presents this variation:

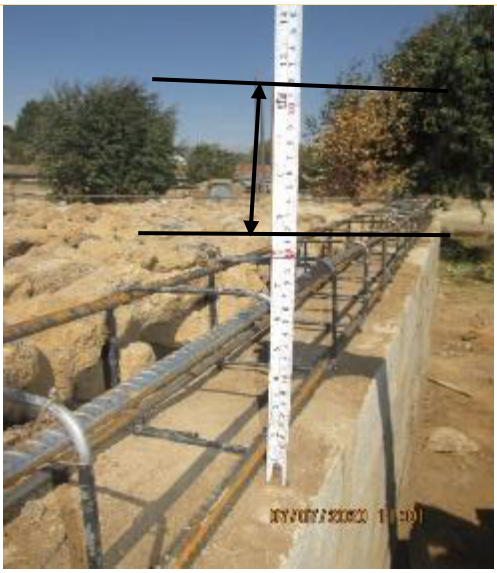


Photo 4.2 (a): **Shows 200mm Ground beam thick while the drawing/design requires 300mm thick to 200mm thick. Photo was taken by the Auditor on 7th July, 2020 at Igawilo Health Centre in Mbeya CC**

Photo 4.2b: **Shows 12mm Re-bars were used instead of 16mm diameter. Photo was taken by the Auditor on 7th July, 2020 at Igawilo Health Centre in Mbeya CC**

Photo 4.2 (4.2a &4.2b) shows various undocumented changes observed during site verification at Igawilo Health Centre. These changes included, thickness of the ground beams, depth of plinth or substructure and reinforcement bars. This was due to inadequate supervision which led to non-compliance to drawings and schedule of materials. As a result, LGAs failed to realise the minimisation of cost for respective construction materials as well as quality of executed works.

4.3.2 Ineffective Inspection and Supervision of Construction of Healthcare Facilities

Do LGAs conduct effective inspection and supervision of ongoing construction work to ensure that completed Healthcare Facilities meet the required quality Standards?

According to the Letter with Ref. No. AD.296/303/01/1/82 dated 21st September 2017 from PO-RALG to Regional Administrative Secretary (RAS), Council Engineers, Artisans and other experts from the respective council /LGAs were required to supervise the projects to meet the required quality. Also, the Engineer from Regional Secretariat is required to ensure the intended quality of the implemented projects is attained.

Likewise, PO-RALG's directive with reference No. AD.296/303/01/01/67 requires LGAs' Engineers, Local *fundis* and the responsible LGAs Officials to ensure that construction of Healthcare Facilities is carried in prescribed quality and standards. It requires also competent personnel preferably Engineers to carryout inspection and supervision for ongoing and completed healthcare facility building works.

LGAs had not effectively supervised and inspected ongoing construction of Healthcare Facilities. Through the interviews held with LGAs officials, it was revealed that LGAs Engineers did not adequately supervise and inspect the ongoing as well as completed Healthcare Facilities in their areas of jurisdiction. During the interviews, it was pointed out that inadequate supervision and inspection were contributed by the shortage of staff and lack of transport to facilitate inspection and supervision works.

Inadequate inspection and supervision were contributed by huge workload due to inadequate number of the professional staff to carryout inspection and supervision.

In summary, the observed inadequate supervision was caused by the absence of planned budget for supervision, lack of transport for supervision in the LGAs of ongoing Healthcare projects and huge work load due to inadequate number of technical personnel as described below:

Huge Workload for Inspection and Supervision

Due to inadequate number of key professional staff (engineers and technicians) for close supervision, the interviews held with LGAs' Engineers revealed that there were huge workloads as they were required to be full time on site compared to number of ongoing projects. Therefore, inspection and supervision was inadequately carried out. Huge workload compared to the available engineers is as indicated in **Table 4.5** below:

Table 4.5: Ratio of Technical Personnel to the Ongoing Construction of Healthcare Facilities (HF) in the Visited LGAs

LGA	No of Planned HF Projects (A)	No of Available Engineers / Architects / Quantity Surveyors in LGAs responsible for Supervision (B)	Ratio A:B
Mbeya CC	3	6	1:1
Nkasi DC	5	4	1:1
Kibaha DC	5	2	1:2
Bukombe DC	2	1	1:2
Mbeya DC	3	1	1:3
Mkuranga DC	3	1	1:3
Arusha CC	6	2	1:3
Manyoni DC	3	1	1:3
Namtumbo DC	3	1	1:3
Sumbawanga DC	6	2	1.3
Longido DC	6	1	1:6
Mkalama DC	6	1	1:6
Songea DC	9	1	1:9
Geita DC	70	4[15]	1:18

***Source**: PO-RALG's Staff Database in Respective LGAs and LGAs' Progress Reports of 2018/19*

Table 4.5 indicates that one (1) Engineer in Geita DC was responsible for supervising eighteen (18) ongoing Health centre projects. Similarly, six (6) projects in Longido DC and Mkalama DC were supervised by one architect and one Civil Engineer respectively. This indicated that there was huge workload at the Geita and Longido DC respectively. The minimum work load can be seen at Mbeya CC.

Through the interviews held with LGAs officials, the Audit Team noted that the engineers within the respective councils were responsible for other ongoing healthcare projects implemented through Force Account within LGAs. This contributed to inadequate supervision of ongoing Healthcare Facilities.

This resulted into poor workmanship of the completed healthcare facilities which was evidently observed during site visit conducted 14 visited LGAs.

[15] *Hired Two Quantities Surveyor and 2 Engineers are temporarily employed on one monthly contract basis.*

For instance, poor workmanship was observed in Mbeya District hospital finishing works, walling, plastering, floor tiles and electrical installation.

Shortage of engineers in the respective LGAs contributed to huge workload on the part of the available staff as shown in Table 4.5 above; whereby 100% of selected Healthcare Facilities were not adequately supervised. As a result, the constructed projects were not adequately inspected and supervised by the respective LGAs' engineers. Inadequate supervision and inspection were further evidenced by the absence of inspection and supervision reports in the respective LGAs.

Lack of Inspection and Supervision Checklist or Plans

It was expected that LGAs to have inspection and supervision checklist at each stage of construction of Healthcare Facilities. However, the Audit team noted that 100% of the selected and visited LGAs had no inspection and supervision plans. This implies that the inspection and supervision were not done as required or they were rather done on the ad hoc basis.

It also was noted through interviews held with LGAs' officials that, inspection and supervision plans were not prepared and followed due to limited time, resources and lack of supervision funds. Hence, this led to inadequate inspection and supervision of the ongoing construction and completed Healthcare Facilities.

Absence of Inspection and Supervision Reports for Construction of Healthcare Facilities

The Guidance issued with Ref. No. AD.296/303/01/1/82 dated 21st September 2017 from PO-RALG requires LGAs to prepare and submit supervision and inspection reports to PO-RALG for further scrutiny and decision making.

Through the document reviews in the visited LGAs, it was noted that 100% of the visited LGAs had neither inspection nor supervision reports for the ongoing and completed construction and rehabilitation of health facilities.

Moreover, inadequate supervision of the constructed health facilities was due to lack of funds set aside for supervision and lack of inspection and

supervision checklist or plans and inadequate number of available officials and professionals who are responsible for inspection.

Further, through document reviews, it was established that the visited LGAs had no inspection reports specific for construction of Healthcare Facilities contrary to issued directives. This was due to lack of project contract management by engineers in the respective LGAs. As a result, there were lack of records of Construction of Healthcare Facilities at each stage.

Poor Workmanship for Completed Healthcare Buildings

Clause 2.18 of PO-RALG's Technical Specification and Guideline of 2017 requires LGAs to ensure all construction activities and concrete works including concreter, bending and fixing, form works, surface finishes are completed according to requirements stipulated in technical specifications.

Through site visit, the Audit Team noted completed works with poor workmanship such as rough finishing, deflected ring beams, uneven surfaces, single coat of paints and murky executed painting works.

These cases were noted in 33 out of 35 Healthcare Facilities equivalent to 94%. For instance, poor workmanship were observed at, Sumbawanga District Hospital (Mtowisa), Kibaha District Hospital (DH), Mkuranga DH, Kibaha Health Centre (HC), Mlandizi HC, Longido DH, Geita DH, Iyunga HC, Igawilo HC, Mbeya DH Nyarugusu HC, Milepa HC and Nzera HC. **Photo 4.3** below provides examples of works that were noted to have poor workmanship

Photo 4.3: Shows Poor Workmanship of door opening at Mbeya District Hospital in Mbeya District Council (Photo taken by the Auditor on 09th July, 2020)

Through site verification, the Audit Team observed poor workmanship at Mbeya District Hospital as shown in **Photo 4.3**. This was due to lack of skills and knowledge of construction of Healthcare Facilities among the artisans and inadequate close supervision during execution of work. Poor workmanship was contributed by lack of skilled personnel who required close supervision. Contrary, close Supervision was inadequately done due to shortage of engineer and huge workload described in section 4.3.2(b) above.

Presence of Healthcare Buildings with Defects

The Audit Team observed the presence of quality defects in 33 out of 35 visited Healthcare Facilities. These defects included vertical crack through both sides of walls. **Photo 4.4** below presents an example of crack in one of the visited Health Centres.

Photo 4.4(a): Showing Vertical Wall Cracks at Mbeya District Hospital. Photo was taken by the Auditor on 7th July, 2020

Photo 4.4(b): Showing Vertical cracks thru walls thickness at Santilya Health Centre in Mbeya DC. Photo was taken by the Auditor on 7th July, 2020

Likewise, the Audit Team conducted site visit and observed several defects in 35 visited ongoing and completed Healthcare Facilities as presented in **Table 4.6** below.

Table 4.6: Observed Defects from Visited Healthcare Facilities

Observed Defects	No. of Visited Healthcare Facilities with Defects	No. of Visited Healthcare Facilities without Defects	% of Healthcare Facilities with Defects (%age)
Vertical cracks	31	4	89
Horizontal cracks	30	5	86
Peeling off paints	30	5	86
Poor painting	30	5	86
Poor finishing	30	5	86
Missing and improper fixed Plumbing fittings	31	4	89
Loose electrical fixtures	24	11	69
Ceiling leakages	19	16	54

***Source**: Observation made from the Conducted Site Visits by Auditors to the Selected LGAs*

From **Table 4.6** above it can be seen that vertical cracks, peeling-off of paints, and rough finishes, loose and missing plumbing fittings and loose

electrical switches were the observed defects in 35 visited Health Facilities from 14 LGAs as detailed in ***Appendix 13*****.** It was also noted that 31 out of 35 Healthcare Facilities equivalent to 89 % of the visited Healthcare Facilities encountered vertical and improper or broken plumbing fittings; while 86% were found with horizontal cracks, poor finishing, peeling off paints, poor painting and poor finishing.

Similarly, 69% of Healthcare Facilities were found with broken and loose or improperly fixed electrical fixtures. It was also found that 54% of the visited Healthcare Facilities' roofs had leakage from rain water. This was because of deviation of roofing sheets specification from PO-RALG's specification and poor workmanship.

The above observed defects imply that the final inspections were not conducted. If the inspections were conducted, the defects could have been identified and rectified timely prior to the use of Healthcare infrastructures. As a result, there were completed Healthcare Facilities with defects which impaired their life span.

4.3.3 Inadequate Documentation, Records and Reporting for On-going and Completed Works

Are Project management documents, records and reports for ongoing and completed works prepared and adequately kept as per requirement?

According to Public Procurement regulation number 276(d) of year 2013 LGAs were required to provide information, documentation and all studies related to building works. Similarly, the Force Account directives issued by PO- RALG on 7th August 2017 requires Projects Manager in collaboration with Health Facility Governing Committee (HFGC) to document all ongoing activities for future references whenever needed.

However, through reviews of project files and correspondences from the visited fourteen (14) LGAs, the Audit Team noted that documentation for project was not adequately prepared and kept on sites and at council offices in accordance to requirements. Likewise, the Audit Team observed changes made on site and found that there were not documented. The undocumented information includes; change of design, layout, changes of specification of materials and site daily activities. **Table 4.7** shows the list of documents which were both missing or undocumented documents and changes made as required (more details see ***Appendix 14*** **(a).**

Table 4.7: Common Missing Documents and Reasons for Being Missing

Common Project Documents that were missing	Number of Visited HFs[16] noted	Probable risk for not having the respective document	Reason for not having
Materials' Store Ledger	12	The quantity, size, dimension, quality of materials received at site could not realised	Poor documentation, lack of store ledger books, inadequate knowledge on record keeping
Materials' issue voucher	8	Equal issuance and distribution of procured of materials to respective ongoing building. The quantity, type and quality of used materials not realised.	Issue Vouchers were not included in their annual plans
Site instruction books	30	The project undertakings, changes, quality issue won't be well managed	Lack of knowledge on contract administration and documentation of ongoing works
Local Purchase Orders	30	The guarantee of quantity and quality of procured materials not realised as agreed contrary to PPA The cost of procured materials could not be realised	Poor documentation, some LGAs shifted to new office
Delivery Notes	22	The quantity and quality of procured materials could not be verified. Less quantities of procured materials delivered on site	Lack of procurement knowledge, inadequate procurement staff in respective LGAs
Materials' Test Results	29	The quality of executed works not be realised.	Limited time for testing and lack of transport to transport materials, inadequate number of Laboratories within LGAs

[16] HFs = Healthcare Facilities

Common Project Documents that were missing	Number of Visited HFs[16] noted	Probable risk for not having the respective document	Reason for not having
		Questionable quality of completed buildings	and Lack of tools for testing on site
Payment Certificates	18	Inadequate cost controls and realistic payments for actual work done	Lack of contracts management and administration among supervising Engineers
Payment Vouchers	23 partially done	The payments made could not be realistic as it lacked evidences	Poor documentation, shifting of LGAs to new office.
Job advertisements for Local artisan's	29	Unfair and incompetent local fundis, suppliers of construction materials in respective LGAs	Lack of skills and knowledge on procurement of local fundi by HFGC and poor documentation

***Source**: Project Documents (Payment Vouchers, Procurement Files and Correspondences)*

Table 4.7 shows the list of missing documents for 35 visited Healthcare Facilities. For instance, 30 out of 35 Healthcare Facilities, which is equivalent to 86%, had no Local Purchase orders (LPOs). It was also found that 29 out of 35 Healthcare Facilities, which is equivalent to 83%, had no test results. Therefore, this posed questions to the qualities of procured and issued construction materials, quality of executed works and payments made for the executed works because of the missing documents and evidences in their respect.

The inadequacy in documentation and record keeping led to limitations and difficulties in establishing the actual expenditures for every completed and ongoing construction of healthcare buildings, including the issue of quality.

The reason provided by the interviewed officials from the visited LGAs was that shifting of councils' offices to the new offices left the responsible staff without any knowledge on contract management and documentation as presented in ***Appendix 14(b)***.

Further the interviewed officials noted that capacity building program and sensitization on preparation and keeping of project management documents, records and other reports were required. However, the Auditors are of the view that there was negligence on documentation of all changes, records, payments and reports by the respective LGA officials. **Table 4.8** presents common reasons for missing documents.

Table 4.8: Common reasons for the Missing Documents from the Visited Healthcare Facilities

Reason	No. of Healthcare Facilities with the same reason
Loss of documents due to shifting from old to new offices	2
Lack of contract management and documentation of records in the use of Force Account method	1
Lack of knowledge on contract administration and documentation of ongoing works (procurement knowledge)	33
Lack of capacity on contract administration and project management	8
Shortage of electricity and poor internet network which led not to print of LPO	4
Lack of sufficient knowledge on contract administration	2
Poor documentation, poor handling of documents and lack of sufficient knowledge on procurement issues	31

Source: *Interviews held with Officials from the Visited LGAs*

Table 4.8 shows the common reasons for missing documents, namely; Lack of knowledge on contract administration and documentation of the ongoing works (procurement knowledge) and inadequate documentation and lack of sufficient knowledge on procurement issues. This was due to lack of training of staff involved in the specific areas. As the results, there were missing documents in the visited Healthcare Facilities in the respective LGAs.

Table 4.9 shows the frequently missing documents and their implications.

Table 4.9: Common Missing Documents and their Implications

Name of Document	No. of Healthcare Facilities with missing the Document	Implication(s)
Store ledger	12	Quality, size, dimension and quality of material received at site could not be realized
Issue Voucher	8	Unequal distribution of procured materials to respective ongoing building
Site Instruction books	30	The project undertakings, changes, quality issues won't be well managed
Local Purchase Orders	30	The guarantee of quantity and quality of procured materials not realized as agreed contrary to PPA and Cost of procured materials could not be realized
Delivery Notes	22	The quantity and quality of procured materials could not be verified. Less quantities of procured materials delivered on site
Material Test Results	29	The quality of executed works not be realized. Questionable quality of completed buildings
Payment Certificates	18	Inadequate cost controls and realistic payments for actual work done
Payment Voucher	23 partially done	The payments made could not be realised as it lacked evidences
Goods Inspections	29	Less number/amount of procured materials to be accepted on site
Job Advertisements for Local artisan's	12	Unfair and incompetent local fundis, suppliers in respective LGAs

Source: *Auditors' Analysis of Documents from Visited LGAs (2020)*

4.3.4 Inadequate Tools, Plans, Inspection checklist and Test checklist

Do LGAs have Tools, Plans, Inspection Checklist and Test Checklist for the Management of Construction and Supervision of construction works of Healthcare Facilities?

The Engineers Registration Act (Cap. 63) The Engineering Works, Services and Projects Monitoring Regulations, 2015, pg. 5, require inspection Team to have inspection tools such as Relevant Checklist, Offence Book, Stop

order Book, Penalty notice, Cameras, Field notes, GPS, PPEs, measuring Tapes etc. Thus, PO-RALG was expected to develop inspection checklist and disseminate to LGAs for use. It was also expected that PO-RALG ensure that LGAs have other inspection tools such as GPS, PPEs, Cameras, Stop Order Book etc.

Through the interviews held with officials from PO-RALG, the Audit Team noted that the Ministry had not developed and disseminated inspection tools to LGAs. The inspection tool could help LGAs and PO-RALG to capture all necessary and critical information for managing time, cost and quality of the constructed healthcare facilities.

The Audit Team also verified this in the visited LGAs, whereby Team noted that, 80 to 100% of the visited LGAs had no plans and key tools for the inspection of construction of Healthcare Facilities. ***Appendix 15 (a)*** presents a summary of the necessary and critical tools which were frequently missing in the visited LGAs and the associate implications.

Appendix 15(b) shows the extent of availability of equipment, inspection tools, inspection and supervision plan in the selected and visited LGAs. The unavailability of tools, equipment and inspection checklist ranged from 80% to 100% respectively. This was because of low priorities given by LGAs on planning for supervision and inspection of the ongoing and completed Healthcare Facilities Projects and lack of capacity of key staff in project management and contract administration contrary to National Construction Industry Policy, 2003, Section 8.1.2

The reason for the noted situation was due to that LGAs' Annual plans did not include tools and equipment for management of Construction works within their area of jurisdictions. This was not included in the LGAs plans specifically for Works Department. As a result, LGAs did not adequately conduct supervision and inspection of the ongoing works.

4.3.5 Shortage Human Resources to Manage Construction of Healthcare Facilities

Are resources (human resources, tools and equipment) that are necessary for effective management of Construction works of Healthcare Facilities enough and registration by the respective professional Board?

According to the Local Government Laws (Miscellaneous Amendments) Act No 13, 2006 Section 20(f) page 14 requires the Implementing Agencies, i.e., PO-RALG and LGAs to ensure availability of equipment, human resources and funds for the implementation of construction projects.

Likewise, Guidance Ref. No. AD.296/303/01/1/82 dated 21st September 2017 from PO-RALG to Regional Administrative Secretary (RAS), requires engineers, artisans and other experts from the respective districts to *supervise* the projects and ensure they do meet the required quality. Further, Regional Secretariat Engineers were required to make sure the intended quality of implemented projects is attained.

Engineers Registration Board Act Cap 63 published vide Government Notice No 273 of 2015 clause 9, directs inspection of building works to be carried out by the Inspector, Auditor or Inspection Team for the purpose of ensuring that the Works are being executed, under the supervision of recognized professional engineers, in accordance with the approved plans, specifications and building consent.

However, the Audit Team noted that PO-RALG did not ensure that LGAs adequately implement the directives. This was evidence by the fact that 20 out of 35 visited Healthcare Facilities did not adequately plan for human resources sufficient to manage construction of healthcare infrastructures. This was indicated by shortage of qualified personnel when compared to the number of planned healthcare facilities to be constructed. This lead to high workload to the available engineers as indicated in **Table 4.10** below:

Table 4.10: Percentage of Shortage of Human Resources in the Visited LGAs

LGA	No. of required technical Personnel	Responsible for supervision of HFs	No of Available Engineers / Architects / Quantity Surveyors in LGA	Gap or Difference	Gap %age
Mbeya CC	26	5	17	9	35
Mbeya DC	10	2	1	9	90
Kibaha DC	10	2	2	8	80
Mkuranga DC	10	1	1	7	70
Arusha CC	12	2	2	8	67
Longido DC	8	1	1	7	88
Geita DC	12	0	0	12	100
Bukombe DC	8	1	1	7	88
Manyoni DC	12	1	1	10	83
Mkalama DC	12	2	2	10	83
Namtumbo DC	17	1	3	14	82
Songea DC	12	1	2	9	75
Sumbawanga DC	12	3	3	7	58
Nkasi DC	22	5	11	11	50
Average (%)					**75**

***Source**: PO-RALG's staff database in LGAs and LGAs Progress reports of 2018/19*

Table 4.10 indicates inadequate number technical personnel responsible for supervision and inspection ranging from 35% to 100%. It can be seen a shortage of Engineers by an average of 75%. Maximum demand of staff was noted at Geita DC whereby the shortage of staff is by 100% while minimum demand was by 35 % noted in Mbeya CC. The shortage of technical personnel led to huge work load in respective LGAs.

For instance, in Mbeya DC, only one (1) engineer was responsible for supervising three (3) ongoing Health centre projects while Mbeya CC had 5 professional staff were responsible for the supervision of three healthcare Facility.

However, through interviews held with LGAs officials, the Audit Team noted that, the engineers within the respective LGAs were responsible for other ongoing projects from other sectors being implemented through Force Account. This provided a loophole for inadequate supervision of the ongoing construction of Healthcare Facilities as the available engineers were required to be full time present on sites of other projects.

Consequently, this resulted into poor workmanship of the completed healthcare facilities as it was evidently observed during site visit of the selected LGAs. For instance, poor workmanship was observed in Mbeya District hospital in terms of the quality of finishing works, walling, plastering, floor tiles and electrical installation. Thus, the prevailing shortage of skilled personnel in LGAs made most Healthcare construction projects to be inadequately supervised by the respective LGAs' council engineers.

Average of 96% of Key Technical Personnel in the Respective Visited LGAs Were Not Registered by Relevant Professional Boards

According to Engineers Registration Board Act Cap 63 published vide Government Notice No 273 of 2015 clause 9, LGAs are required to conduct periodic and routine inspections of building works. They are also required to carry out the inspections through registered professional engineer, inspector, and auditor or inspection team for the purpose of ensuring that the works are executed under the supervision of the recognized professional engineers, in accordance with the approved plans, specifications and building consent.

Clause 167 of the Public Procurement Act of 2011 requires LGAs to have qualified personnel to carry out and supervise the required works. In order to meet this requirement of the Act, PO-RALG issued a directive in August 2017 regarding the use of Force Account Method, that all construction works should be executed by qualified local *fundi* (artisan) who have knowledge and experience of buildings construction so as to have quality assurance on the executed works and timely completion of works.

However, the Audit Team further noted that on average 96% of the available engineers, architects, technicians and Quantity Surveyors were not registered with their respective professional bodies contrary to Engineers Registration Board Act Cap 63 published vide Government Notice No 273 of 2015 clause 9 (Detailed analysis is provided in Table **4.11**).

Table 4.11: Status of Registration of LGAs staff with their respective Professional Boards

LGA	No. of required technical Personnel	Responsible for supervision of HFs	No of Available Engineers / Architects / Quantity Surveyors in LGA	Registration Status	%age of Unregistered Staff
Mbeya CC	26	5	17	1	94
Mbeya DC	10	2	1	0	100
Kibaha DC	10	2	2	0	100
Mkuranga DC	10	1	1	0	100
Arusha CC	12	2	2	1	100
Longido DC	8	1	1	0	100
Geita DC	12	0	0	0	100
Bukombe DC	8	1	1	0	100
Manyoni DC	12	1	1	**1**	50
Mkalama DC	12	2	2	**0**	100
Namtumbo DC	17	1	3	**0**	100
Songea DC	12	1	2	**0**	100
Sumbawanga DC	12	3	3	**0**	100
Nkasi DC	22	5	11	**0**	100
Average (%)					**96**

***Source**: LGAs Staffing levels (IKAMA)*

Table 4.11 shows registration status of LGAs' technical personnel with their respective Professional Boards. It also shows that in 12 out of 14 of LGAs, which is equivalent to 86% of the visited LGAs, their available key technical personnel were not registered with their respective Professional Boards.

Through the interviews held with LGAs' key technical personnel staff, it was revealed that the registration was not done due to limited time for training and their adequacy for supervision of the ongoing projects overtime. It was also noted that unregistered key personnel were given low priorities on registration by their respective board. Therefore, they practised their professions contrary to their respective professional Board's Acts.

As a result, some key activities which required the approval of registered professionals were outstanding until the time of this audit. For instance, Longido DC was headed by the unregistered Architect who was limited to issue and approve building permit, instruction, inspections and approvals

as Council Engineer. The reason provided for the noted shortage of technical staff, during the interviews held in the visited LGAs, was that most of the key staff were hired by TARURA after its establishment. **Table 4.11** further shows that a total of 11 out of 14 selected and visited LGAs had no registered professionals. Consequently, these LGAs did not act fully according to the required profession practice in the area of building construction.

4.3.6 Ineffective Utilisation of Available Resources in the Respective LGAs

Are available resources (human resources, tools and equipment) that are necessary for effective management of construction works of Healthcare Facilities effectively used?

PO-RALG, through LGAs, is required to ensure that equipment, human resources and funds for the construction of Healthcare Facilities in LGAs are available and fully utilised as required by the Local Government Laws (Miscellaneous Amendments) Act, 2006 Section 20). Likewise, National Industrial Policy, 2003 Section 8.1.2 requires PO-RALG to develop the capacity of its staff in project management and contract administration.

However, the Audit Team noted that the available staff in the respective LGAs were not fully utilised due to several factors. Among the factors which led to inefficient utilisation of resources was due to lack of transport, lack of supervision funds and inadequate number of staff within LGAs.

Moreover, interviews held with LGAs' officials revealed that inefficient utilisation was due to lack of transport specifically for works department which could have contributed to close supervision regardless of inadequacy in number in the respective LGAs.

Through analysis of availability as provide in ***Appendix 15 (b)***, 34 of 35 visited LGAs had 97% shortage of transport or inspection vehicle. This implies that, the ongoing construction works were not inspected and supervised in time. As a result, available staff were not fully present on site for inspection and supervision of the ongoing construction works. This was acknowledged through interviews held with respective LGAs' engineers. The reason for not having personnel fully on site was lack of supervision cost and transport.

4.4 Lack of Closure and Commissioning Mechanism for Completed Healthcare Facilities

Are mechanism for closure and completion of the Constructed Healthcare Facilities functioning well?

HSSP-IV, 2015-2020 section 6.3.1 page 60 required PO-RALG to issue Health Facilities Standard guideline on the infrastructure in order to guide LGAs in a more balanced development of infrastructure, to ensure that Healthcare Facilities are constructed and rehabilitated to meet accreditation standards (HSSP-IV of 2015-2020 section 6.3.1 pg. 60)

It was also expected that LGAs to have handing over mechanism to ensure that completed Healthcare Facilities met accreditation Standards. However, the Audit Team noted that, LGAs had no effective mechanism for closure and commissioning of Healthcare Facilities. The Audit Team through interviews, document reviews and site visit noted the following weaknesses:

4.4.1 Lack of Mechanism for Inspection of Completed Healthcare Facilities

Do LGAs have mechanism for ensuring that the Completed healthcare Facilities are inspected prior to commissioning?

It was expected LGAs, DMOs, and RS in collaboration with Healthcare Facilities Governing Committee to conduct final inspection for completed Health Facilities. This is among the requirements of HSSP-IV 2015-2020 section 6.3.1 pg. 61 which requires PO-RALG through LGAs, CHMTs, RHMTs to ensure that, completed facilities are inspected and ensure that are fully equipped and adequately staffed with healthcare workers before construction of new ones begins.

The Audit Team noted that LGAs did not conduct inspection of the completed Healthcare Facilities prior to its use. This was indicated by:

Absence of Official Handing-over for the Healthcare Facilities that were in Use

The Audit Team noted that 11 out of 35 substantially completed Health Centres were not officially handed over to user department. On the other

hand, the Audit also noted that 16 partially completed Healthcare Facilities were in use with an outstanding works without official handover. List of completed or partially completed without handing over are presented in ***Appendix 16***.

A total of 35 Healthcare Facilities were visited in 14 LGAs in 7 regions. 11 out of 35 Healthcare Facilities were substantially completed, however they were not officially handed over to the user department ***(Refer Appendix 16)***.

Presence of Unused Theatres of the Completed Healthcare Facilities

The Audit Team noted 9 out of 11 Healthcare Facilities which were substantially completed, however their theatres were not in use because of the absence of medical equipment. Given the observed situation, the Audit Team is of the view that there was no value for money, since the Healthcare Facilities did not provide the services as intended. The contributing factor to this situation was the failure to include medical equipment during the planning for the construction of Healthcare Facilities. As the result some of theatres were observed to be dirty, with tear and blemished out of paints. Hence, the value for money could not be attained as they were not performing as intended.

4.4.2 Lack of Joint Inspections for Identification of Defects Prior to Taking-over of Completed Healthcare Facilities

Do LGAs conduct joint inspections to identify defects of executed works prior to taking over of completed Healthcare Facilities and ensure that defects are rectified accordingly?

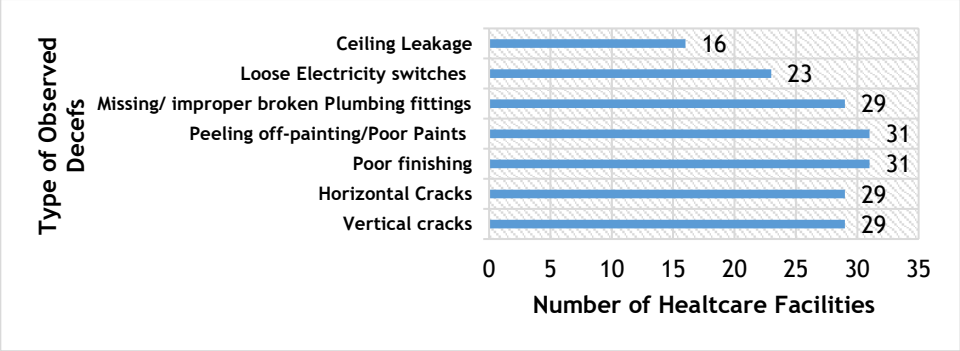
LGAs were expected to conduct joint inspections for identification of defects of executed works prior to taking over the completed Healthcare Facilities. This was to ensure that defects are rectified accordingly. However, the Audit Team noted that LGAs did not conduct final inspection contrary to HSSP-IV 2015-2020 page 61.

Health Sector Strategic Plan – IV (HSSP-IV), 2015-2020 *Section 6.3.1 page 61*, requires PO-RALG through LGAs, CHMTs, RHMTs to ensure that, completed facilities are fully equipped and adequately staffed before construction of new ones begins.

Through reviews of documents in visited LGAs, the Audit Team noted that there were neither joint inspections while building was in use and with some outstanding works as detailed in ***Appendix 16***. Final Joint inspections could have identified defects and rectified accordingly prior to using the facility.

The Audit Team noted that LGAs neither conducted handing over nor prepared either final inspection or final reports after completion of construction of Healthcare Facilities. Moreover, through site Visit conducted to completed healthcare Facilities, the Audit Team noted defects in some of the completed buildings which were supposed to be rectified before use the Facility. The observed defects include; vertical and horizontal cracks, peeling off-paints, poor paints, poor finishing, missing plumbing fittings, Loose electricity switches and outstanding works. **Figure 4.1** below shows Common defects observed from the visited HFs

Figure 4. 1: Common Defects Observed from the Visited Healthcare Facilities.



Source: *Auditors' Observations during site visit*

As indicated in **Figure 4.1**, most observed common defects were poor finishing and peeling off paints or poor paints which were found in 31 out of 35 constructed Healthcare Facilities, equivalent to 89%. Least observed defects were found in 16 out of 35 which equivalent to 46 % constructed Healthcare Facilities. This implies that constructed healthcare facilities had common defects ranging from 46 % to 89 % as observed from conducted site visits. For more detailed information, see ***Appendix 16***.

Reasons provided by the interviewed officials from the selected and visited LGAs for not conducting final inspection and handing over was that the works were done in piece works with different local *fundi*. Thus, it made

difficulties in carrying out the final inspection at every stage of the completed piece work. The Audit Team is of the view that the completed piece work could have been inspected prior to commencement of preceding stage and certificate issued to respective local *fundi* or artisan as well as defects could have been easily identified and rectified.

Absence of Mechanism for Compiling and Managing the Snag Lists

LGAs were expected to inspect completed constructed healthcare facilities to identify and compile snag list for their proper management. Contrary to this the Audit Team noted that LGAs were neither identifying snag list nor compiling them as well as setting actions for managing them.

As a result, the Audit Team noted 33 out of 35 completed Healthcare Facilities that were visited, equivalent to 94%, had various defects. Further, 24 out of 35 (is equivalent to 69%) visited completed Healthcare Facilities had an outstanding works which were substantially completed (Refer ***Appendix 16***). This was because the respective LGAs did not conduct inspection including proper project hand over prior to using the facilities.

In response to this, officials from the visited LGAs indicated lack of skills and knowledge for contracts management, limited time of execution and huge workload were among the reasons for the absence of mechanism for managing snag list for the completed healthcare facilities.

4.5 PO-RALG Inadequately Measured the Performance of LGAs in Managing the Construction of Healthcare Facilities

Assessment of Performance of PO-RALG was measured based on its adequacy of planning and evaluation, the extent to which the monitoring activities performed addressed the existing challenges noted in the constructed Healthcare Facilities. It was also measured on the way the monitoring results were shared with the responsible actors for effective implementation and on its performance in making follow up of the recommendation issued to LGAs. The results are as presented below:

4.5.1 Inadequate Plan for Monitoring and Evaluation

Does PO-RALG Plan for monitoring and evaluation of activities performed by Regional Secretariats (RSs) and LGAs for construction of Healthcare Facilities?

Strategic Plan 2016/17 to 2020/21 of PO-RALG, requires the Ministry to have effective monitoring and evaluation system at all levels and enhancing Monitoring and Evaluation Mechanism.

The Audit Team noted that PO-RALG, through its Health Services Section, had no plan at all levels to enhance monitoring and evaluation for rehabilitation and construction of Healthcare Facilities.

Through the review of M&E reports of 2015/16-2019/20, the Audit Team noted that, activities regarding construction of healthcare facilities were not captured.

Through interview held with PO-RALG officials, it was noted that monitoring and evaluation was not conducted on implementation of construction of Healthcare Facilities. The reasons stated were due to unaddressed quality, human resources, key profession staff and capacity buildings in respect to rehabilitation and construction of healthcare facilities in PO-RALG's Monitoring and Evaluation Framework (2016/17-2020/21).

As a result, failure to have M& E Plan led to lack of information that would enable stakeholders to track progress and to enhance informed decision-making on implementation of construction of health care facilities and on the strategic plan.

4.5.2 Conducted Monitoring and Evaluations Did Not Address Quality Issues of Ongoing and Completed Healthcare Facilities

Nation Five Years Development Plan 2016/17-2020/21, "Objectives of the M& E framework" section 7.3 requires PO-RALG to have M&E reports designed to inform achievements, and identified gap in relaton to the expected timeline targets, milestones and run in term of time and cost as sitipulated in the action plan.

Review of Evaluation Report conducted in October 2018, addressed four challenges on construction and rehabilitation of healthcare facilities, the challenges were; Materials' costs for construction and Labor cost are

uneven from one LGA to another because of differences in their geographical settings; shortage to number of project supervisors (engineers) in LGAs since many of such saff had shifted to TARURA; fund for supportive supervison at LGAs and RSs levels was not allocated; and existence of payments were made out of electronic systems.

However, The Audit Team noted that, the evaluation report did not capture or report issues concerning quality, status and cost overrun resulted from inadequate management in constructions of healthcare facilities. This was because the M&E Framework did not include key indicators regarding quality, cost and time for construction of Healthcare Facilities. It was also not informative regarding what was supposed to be done in order to address results from the evaluation report.

As a result of inadequacy to capturing the key project issues, there were noted poor finished works, lack of accountability to people who were implemeting projects, skipping of some essential material tests during construction and rehabilitation of health facilities and observed number of site adjustement without any prior approval nor documentation.

4.5.3 PO-RALG Did Not effectively Communicate M &E Results to Responsible Stakeholders

Section 2.6.1 of PO - RALG M & E framework (2016/17 to 2020/21) requires, PO- RALG to share the results obtained from M & E reports to all relevant stakeholders (i.e. RSs and LGAs) for accountability purposes.

Through reviews of Evaluation Report (October 2017 to October 2019), the Audit Team noted that, PO-RALG ineffectively communicates the results of M & E reports to the respective LGAs and other stakeholders such as TAEC, TEANESCO, MoHCDGEC and Water authorities. Key results observed were not communicated contrary to the framework. This was also confirmed through interviews held with PO-RALG officials.

Due to lack of active reporting mechanism, measures on identified gaps during evaluation were not addressed/ no action were taken to rectify the identified challenges. This led to the existence of problems up to the time of this audit as explained in the above section. This was noted through reviews of Monitoring report of October 2018.

4.5.4 PO-RALG Did Not Frequently Conduct Follow-ups on the Implementation of Recommendations Issued to RSs and LGAs

According to the Functions and Organization Structure (PMO-RALG), PO-RALG (through the Sector Coordination Division) is required to coordinate critical interfaces with Central and Sector Ministries, Departments and Agencies, Non-State Actors (NSAs), RSs and LGAs. It is also required to provide technical backstopping, capacity building, supportive supervision, monitoring and evaluation of central and sector ministries' programme, project and other related activities of respective sectors that are implemented in RSs and LGAs.

PO-RALG did not frequently conduct follow-ups on issued monitoring and evaluation recommendations. The reason provided by PO-RALG Officials was due to lack of human resources for follow-ups.

Through interviews with officials from PO-RALG health section, it was revealed that there were no follow-ups made or reported concerning implementation of recommendations given to them on construction of healthcare facilities. However, there were no evidences provided on implementation of recommendation given to RSs as well as LGAs. As a result, there was no feedback given on improvement made regarding Healthcare Facilities.

CHAPTER FIVE

AUDIT CONCLUSIONS

5.1 Introduction

This chapter provides conclusions of the audit based on the audit findings presented in Chapter Three and Chapter Four of this report. The conclusion is categorised into two parts namely, general conclusion and specific conclusions as detailed below: -

5.2 General Conclusion

The Audit Team acknowledges efforts made by the President's Office – Regional Administration and Local Government (PO-RALG) in improving Healthcare Facilities in the country. However, PO-RALG needs to enhance management of the construction of Healthcare Facilities to attain intended objectives for the delivery of quality healthcare services, while at the same time realizing value for money of the funds spent.

Based on the facts presented in Chapter Three and Chapter Four of this report, it is generally concluded that the PO-RALG through Local Governments Authorities (LGAs) to some extent is not effective in managing the construction of Healthcare Facilities with regards to needs, time, quality and cost. The Ministry has not managed to ensure that the constructed Healthcare Facilities meet the prescribed quality standards to facilitate provision of quality of the intended healthcare services.

This is evidenced by fact that, 333 out of 447 equivalent to 74% of constructed Healthcare Facilities under phase I to phase VII were delayed in completion. The delayed period ranged from 12 to 40 months. Further, 67 out of 68 District Hospital implemented projects, equivalent to 99% of District Hospitals, had cost overrun while 97% of visited Healthcare Facilities did not meet the prescribed quality, standards and specifications.

Ineffective management of construction of Healthcare Facilities is associated with the following contributing factors, namely: lack of quality control mechanism for construction of Healthcare Facilities, inadequate planning for construction of Healthcare Facilities and inadequate management of procurement of construction materials. Similarly, PO-RALG and Regional Secretariats are not effectively supervising and monitoring

the performance of LGAs regarding management of the construction of Healthcare facilities.

5.3 Specific Conclusions

5.3.1 PO-RALG did not Effectively Plan for Construction of Healthcare Facilities

PO-RALG plans for construction of Healthcare Facilities are not effective to ensure the facilities are constructed within the planned time and meet the standards and specifications. Prepared designs did not put into consideration geographical, topographical and soil condition varying in areas where the projects are implemented. Similarly, provided designs and schedule of materials for Healthcare Facilities lacked specifications and provision for necessary building components such as soak away and septic tanks, external water supply and ICT infrastructures.

As a result, constructed Healthcare Facilities had major changes and variations of measurements and dimensions due to overdesign and under design. For example, 100% of the visited Healthcare Facilities had major variations of plinth or foundations depths that varies from 0.2m to 4.5m as referred to Table 3.7. Inadequate specification also leads inconsistency in the construction of X-Ray control room and theatre building (operation rooms), laundry and mortuary buildings' doors, which necessitated some of the LGAs to demolish some constructed parts to suit the user appliances.

This is because PO- RALG did not adequately conduct needs analysis prior to design and budgeting for construction of the same. During designing PO-RALG involves officials from the Ministry leaving key stakeholders such as experts from Utility Authorities and TAEC. These were key in providing inputs for specification for materials for radiology and theatre rooms to facilitate their functionality of construction materials for healthcare facilities and provision of utilities respectively.

Further to that, PO-RALG did not adequately plan for human resources and budget for effective management of construction of Healthcare Facilities. This was depicted through analysis which showed shortage of qualified Engineers by 75% in the country when compared to the number of planned Healthcare Facilities. Also, for the period of four years PO-RALG did not set aside supervision funds set for Regional Secretariats and the respective LGAs and project preliminaries. As a result, Regional Secretariats and their

respective LGAs did not conduct adequate quality control through close supervision.

5.3.2 PO-RALG did not ensure Constructed Healthcare Facilities are not completed on Time and within the Planned Cost

Healthcare Facilities constructed by PO-RALG through LGAs are not completed on time and within the planned cost. The Audit Team noted that 33 out of 35 equivalent to 94% of visited Healthcare Facilities from 14 LGAs delayed in the completion. The delay in completion of visited Healthcare Facilities ranged from 2 to 36 months.

Inadequate mechanism to ensure that construction projects of Healthcare Facilities were timely completed and were within planned cost were among the causes of delays. Also, the time allocated for implementation of project was not realistic. This is because PO-RALG did not take into consideration time for mobilisation and for procurement process prior to commencement of construction in the program of work. As a result, construction of 333 out of 447 equivalent to 74% of Healthcare Facilities in the country delayed in completion for a maximum of forty (40) months.

On the other hand, PO-RALG did not ensure that LGAs managed construction of Healthcare Facilities with regards to cost. This was indicated by the fact that 11 out of 28 of the constructed Health Centres in the Visited LGAs had cost overrun ranging from **TZS 0.674 to TZS 137** Million equivalent to 1 % to 34 %. Absence of cost control mechanisms, inadequate need analysis prior to design and inadequate design contributed to variations that eventually led to increase of cost.

Moreover, inadequate management of procurement of construction materials which was associated with non-adherence to the payment procedure, ineffective mechanism for proper documentation and accounting of procured construction materials also contributed to cost overrun. This was based on the evidence that 80% of visited Healthcare Facilities lacked Local Purchase Order (LPO) for the procured construction materials.

5.3.3 PO-RALG did not ensure Completed Healthcare Buildings Meets the Pre-defined Specifications

PO-RALG did not have mechanism to ensure quality control on the construction of Healthcare Facilities in the respective LGAs. Similarly, LGAs had a limited time for construction which was 3 to 6 Months which did not provide enough time for testing and waiting time for curing whereby, in practice, minimum curing period is 7 days to 28 days.

The absence of qualified personnel for supervision of construction of Healthcare Facilities indicates that Healthcare buildings were constructed without following entrusted procedures that provides assurance on the quality of buildings. Inadequacies in quality assurance resulted into quality defects such as presence of both vertical and horizontal cracks, peeling off paintings, poor workmanship, already broken/ flipped-off PVC ceilings, broken tiles, and poor heaved and deflected external doors, and finishing of laboratory working tables

Likewise, PO-RALG did not allocate funds for supervision of construction of Healthcare Facilities by the Regional Secretariats and LGAs despite the use of Force Account method that involves use of local f*undis* which normally requires close supervision. Further, most of the Healthcare facilities were located about 45 to 200 kilometres from LGAs' offices, whereby in some instances the Councils' Engineers required accommodation and transport to stay close to site locations.

LGAs lacked closure and commissioning mechanism for handing over completed Healthcare Facilities to the user. As a result, partially completed Healthcare Facilities with outstanding works without official handover had been put into use. The Audit noted that in 9 out of 11 Healthcare Facilities, theatres were completed but not in use for reasons of lack of facilities and skilled personnel to make them operational. The value for money of completed theatre buildings which were not in use was not realised.

PO-RALG through LGAs did not ensure that completed Healthcare Facilities are fully utilised and equipped with required equipment and staff contrary to HSSP-IV 2015-2020. PO - RALG also did not include medical equipment that could make theatres operational. Thus, value for money was not

realised from these theatres as there were no surgery operations going on until the time of site visits.

5.3.4 PO-RALG did not Adequately Evaluate Performance of LGAs

PO-RALG was not adequately monitoring and evaluating the performance of Regional Secretariats and LGAs to ensure Healthcare Facilities were completed with due regards to time, cost and quality. This was partly attributed to the absence of monitoring and evaluation plan and capacity of the Health Services Section in terms of human resources. As a result, PO-RALG lacked sufficient information and clear picture for the performance of RS and LGAs as far as the construction of Healthcare Facilities was concern.

Further, the conducted monitoring did not address the critical challenges affecting time, cost and quality of constructed healthcare facilities in the country. Also, PO-RALG did not communicate the results of M & E reports to respective LGAs and other stakeholders such as TAEC, TANESCO, MoHCDGEC and Water authorities

CHAPTER SIX

AUDIT RECOMMENDATIONS

6.1 Introduction

The audit findings and conclusions point out areas that need further improvements in the management of construction of Healthcare Facilities in the country.

The areas for further improvements were noted in all four focused areas of the audit namely; effectiveness of PO-RALG in planning for construction of Healthcare Facilities; construction of Health facilities on time and within the planned cost; quality of constructed or rehabilitated Healthcare Facilities; and performance evaluation of LGAs on the management of construction of Health Facilities in the country.

The National Audit Office is of the view that, based on principles of 3Es of Economy, Efficiency and Effectiveness, these recommendations need to be fully implemented so as to ensure that there are improvements in the management of construction of Healthcare Facilities in the country.
Therefore, recommendations to the President's Office - Regional Administration and Local Government (PO-RALG), on areas of improvements for the management of construction of Healthcare Facilities are as listed below.

6.2 Specific Recommendations to the President's Office-Regional Administration and Local Government

6.2.1 To Improve Planning for Construction of Healthcare Facilities

The President's Office – Regional Administration and Local Government to:

1. Ensure adequate needs assessment for the construction of Healthcare Facilities uses the result to review the existing design, planning and budgeting. The analysis should also include identification of needed resources and required specifications for effective implementation of the construction of healthcare facilities;

2. Develop coordination mechanism to allow involvement of key stakeholders to provide their inputs during planning and designing of Healthcare Facilities. The developed mechanism should enable stakeholders to provide their input on specifications required to meet the intended use for each Healthcare Facility building component; and

3. Prepare, integrate and mainstream plans and budgets for management of construction and rehabilitation of Healthcare facilities into their budget. The budget should take into consideration all project key items such as, but not limited to, preliminary works, actual functional requirements of the respective Healthcare Facilities and supervision activities in management of Healthcare Facilities at the level of Regional Secretariats and LGAs.

6.2.2 To Improve Construction of Healthcare Facilities with Regard to Time, Cost and Quality

The President's Office – Regional Administration and Local Government to:

1. Prepare realistic program of work and schedule of materials and ensure LGAs adhere to the same in order to control the completion time and cost respectively. The time allocated for project should take into consideration the time required for needs assessment and/or conditional survey, mobilization, design, procurement process and recommended curing period;

2. Provide for equitable allocation of resources both financial and recommended technical personnel for effective management of construction of Healthcare Facilities under their jurisdictions at both Regional Secretariats and LGA Levels;

3. Develop quality control mechanism to be used by LGAs during the implementation of construction of Healthcare Facilities. The developed mechanism should enable LGAs to conduct quality test of construction materials and works, proper documentation and accounting for procured construction materials;
4. Ensure that staff involved in the management of construction of Healthcare Facilities are well trained and equipped with

knowledge on use of Force Account, procurement and contract management principles;

5. Capacitate the LGAs to identify groups of Local *Fundis* (Artisan) register them (have a list /inventory) and train them on construction and rehabilitation of Healthcare Facilities; and

6. Ensure that there is mechanism for closure and commissioning to ensure that, defects and outstanding works are identified and corrected before use of completed Healthcare Buildings so as to ascertain value for money of executed construction works of Healthcare Facilities.

7. Develop the Maintenance Plan for the constructed Healthcare Facilities in the country. The Maintenance Plan should indicate the required Human Resources, budget, type of maintenance, maintenance schedule and method for the maintenance.

6.2.3 To Improve Monitoring and Evaluation of LGA's Performance

The President's Office – Regional Administration and Local Government to:

1. Plan and budget for routine monitoring and evaluation of performance and capacity of Regional Secretariats and LGAs. The plan should include development of tools and reporting format that will enable PO-RALG to capture all key project elements related to time, quality and cost; and

2. Develop a mechanism to coordinate and share the monitoring results with stakeholders. The mechanism should enable PO-RALG to address the challenges faced by LGAs towards the management of construction healthcare facilities at all levels in the country.

REFERENCES

1. Health Facilities Journals Articles: Available at https://www.imedpub.com/scholarly
2. PO-RALGs' Report; Kapologwe et.al, 2020: Available at www.tamisemi.go.tz.
3. United Republic of Tanzania: The National Health Policy 2017 Sixth Draft Version
4. United Republic of Tanzania: www.ikulu.go.tz/ or http://blog.maelezo.go.tz/
5. Mtanzania Newspapers of 17th October 2019
6. United Republic of Tanzania : Health Sector Strategic Plan – IV, 2015-2020
7. United Republic of Tanzania: Local Government (Urban Authorities) Act, No. 8 of 1982
8. The United Republic of Tanzania: National Essential Health care Interventions Package–Tanzania 2013.
9. United Republic of Tanzania: Basic Standards for Health Facilities Level I and II of 2015
10. United Republic of Tanzania: National Construction Industry Policy 2003
11. United Republic of Tanzania: Public Health Policy of 2009
12. United Republic of Tanzania: Architect and Quantity Surveyors Registration
13. United Republic of Tanzania: PO-RALG's Directive on use of Force Account ,2017
14. United Republic of Tanzania: Public Procurement Act of 2010
15. United Republic of Tanzania: The Local Government (Urban Authorities) Act No. 8 of 1982
16. United Republic of Tanzania: Local Government (Urban Authorities) (Development Control) Regulations of 2008).
17. United Republic of Tanzania: Engineers Registration Board Act Cap GN No 273 of 2015
18. United Republic of Tanzania: The Engineers Registration Act (Cap. 63) of 2015
19. United Republic of Tanzania: The Engineering Works, Services and Projects Monitoring Regulations, 2015
20. United Republic of Tanzania: Public Procurement Regulation of 2013

21. United Republic of Tanzania: The Local Government Laws (Miscellaneous Amendments) Act No 13, 2006.
22. United Republic of Tanzania: PO-RALG's Strategic Plan 2013-2018
23. United Republic of Tanzania: The Atomic Energy Act No 7, 2002
24. United Republic of Tanzania: National Development Vision 2025
25. United Republic of Tanzania: National Five Year Development Plan (FYDP) 2016/17-2020/21
26. PO-RALG's Annual Budgets 2016-2022
27. PO-RALG's Evaluation Report on Implementation of Healthcare Facilities, 2018/19
28. PO-RALG's Approved Organisation Structure, Staff List, 2020
29. PO-RALG's Progress reports of June 2020
30. PO-RALG's Evaluation Report for Construction of Healthcare Facilities, 2018/2019
31. LGAs IKAMA (Staffing level) of 2019/20
32. PO-RALG's Monitoring & Evaluation Framework (2016/17 to 2020/21)
33. PO-RALG's Evaluation Report (October 2017 to October 2019

APPENDICES

Appendix 1: Responses from the President's Office - Regional Administration and Local Government

This part covers the responses from the audited entity namely the President's Office –Regional Administration and Local Government. The responses are divided into two i.e. general comments and specific comments for each of the issued audit recommendations. This is detailed in below:

A: Overall responses

PO - RALG would like to thank NAO for bringing up these findings and recommendations regarding the rehabilitation and construction of Health Facilities using the force account method. Since no in-depth evaluation of rehabilitation and construction of Health Facilities using force account has been done to date, PO – RALG will use these findings to improve the management of these projects. We are happy to implement these findings as elaborated in the table below on specific responses (action and timeline).

B: Specific Responses

No	*Recommendation*	*PO-RALG's Comment (s)*	*Action(s) to be taken*	*Time line*
To Improve Planning for Construction of Healthcare Facilities				
1.	Ensure adequate needs assessment for the construction of Healthcare Facilities uses the result to review the existing design, planning and budgeting. The analysis should also include identification of needed resources	Need assessment was done before designing the current standard drawings. These standard drawings have included all the needed specifications. Together with the standard drawings, a schedule of materials was also developed to help LGAs to identify the needed resources. However, LGAs are supposed to customize these standard drawings according to their needs at the site.	PO – RALG will review the current drawings and schedule of materials to accommodate inputs from various stakeholders including the gaps identified by NAO during the performance audit.	End of September 2021

No	*Recommendation*	*PO-RALG's Comment (s)*	*Action(s) to be taken*	*Time line*
	and required specifications for effective implementation of the construction of healthcare facilities	Where standard drawings do not fit the needs/requirements, Councils are allowed to design the drawings that reflect their needs and submit them to PO-RALG and MoHCDGEC for approval.		
2.	Prepare, integrate and mainstream plans and budgets for management of construction and rehabilitation of Healthcare facilities into their budget. The budget should take into consideration all project key items such as but not limited to preliminary works, actual needs and functional requiremen	This recommendation is observed. PO - RALG usually prepares priorities for the next fiscal year and submits it to MoFP, then MoFP in collaboration with PO-RALG adjusts the priority according to the available sealing. LGAs are then given priority areas to include in their plans and budget. LGAs also submit to PO - RALG the names of the facilities/ areas to be rehabilitated/constructed. The fund given to LGAs is "flat rate", LGAs are supposed to submit to PO-RALG and MoFP the BOQs and	PO-RALG will develop a standard template that will enable LGAs to consistently document cost breakdowns that includes; preliminary works, actual needs, and functional requirements of the respective Healthcare Facilities as well as supervision cost.	End of June 2021

No	*Recommendation*	*PO-RALG's Comment (s)*	*Action(s) to be taken*	*Time line*
	ts of the respective Healthcare Facilities and supervision activities in management of Healthcare Facilities at the level of Regional Secretariats and LGAs	other cost activities as one of the attachments needed when they submit the request for the fund.		
3.	Develop coordination mechanism to allow the involvement of key stakeholders to provide their inputs during planning and designing of Healthcare Facilities. The developed mechanisms should enable stakeholders to provide their inputs on specifications required to meet the intended	Various professionals were involved during the designing of the standard drawings, their inputs helped to develop the drawings with specifications that meet the standards required by MoHCDGEC. PO – RALG will continue to involve various professions in designing standard drawings. LGAs also need to involve stakeholders during the implementation of rehabilitation/construction projects.	PO–RALG In collaboration with MoHCDGEC, to develop coordination mechanism to allow the involvement of key stakeholders to provide their inputs during planning and designing of Healthcare Facilities. The developed mechanisms should enable stakeholders to provide their inputs on specifications required to meet the intended use for each Healthcare Facility building component	End of June 2021

No	*Recommendation*	*PO-RALG's Comment (s)*	*Action(s) to be taken*	*Time line*
	use for each Healthcare Facility building component			
To improve Construction of Healthcare Facilities with regard to Time, Cost and Quality				
1.	Prepare realistic program of work and schedule of materials and ensure LGAs adhere to the same in order to control the completion time and cost respectively. The time allocated for projects should take into consideration during the time required for design, mobilization, procurement process and construction time including recommended curing period for	PO-RALG normally prepares a standard program of work. LGAs are supposed to prepare a program of work that reflects their need and serve as a tool for monitoring and evaluation. Schedule of materials was developed alongside the standard drawings, PO-RALG will review the schedule of materials.	PO-RALG will prepare the standard program of work for each project. The standard drawing will include all the necessary stages of the rehabilitation/construction project.	Middle of next financial year 2021/2022 (End of Jan 2022)

No	*Recommendation*	*PO-RALG's Comment (s)*	*Action(s) to be taken*	*Time line*
	concrete works			
2.	Provide for equitable allocation of resources both financial and recommended technical personnel for effective management of construction and operationalisation of Healthcare Facilities under their jurisdictions at both Regional Secretariats and LGA Levels	This recommendation is observed. Funds for construction are sent to LGAs according to the needs, basing on the following criteria; The size of the **population** in need of Health care services, **Distance** which people travel before they get to the nearest health care facility, and area with **geographical difficultie**s ie islands, impassable localities especially during the rainy season.	PO-RALG in collaboration with MoHCDGEC and MoFP will continue to equitably allocate funds for construction/rehabilitation based on the need and the mentioned criteria. PO–RALG, RSs and LGAs will submit request for work permits from PO – PSMGG to fill the deficit of Health Workers and Technical people in construction field.	Routinely, during the allocation of funds for construction/rehabilitation. End of December 2022
3.	Develop quality control mechanism to be used by LGAs during implementation of construction of Healthcare Facilities. The	This recommendation is important in order to ensure the quality of the rehabilitation/construction projects. LGAs are now supposed to submit quality Control plans as one of the important documents needed to be submitted to PO –	PO-RALG will prepare a standard quality control plan and share it with LGAs	End of June 2021

No	*Recommendation*	*PO-RALG's Comment (s)*	*Action(s) to be taken*	*Time line*
	developed mechanism should enable LGAs to conduct quality test of construction materials and works, proper documentation and accounting for procured construction materials	RALG and MoFP when requesting Fund.		
4.	Ensure that staff involved in the management of construction of Healthcare Facilities are well trained and equipped with knowledge on use of Force Account, procurement and contract management principles	All staff and committees responsible for rehabilitation/construction projects under force account modality need to be knowledgeable in order to perform their duties well. PO-RALG has already started training to staff and chairs of committees responsible for rehabilitation/construction in Njombe, Iringa, Mbeya, Mwanza, Mara, Kigoma, Kilimanjaro, Arusha, Tanga, Dar es Salaam, Morogoro, Pwani, Lindi, and Mtwara Regions.	PO-RALG Will mobilize fund to train staffs in the remained regions.	End of December 2021

No	*Recommendation*	*PO-RALG's Comment (s)*	*Action(s) to be taken*	*Time line*
5.	Capacitate the LGAs to identify groups of Local Fundis (Artisan) register them (have a list /inventory) and train them on construction and rehabilitation of Healthcare Facilities.	The recommendation will be implemented. LGAs are supposed to prepare qualification requirements for registrations of local fundi, shortlisting annually and training them using their own collection.	PO–RALG will give directives to RSs and LGAs to make sure they do shortlist of local fundi's and do necessary training using their own collections.	The letter will be submitted before the end of June 2021.
6.	Ensure that there is mechanism for closure and commissioning to ensure that, defects and outstanding works are identified and corrected before use of completed Healthcare Buildings so as to ascertain value for money of executed construction works of	The recommendation will be implemented.	PO–RALG will give directives to RSs and LGAs to make sure there is always a formal closure of the construction and rehabilitation projects to ensure that defects and outstanding works are identified and corrected before handing over.	Routinely, in every project. The letter will be submitted before the end of June 2021.

No	*Recommendation*	*PO-RALG's Comment (s)*	*Action(s) to be taken*	*Time line*
	Healthcare Facilities			
7.	Develop the Maintenance Plan for the constructed Healthcare Facilities in the country. The Maintenance Plan should indicate the required Human Resources, budget, type of maintenance, maintenance schedule and method for the maintenance.	The recommendation will be implemented.	PO-RALG in Collaboration with other institutions and stakeholders will develop the Maintenance Plan for the construction of Healthcare Facilities.	End of January 2022.
To Improve Monitoring and Evaluation of LGAs' Performance				
1.	Plan and budget for routine monitoring and evaluation of performance and capacity of Regional Secretariats and LGAs. The plan should	The recommendation will be implemented.	PO-RALG will develop the M&E plan, Checklist, and reporting template for use at all levels.	End of September 2021

No	*Recommendation*	*PO-RALG's Comment (s)*	*Action(s) to be taken*	*Time line*
	include development of tools and reporting format that will enable PO-RALG to capture all key project elements related to time, quality and cost			
2.	Develop a mechanism to coordinate and share the monitoring results with stakeholders. The mechanism should enable PO-RALG to address the challenges faced by LGAs towards the management of the construction healthcare facilities at all levels in the country	This recommendation will be considered	PO-RALG will share the monitoring and Evaluation reports of rehabilitation and construction projects with stakeholders including MoHCDGEC, MoFPRSs, and LGAs.	Routinely, after every monitoring and evaluation activity. End of January 2022

Appendix 2: Main and Sub-audit Questions

Focus	Audit Question	Audit Question
Existence of the Problem	Audit Question 1	To what extent problems of Delays, Cost Overrun and Substandard Work are common in the constructed Healthcare Facilities?
	Sub question 1.1:	What is the extent of delays in completing Healthcare Facilities projects in LGAs?
	Sub-question 1.2:	To what extent the completed healthcare projects in LGAs meet the quality requirements?
	Sub-question 1.3:	To what extent the projects have cost overrun?
Planning for Construction of Projects	Audit Question 2	Do PO-RALG and LGAs have effective planning system for management of construction of Healthcare Facilities?
	Sub-question 2.1:	Does PO-RALG effectively conduct needs assessment prior to designing and budgeting for the construction of Healthcare Facilities?
	Sub-question 2.2:	Does PO-RALG ensure that there is adequate design for Healthcare Facilities prepared and approved accordingly?
	Sub-question 2.3:	Does PO-RALG plan and allocate funds for efficient management of construction of Healthcare Facilities in LGAs?
Procurement of Construction Materials	Audit Question 3	Are plans for procurement of construction materials in place and effectively followed?
	Sub-question 3.1.	Is there a functioning mechanism to ensure that procured construction materials are properly documented and accounted for?
	Sub-question 3.2.	Is there a functioning mechanism to ensure that procured construction materials meet the required quality as specified in the schedule of materials?
Implementation of Projects (Procurement and supervision)	Audit Question 4	Does PO-RALG ensure that LGAs efficiently construct Healthcare Facilities as per prescribed standards and specifications?
	Sub-question 4.1:	Does PO-RALG have mechanism(s) for ensuring that Health Facilities in respective LGAs have been constructed in accordance with the pre-determined quality, specifications and standards?
	Sub-question 4.2:	Do LGAs conduct effective inspection and supervision of ongoing construction works to ensure that completed Healthcare Facilities meet the required quality standards?
	Sub-question 4.3:	Are project management documents, records and report for ongoing and completed works prepared and adequately kept in accordance to the requirements?

Focus	Audit Question	Audit Question
	Sub-question 4.4	**Do LGAs have Tools, Plans, Inspection checklist and Test checklist for management of Construction and Supervision of construction worksof Healthcare Facilities?**
	Sub-question 4.5	**Are the available resources (human resource, tools and Equipment) that are considered necessary for effective management of construction works of Healthcare Facilitiesefficiently used?**
Closure and Commissioning	**Audit Question 5**	**Are mechanism for closure and completion of the Constructed Healthcare Facilities functioning well?**
	Sub-question 5.1	**Do LGAs have mechanism for ensuring the completed healthcare facilities are inspected prior to Commissioning?**
	Sub-question 5.2:	**Do LGAs conduct joint inspections to identify defects of executed works prior to taking over of the completed Healthcare Facilities and ensure the noted defects are rectified accordingly?**
Monitoring and Evaluation	**Audit Question 6**	**Does PO-RALG measure performance of LGAs' in managing construction of Healthcare Facilities to ensure the constructed Healthcare facilities meet the intended objectives?**
	Sub-question 6.1:	**Does PO-RALG plan for monitoring and evaluation of activities performed by Regional Secretariats (RSs) and LGAs for construction of Healthcare Facilities?**
	Sub-question 6.2:	**Are the conducted monitoring and evaluations activities address the existing challenges on management of construction works of Healthcare Facilities?**
	Sub-question 6.3:	**Are the results of monitoring and evaluation being effectively communicated or reported to respective LGAs and other responsible stakeholders for further action?**
	Sub-question 6.4:	**Does PO-RALG frequently conduct follow-ups on the implementation of recommendations issued to RSs and LGAs?**

Source: *Auditor's Analysis*

Appendix 3: List of Reviewed Documents and Reasons for Reviewing Them

Category of the Documents	Title of the Document	Reasons for reviewing
Strategies and plans from PO-RALG	• Health Sector Strategic Plan IV (HSSP-IV) 2015-2020 • PO-RALG Strategic Plans 2015- 2020 • PO-RALG's Annual Plans, 2015- 2020	• To assess to what extent HSSP Plans envisaged on the management of construction of Healthcare Facilities • To assess whether management of construction of Healthcare Facilities are well Planned and Budget for
Directives from PO-RALG	Guidelines regarding designing, supervision and inspection of Construction of Healthcare Facilities	• To assess whether LGAs conduct periodical supervision inspections and reports on issues regarding the Construction if Healthcare Facilities in the country Conduct periodical supervision, inspections and reports on issues regarding the construction of Healthcare Facilities in the country
Performance Reports from PO- RALG, Selected 7 RSs and 14 LGAs	• PO-RALG's Annual Performance Report for the period 2015/16-2019/20 • Selected LGA's Annual Performance Reports for the period 2015/16-2019/20	• To assess whether activities regarding the management of construction of Healthcare Facilities were planned and budgeted for in respective LGAs
Published Research and Reports on the Construction of Healthcare Facilities on the construction of Healthcare Facilities	• The Fourth Tanzania National Health Research Priorities 2013 - 2018 • Provision and access to healthcare	To assess whether identified issues , challenges and bottlenecks in the Management of Construction of Healthcare Facilities were captured and acted upon by respective Ministries as well as LGAs issues, challenges

	services in the urban healthcare market in Tanzania • Actions plans from different Stakeholders • Implication of Health Sector Reform in Tanzania: Policies, Indicators and Accessibility to Health Services 2014	and bottlenecks in the Management of Construction of Healthcare Facilities were captured and acted upon by respective Ministries as well as LGAs
Performance Reports on the Management of Construction of Healthcare Facilities Management of Construction of Healthcare Facilities	• Quarterly Progress Reports for Financial Year 2015/16-2019/20 • Annually Performance Reports for Financial Year 2015/16-2019/20	To assess the level of performance as one of the self- assessment and reported by relevant entities regarding construction of Healthcare performance as one of the self-reported by relevant entities regarding construction if Healthcare Facilities
Projects Files	**Projects Documents 2015/16- 2019/20 namely:** • Drawings, Contract documents, Schedule of Materials, Schedule of labour, Minutes of site Meeting, Register of Materials, Quality test report, Payment vouchers for Materials and labour, and Progress report	To assess whether Healthcare Facilities Projects have been executed as per prescribed quality, on time and planned cost.

Other Documents	• Professional Standards, Standards Procedures, Technical Reports, Good Practices from Academic Studies and Researches in the area of Management of Construction of Healthcare Facilities in the country. • Published Journals, Literatures, Newspapers and Circulars in the area of management of Construction, specifically in Healthcare Facilities.	To get General knowledge and learn the best way(s)/ approach on management of construction of Healthcare Facilities if when adopted can be easily understood and bring about impact to particular Health Sector.

Source: *Auditors' Analysis*

Appendix 4: List of Interviewed Officials

Institution Covered	Title of Interviewed official	Reasons for interviewing
PO-RALG	• Division, Health, Social Welfare and Nutrition Service Division • Coordinator, Construction and Monitoring of Healthcare Facilities	• To assess implementation • status and overall strategies in the Management of Construction of Healthcare Facilities • To assess the level of implementation of the constructed, renovated and rehabilitated Healthcare Facilities • To determine the planned cost of construction/renovation of Healthcare Facilities and funds disbursed to respective LGAs
	• Director, Procurement Management Unit • Officials responsible for Procurement Management within PO-RALG	• To analyse challenges facing LGAs in the management of construction of Healthcare Facilities • To evaluate challenges face when using Force Account Method for the Construction of Healthcare Facilities
	• Director, Infrastructure Development (DID) and • Officials responsible for managing the Construction of Healthcare Facilities	• To assess existing problems in the construction of Healthcare Facilities • To assess the level of implementation of the constructed and renovated Healthcare Facilities in the country
7 Regional Secretariats	• Regional Building Engineers • Regional Medical Officer (RMO) • Regional Health Secretary (RHS)	• To analyse the adequacy of procedures used when managing construction of Healthcare Facilities

Institution Covered	Title of Interviewed official	Reasons for interviewing
14 LGAs	• District Medical Officer (DMO) • District Health Secretary (DHS) • LGAs' Engineers responsible for supervision of Healthcare Facilities (Hospitals, Health • Centres dispensaries etc)	• To assess existing problems in the construction of Healthcare Facilities at LGA level • To analyse challenges faced during execution of Construction works of Health Centres
35 Healthcare Facilities	• Healthcare Facilities • superintended Medical Office • Healthcare Facilities Governing Committee(s) chair person	• To analyse challenges faced during execution of Construction works of Health Centres

Source: *Auditors' Analysis*

Appendix 5: Assessment Criteria and Source of Criteria

Focus Area	Criteria and Source of Criteria
Extent of existence for the problem of Management of Construction of Healthcare Facilities in the country	PO-RALG is required to ensure that the newly constructed and refurbished Healthcare Facilities Buildings are within the required quality and standards ***(Health Sector Strategic Plan – IV , 2015-2020) Section 6.3 " Direction 6)*** LGAs are required to manage Building Works in order to ensure that the constructed buildings are of desired quality and safe for use ***(Local Government (Urban Authorities) Act, No. 8 of 1982, Section 59 (u)).*** PO-RALG and LGAs are required to prepare designs and schedule of materials to be performed satisfactorily in terms of quality and quantity of premises i.e, Healthcare Facilities (***National Essential Health care Interventions Package – Tanzania 2013.***)
Planning by PO-RALG and LGAs	PO-RALG is required to ensure that premises to be located and due attention are given to; size, shape of the site, topography, drainage, soil conditions, utilities available, natural features, orientation of the site (north, south, east, west), vegetation, trees and plantings.(***Basic Standards for Health Facilities Level I and II of 2015 chap 6(6.1))*** PO-RALG and LGAs are required to ensure efficient and cost effective of constructed facilities in line with best Practice in order to guarantee value for money. (***Construction Industry Policy 2003 Clause 7.2 (d)*** PO-RALG and Funding Agencies need to allocate adequate funds and disburse them timely as per approved budget for Rehabilitation and Construction of Healthcare Facilities (***HSSP-IV 2015-2020 section 6.3.1 direction 6.3 pg. 60)*** Moreover, MoFP and PO-RALG are required to ensure that funds are timely disbursed and executed at all levels for better service delivery (***The joint policy agreement entered between MoHCDGEC and PO-RALG on commitments of 2018/19 for implementation of Public Health Policy of 2009)*** Public or Private Institution or Organisation cannot provide services in architecture or quantity surveying or approve architectural or quantity surveying designs or documents, unless its key officer responsible for taking or approving managerial or technical decisions is registered with the Board (***AQRB Act 2010 (Clause 34 (3)20))***

Focus Area	Criteria and Source of Criteria
	PO-RALG is required to introduce Monitoring System of Healthcare Facilities and provide actual implementations status to have a better overview of specific needs, constraints and anticipated renovation, and rehabilitation of Healthcare Facilities (***HSSP-IV Section 6.3.1 pg. 60)*** PO-RALG and LGAs are required to set budgets for management of building works. ((***National Construction Industry Policy of 2003. Section 8.1.1 (c))*** Engineers from RSs' Office are required to ensure that the designed quality of executed works is met. ***(Directive on use of Force Account issues by PO-RALG, 2017)***.
Procurement Stage by PORALG	LGAs are required to provide information, documentation and all studies related to building works (***Public Procurement Act of 2013 clause 276(d))*** Procuring Entity to adhere to Public Procurement Act and its Regulations (***Construction Industry Policy, 2003. Para Para 8.1.3 (c))***
Implementation of planned management of Construction of Healthcare Facilities by LGAs	GAs are required to conduct regular inspections to buildings in their respective areas of jurisdiction in order to ascertain if the construction work is being carried-out in accordance with the approved building designs and standards. This includes inspections to building works for the purpose of enquiring on the execution of works being carried out as planned ***(The Local Government (Urban Authorities) Act No. 8 of 1982 and the Local Government (Urban Authorities) (Development Control) Regulations of 2008)***. Engineers, Artisans and other experts from respective LGAs are required to supervise the projects to meet the required quality. Engineers from Regional Secretariats are also required to make sure the intended quality of the implemented projects is attained (***Letter with Ref. No. AD.296/303/01/1/82 dated 21st September 2017 from PO-RALG to Regional Administrative Secretary (RAS)***, LGAs' need to conduct periodical inspections of building works, the inspections to be carried out by the Inspector, Auditor or Inspection Team for the purpose of ensuring that the Works are being executed, under the supervision of recognized Professional Engineers, in accordance with the approved plans, specifications and building consent. (***Engineers Registration Board Act Cap 63 published vide Government Notice No 273 of 2015 clause 9)***

Focus Area	Criteria and Source of Criteria
	Projects Manager in collaboration with Health Facility Governing Committee (HFGC) to document all ongoing activities for future references whenever needed ***(The Force Account Directives Issued by PORLAG on 7th August 2017)*** The Inspection Team must have inspection tools such as Relevant Checklists, Offence Book, Stop Order Book, Penalty Notice, Cameras, Field notes, GPS, PPEs, Measuring Tapes etc (***The Engineers Registration Act (Cap. 63) The Engineering Works, Services and Projects Monitoring Regulations, 2015, pg 5)*** LGAs are required to have qualified personnel to carry out and supervise the construction works (***Public Procurement Regulation of 2013 Regulation 167)*** Construction works to be executed by qualified Local Fundi (Artisan) who have knowledge and experience on the construction of buildings, the executed works meet the required quality and timely completed (***PO-RALGs' Directives issued on August 2017 regarding use of Force Account Method)*** Implementing Agencies i.e PORALG and LGAs are required to ensure availability of equipment, human resources and funds for the implementation of construction projects in LGAs (***The Local Government Laws (Miscellaneous Amendments) Act No 13, 2006 ; section 20 (f) pg 14.)*** According to Engineers Registration Board Act Cap 63 published vide Government Notice No 273 of 2015 Clause 9, directs inspection of building works to be carried out by the Inspector, Auditor or Inspection Team for the purpose of ensuring that the Works are being executed, under the supervision of recognized Professional Engineers and in accordance with the approved plans, specifications and building consent. Projects Manager in collaboration with Health Facility Governing Committee (HFGC) is required to document all ongoing activities for future references whenever needed (***The directive Issued by PO-RALG 2017 Regarding the use of Force Account method, require LGAs to ensure the completed healthcare Facilities are with required quality)***. PO-RALG is required to develop the capacity of its staff in project management and contract administration ***(National Construction Industry Policy, 2003, Para 8.1.2)***;

Focus Area	Criteria and Source of Criteria
	PO-RALG through LGAs is required to ensure that equipment, human resources and funds for the construction of Healthcare Facilities in LGAs are available***(Local Government Laws (Miscellaneous Amendments) Act, 2006 Section 20)***
Completion and commissioning	PO-RALG through LGAs, CHMTs, RHMTs to ensure that, completed Healthcare Facilities are fully equipped and adequately staffed before construction of new Healthcare Facility begins ***(HSSP-IV 2015-2020 section 6.3.1 pg. 61)*** MoHCDGEC through PO-RALG is required to issues Health Facilities Standard guideline on the infrastructure in order to guide LGAs in more balanced development of infrastructure, to ensure that Healthcare Facilities are constructed and rehabilitated to meet accreditation standards (***HSSP-IV of 2015-2020 section 6.3.1 pg. 60)***
Coordination and Supervision by PO-RALG	PO-RALG is required to oversee plans and coordinate the national level resource allocation for infrastructures development and maintenance in the country. Also, PO-RALG is required to oversee and coordinate preparation of plans and budgets which are done by LGAs and assess their implementation status. ***(The Functions and Organisation Structure of The Prime Minister's Office, Regional Administration and Local Government (PO-RALG) (Approved by the President On 12th February, 2015) President's Office-Public Service Management)*** PO-RALG is required to have a better overview of specific needs and constraints and anticipated renovations, replacements of equipment as part of the star rating activities (***HSSP-IV of 2015-2020 section 6.3.1 page 60)*** PO-RALG is required to ensure that an appropriate organizational framework, upon which the roles and responsibilities of all institutions supporting the development and performance of the construction industry are clearly defined and their activities are effectively co-ordinated and implemented. ***(The National Construction Industry Policy, 2003 Paragraph 8.1.14)***
Monitoring and Evaluation of LGAs's performance in Management of Healthcare Facilities activities	The sector Ministries to undertake monitoring and evaluations of their performances (***The Local Government Laws (Miscellaneous Amendments) Act No 13, 2006 pg. 14 (c))*** PO-RALG (through the Sector Coordination Division) is required to coordinate critical interfaces with Central and Sector Ministries, Departments and Agencies, Non-State Actors (NSAs), RSs and LGAs. It is also required to provide technical

Focus Area	Criteria and Source of Criteria
	backstopping, capacity building, supportive supervision, monitoring and evaluation of central and sector ministries' programme, project and other related activities of respective sectors that are implemented in RSs and LGAs ***(The Functions and Organisation Structure of The Prime Minister's Office, Regional Administration and Local Government (PORALG) (Approved by the President On 12th February, 2015) President's Office-Public Service Management)*** PO-RALG is required to facilitate the development, review, implementation and monitoring of performance reporting frameworks in RSs, LGAs and Affiliated Institutions. It is required to develop and install M&E System, Strategies and Plans and monitor its implementation in RSs, LGAs and Affiliated Institutions. (PO-RALG's Strategic Plan 2013-2018;(***The Functions and Organisation Structure of The Prime Minister's Office, Regional Administration and Local Government (PORALG) (Approved by the President On 12th February, 2015)*** ***President's Office-Public Service Management)*** PO-RALG is also required to supervise professionalism of personnel relating to the particular sector in the LGAs; ensure quality assurance in the performance of the functions of technical personnel relating to the sector in the Local Government Authorities; undertake monitoring and evaluation of the technical personnel's performance of their performance ***((Local Government Laws (Miscellaneous Amendments) Act, 2006 Section 20(2))***

Source: *Government Legislations and Acts, Directive, Regulations and Strategic Plans*

Appendix 6: Overall Status and Extent of Delays of Healthcare Facilities and District Hospitals in the Country

Level of Facilities	Total No. of Facility	Phase	Planned Start date	Planned Completion date	Actual Start date	Revised Completion Date	Number of Uncompleted Facilities	Extent Delay to date (Months)
District Hospitals	68	-	Jan 2019	July 2019	Jan 01,2020	June 30,2020	1	24
Dispensaries	44	I	Oct 2017	Apr 2018	Jan 01, 2018	April 30,2018	2	40
Health Centres	100	II	Jan 2018	Jun, 2018	Jan 01, 2018	June 30, 2020	100	36
	39	II	Jan 2018	Jun 2018	Jan 01, 2018	June 30, 2020	39	36
	38[17]	II	Jan 2018	Jun, 2018	Jan 01, 2018	June 30, 2020	0	36
	25	III	May 2018	Nov 2018	May 01, 2018	Nov 30, 2018	25	32
	2	III	May 2018	Nov 2018	May 01, 2018		2	32
	104	IV	Jun 2018	Dec 2018	Jul 01, 2018	Dec 30, 2020	104	31
	7	V	Nov 2019	Apr 2019	0	0	7	14
	23	VI	Jul 2019	Dec 2019	Aug 01, 2019	0	23	18
	43	VI	Aug 2019	Dec 2019	Aug 01, 2019	0	43	17
	66	VII	Jan 2020	June 2020	Jan 01, 2020	0	66	12

Source: *Implementation Status Report 2019/20*

[17] CRRF Funded Project whereby funds were not released until the time of this Audit

Appendix 7: Delay in Completion of Healthcare Facilities in Selected and Visited LGAs

LGA	Health Facility	Planned Start Date	Completion Date	Status	Baseline	Extent of Delays in Days	Extent of Delays in Months
Mbeya CC	Igawilo Health Centre	18/09/2018	05/04/2019	Not complete	31/12/2020	636.00	21
	Iyunga HC	30/12/2018	30/03/2019	Not Complete	31/12/2020	642.00	21
	Nzovwe HC	01/06/2020	01/09/2020	Not Complete	31/12/2020	121.00	4
Mbeya DC	Mbeya DH	02/02/2018	02/10/2018	Not Complete	31/12/2020	821.00	27
	Santilya HC	20/02/2019	30/07/2019	Complete	31/12/2020	520.00	17
Kibaha DC	Kibaha DH	21/01/2019	30/07/2019	Not Completed	31/12/2020	520.00	17
	Mlandizi HC	01/07/2018	30/12/2020	Not Completed	31/12/2020	1.00	0
	Magindu HC	02/06/2018	02/02/2019	Jan 20, 2019	31/12/2020	698.00	23
Mkuranga DC	Kisiju HC	02/08/2018	02/04/2019	Not Completed	31/12/2020	639.00	21
	Mkamba HC	27/02/2018	27/05/2018	Completed	31/12/2020	949.00	32
Arusha CC	Moshono HC	01/01/2019	30/06/2020	Not Completed	31/12/2020	184.00	6

LGA	Health Facility	Planned Start Date	Completion Date	Status	Baseline	Extent of Delays in Days	Extent of Delays in Months
	Murriet HC	01/01/2018	30/04/2018	Not Completed	31/12/2020	976.00	33
Longido DC	Londido DH	13/01/2019	30/05/2019	Not Completed	31/12/2020	581.00	19
	Eworondeke HC	01/01/2018	30/04/2018	Not Completed	31/12/2020	976.00	33
	Engaranaibor HC	01/01/2018	30/04/2018	Not Completed	31/12/2020	976.00	33
Geita DC	Geita DH	21/01/2019	30/08/2019	Not Completed	31/12/2020	489.00	16
	Nzera HC	01/01/2018	30/04/2018	Not Completed	31/12/2020	976.00	33
	Nyarugusu HC	01/07/2018	30/12/2018	Not Completed	31/12/2020	732.00	24
Bukombe DC	Uyovu HC	01/01/2018	04/04/2018	Not Completed	31/12/2020	1002.00	33
	Ushirombo HC	01/05/2018	30/11/2018	Not Completed	31/12/2020	762.00	25
Mkalama DC	Kinyambuli HC	01/01/2018	30/06/2018	Completed	30/06/2018	0.00	0
	Mkalama DH	01/06/2018	30/12/2018	Not Completed	31/12/2020	732.00	24
Manyoni DC	Kitinku HC	01/01/2020	30/06/2020	Not Completed	31/12/2020	184.00	6
	Nkoko HC	01/01/2018	30/06/2020	Not Completed	01/12/2020	154.00	5

LGA	Health Facility	Planned Start Date	Completion Date	Status	Baseline	Extent of Delays in Days	Extent of Delays in Months
	Chibumagwa HC	01/01/2019	30/09/2019	Not Completed	01/12/2020	428.00	14
Namtumbo DC	Namtumbo HC	01/01/2018	30/06/2018	Competed	30/06/2018	0.00	0
	Namtumbo DH	01/01/2019	30/09/2019	Not completed	31/12/2020	458.00	15
	Mtakanini HC	01/01/2019	30/12/2018	Not Completed	31/12/2020	732.00	24
Songea DC	Matimila HC	02/08/2018	30/12/2019	Not Completed	31/12/2020	367.00	12
	Magagula HC	02/08/2019	30/12/2019	Not Completed	31/12/2020	367.00	12
Nkasi DC	Kirando HC	01/01/2018	30/04/2018	Not Completed	30/06/2018	61.00	2
	Nkomolo HC	01/01/2018	30/04/2018	Completed	30/06/2018	61.00	2
Sumbawanga DC	Milepa HC	01/01/2018	30/04/2018	Completed	30/06/2018	61.00	2
	Sumbawanga DH	01/01/2019	30/09/2019	Not Completed	31/12/2020	458.00	15
	Mpui HC	01/01/2020	30/06/2020	Not Completed	31/12/2020	184.00	6

***Source**: Project Correspondences, Projects Progress Reports of Nov 2020 and Site Verifications*

Appendix 8: Delay in the Commencement of the Construction of Healthcare Facilities

Phase/Batches of the projects	Total Number of Health Facilities	Date of Fund	Project Start Date	Time used from receive of fund up start date (months)
I	44	October -2017	January 01, 2018	3
II	139	December - 2017	January 01, 2018	1
III	30	May-2018	May 01, 2018	0
CRRF May-December 2018	2	May-2018	May 01, 2018	0
7 Health centers (HBF 2018)	7	October -2018	May 01, 2018	-5
IV	114	Jun-2018	July 01, 2018	1
68 Hospital 2018 (GoT)	68	December - 2018	January 15, 2020	14
32 Health Facilities GF2019	32	June-2019	August 01, 2019	2
7 Health Facilities June 2019 - December 2019	7	June-2019	August 01, 2019	2
P4R June 2019	4	June-2019	August 01, 2019	2
Total	**447**			

Source: *Database and Project Files from the Respective LGAs*

Appendix 9: Quality Tests for the Construction Materials from the Selected and Visited LGAs

LGAs	Name of Healthcare Facility	Anticipated Tests						
		Concrete	Sand - Cement Blocks	Re-bars	G.I.S(IT5)	Sand	Aggregates	Water
Mbeya CC	Nzovwe HC	x	x	x	x	x	x	x
	Iyunga HC	x	x	x	x	x	x	x
	Igawilo C H	✓	x	x	x	x	x	x
Mbeya DC	Mbeya DH	x	x	x	x	x	x	x
	Santilya HC	x	x	x	x	x	x	x
Mkuranga DC	Kisiju HC	x	x	x	x	x	x	x
	Mkamba HC	x	x	x	x	x	x	x
	Mkuranga D.H	x	x	x	x	x	x	x
Kibaha DC	Kibaha DH (Disunyara)	x	✓	✓	x	x	x	x
	Magindu HC	x		x	x	x	x	x
	Mlandizi HC	x	x	x	x	x	x	x
Arusha CC	Murriet HC	x	x	x	x	x	x	x
	Moshono HC	x	x	x	x	x	x	x
Longido DC	Longido DH	x	x	x	x	x	x	x
	Eworendeke HC	x	x	x	x	x	x	x
	Engaranaibor HC	x	x	x	x	x	x	x
Geita DC	Geita DH (Nzera)	x	x	x	x	x	x	x
	Nyarugusu HC	x	x	x	x	x	x	x
	Nzera HC	x	x	x	x	x	x	x
Bukombe DC	Uyovu HC	x	x	x	x	x	x	x
	Ushirombo HC	x	x	x	x	x	x	x
Mkalama DC	Kinyambuli HC	x	x	x	x	x	x	x
	Mkalama DH	x	✓	x	x	x	x	x
Manyoni DC	Kitinku HC	x	x	x	x	x	x	x
	Nkonko HC	x	x	x	x	x	x	x
	Chibumagwa HC	x	x	x	x	x	x	x
Namtumbo DC	Namtumbo HC	x	x	x	x	x	x	x

LGAs	Name of Healthcare Facility	Anticipated Tests						
		Concrete	Sand - Cement Blocks	Re-bars	G.I.S(IT5)	Sand	Aggregates	Water
	Namtumbo DH	x	x	x	x	x	x	x
	Mtakanini HC	x	x	x	x	x	x	x
Songea DC	Matimila HC	x	x	x	x	x	x	x
	Magagula HC	x	x	x	x	x	x	x
Nkasi DC	Kirando HC	x	x	x	x	x	x	x
	Nkomolo HC	x	x	x	x	x	x	x
Sumbawanga DC	Milepa HC	x	x	x	x	x	x	x
	Sumbawanga DH	✓	✓	x	x	✓	x	x
	Mpui HC	x	x	x	x	x	x	x

***Source**: Project Correspondences and Interviews with LGA's Officials*

Key:
X= No Quality Test Conducted
✓= Conducted Quality Test

Appendix 10: Percentage Variation of Planned Construction Cost Overrun to District Hospitals

Hospitals	Planned Cost (TZS) Billion	Additional Fund Requested (TZS) Million	% Variation
Kilolo	1.5	300	20
Mbeya DC	1.5	70.0	5
Buchosa	1.5	83.6	6
Mtwara - Nanguruwe	1.5	150	10
Chemba	1.5	150	10
Makambako TC	1.5	180	12
Tabora (Uyui)	1.5	193	13
Korogwe DC	1.5	200	13
Bahi DC	1.5	200	13
Mkalama	1.5	200	13
Busega	1.5	213	14
Buhigwe	1.5	220	15
Tanga CC	1.5	238	16
Shinyanga	1.5	240	16
Kasulu	1.5	250	17
Chamwino	1.5	263	18
Geita DC	1.5	289	19
Nyangwale	1.5	290	19
Kyerwa	1.5	290	19
Nkasi	1.5	300	20
Mufindi	1.5	300	20
Iringa	1.5	300	20
Ilala MC	1.5	300	20
Nyasa	1.5	308	21
Masasi	1.5	316	21
Mbulu DC	1.5	326	22

Hospitals	Planned Cost (TZS) Billion	Additional Fund Requested (TZS) Million	% Variation
Mpimbwe	1.5	350	23
Siha	1.5	356	24
Bariadi	1.5	371	25
Bukoba	1.5	373	25
Itilima	1.5	381	25
Ilemela	1.5	390	26
Kigamboni	1.5	395	26
Ileje	1.5	416	28
Rorya	1.5	419	28
Lindi	1.5	423	28
Ruangwa	1.5	423	28
Songea	1.5	425	28
Namtumbo	1.5	444	30
Nanyamba	1.5	450	30
Uvinza	1.5	459	31
Karagwe	1.5	484	32
Mbarali	1.5	487	32
Busokelo	1.5	494	33
Musoma DC	1.5	500	33
Kibaha DC	1.5	500	33
Songwe	1.5	500	33
Kibaha TC	1.5	500	33
Sumbawanga	1.5	500	33
Muheza	1.5	500	33
Ngorongoro	1.5	516	34
Bunda DC	1.5	522	35
Morogoro	1.5	557	37
Gairo	1.5	557	37
Njombe	1.5	563	38
Mpanda	1.5	581	39

Hospitals	Planned Cost (TZS) Billion	Additional Fund Requested (TZS) Million	% Variation
Kibiti	1.5	595	40
Mlele	1.5	598	40
Sikonge	1.5	620	41
Wang'ing'ombe	1.5	626	42
Kalambo	1.5	700	47
Rombo	1.5	700	47
Ushetu DC	1.5	709	47
Malinyi	1.5	830	55
Longido	1.5	864	58
Simanjiro DC.	1.5	993	66
Geita DC (Katoro)	1.5	0	0
Singida DC	1.5	300	20

Source: *PO-RALG's Healthcare Facilities Database of 2018/19*

Appendix 11: Allocation Flat Rates of Funds for Construction and Rehabilitation of Healthcare Facilities Between Financial Years 2017/18 and 2019/20

Source of Funds	Phase	No of Healthcare Centres	Implementation Period	Coordination/Construction of Infrastructure (TZS)	Procurement of Medical Equipment (TZS)	Collaborative Supervision (TZS)	Training to Healthcare Staff (TZS)	Total (TZS)
Health Basket Fund	I	44	Oct. 2017 -Apr, 2018	22,000,000,000.00	5,700,000,000.00	308,000,000.00	924,000,000	28,932,000,000.00
Health Basket Fund	II	100	Jan - June, 2018	40,000,000,000.00	29,300,000,000.00	0	0	69,300,000,000.00
Health Basket Fund	II	39	Jan - June, 2018	19,000,000,000.00	0.00	500,000,000.00	0	19,500,000,000.00
UNFPA/KOICA	II	(38)*	Jan - June, 2018	2,696,380,220.00	2,256,026,445.00	48,000,000.00	0	5,000,406,665.00
Health Basket Fund	III	25	Mei - Nov, 2018	12,500,000,000.00	2,500,000,000.00	401,155,045.24	0	15,401,155,045.24
Health Basket Fund	III	2	Mei - Nov, 2018	1,160,000.00	440,000,000.00	121,160,000.00	0	1,882,320,000.00
LGDG -phase IV	IV	104	June - Dec, 2018	38,900,617,857.00	0.00	0	0	38,900,617,857.00
GoVT - Construction of District Hospitals		67	Jan - July 2019	100,500,000,000.00	0.00	0	0	100,500,000,000.00
GoVT - Constriction of Tunduma TC Hospital		1		2,500,000,000.00	0	0	0	2,500,000,000.00
Health Basket Fund	V	7	Nov - April 2019	3,500,000,000.00	1,400,000,000.00	200,000,000.00	0	5,100,000,000.00
UNFPA	VI	11		910,922,600.10	0.00	0.00	0	910,922,600.10
Global Fund (GF)	VI	32	Aug - Des 2019	7,729,972,263.50	0	0	0	7,729,972,263.50
GoVT + Airtel Dividend (UHURU Hospital)				3,386,000,000	0.00	0	0	3,386,000,000.00
*Basket Fund (CRRF)	VI	9	July - Dec, 2019	2,660,000,000.00	1,050,000,000.00	240,000,000.00	0	3,950,000,000.00
Compensation Funds (SGR)	VI	3	July - Dec, 2019	1,300,000,000.00	0.00	0	0	1,300,000,000.00

Source of Funds	Phase	No of Healthcare Centres	Implementation Period	Coordination/Construction of Infrastructure (TZS)	Procurement of Medical Equipment (TZS)	Collaborative Supervision (TZS)	Training to Healthcare Staff (TZS)	Total (TZS)
P4P- GF Funds	VI	4	July - Dec, 2019	2,000,000,000.00	0.00	0	0	2,000,000,000.00
BF (PHC) Funds	VI	7	July - Dec, 2019	2,400,000,000.00	0.00	0	0	2,400,000,000.00
Health Basket Fund		I,II,III,IV		0	26,060,000,000.00	0	0	26,060,000,000.00
BF Funds	VII	14	Jan - June 2020	6,500,000,000.00	0	0	0	6,500,000,000.00
GoVT – 52 Health Centres	VII	52	Jan - June 2020	10,400,000,000.00				10,400,000,000.00
Total				**280,205,052,940.60**	**68,706,026,445.00**	**1,818,315,045.24**	**924,000,000.00**	**351,653,394,430.84**

Source: *PO-RALG's Progress Reports 2018/19 and 2019/20*

Appendix 12: Comparison of PO-RALGs' Specification and Procured Materials from Visited District Hospitals

Description of Materials as per PO-RALG	Mbeya DH	Kibaha DH	Longido DH	Geita DH	Mkalama DH	Tolerance and Weaknesses from PO-RALG's Speciation from Schedule of Materials
Cement 50 Kg		42.5 R	42.5 R	No Specs	No Specs	Not specified as Portland or Pozzolana and its strength or class
Aggregates 3/4"		3/4" &1/2"	3/4" & 1/2"	3/4" &1/2"	No Specs	
Sand	Not Specified	No Specified	Not Specified	No Specified	Not Specified	Schedule of Materials and Procured sand materials did not specify type of sand to be used
Re-bars 16mm High Tensile	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	Schedule of material did not state either type of reinforcement to be used is mild steel or high yield. The same to the procurement of reinforcement were not stated
Re-bars 12mm High Tensile	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	Schedule of material did not state either type of reinforcement to be used is mild steel or high yield. The same to the procurement of reinforcement were not stated
Re-bars 8mm High Tensile	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	Schedule of material did not state either type of reinforcement to be used is mild steel or high yield. The same to the procurement of reinforcement were not stated

Description of Materials as per PO-RALG	Mbeya DH	Kibaha DH	Longido DH	Geita DH	Mkalama DH	Tolerance and Weaknesses from PO-RALG's Speciation from Schedule of Materials
Timber 1" X 8 " (5.2m long)	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	Schedule of materials from PO-RALG did not state if procured timber should be treated or not.
Timber 2" X 2"	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	Schedule of materials from PO-RALG did not state if procured timber should be treated or not.
Timber 1" X 5" (Plates)	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	Schedule of materials from PO-RALG did not state if procured timber should be treated or not.
40mm thick solid core flush door shutter	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	Through Site Observation all Flush doors brought are not solid core flush doors.
1500 x2100mm high double door	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	Through Site Observation all Flush doors brought are not solid core flush doors.
1000 x2100mm high	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	Through Site Observation all Flush doors brought are not solid core flush doors.
900 x2100mm high	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	Through Site Observation all Flush doors brought are not solid core flush doors

Description of Materials as per PO-RALG	Mbeya DH	Kibaha DH	Longido DH	Geita DH	Mkalama DH	Tolerance and Weaknesses from PO-RALG's Speciation from Schedule of Materials
450 X 450 X 8 mm thick - Non-slippery porcelain floor tiles -(1.42 sqm/Box)	Not Specified	Not Specified	Floor tiles 500 x 500x 8mm non-slipper porcelain floor tiles 1.75sqm/box china.	Not Specified	Not Specified	There were inconsistency of types of floor tiles and quality in terms of thickness and colours as specified in Health Standards
Epoxy - Grout (1kg/packet)	Not Specified	Not Specified	Grout	Grout	Not Specified	Procured grout are not Epoxy grout.

Source: *PO-RALGs' Schedule of Materials, Specifications, LPOs, Quotations, and Payments Vouchers*

Appendix 13: Observed Defects from the Visited Healthcare Facilities

LGA	Nambe of Health Facility	Observed Defects During Site Visits conducted by Auditors							
		Vertical Cracks	Horizontal cracks	Poor Painting	Peeling of Paints	Poor Finishing	Missing /improper Plumbing fittings	Loose electricity fixtures	Ceiling Leakage
Mbeya CC	Iyunga HC	x	x	✓	✓	✓	✓	✓	x
	Igawilo HC	x	x	x	x	x	x	x	x
	Nzovwe HC	✓	✓	✓	✓	✓	✓	✓	x
Mbeya DC	Santilya Health Centre	✓	✓	x	x	x	✓	✓	x
	Mbeya DH	✓	✓	✓	✓	✓	✓	✓	x
Mkuranga DC	Mkamba HC	✓	✓	✓	✓	✓	✓	x	x
	Kisiju HC	✓	✓	✓	✓	✓	✓	x	x
Kibaha DC	Kibaha DH (Disunyara)	✓	✓	✓	✓	✓	✓	✓	x
	Magindu HC	✓	✓	✓	✓	✓	✓	x	x
	Mlandizi HC	✓	✓	✓	✓	✓	✓	✓	x
Arusha CC	Moshono HC	✓	✓	✓	✓	✓	✓	✓	x
	Murriet HC	✓	✓	✓	✓	✓	x	x	x
Longido DC	Longido DH	✓	✓	✓	✓	✓	✓	x	x
	Eworendeke HC	✓	✓	✓	✓	✓	✓	✓	✓
	Engaranaibor HC	✓	✓	✓	✓	✓	✓	✓	✓
Geita DC	Geita DH	✓	✓	✓	✓	✓	✓	✓	x
	Nzera HC	✓	✓	✓	✓	✓	✓	✓	x
	Nyarugusu HC	✓	✓	✓	✓	✓	✓	✓	

LGA	Nambe of Health Facility	Observed Defects During Site Visits conducted by Auditors							
		Verti cal Crac ks	Horizo ntal cracks	Poor Paint ing	Peel ing of Pain ts	Poor Finis hing	Missin g /impr oper Plumb ing fitting s	Loose electr icity fixtur es	Ceili ng Leak age
Bukomb e DC	Uyovu HC	✓	✓	✓	✓	✓	✓	✓	
	Ushirom bo HC	✓	✓	✓	✓	✓	✓	✓	✓
Mkalam a DC	Kinyam buli HC	✓	✓	✓	✓	x	✓	x	✓
	Mkalam a DH	✓	✓	✓	✓	✓	✓	✓	✓
Manyon i DC	Kitinku HC	✓	✓	✓	✓	✓	x	x	✓
	Nkonko HC	x	x	✓	✓	✓	✓	✓	✓
	Chibum agwa HC	✓	✓	x	x	✓	x	x	✓
Namtu mbo DC	Namtu mbo HC	✓	✓	✓	✓	✓	✓	✓	✓
	Namtu mbo DH	✓	✓	✓	✓	✓	✓	✓	✓
	Mtakani ni HC	✓	✓	✓	✓	✓	✓	✓	✓
Songea DC	Matimil a HC	✓	✓	✓	✓	✓	✓	✓	✓
	Magagul a HC	X	X	✓	✓	✓	X	X	X
Nkasi DC	Kirando HC	x	x	x	x	✓	✓	✓	✓
	Nkomol o HC	✓	✓	✓	✓	✓	✓	✓	✓
Sumba wanga DC	Milepa HC	✓	✓	✓	✓	✓	✓	x	✓
	Sumbaw anga DH	✓	✓	✓	✓	✓	✓	✓	✓
	Mpui HC	x	x	x	x	x	x	x	x

Source: *Observation made by the Auditors during the Site Visits for Selected and Visited Healthcare Facilities*

Appendix 14 (a): Missing Documents for the Visited Healthcare Facilities

Name of Healthcare Facility	Materials' Store Ledger	Materials' issue voucher	Site instruction books	Local Purchase Orders	Delivery Notes	Performa Invoices	Supplier's Quotations	Materials' Test Results	Payment Certificates	Payment Vouchers	Goods Inspections regulation 127 procurement	Job advertisements for Local artisan's
Mbeya DH	▫	▫	▫	ŧ	▫	▫	▫	X	▫	▫	X	▫
Santilya HC	X	▫	▫	ŧ	▫	▫	▫	X	▫	ŧ	X	▫
Nzovwe HC	▫	▫	▫	ŧ	▫	▫	▫	X	▫	▫	X	▫
Igawilo HC	▫	▫	▫	▫	▫	▫	▫	▫	▫	ŧ	X	▫
Iyunga HC	▫	▫	▫	ŧ	▫	▫	▫	X	▫	ŧ	X	X
Kisiju HC	X	X	X	X	▫	▫	▫	X	X	▫	X	X
Mkamba HC	▫	▫	X	X	X	▫	▫	X	X	ŧ	X	X
Kibaha DH	▫	▫	X	ŧ	ŧ	▫	▫	▫	▫	ŧ	X	X
Magindu HC	▫	▫	X	ŧ	▫	▫	▫	▫	▫	▫	▫	X
Mlandizi HC	X	▫	X	▫	ŧ	▫	▫	X	▫	ŧ	X	X
Longido DC	▫	▫	X	▫	▫	▫	▫	X	▫	ŧ	▫	X
Engaranaibor HC	X	▫	X	ŧ	▫	▫	▫	X	▫	ŧ	▫	X
Eworendeke HC	X	▫	X	ŧ	▫	▫	▫	X	▫	ŧ	▫	X
Moshono HC	X	▫	X	ŧ	X	▫	▫	X	ŧ	▫	▫	X
Murriet HC	X	▫	X	ŧ	ŧ	▫	▫	X	▫	ŧ	▫	▫
Geita DH	▫	▫	X	ŧ	ŧ	▫	▫	X	▫	ŧ	▫	X
Nzera HC	▫	▫	X	ŧ	▫	▫	▫	X	X	ŧ	▫	X
Nyarugusu HC	▫	▫	X	▫	ŧ	▫	▫	X	▫	▫	▫	X
Ushirombo HC	▫	▫	X	ŧ	▫	▫	▫	X	▫	▫	▫	X
Uyovu HC	▫	▫	X	ŧ	X	▫	▫	X	ŧ	ŧ	X	X
Mkalama DH	▫	▫	X	ŧ	ŧ	▫	▫	X	X	ŧ	X	X
Kinyambuli HC	▫	▫	X	X	X	▫	▫	X	X	▫	X	X
Nkonko HC	X	▫	X	ŧ	X	▫	▫	X	▫	ŧ	ŧ	X
Chibumagwa	▫	▫	X	ŧ	ŧ	▫	▫	▫	X	ŧ	ŧ	X
Kintinku HC	▫	X	X	ŧ	ŧ	▫	▫	X	▫	ŧ	X	X

Name of Healthcare Facility	Materials' Store Ledger	Materials' issue voucher	Site instruction books	Local Purchase Orders	Delivery Notes	Performa Invoices	Supplier's Quotations	Materials' Test Results	Payment Certificates	Payment Vouchers	Goods Inspections regulation 127 procurement	Job advertisements for Local artisan's
Namtumbo DH	▫	▫	X	₺	₺	▫	▫	X	X	₺	₺	▫
Namtumbo HC	X	X	X	₺	▫	▫	▫	X	X	₺	₺	X
Mtakanini HC	X	X	X	₺	₺	▫	▫	X	X	▫	X	X
Matimila HC	▫	▫	X	▫	₺	▫	▫	X	X	▫	X	X
Magagula HC	▫	X	X	₺	₺	▫	▫	X	X	▫	X	X
Sumbawanga DH	X	▫	X	₺	₺	▫	▫	▫	X	₺	X	₺
Milepa HC	▫	▫	X	X	₺	▫	▫	X	X	₺	X	X
Mpui HC	▫	X	X	₺	₺	▫	▫	▫	X	₺	₺	₺
Nkomolo HC	X	X	X	₺	₺	▫	▫	X	X	₺	X	X
Kirando HC	▫	X	X	X	₺	▫	▫	X	X	▫	X	X

***Source**: Project Correspondences, Payment Vouchers, and Procurement Documents*

Appendix 14(b): detailed reasons for inadequate documentation projects records

Name of Healthcare Facility	Reasons for inadequate documentations of projects documents records
Mbeya DH	• Shifting of Mbeya DC's office from Mbeya CC to Inyala Village • Lack of contract administration and management
Santilya HC	• Lack of contract management and documentation of Force account method
Nzovwe HC	• The supervising staff appointment letter did not stipulate their roles on documentation of projects undertakings
Igawilo HC	• Changes made were not documented due to lack of contract administration and force account project management
Iyunga HC	• Lack of knowledge on contract administration and documentation of ongoing works

Name of Healthcare Facility	Reasons for inadequate documentations of projects documents records
Kisiju HC	• Lack of capacity on contract administration and project management
Mkamba HC	• Lack of force account construction method
Kibaha DH	• Lack of project contract administrations
Magindu HC	• Lack of project contract administration and documentation of ongoing project
Mlandizi HC	• Lack of knowledge on the contract administration and management
Longido DH	• Loss of document due to shifting of Office to New Office • Shortage of electricity and low internet network which led not to printout LPO • Lack of knowledge of Contracts Administration
Engaranaibor HC	• Lack of electricity, poor documentation and lack of procurement knowledge
Eworendeke HC	• Poor documentation and lack of procurement knowledge
Moshono HC	• Poor documentation and lack of procurement knowledge
Murriet HC	• Poor documentation and lack of procurement knowledge
Geita DH	• Lack of procurement knowledge
Nzera HC	• Poor documentation and lack of procurement knowledge
Nyarugusu HC	• Poor documentation and lack of procurement knowledge
Ushirombo HC	• Poor documentation and lack of procurement knowledge and misplacement of documents
Iyovu HC	• Lack of electricity, poor documentation and lack of procurement knowledge
Mkalama DH	• Lack of electricity, poor documentation and lack of procurement knowledge
Kinyambuli HC	• Poor documentation and lack of procurement knowledge
Nkonko HC	• Poor documentation and lack of procurement knowledge
Chibumagwa HC	• lack of procurement knowledge
Kintinku HC	• Lack of procurement knowledge

Name of Healthcare Facility	Reasons for inadequate documentations of projects documents records
Namtumbo HC	• Poor Documentation and Mishandling of documents
Mtakanini HC	• Poor Documentation and Mishandling of documents
Namtumbo DH	• Lack of contracts management and procurement knowledge
Magagula HC	• Poor Documentation and Mishandling of Documents
Matimila HC	• Poor Documentation and Mishandling of Documents
Sumbawanga DH	• Poor Documentation and Mishandling of Documents
Milepa HC	• Lack of procurement knowledge and contracts management
Mpui HC	• Lack of procurement and contracts management knowledge
Nkomolo HC	• Poor documentation and Mishandling of documents
Kirando HC	• Poor documents and Mishandling of documents

Source: *Auditors' Analysis from the Interviews Minutes*

Appendix 15(a): Summary of Missing Inspection Tools and Equipment in the Visited LGAs

Name of the Tools	Total Number of LGAs Visited	Number of LGAs missing the tool	Shortage in % age	Effect of Not having	Reasons/ cause for not having the tool
Inspection Tool specifically for LGAs					
GPS	14	14	100	Failure to Track the location/coordinate of Buildings features or type and setting out	Not included in LGAs Plans
Camera	14	14	100	Failure to capture actual situations and picture at each stages of construction for progress and future records and references	Not included in their LGAs plans
Stop Orders	14	14	100	Not acting accordingly to defaulters and other out of specs during constructions	Not given attention and not seeing its importance in respective LGAs
Tool specifically for Healthcare Facilities					
Name of the Tools	**Number of Healthcare Facilities visited**	**HFs without Tool**	**Shortage in % age**	**Effect of Not having**	**Reasons/ cause for not having the tool**
Site Diary	35	35	100	Not recording site scenarios, activities , issues regarding construction of ongoing works	Lack skills and knowledge of contract administration
Site Instruction Book	35	35	100	Failure to records all instructions issued on site	Lack of Contracts administration in

				and actions taken	respective LGAs
Name of the Tools	**Number of Healthcare Facilities visited**	**HFs without Tool**	**Shortage in % age**	**Effect of Not having**	**Reasons/ cause for not having the tool**
Construction Materials' store Ledger	35	12	34	Failure to register procured constriction materials and accounting for its actual cost, quantities, size and quality	Lack of knowledge on construction materials documentation and its importance not given attention
Construction Materials' Issue Voucher	35	8	23	Failure to record quantities of issued construction materials during construction	Ignorance on its importance for issuance and recoding of construction materials on site
Site Records Documentation files	35	35	100	Failure to document all changes, management documents and project correspondences	Low priorities or not given attention on its importance contrary to PO-RALG's directives
Inspection/ Supervision Checklist	35	35	100	Ad hoc inspection and supervision by respective LGAs' Engineers at each stages of project Inadequate quality control of each construction activities	Not given attention and not seeing its importance in respective LGAs due to lack of knowledge of contracts administration

Name of the Tools	Number of Healthcare Facilities visited	HFs without Tool	Shortage in % age	Effect of Not having	Reasons/ cause for not having the tool
Site Visitors' Books	35	35	100	Poor attendance of Engineer or not being full time at site and records of other visitors	Low priorities given and not seeing its importance
PPE's	35	35	100	Employees Exposure to incidences and accidents during construction Lack of safety precaution for construction projects	Low priorities given by respective LGAs. Not included in their plans
Inspection Vehicle	35	34	97	The remoted or far located Healthcare Facilities will be not reached, supervised and inspected on time	Inspection Vehicles specifically for works department in respective LGAs were included in their plans
Stop Orders	35	35	100	Not acting accordingly to defaulters and other out of specs during constructions	Not given attention and not seeing its importance in respective LGAs

***Source**: Interviews, Projects documents and Site Observation*

Appendix 15: (b): Tools Availability in Selected and Visited LGAs

Name of LGA	Availability of Tools and Equipment in respective visited LGA											
	Measuring Tap	GPS	Camera	Site Instruction Book/ Diary	Offence Book	Site Records Documentation files and Visitors' Book	Vehicle for Inspection	Inspection and supervision Checklist	PPE'S	Stop Orders	Visitor's Book	Filed notes
Mbeya DC	✓	x	x	x	x	x	x	x	x	x	x	x
Mbeya CC	✓	x	x	x		x	x	x	x	x	x	x
Mkuranga DC	✓	x	x	x	x	x	x	x	x	x	x	x
Kibaha DC	✓	x	x	x	x	x	x	x	x	x	x	x
Longido DC	✓	x	x	x	x	x	x	x	x	x	x	x
Arusha CC	✓	x	x	x	x	x		x	x	x	x	x
Geita DC	✓	x	x	x	x	x	x	x	x	x	x	x
Bukombe DC	x	x	x	x	x	x	x	x	x	x	x	x
Mkalama DC	✓	x	x	x	x	x	x	x	x	x	x	x
Manyoni DC	✓	x	x	x	x	x	x	x	x	x	x	x
Namtumbo DC	✓	x	x	x	x	x	x	x	x	x	x	x
Songea DC	✓	x	x	x	x	x	x	x	x	x	x	x
Sumbawanga DC	✓	x	x	x	x	x	x	x	x	x	x	x
Nkasi DC	✓	x	x	x	x	x	x	x	x	x	x	x

***Source**: Projects documents, Interviews with LGAs officials and Observations*

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Appendix 16: Defects, Outstanding Works and Status of Visited LGAs Healthcare Facilities

LGA	Name of Healthcare Facility in Use	Outstanding works to be done / defects	Status of Healthcare Facility in Use
Health Centres			
Mbeya CC	Nzovwe HC	Floor tiles, finishing and plumbing fittings	In use, except theatre Partially completed
	Iyunga HC	Substantially completed, Landscaping and remove of debris, second coat painting, plumbing fittings	In use, except theatre. Partially Completed
	Igawilo HC	Under Construction	In Progress
Mbeya DC	Santilya HC	Plumbing fittings, door shutters	In use, except Theatre not in use
Mkuranga DC	Kisiju HC	Substantially Completed	In Use, except theatre
	Mkamba HC	Substantially Completed	In use Except theatre
Kibaha DC	Magindu HC	Substantially Completed	In use Except theatre building
	Mlandizi HC	Plumbing fittings, paintings, door shutters fixing	OPD and Maternity in Use except theatre under construction
Arusha CC	Murriet HC	Laboratory door shutters, ramp to connect with theatre and maternity, Windows and doors glazing	In use , theatre is under operation
	Moshono HC	At Plastering stage	Under construction
Longido DC	Engaranaibor HC	Plumbing fittings, Septic tanks and soakaway, Doors and Painting	OPD in use, except theatre
	Eworendeke HC	Plumbing works, finishing and electrical fixtures	OPD in use

LGA	Name of Healthcare Facility in Use	Outstanding works to be done / defects	Status of Healthcare Facility in Use
Geita DC	Nzera HC	In use , Staff house floor tiles broken	In use, theatre not in use
	Nyarugusu HC	Doors shutters out of specs, walkway not ready, mortuary not completed	In use, theatre not in use
Bukombe DC	Uyovu HC	Substantially Completed	In use , except theatre not in use
	Ushirombo HC	Substantially Completed	In use
Mkalama DC	Kinyambuli HC	Substantially Completed	In use
Manyoni DC	Kitinku HC	Substantially Completed	In use , theatre not in use
	Chibumagwa HC	At finishing level	Under Construction
	Nkonko HC	Substantially Completed , Finishing level	Under construction
Namtumbo DC	Namtumbo HC	Competed	In use
	Mtakanini HC	Substantially completed	OPD in use
Songea DC	Matimila HC	Finishing level	Under construction
	Magagula HC	Finishing level	Under construction
Sumbawanga DC	Milepa HC	Substantially Completed	In use
	Mpui HC	Finishing level	Under construction
Nkasi DC	Nkomolo HC	Substantially Completed	In use
	Kirando HC	Substantially Completed	In use
District Hospitals			
Geita DC	Geita DH (Nzera)	X-rays doors, laboratory , plumbing fittings, electrical, water supply, Laundry washing machines platforms and fittings ,epoxy floor not yet done	Under construction

LGA	Name of Healthcare Facility in Use	Outstanding works to be done / defects	Status of Healthcare Facility in Use
Mbeya DC	Mbeya DH (Inyala)	Painting second coat, Walkway, ICT infrastructure, plumbing fittings, poor Workmanship and	OPD in use
Longido DC	Longido DH	Painting, septic tanks, plumbing fittings, finishing works, floor tiles, doors shutters	OPD in use, In Progress
Kibaha DC	Kibaha DH	Finishing works, plumbing fittings, door shutters, electrical and water connection	OPD in use, one Unit of septic tank constructed for whole Hospital
Mkalama DC	Mkalama DH	Finishing works and plumbing works	OPD in use
Namtumbo DC	Namtumbo DH	Finishing level, plumbing works, door shutters, electrical second fix, painting and foul water system	Not in use
Sumbawanga DC	Sumbawanga DH (Mtowisa)	Finishing level, plumbing works, door shutters, electrical second fix, painting and foul water system	OPD in use

Source: *Site Observations from the Visited Healthcare Facilities*