The United Republic of Tanzania
Ministry of Health, Community Development, Gender,
Elderly and Children

The United Republic of Tanzania
The Project for
Strengthening Hospital Management of
Regional Referral Hospitals
(Phase 2)

FINAL REPORT

May 2020

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

Fujita Planning Co., Ltd.

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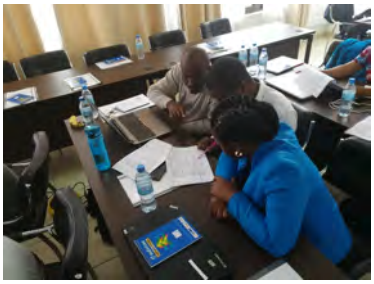
Pictures of several scenes of the project's activities

		
BHMT (April 2017)	BHMT (February 2018)	AHMT on new CHOP (June 2019)
		
Facilitator training for Training institutions (February 2019)	1st pilot training on hospital management and QI at CEDHA (May 2019)	HRHIS Facilitator Training (September 2017)
		
HRHIS Supportive Supervision (June 2019)	CHOP Assessment (July 2019)	QPR Assessment (October 2019)
		
EHPA Facilitator Training (July 2019)	EHPA (September 2019)	Feedback session of EHPA (September 2018)

		
Follow-up visit after EHPA (March 2019)	5S-KAIZENNational Facilitator Training (March 2017)	Good practice sharing in KAIZEN ToT (November 2018)
		
KAIZEN ToT (June 2019)	5S-KAIZEN Consultation Visit (October 2017)	HAB Training (February 2017)
		
Study tour from Ghana (March 2019)	Study tour from Bangladesh (July 2019)	Awarding ceremony in Medical Officer In-Charge Meeting (November 2019)
		
Training for End line surveyors (October 2019)	Project progress report at 7th JCC (July 2019)	Group photo of 10th JCC (January 2020)

Acronyms

AHMT	Applied Hospital Management Training
BHMT	Basic Hospital Management Training
BMC	Bugando Medical Center
BRN	Big Results Now
CEDHA	Center for Education Development in Health, Arusha
CHMT	Council Health Management Team
CHOP	Comprehensive Hospital Operation Plan
CV	Consultation Visit
DAC	Development Assistance Committee
DCS	Department of Curative Services
DDH	Designated District Hospital
DHQA	Department of Health Quality Assurance
DHR	Department of Human Resource
DPP	Department of Policy and Planning
EHPA	External Hospital Performance Assessment
GOT	Government of Tanzania
HAB	Hospital Advisory Board
HRH	Human Resource for Health
HRHIS	Human Resource for Health Information System
HSSP	Health Sector Strategic Plan
ISS	Internal Supportive Supervision
JCC	Joint Coordination Committee
JICA	Japan International Cooperation Agency
JOCV	Japanese Oversee Cooperation Volunteer
KCMC	Kilimanjaro Christian Medical Center
MNH	Muhimbili National Hospital
MoHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
MZRH	Mbeya Zonal Referral Hospital
M&E	Monitoring and Evaluation
NH	National Hospital

NHIF	National Health Insurance Fund
ODK	Open Data Kits
PDM	Project Design Matrix
PHCI	Primary Health Care Institute
PO-RALG	President's Office Regional Administration and Local Government
PRM	Progress Report Meeting
PSU	Pharmaceutical Service Unit
QC	Quality Control
QI	Quality Improvement
QIT	Quality Improvement Team
QIU	Quality Improvement Unit
QPR	Quarterly Progress Report
RHMT	Regional Health Management Team
RMO	Regional Medical Officer
RMSS-H	Regional Management Supportive Supervision for Hospitals
RRHs	Regional Referral Hospitals
RRHMP	Regional Referral Hospital Management Project
RRHMT	Regional Referral Hospital Management Team
ToT	Training of Trainers
TQM	Total Quality Management
WHO	World Health Organization
WIT	Working Improvement Team

Table of Contents

1. Basic Information for the Project

1.1. Country

The United Republic of Tanzania (herein after referred to as "Tanzania") is the largest country in East Africa. It is bordered to the north by Uganda and Kenya, to the west by Rwanda, Burundi, and the Democratic Republic of the Congo, and to the south by Zambia, Malawi, and Mozambique. Tanzania decided to shift its capital city from Dar es Salaam to Dodoma and its actual implementation started in 2018. Afterwards, Dar es Salaam remains its largest city, principal port, and leading commercial city. The Tanzanian mainland has 26 administrative regions which was the target regions for the project, 133 districts, and 185 councils. The population of Tanzania is approximately 51.82 million (2014, World Bank), composed of diverse ethnic and linguistic groups.

1.2. Title of the Project

The Project for Strengthening Hospital Management of Regional Referral Hospitals (hereinafter referred as "RRHMP" or "the project")

1.3. Duration of the Project

The duration of the project is five years, and the first phase was successfully implemented from May 2015 to August 2016. The second phase of the project started in October 2016 and is scheduled to be complete in May 2020.

- The first phase was executed from May 15th, 2015 to August 31, 2016.
- The second phase was executed from October 13, 2016 to May 31st, 2020.

1.4. Background of the Project

Hospitals play a vital role in a country's health system by providing essential healthcare service to the population. Hospitals are often the first point of contact for patients to be diagnosed, cared for, and designated to have specialized inpatient care. Despite their key role in the health system, and despite the fact that the majority of national health expenditures are spent on hospitals, the performance of hospitals has not been considered a priority, given that more attention is paid to the strengthening of primary healthcare and disease-specific programs. In Tanzania, 62% of total health expenditures was allocated to hospitals in 2005/6 (Tanzania National Health Accounts, 2005/6, WHO). With the majority of health expenditures in Tanzania being disbursed to hospitals,

hospital management and the efficiency of hospitals need to be addressed to strengthen the country's overall health system and to promote universal health coverage under resource constraints.

Regional referral hospitals (RRHs) face a number of challenges pertaining to hospital management. RRHs face a chronic shortage of resources, such as health financing, human resources for health (HRH), medical equipment and supplies, which makes the provision of sufficient and quality health services difficult. Improving hospital management in RRHs has been addressed by the government of Tanzania (GOT) since the onset of the health sector reforms which has continually been implemented through health sector strategic plans (HSSPs). In the third HSSP (HSSP III), the GOT set 11 implementation strategies and one of them (Strategy 2) was to strengthen the referral service. Likewise, in the HSSP IV Part 5 (Service delivery), the government was committed to strengthening the RRHs by focusing on improved quality of care and management. Putting the commitment into action, several items have been listed to improve the quality of healthcare services at the RRHs, such as improvements in hospital management, the implementation of quality improvement activities through the "Total Quality Improvement Framework in Health Care 2011–2016" (MoHSW, October 2011), the establishment of quality improvement units in the RRHs, and strengthening of hospital governance through hospital advisory boards (HAB).

In its endeavor to achieve the above objectives, the GOT, with support from and in collaboration with the Japan International Cooperation Agency (JICA), has been engaged in capacity development of regional health management teams (RHMTs), strengthening HRH planning and management through the introduction of HRH information systems, and quality improvement of healthcare services with the 5S-KAIZEN-TQM approach since 2008. Through this cooperation, the performance of RHMTs has been splendidly improved and HRH information is being handled for better planning and management in the future. Furthermore, working environments in health facilities have progressively improved with the 5S approach. With these successes, the GOT has officially adopted the 5S-KAIZEN-TQM approach for improvement of health commodity management at district health facilities in its "Big Results Now" health initiative.

The above achievements resulted in the GOT requesting further technical cooperation from JICA for strengthening the management of RRHs and also commodity management through 5S-KAIZEN-TQM approach in council health facilities. In RRHs, the request included strengthening the managerial capacity of hospital management teams, improving resource management and quality improvement through the KAIZEN approach, and improving governance by strengthening the HABs.

1.5. Implementing Agency

The implementation structure of the project is shown in Table 1-1. Different organizations and individuals were involved in the implementation of the project.

Table 1-1: List of RRHMP members in the second phase

Name	***Position in RRHMP***	***Designation***
Dr. Mpoki M. Ulisubisya Dr. Zainab A. S. Chaula	Project Director (predecessor) Project Director (successor)	Permanent Secretary, MoHCDGEC*
Mr. Bernard Konga Mr. Edward N. Mbanga	Project Director (predecessor) Project Manager (successor)	Director, Policy and Planning, MoHCDGEC
Dr. Didace Mtagwaba Mr. Raynold John	Project coordinator (predecessor) Project coordinator (successor)	Regional Health Sector Coordinator, MoHCDGEC
Dr. Hisahiro Ishijima	Chief Advisor/ Hospital Management	RRHMP / Fujita Planning Co., Ltd.
Mr. Shuichi Suzuki	Hospital planning	RRHMP / Fujita Planning Co., Ltd.
Mr. Noriyuki Miyamoto	5S-KAIZEN-TQM (1)	RRHMP / Fujita Planning Co., Ltd.
Ms. Nao Yanase Mr. Takahiko Minase	5S-KAIZEN-TQM (2) (predecessor) 5S-KAIZEN-TQM (2) (successor)	RRHMP / Fujita Planning Co., Ltd.
Ms. Yasuko Kasahara	Training management	RRHMP / Fujita Planning Co., Ltd.
Mr. Fares Masaule	Senior Technical advisor	RRHMP
Ms. Violeth S. Mlay	Technical assistant	RRHMP
Mr. Lukundo J. Busyanya	Accountant	RRHMP
Mr. Willy G. Shechonge	Driver	RRHMP
Mr. Daniel Eriyo	Driver	RRHMP

* MoHCDGEC: Ministry of Health, Community Development, Gender, Elderly and, Children

1.6. Project Outline

1.6.1. Overall Goal of the Project

To improve the quality of health service at RRHs

1.6.2. Project Purpose

To improve hospital management at RRHs

1.6.3. Expected Outputs

The project's outputs are shown in Table 1-2 and the relation between those outputs are described in Figure 1-1.

Table 1-2: Expected outputs of the project

Output 1	Basic management capacity (leadership, planning, M&E, human resource management, financial management, resource management, information management) of HMTs is improved.
Output 2	Planning and reporting capacity of RRHs is improved
Output 3	Monitoring and Evaluation of RRHs is strengthened.
Output 4	Resource management and quality improvement activities are strengthened through KAIZEN approach
Output 5	Governance of RRHs is strengthened
Output 6	Tanzania's experience and knowledge on hospital management and QI are shared within Tanzania and with other African countries

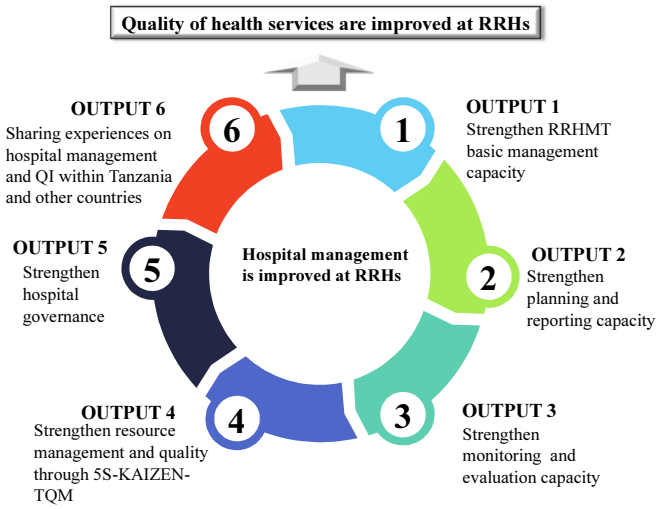


Figure 1-1: Six expected outputs of RRHMP

1.7. Target of the Project

Target hospitals are 28 RRHs in 26 regions in the Tanzanian mainland listed in Table 1-3.

Table 1-3: 28 target hospitals of the project

Sq#	Name of Hospital	Region	Sq#	Name of Hospital	Region
1	Amana RRH	Dar es Salaam	15	Mpanda RRH	Katavi
2	Bariadi RRH	Simiyu	16	Mt. Meru RRH	Arusha
3	Bukoba RRH	Kagera	17	Musoma RRH	Mara
4	Dodoma RRH	Dodoma	18	Mwananyamala RRH	Dar es Salaam
5	Geita R RRH	Geita	19	Sekou-Toure RRH	Mwanza
6	Iringa RRH	Iringa	20	Shinyanga RRH	Shinyanga
7	Njombe RRH	Njombe	21	Singida RRH	Singida
8	Kitete RRH	Tabora	22	Sokoine RRH	Lindi
9	Ligula RRH	Mtwara	23	Songea RRH	Ruvuma
10	Manyara RRH	Manyara	24	Songwe RRH	Songwe
11	Maweni RRH	Kigoma	25	Sumbawanga RRH	Rukwa
12	Mawenzi RRH	Kilimanjaro	26	Tanga RRH	Tanga
13	Mbeya RRH	Mbeya	27	Temeke RRH	Dar es Salaam
14	Morogoro RRH	Morogoro	28	Tumbi RRH	Pwani

1.8. Coordination of the Project

1.8.1. Joint Coordination Committee (JCC)

JCC was established to facilitate inter-organizational coordination. The project finished until 4th JCC during the first phase of the project, therefore, 5th JCC was the first JCC in the second phase. Seven JCC meetings were held during the second phase of the project (See Table 1-4).

Table 1-4: Summary table of JCC meetings in the second phase

JCC#	Date	Main agenda
5th JCC	April 20, 2017 at MoHCDGEC, Dodoma	• Progress of project activities (October 2016-April 2017) • Progress of BRN commodity management • Project work Plan for the next Six month
6th JCC	November 16, 2017 at MoHCDGEC, Dodoma	• Progress of project activities (April-October 2017) • Progress of BRN commodity management • Results for EHPA baseline Survey • Project work Plan for the next Six month
7th JCC	April 05, 2018 at MoHCDGEC, Dar es Salaam	• Progress of the project activities (October 2017-March 2018) • Progress of BRN commodity management • PDM amendment for Version 3 • Project work Plan for the next Six month
8th JCC	November 01, 2018 at MoHCDGEC, Dodoma	• Progress of the project activities • Brief reporting on 2nd EHPA • Progress of Commodity Management with 5S-KAIZEN • Project work Plan for the next Six month

JCC#	Date	Main agenda
9th JCC	July 29, 2019	• Progress of the project activities • Project work Plan for the next Six month
10th JCC	January 15, 2020	• Progress of the project activities • Findings from End-line survey • Project work Plan for the end of the project

1.8.2. Project's Internal Meeting

Internal meetings were conducted with the project coordinators, the project experts, and local staff monthly to update the project's activity plan and discuss any issues for moving forward.

1.8.3. Key Stakeholders of RRHMP

The project was established under the Department of Policy and Planning in MoHCDGEC in line with discussions between the governments of Tanzania and Japan. However, hospitals are serviced by a wide range of sections and units in the Ministry, and it was necessary for all departments in the Ministry to be engaged in the project's activities. Moreover, the project is also closely working with President's Office Regional Administration and Local Government (PO-RALG) and RHMTs for the implementation of different activities. The project is also working together with universities, training institutions, and tertiary hospitals. Work relations with key stakeholders are described in Figure 1-2 below:

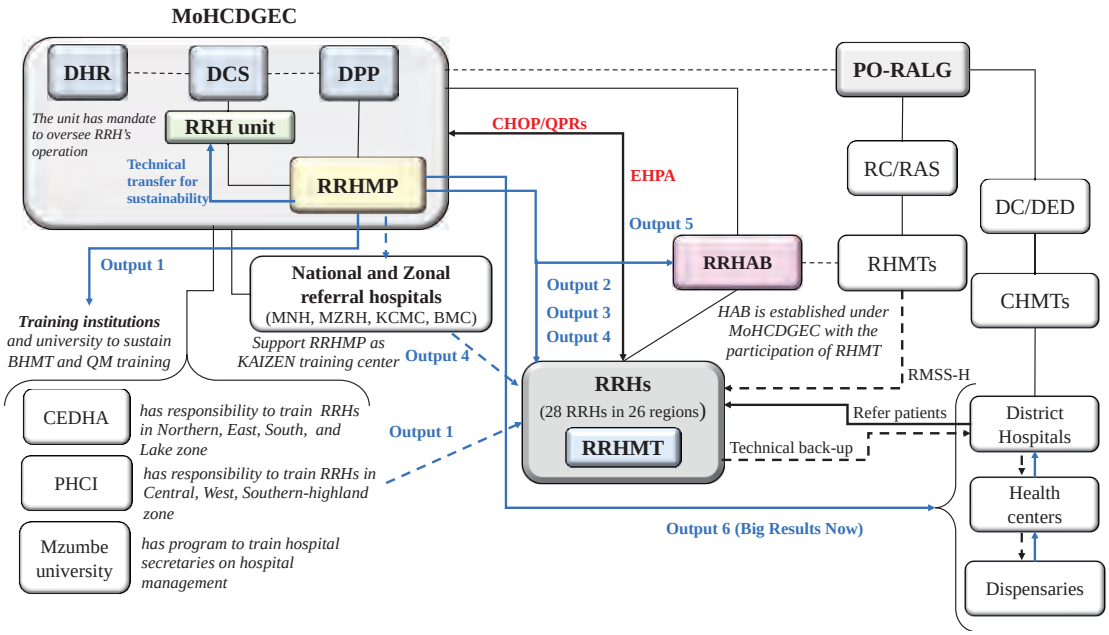


Figure 1-2: Work relations with key stakeholders

2. Results of the Project

2.1. Inputs to the Project

2.1.1. Input from Japan (Planned and Actual)

Most of the costs for the project activities were financed by the JICA. Details on the inputs from Japan are listed in Annex 1-(1). Two vehicles for the project were purchased by the Japanese side, and this is due to changes in Record of Discussion (R/D) on December 8, 2015. Moreover, a Japanese expert with the title "Quality Management (5S-KAIZEN-TQM 2)" was added to the list of experts.

2.1.2. Input from Tanzania (Planned and Actual)

The MoHCDGEC provided the project office space, electricity, and water supply, since the project started. Details on the inputs by Tanzania are listed in Annex 1-(2).

2.1.2. Activities (Planned and Actual)

The list of project activities is listed in Annex 1-(3).

2.2. Activities related to Outputs

For achieving objectives of each output, the project and C/P always tried to figure out and implement appropriate approaches and methodologies based on lessons learned from the planned activities in the project original plan. Achievement status of each output is described in Table 2-39: "Indicators set for each output and its achievement".

2.3. Activities related to Output 1

2.3.1. Basic Hospital Management Facilitators Training

Basic hospital management facilitators training was conducted from March 27–31, 2017 at the Amabilis Centre in Morogoro. The following were the training objectives:

- To explain the objectives of Basic Hospital Management Training (BHMT) for RRHs.
- To explain the topics covered in BHMT.
- To identify the points to be emphasized during the lectures in BHMT.
- To facilitate the lectures and practical sessions.

The contents of "The Participants' manual for Basic Hospital Management Training (BHMT)" and the presentation materials were checked and essential points to be emphasized during each

lecture were identified. These points were reflected in the presentation materials. Order of training topics, themes of practical sessions, and methodologies were also checked for improving the efficiency and effectiveness of the BHMT.

2.3.2. Basic Hospital Management Training in 2017

BHMT was training designed to strengthen the management capacity of RRHMTs, and it was composed of the following five modules: 1) Understanding the RRHs settings (regional health system), 2) Basic management, 3) Human resource management, 4) Basic financial, logistical, and information management, 5) Quality and safety in hospital services.

Table 2-1: Outline of BHMT 2017

Region	Duration	# of RRHs	# of participants
Dar es Salaam	Apr.03 - 07, 2017	7	42 participants from Tumbi, Morogoro, Sokoine, Ligula, Amana, Temeke, Mwananyamala RRHs
Moshi	Apr.24 - 29, 2017	6	36 participants from Mawenzi, Mt. Meru, Tanga, Singida, Manyara, Dodoma RRHs
Mwanza	May.08 - 13, 2017	7	42 participants from Kagera, Sekou-Toure, Shinyanga, Kitete, Musoma, Geita, Bariadi RRHs
Mbeya	May 22 - 27, 2017	8	48 participants from Mbeya, Sumbawanga, Songea, Iringa, Njombe, Mpanda, Maweni, Songwe RRHs

To measure the effectiveness of the training, pre- and post-assessments were conducted, and "Effect size (△)" of each training session was calculated. The results of the assessment are shown in Figure 2-1 and Table 2-2. As a result, all training sessions achieved "large" effect size; therefore, it can be concluded that BHMT was effective in providing knowledge about the management of hospital operations.

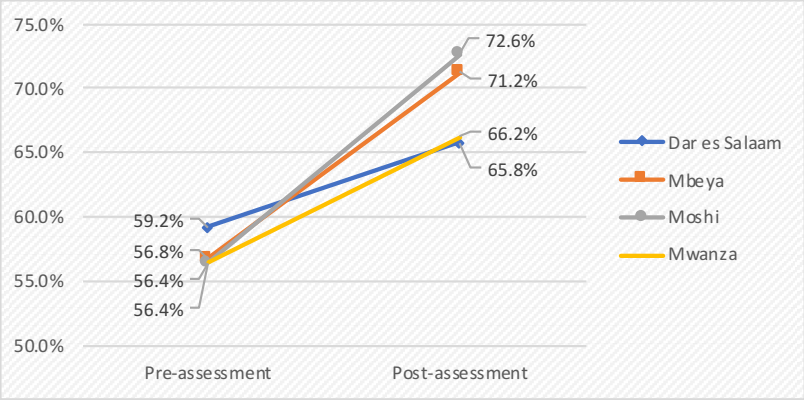


Figure 2-1: Improvement of knowledge from BHMT in 2017

Table 2-2: Pre- and Post-assessment results (average) in 2017

	Western	Lake	Northern	Southern
Pre-assessment	59.2%	56.4%	56.4%	56.8%
Post assessment	65.8%	66.2%	72.6%	71.2%
Effect size (Δ)	0.84	1.21	1.74	1.55
	large effect size	large effect size	large effect size	large effect size

If Δ is higher than 0.50, it has meaning (Koizumi & Katagiri, 2007) |.20|≦small<|.50|, |.50|<medium<|.80|, |.80|≦large
Koizumi, R., & Katagiri, K. (2007). Changes in speaking performance of Japanese high school students: The case of an English course at a SELHi. ARELE, 18, p.81-90.

2.3.3. Review of Training Materials for Basic Hospital Management Training

A review workshop of the BHMT training materials was conducted in Morogoro from January 22–26, 2018. The review process to improve the content of the training materials was taken by considering feedback from the BHMT participants and also accommodating findings identified by the BHMT facilitators during the BHMT in the previous year. Then, vulnerable topics were analyzed for further improvements to the materials for effective training of hospital management. The following training materials were reviewed:

- BHMT participants' manual.
- BHMT PowerPoint presentations by modules.
- BHMT facilitator's guide.

2.3.4. Conducting Basic Hospital Management Training in 2018

The goal of the training was to strengthen the capacity of the RRHMTs to support and facilitate the delivery of quality health services to the respective regions. The objectives of the training were as follows:

- To impart the knowledge and skills necessary for effective and efficient RRH management.
- To enable participants to apply management concepts to their work environment.
- To enable participants to effectively plan and implement RRH activities.
- To enable participants to design and effectively implement hospital projects for quality improvement and appropriate resource management.

The series of BHMT was conducted as follows in Table 2-3.

Table 2-3: Outline of BHMT 2018

Training region	Duration	# of RRHs	# of participants
Mbeya	Feb.12–Feb.17, 2018	8	34 participants from Mbeya, Sumbawanga, Songea, Iringa, Njombe, Mpanda, Maweni, Songwe RRHs
Morogoro	Feb.26–Mar.03, 2018	7	35 from Tumbi, Morogoro, Sokoine, Ligula, Amana, Temeke, Mwananyamala RRHs
Mwanza	Mar.12-Mar.17, 2018	7	40 participants from Kagera, Sekou-Toure, Shinyanga, Kitete, Musoma, Geita, Bariadi RRHs
Moshi	Apr.09-Apr.14, 2018	6	31 participants from Mawenzi, Mt. Meru, Tanga, Singida, Manyara, Dodoma RRHs

It was revealed that the majority of participants in the BHMT 2018 were newly-appointed members of the RRHMTs, and they had never participated in any training on hospital management before being an RRHMT member.

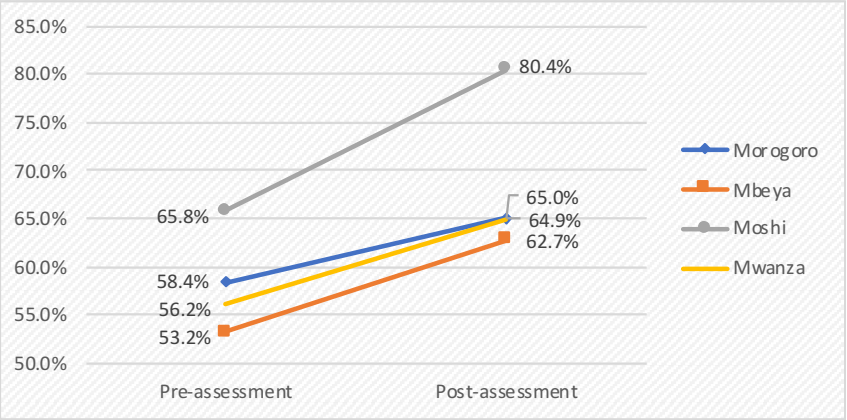


Figure 2-2: Improvement of knowledge from BHMT in 2018

Table 2-4: Pre- and post-assessment results (average) in 2018

	Southern	Western	Lake	Northern
Pre-assessment	53.2%	58.4%	56.2%	65.8%
Post assessment	62.7%	65.9%	64.9%	80.4%
Effect size (Δ)	1.31	1.16	1.13	1.57
	large effect size	large effect size	large effect size	large effect size

If Δis higher than 0.50, it has meaning (Koizumi & Katagiri, 2007) |.20|≦small<|.50|, |.50|<medium<|.80|, |.80|≦large
Koizumi, R., & Katagiri, K. (2007). Changes in speaking performance of Japanese high school students:The case of an English course at a SELHi. ARELE, 18, p.81-90.

2.3.5. Sustainability of BHMT in Collaboration with Training Institutions and Universities

The importance and effectiveness of BHMT have been demonstrated in the training sessions conducted in the past. In order to sustain BHMT, the project decided to transfer the training

packages and teaching skills to selected health training institutions. The Center for Educational Development in Health, Arusha (CEDHA) and the Primary Health Care Institute, Iringa (PHCI Iringa) were identified as potential training institutions by the MoHCDGEC. Additionally, Mzumbe University was involved in this handing over process because Mzumbe University is producing many hospital secretaries. The first step in the transfer was to invite observers from the training institutions and universities to promote their understanding of how BHMT is carried out effectively. Then, the project conducted a hearing session with the observers to clarify their interest in adopting the BHMT program and materials.

2.3.5.1. Development of Facilitator's Guides for BHMT with Training Institutions

A workshop was conducted from May 7–11, 2018 at Amabilis Centre in Morogoro with the aim of developing a facilitator's guide for BHMT. The following were the objectives of the workshop:

- To align the contents in the facilitator's guide and participants' manual for BHMT drafted by the project.
- To finalize the facilitator's guide for BHMT.

During the workshop, the section objectives, topics to be covered, key points, and other necessary information for each module of the BHMT for effective teaching were clarified, and afterwards, the facilitator's guide was finalized.

2.3.5.2. Training of Lecturers from the Training Institutions

In order to promote effective BHMT conducted by the training institutions, the lecturers of the training institutions need to be familiar with all the modules of BHMT and 5S-KAIZEN-TQM training. Therefore, the project organized the following workshops to design a training package on hospital management and to capacitate the lecturers from the training institutions for BHMT and 5S-KAIZEN-TQM training:

- First transfer workshop of Hospital Management Training package (program development and capacitation of BHMT): Five days from October 15–19, 2018 at the Amabilis Centre, Morogoro.
- Second transfer workshop of Hospital Management Training (capacitation of the 5S-KAIZEN-TQM approach): Five days from January 21–25, 2019 at PHCI Iringa.

During the first workshop in Morogoro, the participants designed the package of hospital management training as a 14-day training course (see Figure 2-3). The package was composed of three sections: (i) BHMT section, (ii) Comprehensive Hospital Operational Plan (CHOP), Quarterly Progress Report (QPR), and ISS section, and (iii) 5S-KAIZEN-TQM section. Afterwards, the participants learned about the BHMT modules, sections, and other relevant topics, as well as worked on the training timetable, training budget, advertising for the training, and application formats.

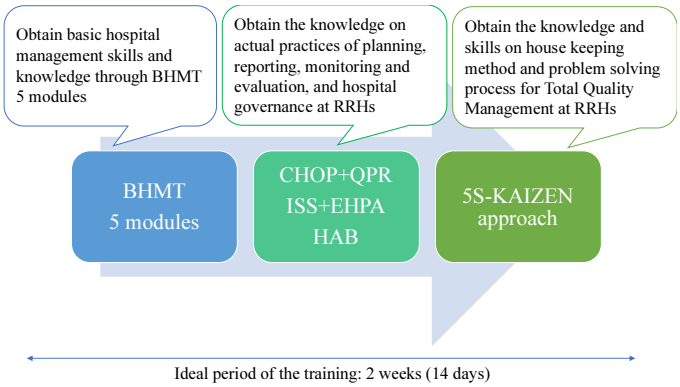


Figure 2-3: Basic design of hospital management training package

During the second workshop in Iringa, the project members trained the participants from CEDHA, PHCI Iringa, and Mzumbe University on the 5S-KAIZEN-TQM approach. Training materials for KAIZEN Training of Trainers (ToT) were used. Key lecture points and effective training methodologies were shared with the participants.

2.3.5.3. Pilot Hospital Management Training at CEDHA

The pilot hospital management training was conducted at CEDHA from May 20–31, 2019. This activity was the final process to transfer BHMT to three health training institutions, and this was vital for achieving Output 1. Since the capacity of CEDHA in executing the training effectively was limited, external facilitators from outside CEDHA and the project assisted CEDHA. The number of people who expressed interest in participating in the training exceeded 120; however, due to the limited capacity of the training venue, only 39 people from 14 RRHs were accepted in the order that their application forms arrived. It is important to mention that any costs for participation in this training were funded by the RRHs themselves. In other words, each RRH

paid the training participation fee of 600,000 Tanzanian shillings (equivalent to approximately 260 U.S. dollars) per person, and the daily allowance, accommodation expenses, and travel expenses for the participants.

This training was designed to cover all BHMT modules and the 5S-KAIZEN-TQM method in ten days. In the first five days, BHMT modules 1 to 4 were taught, and in the final five days, BHMT module 5 and the 5S-KAIZEN approach were taught. The results of the pre- and post-assessments are shown in Figure 2-4.

Another purpose of this pilot training was to train lecturers from PHCI Iringa and Mzumbe University on how to execute the training, provide the lectures effectively, and organize similar training at their respective institutions smoothly in the future. Therefore, the project invited lecturers from those training institutions as observers.

As mentioned above, a large number of people from RRHs showed interest in this training; it was indicated that demands to improve knowledge of and skills in “hospital management” and “quality improvement” are very high among hospital managers at the RRH level.

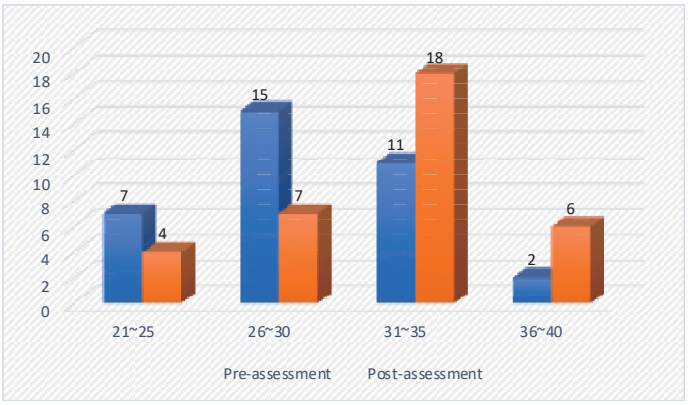


Figure 2-4: Pre- and post-assessment scores of pilot hospital management training at CEDHA

2.3.5.4. Pilot Hospital Management Training at PHCI Iringa

Based on the lessons learned from the pilot training at CEDHA, and the high demand for hospital management training from RRHMTs, PHCI Iringa, in corroboration with the MoHCDGEC, organized and conducted hospital management training and 5S-KAIZEN-TQM training at Iringa

from July 8–19, 2019. There were 49 RRHMT member participants from 18 RRHs. The project covered the expenses for the external facilitators for the BHMT and 5S-KAIZEN-TQM approach, and provided technical support for effective training.

The training was conducted with same schedule used for the pilot training in CEDHA; that is the first week was allocated to teaching BHMT modules 1 to 5, and the second week was allocated for teaching the 5S-KAIZEN-TQM approach. The results of the pre- and post-assessments are shown in Figure 2-5.

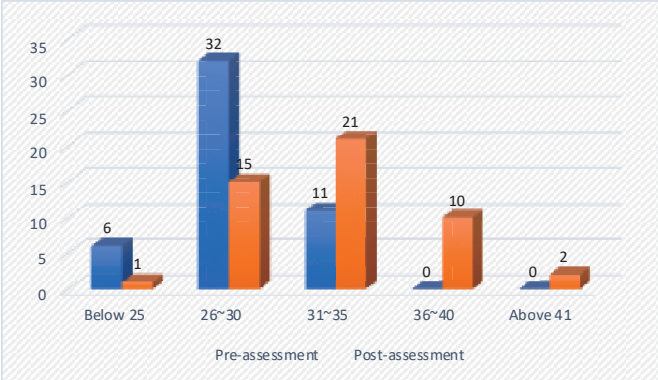


Figure 2-5: Pre- and post-assessment scores of pilot hospital management training at PHCI Iringa

The pilot training of the project completed the required process for transferring the training packages of BHMT and the 5S-KAIZEN-TQM approach to three health training institutions. However, there were some issues observed during the pilot training, such as insufficient teaching abilities of the lecturers, improper time allocations and time management during lectures and practical sessions, unavailability of training materials for participants, etc. It was discussed and confirmed that each training institution would have to solve the issues before conducting the next training session.

2.3.5.5. Review Workshop of the Pilot Hospital Management Training

A review workshop of the pilot hospital management training was conducted on October 16–17, 2019 at CEEMI in Dar es Salaam. Lecturers from CEDHA, PHCI Iringa, and Mzumbe University were invited as workshop participants, and the national facilitators of BHMT and the 5S-KAIZEN-TQM approach was invited as a technical advisor. The purpose of the workshop was to capture issues and share experiences from the pilot training conducted at the respective

institutions, and to identify countermeasures on how to better organize future hospital management training for RRHMTs.

First, in the review of the pilot training, CEDHA and PHCI presented the issues identified from the pilot training and recommendations for future training. The issues raised by training institutions were:

- The course fee was insufficient and too restrictive for providing proper printed materials and inviting external facilitators.
- The course fees were not be paid by the RRHs before starting the training.
- There was a delay in advertising the training program to RRHs.
- The timeframe of two weeks was too short to teach BHMT and the 5S-KAIZEN-TQM approach.
- The teaching capacity of the lecturers from training institutions was weak, especially on CHOP, ISS, EHPA, and the 5S-KAIZEN-TQM approach.
- There is a need to include a session on office procedures that would address routine office management issues.

Then, participants from Mzumbe University, who participated in both training sessions as observers, gave a presentation about considerations and suggestions for future training. Finally, the national facilitator of BHMT and the 5S-KAIZEN-TQM approach, who provided technical support during the pilot training, gave a presentation on training methods and technical skills to further strengthen the ability of the training institutions to deliver the training.

Based on the discussion during the review workshop, it was agreed that capacity building workshops for lecturers from the training institutions would be organized in early December 2019.

2.3.5.6. Capacity Building Workshops for the Training Institutions

Based on the strong request from the lecturers of CEDHA, PHCI Iringa, and Mzumbe University, capacity building workshops for training institutions were conducted from December 2–13, 2019 at Dodoma RRH. The aims of the workshop were:

- To capacitate lecturers from the training institutions on BHMT modules, CHOP/QPR, ISS/External Hospital Performance Assessment (EHPA), and the 5S-KAIZEN-TQM approach.
- To improve the quality of hospital management training for RRHMTs.

Twelve participants (four participants from each training institution) and two observers from the Mbeya Zonal Referral Hospital participated in the workshop. The first week (December 2–7) was allocated to how to teach BHMT modules, CHOP/QPR, and ISS/EHPA. The second week (December 9–13) was allocated to how to teach the 5S-KAIZEN-TQM approach properly and effectively.

2.3.6. Applied Hospital Management Training

Applied hospital management training (AHMT) was designed to focus on strengthening any specific capacities of RRHMTs to properly execute the day-to-day management of RRHs. Its training topics were carefully selected based on the current weaknesses in the actual management of RRHs. AHMT has been organized three times during the project period with the topics of: 1) ISS, 2) Monitoring and Evaluation, and 3) Introduction of new CHOP and QPR.

2.3.6.1. AHMT on ISS

AHMT on ISS was held in Morogoro from February 13–15, 2017. Eighty-two people from 28 RRRHs and 26 RHMTs participated in this training. The objectives of the training were:

- To capacitate RRHMTs to implement ISS appropriately.
- To clarify the relationship between ISS, CHOP, and EHPA.

During the training, the participants were taught the composition of the ISS checklist, how to evaluate results of the ISS, and how to develop ISS reports. Additionally, the participants learned how to properly teach other staff in their respective hospitals about ISS.

2.3.6.2. AHMT on Monitoring and Evaluation

From the assessment results of the CHOP and QPRs, the project realized many deficiencies in the reported content. It was revealed that those deficiencies were mainly caused by insufficient knowledge and skills for developing plans and reports among the members of the RRHMTs.

Additionally, the implementation of key activities in the development process of QPR, such as ISS and monitoring and evaluation of 5S-KAIZEN activities that need to be reported together with QPR, were also not well understood by RRHMTs. Therefore, the project decided to pick-up "Monitoring and Evaluation (M&E)" as a second topic of the AHMT.

The training was divided into two batches. The training for the first batch was conducted for 26 participants from 13 RRHs from May 15–17, 2018 in Mwanza, and the training for the second batch was conducted for 28 participants from 14 RRHs from May 22–24, 2018 in Morogoro. The main contents of the training were:

- Sharing the current updates of the CHOP and QPR formats and how to fill in the formats.
- Identifying weak areas in the development of CHOP and QPR through self-assessment of CHOP and QPR by the participants.
- Sharing implementation and reporting processes of ISS.
- Explaining key performance indicators (KPIs) and correcting their calculation formula.
- Explaining the semi-structured client satisfaction survey tool and confirming its contents.
- Sharing implementation and reporting processes for internal monitoring and evaluation of 5S-KAIZEN activities.

Note that Ligula RRH could not attend the training due to their ad hoc activities in the hospital. Therefore, the project and C/P visited Ligula RRH to train the hospital on the same contents of AHMT.

2.3.6.3. AHMT on New CHOP and QPR

During the 2017 and 2018 CHOP assessments, the project received various inquiries from the RRHMTs about the CHOP guidelines and the formats for CHOP and QPR. In addition, since the ownership of RRHs was transferred from the PO-RALG to the MoHCDGEC, some content of the CHOP guidelines, which were developed in 2016, were not appropriate for the current structure. Therefore, the project revised the CHOP guidelines in February 2019 and conducted an orientation for RRHMTs on the amended points through the AHMT scheme. The AHMT on the new CHOP guidelines and QPR was conducted for 86 managers from 28 RRHs from June 11–13, 2019 in Dodoma.

2.4. Activities related to Output 2

2.4.1. Clarification of the Updated Mechanism for Submitting, Assessing, and Reporting CHOP and QPR

Due to the change in the ownership of RRHs from the PO-RALG to the MoHCDGEC, the planned mechanism in the project's work plan had to be revised according to the new structure for managing RRHs at the Ministry's level. RRHs are now positioned under the Department of Curative Services (DCS); however, budgeting of operational costs, personal expenses, and development cost of the RRHs need to be done by the Department of Policy and Planning (DPP). Therefore, receiving and assessing of CHOP and QPRs needs to be carried out mainly by DCS and DPP. The newly designed mechanisms for CHOP submission, assessment, and reporting are as follows in Table 2-6:

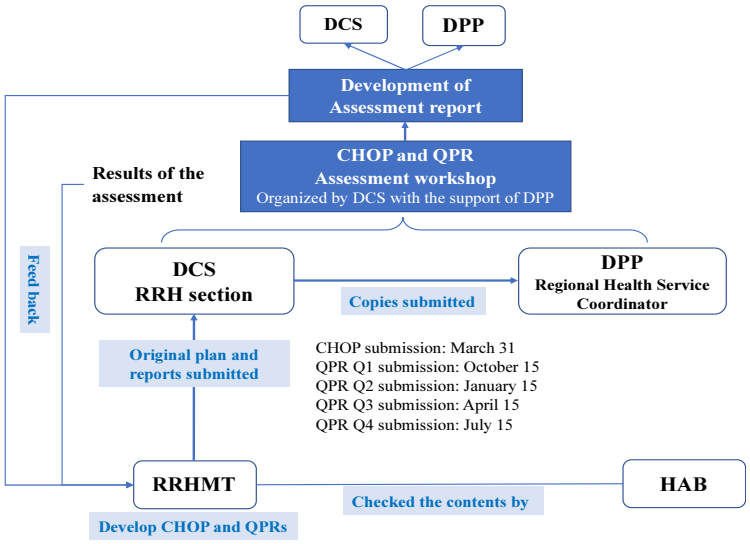


Figure 2-6: Mechanisms for CHOP submission, assessment, and reporting

2.4.2. CHOP and QPR Training

After the concept of the new CHOP on finance management was introduced in June 2016 through the AHMT, RRHMTs requested more intensive training on how to properly develop CHOP. Therefore, CHOP training was conducted in Morongo from November 21–24, 2016 with the participation of 82 people (three participants were invited from each RRH). During the training, an overview of the CHOP guidelines, preparation process, and other relevant information were explained to make RRHMT members familiar with the new CHOP. Then,

format usage was explained for actual planning of CHOP, followed by monitoring of implementation of planed activities, including QPRs.

2.4.3. CHOP and QPR Assessment

2.4.3.1. CHOP 2017–2018 Assessment

Twenty-seven out of 28 RRHs (96%) submitted CHOP before the submission deadline of March 31. The assessment of CHOP 2017–2018 was conducted from April 10–13, 2017 at CEEMI, Dar es Salaam. A standardized assessment tool with assessment criteria was used for assessing the CHOP, and as a result, all of CHOPs was qualified in the first assessment. Scores of the CHOP assessment are shown in Table 2-5. After the completion of the assessment, the assessment results were reported back to the RRHMTs respectively, and each CHOP was endorsed by the Regional Administration Secretary (RAS) office.

Table 2-5: Assessment scores of CHOP 2017–2018

RRHs	score	RRHs	score	RRHs	score	RRHs	score
Amana RRH	85	Iringa RRH	88	Mbeya RRH	87	Singida RRH	83
Manyara RRH	91	Njombe RRH	62	Morogoro RRH	87	Sokoine RRH	93
Bariadi RRH	75	Kitete RRH	74	Mpanda RRH	82	Songea RRH	85
Tanga RRH	81	Ligula RRH	75	Mt. Meru RRH	87	Songwe RRH	78
Bukoba RRH	95	Manyanamala RRH	85	Musoma RRH	77	Sumbawanga RRH	93
Dodoma RRH	83	Maweni RRH	100	Sekou-Toure RRH	85	Temeke RRH	78
Geita RRH	63	Mawenzi RRH	86	Shinyanga RRH	86	Tumbi RRH	93

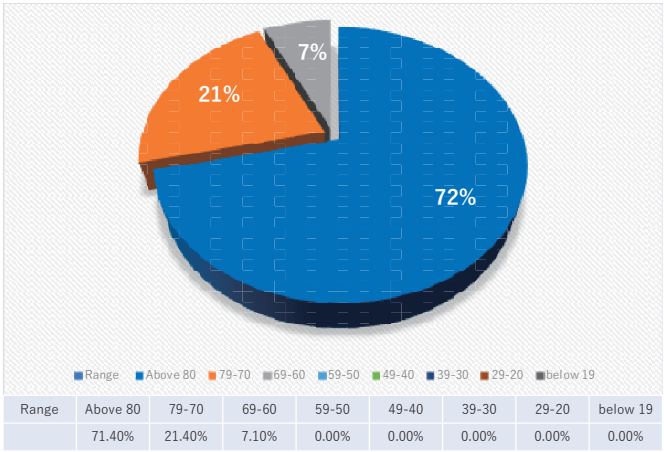


Figure 2-7: Distribution of CHOP 2017–18 assessment results

2.4.3.2. QPR 2017–2018 Assessment

There was no QPR mechanism in the past; therefore, this was the first time introducing a periodic progress reporting mechanism to the MoHCDGEC, as well as the RRHs, in fiscal year 2017–2018. In other words, the RRHMTs were not used to developing a progress report, and the MoHCDGEC was not familiar with assessing the RRH progress reports. A number of RRHs delayed their submissions of their first quarter QPRs and combined them with the second quarter QPRs. The delayed submissions of QPRs by many RRHMTs were not fully realized until the third quarter. However, the MoHCDGEC encouraged the RRHMTs to continue developing and submitting QPRs, which eventually lead to improved quality of the reports and submission rates.

Table 2-6: State of the QPR 2017–2018

Fiscal 2017-2018	Period of QPR assessment	# of RRHs with on-time submission	# of RRHs with delayed submission	Average score of assessment
Quarter 1	Apr. 16 - Apr. 22, 2018	17	11	55.6%
Quarter 2	Apr. 16 - Apr. 22, 2018	18	10	56.2%
Quarter 3	Jun. 4 - Jun. 8, 2018	18	10	65.8%
Quarter 4	Nov. 19 - Nov. 27, 2018	26	2	63.4%
Annual average				**60.2%**

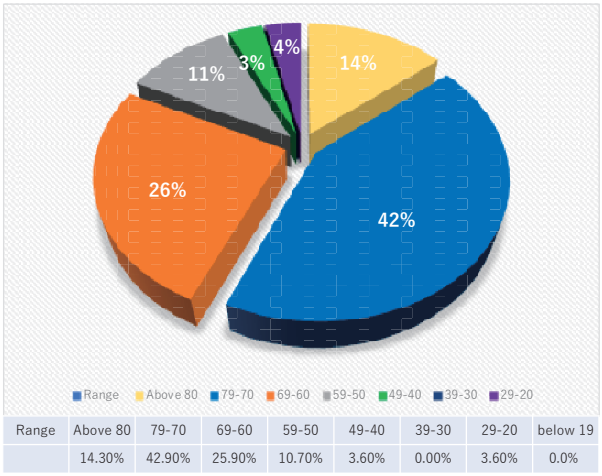
2.4.3.3. CHOP 2018–2019 Assessment

Twenty-six out of 28 RRHs (92.9%) submitted CHOP before the submission deadline of March 31. Unfortunately, many RRHs had to revise CHOP after submission due to the change in the ceiling of operational costs (OC) by the Ministry of Finance at the end of March 2018. Many RRHMTs pulled CHOP back from the HABs and recalculated OC to adjust to the ceiling.

The assessment of CHOP 2018-2019 was conducted from April 16-22, 2018 at Amabilis Centre, Morogoro. Eight assessors from the MoHCDGEC assessed the CHOP 2018–2019 submitted by 28 RRHs. Assessment criteria was clarified with the assessors, and the assessment tool was modified according to the changes in the areas of focus. A standardized assessment tool was used to assess the CHOP and all CHOP was qualified in the first assessment. Scores of the CHOP assessment are shown in Table 2-7. After completion of the assessment, results were reported back to the RRHMTs respectively, and CHOP was endorsed by the RAS.

Table 2-7: Assessment scores of CHOP 2018–2019

RRHs	score	RRHs	score	RRHs	score	RRHs	score
Amana RRH	54	Iringa RRH	79	Mbeya RRH	73	Singida RRH	74
Manyara RRH	70	Njombe RRH	66	Morogoro RRH	78	Sokoine RRH	75
Bariadi RRH	69	Kitete RRH	42	Mpanda RRH	78	Songea RRH	67
Tanga RRH	56	Ligula RRH	78	Mt. Meru RRH	59	Songwe RRH	23
Bukoba RRH	92	Manyanamala RRH	100	Musoma RRH	70	Sumbawanga RRH	98
Dodoma RRH	70	Maweni RRH	61	Sekou-Toure RRH	68	Temeke RRH	75
Geita RRH	66	Mawenzi RRH	61	Shinyanga RRH	71	Tumbi RRH	96



Range	Above 80	79-70	69-60	59-50	49-40	39-30	29-20	below 19
	14.30%	42.90%	25.90%	10.70%	3.60%	0.00%	3.60%	0.0%

Figure 2-8: Distribution of CHOP 2018–2019 assessment results

The assessment score of CHOP 2018-2019 was slightly declined comparing with the score of CHOP 2017-2018. One of the main reasons is shortage of knowledgeable and skillful members of RRHMT in many RRHs due to staff transfer of RRHMT members.

2.4.3.4. QPR 2018–2019 Assessment

The necessity of developing quality QPRs submitted on time was accepted as part of the routine work of RRHMTs in the second year. The average number of RRHs that submitted QPRs on time increased to 26 (93%) from 19 (68%) in the previous fiscal year. The average score of the QPR assessment also increased from 60.2 in 2017–18 to 63.9 in 2018–19 (see Table 2-8). On the other hand, the QPR assessors were also becoming more familiar with the reports, and the assessment

of the reports was being implemented properly, such as utilizing previous QPRs to monitor the progress of activities and financial status.

Table 2-8: State of the QPR 2018–2019

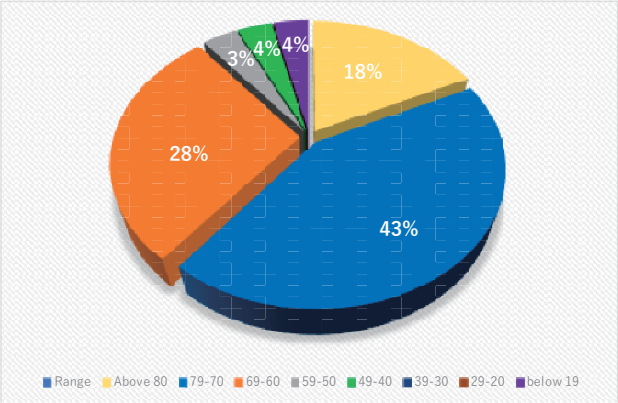
Fiscal 2018-2019	Period of QPR assessment	# of RRHs with on-time submission	# of RRHs with delayed submission	Average score of assessment
Quarter 1	Nov. 19 - Nov. 27, 2018	26	2	67.5%
Quarter 2	Jan. 28 - Feb. 01, 2019	26	2	58.0%
Quarter 3	Apr. 29 - May 03, 2019	26	2	65.8%
Quarter 4	Jul. 22 - Jul. 26, 2019	25	3	64.4%
Annual average		**93%**	**7%**	**63.9%**

2.4.3.5. CHOP 2019–2020 Assessment

Twenty-four of 28 RRHMTs (85%) submitted CHOP before the submission deadline of March 31. The assessment of CHOP 2019–2020 was conducted from April 8–17, 2019 at the Amabilis Centre, Morogoro. Twelve assessors assessed CHOP 2019–2020, submitted from 28 RRHs. The assessment criteria were well defined before the assessment and agreed upon by the assessors. A standardized assessment tool was used to assess the CHOP and all CHOP was qualified in the first assessment. The scores of the CHOP assessment are shown in Table 2-9. After completion of the assessment, results were reported back to the RRHMTs and CHOP was endorsed by the RAS.

Table 2-9: Assessment scores of CHOP 2019–2020

RRHs	score	RRHs	score	RRHs	score	RRHs	score
Amana RRH	85	Iringa RRH	66	Mbeya RRH	79	Singida RRH	79
Manyara RRH	81	Njombe RRH	57	Morogoro RRH	80	Sokoine RRH	76
Bariadi RRH	68	Kitete RRH	45	Mpanda RRH	66	Songea RRH	77
Tanga RRH	75	Ligula RRH	86	Mt. Meru RRH	64	Songwe RRH	71
Bukoba RRH	69	Manyanamala RRH	75	Musoma RRH	76	Sumbawanga RRH	75
Dodoma RRH	61	Maweni RRH	78	Sekou-Toure RRH	81	Temeke RRH	74
Geita RRH	68	Mawenzi RRH	74	Shinyanga RRH	68	Tumbi RRH	73



Range	Above 80	79-70	69-60	59-50	49-40	39-30	29-20	below 19
	17.90%	42.90%	28.60%	3.60%	3.60%	0%	0%	3.60%

Figure 2-9: Distribution of CHOP 2019 20 assessment results

The highest score was 86% (Ligula RRH) and the lowest score was 45% (Kitete RRH). The range of scores was 41. The average score was 72.4%. Ten RRHs (35.7%) scored below 70% and their CHOPs were not recommended; namely, Bariadi, Bukoba, Dodoma, Geita, Iringa, Katavi, Kitete, Mt. Meru, Njombe, and Shinyanga RRHs. Among the assessed items, "Time of Submission" scored highest (89%), and "General Outlay" scored lowest (53%). Nearly all RRHs submitted their CHOP in/on time, however, it may be inferred that most RRHs still lag behind on the importance of quality hospital operational plans with standardized formats.

2.4.3.6. QPR 2019–2020 Assessment

The latest rates of RRHs submitting QPRs on time was 89.3% (25 RRHs). As for QPR Q3, the reason behind of delay was internet-network failure and miscommunication among RRHMT members in development process etc. Finally, since the average assessment score of QPR Q3 is 79.4% which is the highest score in QPR 2019-2020, it can be concluded that the quality of the report has been improved.

Table 2-10: State of QPR 2019–2020

Fiscal 2018-2019	**Period of QPR assessment**	**# of RRHs with on-time submission**	**# of RRHs with delayed submission**	**Average score of assessment**
Quarter 1	Oct. 28 - Nov. 01, 2019	25	3	70.9%
Quarter 2	Jan. 27 - 31, 2020	27	1	75.5%
Quarter 3	Apr. 14 - 18, 2020	25	3	79.4%
Annual average		**-**	**-**	**75.3%**

2.4.3.7. Overall QPR Assessment

The quality of the 2019-2020 QPRs has improved compared to 2017–2018 QPRs as shown in Figure 2-10 below. However, since the number of RRHs obtained more than 70% of the assessment score was 22 RRHs (78.5%) in QPR 2019-2020 Q3, one of the targets for Output 3: "More than 80% of RRHs obtains more than 70% of the average of 4 QPR scores" was not achieved.

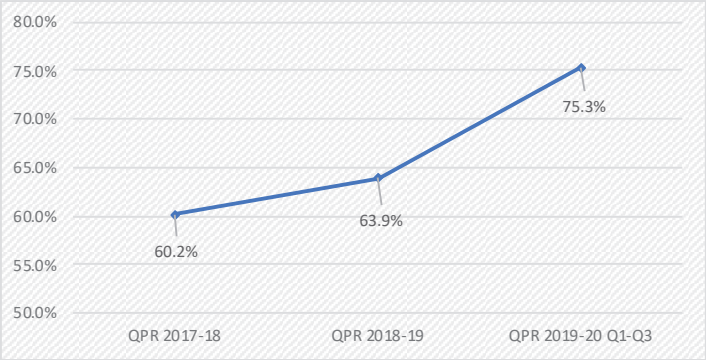


Figure 2-10: Changes in QPR average assessment scores

Through all the QPR assessments, the following challenges in development and assessment of QPR were observed.

Challenges faced by RRHs in the development of QPRs:

- Data for KPIs was not collected and compiled regularly.
- Quality of data submitted was not reliable, including the results of ISS and self M&E of 5S-KAIZEN activities.
- The number of RRHs that attached the results of the self M&E of 5S-KAIZEN activities was not always 100%, for example, 4 RRHs did not report it in the QPR for the first quarter of 2019, and 7 RRHs did not reported it in the second quarter of 2019, and 6 RRHs did not report it in the QPR for the third quarter of 2019.

Challenges faced by the MoHCDGEC in the assessment of QPRs:

- The assessors tended to focus on only scoring rather than checking the quality of data submitted and the linkage between the data submitted and CHOP.
- Checking the implementation progress of CHOP and identifying challenges in planning and reporting of each RRH were not properly done during the assessment activities.

2.4.3.8. CHOP 2020–2021 Assessment and Assessment Training for Assessors

Since it is observed that assessment skill of assessors for CHOP was not sufficient, skill building training for 20 assessors from MoHCDGEC was conducted before starting CHOP 2020-2021 assessment, from March 19-21, 2020 at the Amabilis Centre, Morogoro. The training program was structured based on the CHOP guideline. During the training, importance of CHOP in RRH hospital management and purpose were clarified, and also assessment criteria and standardized assessment tools for CHOP and assessment methodologies and process were introduced.

After the training, CHOP 2020-2021 Assessment was conducted from March 22-30, 2020. Nineteen of RRHMTs out of 28 RRHMTs (67.8%) submitted CHOP before the submission deadline of March 20, 2020.

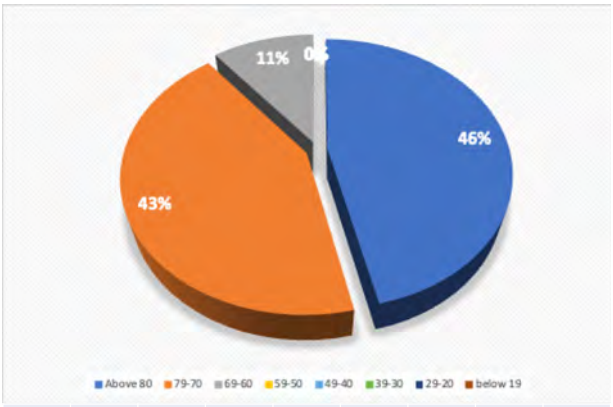
As a result of the assessment, the followings were revealed:

- The highest score was 96% (Kitete RRH) and the lowest score was 65% (Njombe RRH).
- The average score of all 28 RRHs was 78.5%. Three RRHs (10.7%) scored below 70%; namely, Katavi, Songwe and Njombe RRHs.

See Table 2-11 and Figure 2-11 for score result of each RRH and hospital distribution by score range.

Table 2-11: Assessment scores of CHOP 2020-2021

RRHs	score	RRHs	score	RRHs	score	RRHs	score
Amana RRH	88	Iringa RRH	81	Mbeya RRH	76	Singida RRH	84
Manyara RRH	80	Njombe RRH	65	Morogoro RRH	80	Sokoine RRH	79
Bariadi RRH	76	Kitete RRH	96	Mpanda RRH	69	Songea RRH	71
Tanga RRH	75	Ligula RRH	85	Mt. Meru RRH	84	Songwe RRH	69
Bukoba RRH	80	Mwananyamala RRH	79	Musoma RRH	84	Sumbawanga RRH	86
Dodoma RRH	70	Maweni RRH	74	Sekou-Toure RRH	72	Temeke RRH	90
Geita RRH	71	Mawenzi RRH	73	Shinyanga RRH	83	Tumbi RRH	78



Range	Above 80	79-70	69-60	59-50	49-40	39-30	29-20	below 19
	46%	43%	11%	0%	0%	0%	0%	0%

Figure 2-11: Distribution of CHOP 2020-2021 assessment results

2.4.3.9. Policy and Budget Meetings

The project members attended a policy and budget meeting which the MoHCDGEC held from January 8-11, 2020 in Dodoma. The participants of the meeting were the Director of the Department of Policy and Planning (DPP), the Director of the Department of Curative Service (DCS), and the regional referral hospital unit of DCS. Also, the Medical Officer In-Charge and Health Secretaries from each of the 28 RRHs participated in the meeting.

The aim of meeting was to disseminate a new health policy to be enforced in fiscal year 2020–2021 and to share the Health Sector Strategic Plan V. During the meeting, all RRHMTs were encouraged to develop CHOP 2020–2021 for the next fiscal year to abide by the national health policy and strategy.

2.4.4. Human Resource for Health (HRH) Management and HRH Information System (HRHIS)

2.4.4.1. Preparation of the Dissemination of HRHIS to RRHs

This work was outsourced to the Department of Computer Science, University of Dar es Salaam. Agreement on the consultation work was signed on between Fujita Planning Co., Ltd. and the Department of Computer Science, University of Dar es Salaam. The following assignments were given to the local consultant:

- HRHIS software improvements and server maintenance includes the HRH inventory feature and ensures it is running for training.

- To review and improve the training materials for HRHIS operation and HRH planning, management, and development.
- To conduct the training on HRHIS operation and HRH planning, management, and development for members of the RRHMTs from 28 RRHs.
- To develop the training reports.
- To conduct on-site supportive supervision according to an agreed upon schedule.
- To provide technical support for HRHIS operations to RRHMTs through online, phone, and emails
- To develop and submit a comprehensive report on the training and supervision.

The implementation of the activities was well planned and divided into three phases that paralleled the execution of some activities.

2.4.4.2. HRHIS Operation and HRH Management Training

Training for HRHIS operations and HR information produced from the HRHIS for proper HRH management was conducted for RRHMTs.

Table 2-12: Outline of HRHIS operations and HRH management training

Training venue	Period	Invited RRHs	Participants
Arusha	October 09 - 13, 2017	Dodoma, Singida, Tanga, Mawenzi, Manyara, Mt. Meru	12
Mwanza	October 23 –-27, 2017	Bariadi, Kitete, Musoma, Maweni, Shinyanga, Kagera, Geita	14
Mbeya	November 13 -17, 2017	Njombe, Mpanda, Iringa, Mbeya, Sumbawanga, Songea, Songwe	15
Dar es Salaam	November 20 – 24, 2017	Amana,Temeke, Mwananyamala, Sokoine, Ligula, Morogoro, Tumbi	13

The objectives of the training were:

- To build the capacity of HRH Managers and Information and Communication Officers from RRHs on HR planning, management, and development.

- To introduce the participants to an overview of the HRHIS that will be used in RRHs as a major tool in HR planning.
- To build the participants' practical skills in using HRHIS.
- To build capacity of the participants to identify key problems and challenges in HR management and identify possible solutions.

Pre- and post-assessments were conducted to measure the effectiveness of the training and to calculate the effect of size on each training session based on the results of pre- and post-assessments. The results of the assessments are shown on Figure 2-12 and Table 2-13 below. Training in Dar es Salaam shows middle effect size (Δ=0.69) and other training sessions show large effect size (Δ= over 1.20). Based on the effect size (Δ), it can be concluded that the training effectively provided knowledge on how to operate the HRHIS and how to utilize information from the HRHIS for effective HRH management at the RRH level.

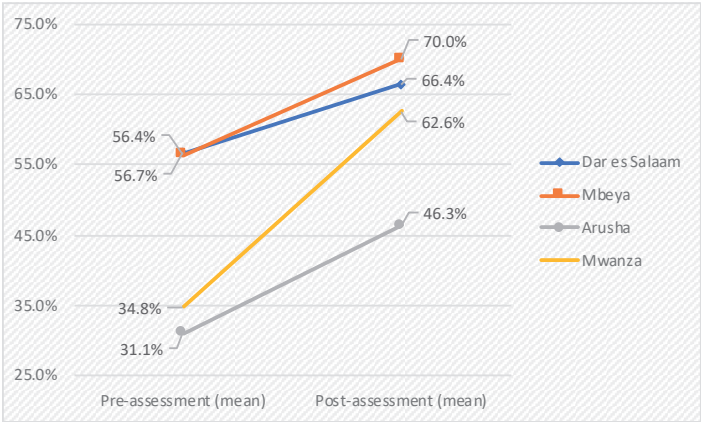


Figure 2-12: Improvement of knowledge about HRHIS and HRM

Table 2-13: Pre- and post-assessment results (average)

Training venue	Pre-assessment (mean)	Post assessment (mean)	Effect size Δ	
Dar es Salaam	56.7	66.4	0.69	middle size
Mbeya	56.4	70.0	1.21	large size
Arusha	31.1	46.3	1.46	large size
Mwanza	34.8	62.6	1.41	large size

If Δis higher than 0.50, it has meaning (Koizumi & Katagiri, 2007) |.20|≦small<|.50|, |.50|<medium<|.80|, |.80|≦large
Koizumi, R., & Katagiri, K. (2007). Changes in speaking performance of Japanese high school students: The case of an English course at a SELHi. ARELE, 18, p.81-90

Note that the comprehensive training report was submitted separately by UDSM in January 2018. The report was already submitted to JICA headquarters and the JICA Tanzania field office in January 2018.

2.4.4.3. Supportive Supervision of HRHIS

The following supportive supervision of the HRHIS was conducted for 28 RRHs:

- The first round of supervision was conducted in 2018 to ensure efficient utilization of the HRHIS, control of the technical quality, and improvements to the online accessibility to the HRHIS national server. The report for the first round was sent to JICA for sharing and also to MoHCDGEC and RRHs for self-evaluation and action-taking.
- The second round of supervision was conducted in 2019 and completed in June 2019 to check whether the improvements have been made, by comparing the performance of the same items that were assessed in the first round with the results of the second-round supervision. This would become helpful for advising the MoHCDGEC accordingly.

An overview of key strong points, weaknesses, and suggestions are as follows:

(1) Overview of key strong points

- Most hospitals have the necessary Information and Communication Technology (ICT) equipment and reliable source of electric power.
- Many hospitals (57%) have an ICT room, with suitable office furniture and cabinets/shelves for proper file storage.
- Some of the hospitals have installed Closed Circuit Television (CCTV) cameras in some service areas that allow the Medical Officer In-Charge to monitor how services are provided to clients at the office.
- Most of the hospitals have an ICT officer hired under contract or on a permanent basis. Most of the better performing hospitals have these ICT officers trained on the HRHIS and dedicated to assist in HRHIS data updates and maintain ICT equipment for the hospital.
- Hospital Secretaries, Health Records Technicians, and ICT officers are key personnel dedicated to the regular operation of the HRHIS.

- A significant number of hospitals, especially those with necessary ICT infrastructures, a trained ICT officer, and a standard operation plan (SOP) in place, have a good percentage of HRH data completeness and have entered and updated HRH data timely.
- RRHs with high levels of HRHIS data completeness show adequate updates of HR information and HRHIS data used for preparation of a training plan, Personnel Expenses (PE) budgeting, and CHOP.

(2) Overview of key weak points

- A significant number of hospitals do not allocate enough space for ICT and cabinets/shelves for proper file storage.
- The ICT Officer in a significant number of hospitals was not trained on the HRHIS.
- Most of the hospitals did not have SOPs for HRHIS operations.
- For RRHs with poor performance in HRHIS data completeness, the HRHIS data was not used for HRH planning, management, and development.
- Most hospitals had no succession plan in place.
- In some cases, electronic patient record systems for patient services was installed in registration and pharmacy departments only and not linked with laboratory systems.

(3) Overview of key suggestions

For RRHs:

- Make key personnel from the RRHMTs aware of the need to use HRH data for planning and decision making. This shall include orientation of the HRHIS for heads of sections and program coordinators to familiarize them with the HRHIS and capacitate them to generate reports for HRH planning and management.
- Provide the Medical Officer In-Charge and matron/patron[1] with log-in accounts for the HRHIS.
- The HRHIS should be able to monitor any HRH updates made from time to time
- Hiring ICT Officers and/or building capacity of ICT officers at RRHs to give technical assistance to users whenever challenges of accessing the HRHIS arise.
- Developing SOPs and distributing to key HRHIS users to help them manage HRH data by themselves.

[1] In Tanzania, the title of head nurse in a hospital is called matron (female) of patron (male).

- Strategically working collaboratively with members of the RRHMTs to generate recruitment, CHOP, and training plans by using HRHIS data.
- Having an HRHIS data agenda item in periodic review meetings to push for data entry, updates, and use.

For the MoHCDGEC:

- Having an HRHIS focal person at a national level to regularly oversee HRHIS use at lower levels.
- HRHIS shall be improved and regularly maintained to undertake data capture and dashboard reports as per current demand.
- Equipping/improving the hospitals with necessary ICT infrastructure for efficient management of HRH data and improving healthcare service provision. This includes buying, installing, and maintaining more computers, along with the local area network and the internet.
- Conducting periodic data quality assessments based on selected key HRH indicators.
- Conducting internal training for RRHMTs to have more personnel assisting with HRH data entry/updates and managing HRH reports.

2.5. Activities related to Output 3

2.5.1. Review Workshop of the Tools for ISS and EHPA

A review workshop of the guidelines and tools for ISS and EHPA was conducted from January 23–27, 2017 at the Amabilis Centre in Morogoro. Fifteen participants from the MoHCDGEC, PO-LARG, RHMT, and RRHMT participated. The contents of the guidelines and tools (checklists and calculation software) were reviewed and aligned for practical use.

2.5.2. ISS Training for RRHs

ISS training was conducted from February 13–16, 2017 at Usambara Lodge, Morogoro. Eighty-two participants from all 28 RRHs and 26 RHMTs participated in the training. Eight facilitators were selected from the members engaged in the development of the ISS/EHPA guidelines, and three observers from PO-RLAG were invited.

The purposes of the training were to build capacity of the participants to conduct ISS properly according to ISS/EHPA guidelines and to make the participants understand the PDCA

(Plan-Do-Check-Act) management cycle of hospital management by describing the relationship among CHOP, ISS, and EHPA.

Since the number of participants exceeded what was planned (originally, RHMTs were not targets of the training), the cost of the training increased. However, involving RHMTs in the training was beneficial for enhancing sustainability of ISS because the progress of ISS will be supervised through "Regional Management Supportive Supervision-Hospital (RMSS-H)" by the RHMTs and consultation visits from the MoHCDGEC and PO-RALG.

2.5.3. Pilot Testing of EHPA

The EHPA tool was piloted at Mawenzi RRH from February 20–24, 2017. The purposes of the pilot test were to identify any points to be modified in the guidelines and tools, to confirm implementation of EHPA practically, and to collect EHPA baseline data for the hospitals. EHPA assessment teams for the pilot testing were composed of two officers, who were in-charge of "Star-Rating" from the Department of Health Quality Assurance of the MoHCDGEC, four officers from Kilimanjaro RHMT, one officer from PO-RALG, and two staff from the project.

After the pilot testing, EHPA tools, including the checklist and its annex, calculation software, and timetable, were modified in April 2017 by reflecting on the findings from the pilot test. Moreover, contents of the EHPA and timetable for those activities were identified as follows:

- Two days for training RHMT officers on EHPA
- Two days for EHPA assessment including providing technical assistance for further improvement
- Half day for feedback session

Additionally, a training program for EHPA assessors and an implementation plan for EHPA 2017 were discussed and agreed upon as follows:

(1) Facilitator training of EHPA will be conducted for EHPA assessors in the Lindi and Mtwara regions.
(2) Assessment teams will be composed of trained facilitators and RHMT members from the region, respectively.
(3) Assessment teams will train the members of the RHMT in each region.
(4) The trained members of the RHMT will participate in the EHPA.

2.5.4. Activities related to EHPA 2017 (Baseline Data Collection) for all RRHs

2.5.4.1. EHPA Facilitator Training and EHPA 2017 in the Mtwara and Lindi Regions

The EHPA facilitator training and baseline of EHPA 2017 were conducted from June 19–24, 2017 in the Ligula and Sokoine RRHs. Twenty people from PO-RALG, DPP, DCS, and the Department of Health Quality Assurance (DHQA) participated in the training. Additionally, RHMT members from Mtwara and Lindi were invited to the training. The purpose of the training was to train the participants as EHPA facilitators. During the training, EHPA 2017 was conducted at Ligula RRH and Sokoine RRH.

2.5.4.2. EHPA Training for RHMT and EHPA 2017 for RRHs

After the completion of the EHPA facilitator training in the Mtwara and Lindi regions, the schedule for EHPA 2017 for the rest of the 26 RRHs was set. Two teams (Team A and B) were formulated by trained EHPA assessors, and each team spent five days per region; the first two days for conducting EHPA training for the RHMT in the region, and the latter three days for collecting EHPA baseline data with the trained members of the RHMT and conducting feedback sessions. Additionally, a third group (Team C) was formulated for the RHMT of the Dar es Salam region and three RRHs in the region. See Table 2-14 for the summary of the EHPA training for RHMTs and EHPA 2017.

For sharing findings observed during the EHPA 2017 and recommendations made by the EHPA team, the RRHMT and QIT were mainly invited to the feedback session at each RRH. Moreover, the EHPA tool was well recognized by RRHMTs and RHMTs as a tool for proper assessment of the RRHs' performance through EHPA 2017.

2.5.4.3. Data Compilation and Analysis of EHPA 2017

After collection and compilation of EHPA baseline data from 28 RRHs, data and information were analyzed by the EHPA assessors during the workshop held in Bagamoyo. After the analysis of the results, an EHPA 2017 comprehensive report was developed. The average EHPA 2017 scores per RRH are shown in Table 2-15.

Table 2-14: Summary of the EHPA Training for RHMTs and EHPA 2017

<table>
<tr><td>Period of the event</td><td>Standard: 5 days for one region
<table>
<tr><th>Date</th><th>Team A</th><th>Team B</th></tr>
<tr><td>Jul. 3 - 7</td><td>Katavi RHMT
(Mpanda RRH)</td><td>Ruvuma RHMT
(Songea RRH)</td></tr>
<tr><td>Jul. 10 - 14</td><td>Rukwa RHMT
(Sumbawanga RRH)</td><td>Njombe RHMT
(Njombe RRH)</td></tr>
<tr><td>Jul. 17 - 21</td><td>Songwe RHMT
(Songwe RRH)</td><td>Iringa RHMT
(Iringa RRH)</td></tr>
<tr><td>Jul. 24 - 28</td><td>Mbeya RHMT
(Mbeya RRH)</td><td>Morogoro RHMT
(Morogoro RRH)</td></tr>
<tr><td>Aug. 7 - 11</td><td>Kagera RHMT
(Bukoba RRH)</td><td>Mwanza RHMT
(Sekou-Toure RRH)</td></tr>
<tr><td>Aug. 14 - 18</td><td>Geita RHMT
(Geita RRH)</td><td>Mara RHMT
(Musoma RRH)</td></tr>
<tr><td>Aug. 21 - 25</td><td>Shinyanga RHMT
(Shinyanga RRH)</td><td>Simiyu RHMT
(Bariadi RRH)</td></tr>
<tr><td>Sep. 4 - 8</td><td>Kigoma RHMT
(Maweni RRH)</td><td>Dodoma RHMT
(Dodoma RRH)</td></tr>
<tr><td>Sep. 11 - 15</td><td>Tabora RHMT
(Kitete RRH)</td><td>Singida RHMT
(Singida RRH)</td></tr>
<tr><td>Sep. 25 - 29</td><td>Arusha RHMT
(Mt. Meru RRH)</td><td>Tanga RHMT
(Tanga RRH)</td></tr>
<tr><td>Oct. 2 - 6</td><td>Manyara RHMT
(Manyara RRH)</td><td>Pwani RHMT
(Tumbi RRH)</td></tr>
</table>
<table>
<tr><th>Date</th><th>Team C</th></tr>
<tr><td>Jul. 13, 14, 19 - 21</td><td>Dar es Salaam RHMT
(Amana RRH, Temeke, RRH, Mwananyamala RRH)</td></tr>
</table>
</td></tr>
<tr><td>Venue</td><td>Conference room of each RHMT office</td></tr>
<tr><td>Number of participants</td><td>6 participants from each RHMT for the first 2 days (Orientation on the Tool)</td></tr>
<tr><td>Facilitator teams</td><td>Two teams (4 members per team) composed of the members from DPP, DCS. DHQA, PO-RALG and the project</td></tr>
<tr><td>Purpose of the training</td><td>• To introduce EHPA/ISS guidelines to RHMT
• To conduct EHPA by RHMT
• To collect EHPA baseline data of respective RRH
• To identify strengths and weaknesses in hospital performance</td></tr>
<tr><td>Schedule and main contents</td><td>• Day 1 and 2: Orientation/ Training to RHMT on EHPA Guide and Tools
• Day 3 and 4: EHPA at target RRH by RHMT supported by the facilitators
• Day 5: Feedback session of EHPA</td></tr>
</table>

Table 2-15: Average EHPA scores of 28 RRHs in 2017

SQ#	RRH	Average score	SQ#	RRH	Average score
1	Sekou-Toure	85.3%	15	Songea	65.7%
2	Mwananyamala	81.7%	16	Sumbawanga	64.3%
3	Amana	79.8%	17	Tumbi	64.0%
4	Mt. Meru	76.3%	18	Tanga	63.5%
5	Bukoba	73.2%	19	Mpanda	62.1%
6	Manyara	72.4%	20	Ligula	61.9%
7	Iringa	72.0%	21	Singida	60.1%
8	Mawenzi	69.4%	22	Njombe	59.0%
9	Dodoma	69.3%	23	Geita	58.9%
10	Morogoro	69.0%	24	Songwe	58.1%
11	Sokoine	68.9%	25	Musoma	54.0%
12	Shinyanga	68.1%	26	Kitete	49.9%
13	Mbeya	67.5%	27	Bariadi	48.1%
14	Temeke	66.9%	28	Maweni	47.3%
			National average		**65.6%**
			Standard deviation		**9.4%**

The findings from the EHPA baseline were as follows:

- Remarkable improvement in revenue with 13 RRHs reporting increased revenue collection.
- No standardized organogram for RRHs; departments and sections providing services differ across hospitals.
- Bed capacity differed from hospital to hospital.
- The necessity to establish facilities for the provision of proper and safer services, such as a Central Sterilization Services department (CSSD), Medical Engineering department, etc., was not well understood by the RRHMTs.
- The importance of evidence-based planning and decision making was not well understood by the RRHMTs.
- The results of baseline assessments indicated that strengthening the function of the RRHMT is essential for improving hospital performance because the identified gaps were caused by improper management of services and inadequate supportive supervision by both RRHMTs and RHMTs.
- Staff performance for handling emergency and referral cases had a very strong positive relationship with hospital management. Moreover, a strong positive relationship was also found with Infection Prevention and Control (IPC) and Safety and Risk management.

- Strengthening of clinical support areas will enhance the IPC and Safety and Risk management.

Information and data collected during EHPA 2017 from all RRHs was compiled and analyzed by the EHPA assessors. Then, a baseline survey report on EHPA was published and shared with the MoHCDGEC officials and RRHs.

2.5.4.4. Dissemination of EHPA Baseline Survey Findings to RRH Managers

The dissemination of EHPA results to the RRHMTs was done before each RRHMT prepared the CHOP for the next fiscal year by conducting three-day dissemination meetings with the RRHMTs in three regions as shown in Table 2-16.

Table 2-16: Series of dissemination meetings for EHPA 2017 results

#	Venue	Period of conducting the event	# of Participants
1	Morogoro	January 29 - 31, 2018	39 participants from 13 RRHs
2	Mbeya	February 19 - 21, 2018	21 participants from 7 RRHs
3	Mwanza	March 07 - 09, 2018	24 participants from 8 RRHs

The Medical Officer In-Charge, the Matron/Patron, and the Hospital Secretary were invited to the meeting as the key members in the RRHMTs. On Day 1, the EHPA results were presented to the RRHMTs. On Day 2, the situation and issues of HAB establishment and functionality, CHOP and QPR preparation and assessment, and HRH management were presented and discussed. Then, each RRHMT was asked to identify corrective actions to overcome these issues, and reflect on how the actions could be incorporated into their own CHOP for 2018–2019.

2.5.4.5. Finalization of ISS/EHPA Guidelines and Tools

After the EHPA baseline survey, the finalization workshop for ISS/EHPA guidelines and tools was conducted from October 9–13, 2017 in Bagamoyo. Ten participants were selected from the EHPA assessors of the baseline survey. The main purposes of the workshop were to amend the EHPA checklist as a more practical tool and to align the annexes of ISS/EHPA guidelines with current standards utilized in the health sector in Tanzania, such as SOPs for several hospitals, IPC guidelines, etc. Additionally, other logistical issues of EHPA implementation were discussed. One of the key issues was the frequency of EHPA implementation. Originally, the draft guidelines suggested that EHPA be conducted annually. During the workshop, some participants recommended that EHPA should be conducted twice a year, and it was agreed upon by all

participants; however, due to the budget constraints of the MoHCDGEC, EHPA has been conducted once a year in the project period.

Moreover, after "Integration workshop of the 5S-KAIZEN-TQM approach and ISS/EHPA" (see 2.4.4.), essential items for monitoring the 5S-KAIZEN activities at RRHs were added as tools for ISS and EHPA. Finally, ISS/EHPA guidelines were endorsed by the management of the MoHCDGEC and printed in March 2018.

2.5.5. Integration of 5S-KAIZEN into EHPA Tools

2.5.5.1. RHMT Training on 5S-KAIZEN M&E

(1) Material development workshop of 5S-KAIZEN-TQM M&E training for RRHs

A workshop was conducted to develop training materials for 5S-KAIZEN-TQM M&E for RHMTs from February 20–22, 2017 at CEEMI, Dar es Salaam. Seven people were selected from the MoHCDGEC, PO-RALG, Muhimbili National Hospital, and Singida RRH. During the workshop, presentation materials and teaching notes for each slide of each topic were developed.

(2) Workshop of 5S-KAIZEN-TQM M&E training for RRHs

5S-KAIZEN monitoring and evaluation training for RHMTs was conducted from June 6–9, 2017 in Dar es Salaam. Seventy-five participants from 25 RHMTs, except for Kilimanjaro RHMT, attended the training. During the training, the following were emphasized:

- The importance of promoting the 5S-KAIZEN-TQM approach in existing mechanisms at the regional level.
- How to assist RRHs in improving the quality of healthcare services by using the 5S-KAIZEN-TQM approach.

2.5.5.2. Integration Workshop of the 5S-KAIZEN-TQM Approach in EHPA

The workshop was held at CEEMI, Dar es Salaam for three days from November 8– 10, 2017 with ten participants from the MoHCDGEC, PO-RALG, 5S-KAIZEN national facilitators, and RHMTs. The purpose of this workshop was to add EHPA tools to monitor the progress of 5S-KAIZEN implementation activities. In the workshop, group work was carried out, and each group considered how the 5S-KAIZEN-TQM approach can further emphasize EHPA tools.

Additionally, the participants reviewed whether M&E tools for monitoring 5S-KAIZEN activity, especially the contents of the QIT function, can be integrated into the current RMSS-H.

2.5.6. Activities related to EHPA 2018

2.5.6.1. EHPA Facilitator Training in Singida

Since the overseer of the RRH has been transferred from the PO-RALG to the MoHCDGEC, the implementation of EHPAs has also been transferred from the RHMT to the MoHCDGEC. Therefore, the project needed to conduct EHPA facilitator training for the MoHCDGEC before conducting EHPA 2018. To enhance the quality of monitoring and assessment activities for the 5S-KAIZEN-TQM approach in the EHPAs, the 5S-KAIZEN national facilitators were also involved in EHPA activities at this time.

The training was held for five days from July 2–6, 2018 at the Diocese of Singida Social Training Centre, Singida. Twelve participants from the MoHCDGEC, 5S-KAIZEN national facilitator, and RHMTs in Singida were trained. The participants learned the implementation process for EHPAs, the contents of the EHPA checklist, how to compile the results, and how to give feedback to a hospital. Moreover, in order to equip the participants with practical skills for EHPAs, the participants experienced actual implementation of an EHPA at Singida RRH after the first two days.

2.5.6.2. Training on PDCA for RRH Management and EHPA for RHMTs

Training of RRH management for RRHs and EHPA for RHMTs was conducted in July 2018. This training was conducted for all RHMTs divided into two groups; the first training was conducted in Singida and the second was conducted in Morogoro. Even though the administration of the RRHs is going to be transferred from the PO-RALG to the MoHCDGEC, the training was conducted because RHMTs still need to supervise RRHs. An outline of the training is shown in Table 2-17.

Table 2-17: Outline of Training on PDCA for RRH Management and EHPA for RHMTs

Date and place	5 days from July 9–13, 2018 at Singida	5 days from July 16–20, 2018 at Morogoro
Participants	43 participants; three from each of the 14 RHMTs	36 participants; three from each of the 12 RHMTs
Purpose	The purpose of the training was to: • Re-orient RHMTs on the functions of RHMTs. • Capacitate RHMTs on the use of CHOP planning and reporting guidelines. • Strengthen the RHMTs' understanding of assessment and reporting criteria for CHOP. • Strengthen the understanding on how to support 5S-KAIZEN activities at RRHs. • Reinforce the capacity of RHMTs in conducting EHPA.	

2.5.7. Activities related to EHPA 2018

2.5.7.1. EHPA 2018

EHPA 2018 started in July 30, 2018. The assessment team spent three days assessing each RRH and completed the assessments of 28 RRHs by the first week of September 2018. Due to the transition of the RRHs from the PO-RALG to the MoHCDGEC, it became difficult to secure assessors and observers from the RHMT and PO-RALG. Therefore, three assessment teams were formulated mainly of staff from the DPP and DCS of the MoHCDGEC and 5S-KAIZEN national facilitators. To ensure the quality of EHPA assessors, the project staff including Japanese experts, MoHCDGEC officials, medical administration staff, and medical staff were allocated equally to three teams as shown in Table 2-18.

Table 2-18: List of assessors and teams

Specialties	**Team A**	**Team B**	**Team C**
Doctor	1 from DCS	1 from Singida RHMT (5S-KAIZEN National Facilitator)	1 from DCS
Administrator	1 from RRHMP (Technical Assistant)	1 from DPP	1 from Pharmaceutical Service Unit, MoHCDGEC
Nurse	1 from Mbeya Zonal Referral Hospital (5S-KAIZEN National Facilitator)	1 from Muhimbili National Hospital (5S-KAIZEN National Facilitator)	1 from Singida RHMT
Other	1 from DCS	1 from RRHMP (Japanese expert)	1 from RRHMP (Technical Assistant)

On the site in each region, for strengthening the sustainability of EHPA, the project requested each RHMT to assign one officer to participate in the implementation of the EHPA and a feedback session. The schedule for EHPA 2018 is described in Table 2-19.

Table 2-19: EHPA schedule of each team

Weeks	Team A	Team B	Team C
1st week	Mpanda RRH Sumbawanga RRH	Tanga RRH Mawenzi RRH	Bukoba RRH
2nd week	Songwe RRH	Mt. Meru RRH	Geita RRH Sekou-Toure RRH
3rd week	Mbeya RRH	Manyara RRH Dodoma RRH	Musoma RRH Bariadi RRH
4th week	Songea RRH Njombe RRH	Tumbi RRH	Shinyanga RRH
5th week	Iringa RRH Morogoro RRH	Ligula RRH Sokoine RRH	Kitete RRH Maweni RRH
6th week	Temeke RRH	Mwananyamala RRH	Amana RRH

2.5.7.2. EHPA Data Compilation and Analysis

To analyze the results of EHPA 2018 and summarize them in a report, a workshop was held at Amabilis Centre in Morogoro from September 10–14, 2018. Seven assessors participated in the workshop. The EHPA reports needed to be submitted before the commencement of CHOP development in the next fiscal year. Since the average assessment scores had risen and the variance was decreasing, the overall performances of RRHs were improved. A summary of analysis results of EHPA 2018 is as follows:

- Compared to last year's EHPA 2017, the overall average rose by about 8% from 65% to 73%.
- The average standard deviation decreased by 2.13 from 9.42 to 7.68.
- The average score of each area of the EHPA checklist increased compared to EHPA 2017; however, in Area 8 (Social Accountability), the presence or absence of a Regional Referral Hospital Advisory Board (RRHAB) greatly affected the score and the variance among RRHs was wide.
- Issues pointed out by the assessors during EHPA 2017 were well taken care of by RRHMTs and improvements were observed in EHPA 2018.

Table 2-20: Comparison of 2017/2018 performance by all RRHs (sorted by performance score rankings)

Ranking		Region	RRH	EHPA average score		Differences	
2017	2018			2017	2018	Score	Ranking
1	1	Mwanza	Sekou-Toure	85.26%	85.81%	0.54%	0
4	2	Arusha	Mt. Meru	76.33%	84.49%	8.17%	2
10	3	Morogoro	Morogoro	68.96%	83.51%	14.55%	7
3	4	Dar es salaam	Amana	79.78%	82.62%	2.84%	-1
7	5	Iringa	Iringa	72.00%	81.60%	9.60%	2
6	6	Manyara	Manyara	72.37%	81.11%	8.74%	0
13	7	Mbeya	Mbeya	67.55%	80.94%	13.39%	6
2	8	Dar es salaam	Mwananyamala	81.70%	80.26%	-1.44%	-6
9	9	Dodoma	Dodoma	69.29%	79.54%	10.25%	0
16	10	Rukwa	Sumbawanga	64.27%	77.99%	13.71%	6
15	11	Ruvuma	Songea	65.66%	76.62%	10.96%	4
14	12	Dar es salaam	Temeke	66.93%	75.86%	8.93%	2
11	13	Lindi	Sokoine	68.86%	72.88%	4.02%	-2
18	14	Katavi	Mpanda	62.15%	72.21%	10.07%	4
23	15	Songwe	Songwe	58.14%	71.84%	13.70%	8
21	16	Njombe	Njombe	59.01%	70.85%	11.84%	5
8	17	Kilimanjaro	Mawenzi	69.42%	70.31%	0.89%	-9
22	18	Geita	Geita	58.86%	69.18%	10.33%	4
17	19	Tanga	Tanga	63.47%	68.06%	4.58%	-2
5	20	Kagera	Bukoba	73.15%	67.88%	-5.27%	-15
24	21	Mara	Musoma	54.01%	67.06%	13.05%	3
12	22	Shinyanga	Shinyanga	68.13%	66.83%	-1.30%	-10
25	23	Pwani	Tumbi	51.17%	65.70%	14.52%	2
28	24	Kigoma	Maweni	47.35%	65.25%	17.90%	4
26	25	Tabora	Kitete	49.86%	63.13%	13.27%	1
20	26	Singida	Singida	60.10%	62.49%	2.38%	-6
27	27	Simiyu	Bariadi	48.12%	62.10%	13.99%	0
19	28	Mtwara	Ligula	61.86%	60.49%	-1.37%	-9

2.5.7.3. Dissemination of Results of EHPA 2018

The results of EHPA 2018 were disseminated during the Medical Officer In-Charge meeting, which was organized from October 29–31, 2018 in Dodoma. On the first day of the meeting, the results of EHPA 2018 and the latest situation of each hospital were shared with all RRHs. After that, each RRHMT was requested to review each hospital's report and discuss how to improve the situation. Based on the contents of the discussion, it was agreed that RRHMTs will review the action plan created during the EHPA feedback session and implement them. It was also agreed that it was necessary for the MoHCDGEC to frequently follow-up on the progress of the action plan.

2.5.7.4. EHPA 2018 Follow-up

According to the results of EHPA 2018, the project realized that some RRHs continuously show low performance in EHPA. Therefore, it was decided to conduct follow-up activities to help RRHMTs improve their performance and strengthen the specific hospital managerial areas. As the results of the discussion among EHPA facilitators, nine RRHs were identified as the targets of EHPA follow-up, namely, Bukoba, Bariadi, Musoma, Tanga, Ligula, Maweni, Shinyanga, Kitete, and Singida RRHs.

Follow-up visits to nine RRHs were conducted from March 11–19, 2019. During the follow-up visits, the facilitator team checked the implementation progress of each RRH's action plan that was developed by the RRHMT based on the findings identified in EHPA 2018. The following bar graph shows the action plan for the implementation level.

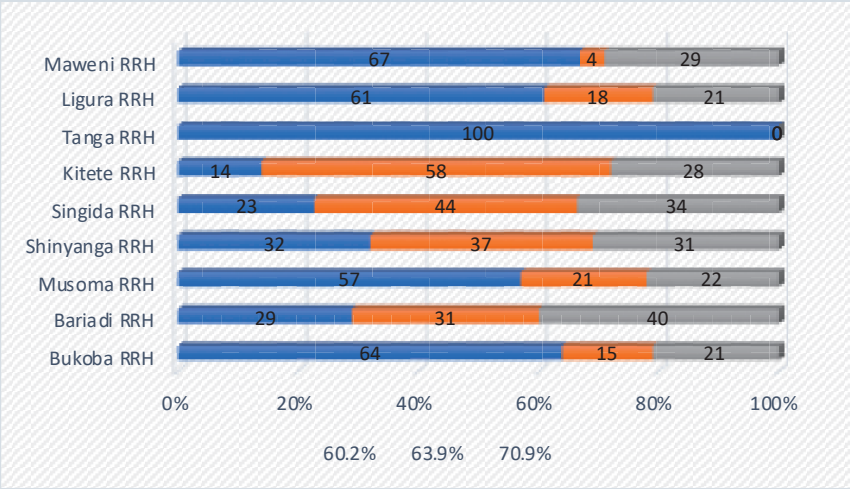


Figure 2-13: Implementation level of action plan by RRHs

2.5.8. Activities related to EHPA 2019

2.5.8.1. EHPA Facilitator Training 2019

EHPA facilitator training was conducted from July 30 to August 2, 2019 at NHIF conference hall in Dodoma RRH. Seventeen officials from the MoHCDGEC, the training institutions, and national hospitals participated in the training. The participants learned the structure of the EHPA checklist and how to conduct EHPAs and strengthened practical skills, including compiling the results and giving feedback through actual implementation of EHPA 2019 at Dodoma RRH.

2.5.8.2. EHPA 2019

As of July 2019, there are 25 trained assessors from the MoHCDGEC, RHMTs, national and zonal hospitals, and training institutions (CEDHA and PHCI Iringa) involved in the implementation process of EHPA. Among those assessors, 12 were selected for EHPA 2019; nine of those 12 assessors had participated in EHPA 2018. An assessor's expertise was considered when formulating comprehensive EHPA teams, such as administrator, doctor, and nurse, as well as experiences with the 5S-KAIZEN-TQM approach (see Table 2-21 for the detailed members of the assessment teams). Additionally, one or two members from the RHMT and/or RRHMT in each region joined the assessment team. See Table 2-22 for the schedule of EHPA 2019.

Table 2-21: List of assessors and teams for EHPA 2019

Specialties	**Team A**	**Team B**	**Team C**
Doctor	1 from DCS	1 from DCS	1 from Singida RHMT (5S-KAIZEN National Facilitator)
Administrator	1 from RRHMP (Technical Assistant)	1 from DPP	1 from DCS
Nurse	1 from RHMT Singida	1 from MZRH (5S-KAIZEN National Facilitator)	1 from MNH (5S-KAIZEN National Facilitator)
Other	1 from MZRH (5S-KAIZEN National Facilitator)	1 from DCS 1 from RRHMP (Japanese Expert)	1 from RRHMP (Technical Assistant)

Table 2-22: Schedule of EHPA 2019 for each team

Weeks	**Team A**	**Team B**	**Team C**
1st week	Temeke RRH	Mwananyamala RRH	Amana RRH
2nd week	Katavi RRH Sumbawanga RRH	Tanga RRH Mawenzi RRH	Bukoba RRH Geita RRH
3rd week	Songwe RRH Mbeya RRH	Mt. Meru RRH Manyara RRH	Sekou-Toure RRH Musoma RRH
4th week	Njombe RRH	Singida RRH	Bariadi RRH
5th week	Songea RRH Ligula RRH	Dodoma RRH Iringa RRH	Shinyanga RRH Kitete RRH
6th week	Sokoine RRH	Morogoro RRH Tumbi RRH	Maweni RRH

EHPA 2019 at each RRH was carried out over three days (see Table 2-23 for the schedule of EHPA): two days for the actual assessment, analysis, and report writing, and the last day for discussing feedback and next steps with the hospitals. In each region, on the first day, the assessors paid a courtesy call to the Regional Medical Officer with a view to keep the RHMT informed of the performance assessment of RRH and also get support of the RHMT to strengthen the team. After the courtesy call, the team oriented the Medical Officer In-Charge on the EHPA before starting the field visit of the targeted departments and sections. The methodologies used during the EHPA were: document review, physical check/photo taking, observation of practice, interviewing staff, and interviewing patients/clients. The instructors were advised to use appropriate methodologies from those identified depending on the data to be collected.

The assessment teams discussed any findings with the staff of the visited sections/departments, and also gave immediate feedback to them. The team also emphasized to the staff that the EHPA was not an inspection or audit, and it was principally built on the concepts of supportive supervision and consultation. Therefore, the teams always tried to facilitate with RRHs to realize the challenges they were facing and reach a consensus on the appropriate corrective actions with the staff on site.

Table 2-23: Schedule for EHPA

Day	Activities
Day 1	Courtesy call to RMO
	Courtesy call to Medical Officer In-Charge
	Hospital round (field visit) and assessment
Day 2	Hospital round (field visit) and assessment
	Compilation work (data entry, analysis, report writing, presentation)
Day 3	Feedback and discussion sessions

2.5.8.3. Findings from EHPA 2019

To analyze the results of EHPA 2019 and summarize them in the report, a workshop was held from September 19–25, 2017 at Amabilis Centre in Morogoro. Twelve EHPA assessors participated in the workshop.

The analysis shows that the average score of EHPA 2019 was 77.36% with a 4.27% increase compared to 73.09% in 2018, and a 12.22 % increase compared to 65.14% in 2017. In 2019, the

overall score results show that 15 out of 28 RRHs scored above the overall national average (77.36%); the scores ranged from the highest 89.33% (Mt. Meru RRH) to the lowest 58.04% (Njombe RRH). Standard deviation was 7.49 in 2019, and it decreased by 2.32 compared to 9.81 in 2017. In regard to improvements in 2019, 25 RRHs increased their own scores compared to results of EHPA 2017. Twenty-one RRHs have clinched over 75% which was set as a target for RRHMP to be achieved by at least 70% of RRHs.

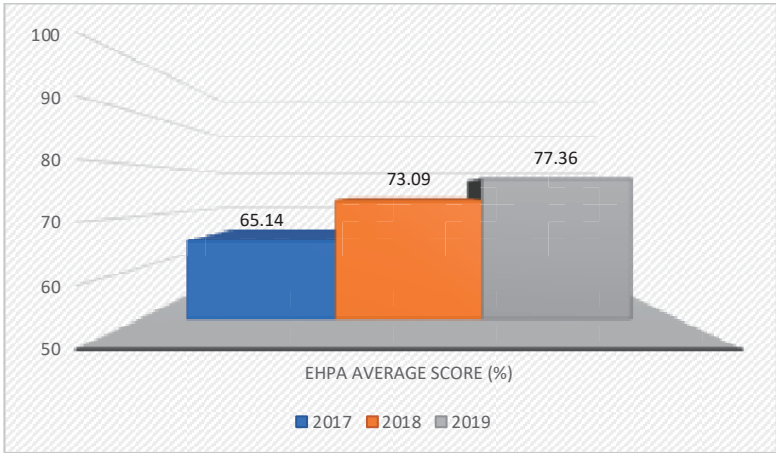


Figure 2-14: Comparison of EHPA average scores from 2017, 2018, and 2019

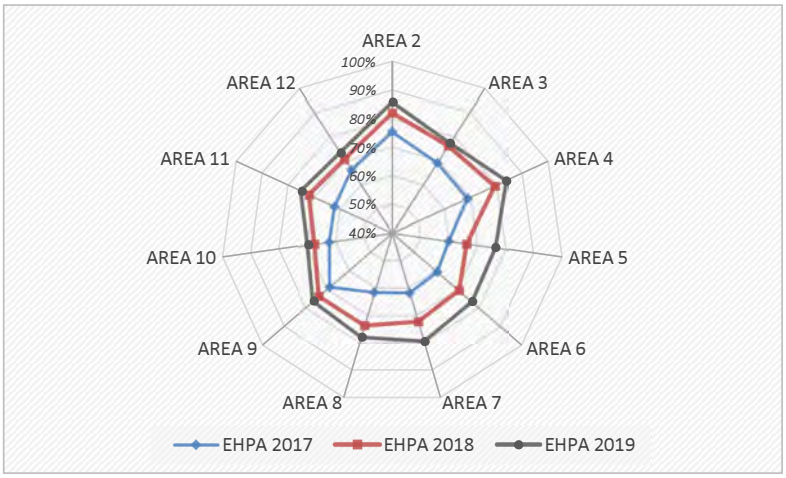


Figure 2-15: Comparison of EHPA average scores by area from 2017, 2018, and 2019

Table 2-24: Comparison of EHPA average score in 2017, 2018, and 2019

Ranking			RRH	Average Score			Deference					
							Score			Rank		
17	18	19		2017	2018	2019	17-18	18-19	17-19	17-18	18-19	17-19
4	2	1	Mt. Meru	76.33%	84.49%	89.33%	8.17%	4.84%	13.00%	2	1	3
13	7	2	Mbeya	67.55%	80.94%	88.15%	13.39%	7.21%	20.60%	6	5	11
1	1	3	Sekou-Toure	85.26%	85.81%	87.05%	0.54%	1.24%	1.79%	0	-2	-2
10	3	4	Morogoro	68.96%	83.51%	85.71%	14.55%	2.20%	16.75%	7	-1	6
3	4	5	Amana	79.78%	82.62%	83.88%	2.84%	1.27%	4.10%	-1	-1	-2
2	8	6	Mwananyamala	81.70%	80.26%	82.46%	-1.44%	2.19%	0.76%	-6	2	-4
25	21	7	Musoma	54.01%	67.06%	82.37%	13.05%	15.31%	28.36%	4	14	18
6	6	8	Manyara	72.37%	81.11%	82.36%	8.74%	1.25%	9.99%	0	-2	-2
16	10	9	Sumbawanga	64.27%	77.99%	80.46%	13.71%	2.47%	16.18%	6	1	7
9	9	10	Dodoma	69.29%	79.54%	80.42%	10.25%	0.88%	11.13%	0	-1	-1
7	5	11	Iringa	72.00%	81.60%	80.24%	9.60%	-1.36%	8.23%	2	-6	-4
5	20	12	Bukoba	73.15%	67.88%	80.08%	-5.27%	12.20%	6.93%	-15	8	-7
15	11	13	Songea	65.66%	76.62%	79.70%	10.96%	3.08%	14.04%	4	-2	2
11	13	14	Sokoine	68.86%	72.88%	77.64%	4.02%	4.76%	8.77%	-2	-1	-3
18	19	15	Tanga	63.47%	68.06%	77.61%	4.58%	9.56%	14.14%	-1	4	3
23	18	16	Geita	58.86%	69.18%	77.31%	10.33%	8.12%	18.45%	5	2	7
17	23	17	Tumbi	51.17%	65.70%	77.22%	14.52%	11.52%	26.05%	-6	6	0
19	14	18	Katavi	62.15%	72.21%	76.85%	10.07%	4.63%	14.70%	5	-4	1
20	28	19	Ligula	61.86%	60.49%	76.63%	-1.37%	16.14%	14.77%	-8	9	1
21	26	20	Singida	60.10%	62.49%	76.12%	2.38%	13.63%	16.01%	-5	6	1
8	17	21	Mawenzi	69.42%	70.31%	75.94%	0.89%	5.63%	6.52%	-9	-4	-13
28	24	22	Maweni	47.35%	65.25%	74.72%	17.90%	9.47%	27.37%	4	2	6
26	25	23	Kitete	49.86%	63.13%	70.56%	13.27%	7.43%	20.70%	1	2	3
24	15	24	Songwe	58.14%	71.84%	67.76%	13.70%	-4.07%	9.62%	9	-9	0
27	27	25	Simiyu	48.12%	62.10%	67.61%	13.99%	5.51%	19.49%	0	2	2
12	22	26	Shinyanga	68.13%	66.83%	67.14%	-1.30%	0.32%	-0.99%	-10	-4	-14
14	12	27	Temeke	66.93%	75.86%	62.82%	8.93%	-13.0%	-4.11%	2	-15	-13
22	16	28	Njombe	59.01%	70.85%	58.04%	11.84%	-12.8%	-0.98%	6	-12	-6
Average				**65.14%**	**73.09%**	**77.36%**	**7.96%**	**4.27%**	**12.23%**			
Standard Deviation				**9.81%**	**7.68%**	**7.49%**	**0.06**	**0.07**	**0.09**			

2.5.8.4. Dissemination of EHPA 2019

Results of EHPA 2019 were disseminated during the Medical Officer In-Charge meeting organized from November 26–28, 2019 in Morogoro. On the first day of the meeting, the results of EHPA 2019 were shared and the state of RRH performance and areas for improvement were reported. Better performing RRHs were nominated to share good practices pertaining to financial, HRH, commodities, and quality management to all participants. Common issues and

hospital-specific issues identified during EHPA 2019 were also presented and shared. Then, each RRHMT was asked to develop an action plan based on their EHPA report. To motivate RRHs, the first to third best performing RRHs in the EHPA and the first to third most improved RRHs in EHPA 2017–2019 were awarded at the end of the meeting.

2.6. Activities related to Output 4

2.6.1. 5S-KAIZEN National Facilitators Training

The training for capacity building of 5S-KAIZEN national facilitators was conducted twice within the period of the second year of the RRHMP. An outline for each training session follows:

(1) training for new national facilitators

The training was conducted at Muhimbili National Hospital, Dar es Salaam from February 28 to March 2, 2017, aiming to understand the roles and responsibilities of the 5S-KAIZEN national facilitators and equipping them with practical skills for conducting a consultation visit (CV). During the training, lectures on essential topics relevant to the 5S-KAIZEN-TQM approach were provided and key points of each lecture were emphasized. Moreover, the participants were requested to do mock CVs at some wards at Muhimbili National Hospital (MNH), and training facilitators gave feedback to their mock CVs for further improvement. Finally, seven healthcare professionals from the MoHCDGEC, national hospital, and zonal referral hospitals were trained as 5S-KAIZEN national facilitators.

(2) Skills-building training for the national facilitators who were trained before

This training was conducted at CEEMI, Dar es Salaam from June 13–16, 2017. 28 national facilitators from the MoHCDGEC, national hospital, and zonal hospitals were invited. The purpose of the training was to enhance knowledge and skills among the national facilitators. The MoHCDGEC assumed that insufficient competencies among national facilitators is one reason for the current stagnated state of the 5S-KAIZEN-TQM approach in the RRHs. These include insufficient knowledge, insufficient teaching skills, ineffective facilitation skills, and improper monitoring and evaluation skills. The training provided lectures on the current progress of 5S-KAIZEN activities, changing behavior, basic hospital management of RRHs and its relationship with the 5S-KAIZEN-TQM approach, effective teaching and lecturing, etc. For strengthening practical skills, especially teaching skills, all participants were requested to develop their own teaching aids and/or presentation materials on the topics related to the 5S-KAIZEN-TQM approach and have mock lectures.

The previous M&E tools for 5S-KAIZEN activities[2] were well designed to check more "progress" of the 5S-KAIZEN activities rather than "outcomes" of the 5S-KAIZEN-TQM approach. Therefore, the MoHCDGEC decided to conduct workshops on the last day to renew the M&E tools to check for the outcomes. All participant groups were given assignments to revise the monitoring and evaluation tools for the 5S-KAIZEN activities and criteria. The CV tools were finalized by considering all comments and opinions from all national facilitators.

Table 2-25 shows the number of national facilitators who can teach 5S-KAIZEN, as well as lead CVs.

Table 2-25: List of 5S-KAIZEN national facilitators by required abilities

Ability of 5S-KAIZEN national facilitator				Number of national facilitators
Sq#	Teaching 5S only	Teaching 5S and KAIZEN	Playing a leader of CV	
1	**Yes**	No	No	2
2	**Yes**	**Yes**	No	10
3	**Yes**	**Yes**	**Yes**	6

2.6.2. KAIZEN Training of Trainers (ToT)

2.6.2.1. KAIZEN ToT 2016/2017

The outline of KAIZEN ToT in fiscal year 2016 is shown in Table 2-26.

Table 2-26: Outline of KAIZEN ToT 2016/2017

Round	**Venue**	**Period**	**Participant including observers (total number)**	
3rd ToT	AMO Mbeya, Mbeya	November 28 to December 2, 2016	65 participants	・ 14 RRHs (42) ・ 7 foreign countries (14) ・ Observers (9); KCMC, MZRH, JOCV
4th ToT	KCMC, Moshi	March 20 to 24, 2017	61 participants	・ 14 RRHs (42) ・ 1 foreign country (4) ・ Observers (15); KCMC, JOCV

As effect size (△) was calculated based on pre- and post-course assessments, it seems that both KAIZEN ToTs were successfully done for improving the knowledge of the participants (see

[2] "5S-KAIZEN M&E Sheet": page 82, Annex 2, Implementation Guidelines for 5S-KAIZEN-TQM Approaches in Tanzania (3rd Edition, March 2013)

Table 2-27 for details). On the other hand, it was noticed that the MoHCDGEC and the project team need to build the capacity of national facilitators further in teaching and facilitation skills during CVs and KAIZEN ToT in the future.

Table 2-27: Pre- and post-course assessment results (KAIZEN ToT 2016/2017)

	Pre		Post		Effect size (Δ)
	Average	Standard Deviation	Average	Standard Deviation	
3rd ToT	65.7%	8.933	78.3%	9.776	1.41 (Large)
4th ToT	69.6%	6.593	77.2%	8.1667	1.16 (Large)

If Δis higher than 0.50, it has meaning (Koizumi & Katagiri, 2007) |.20|≦small<|.50|, |.50|<medium<|.80|, |.80|≦large
Koizumi, R., & Katagiri, K. (2007). Changes in speaking performance of Japanese high school students: The case of an English course at a SELHi. ARELE, 18, p.81-90.

During this KAIZEN ToTs, the MoHCDGEC, the project team, and all RRHs agreed that "Healthcare waste management is improved" is a yearly, national KAIZEN theme to improve current healthcare waste management practices in respective hospitals.

2.6.2.2. KAIZEN ToT 2017/2018

The outline of KAIZEN ToT in fiscal year 2017 is shown in Table 2-28.

Table 2-28: Outline of KAIZEN ToT 2017/2018

Round	**Venue**	**Period**	**Participant including observers (total number)**	
5th ToT	MNH, Dar es Salaam	December 4 to 8, 2017	56 participants	・ 13 RRHs (39) ・ 6 foreign countries (11) ・ Observers (6); MNH, JOCV
6th ToT	Nyakahoja Hall and BMC, Mwanza	March 19 to 23, 2018	60 participants	・ 15 RRHs (49) ・ MoHCDGEC (3) ・ Observers (8); BMC, JOCV

As effect size (Δ) was calculated based on pre- and post-course assessments, it seems that both KAIZEN ToTs were successfully done for improving knowledge of the participants (see Table 2-29 for details).

During the training, the MoHCDGEC and the project team recommended that all RRHs use EHPA results for identifying KAIZEN themes in their respective hospitals, instead of setting yearly, national KAIZEN themes as common themes among all RRHs.

Table 2-29: Pre- and post-course assessment results (KAIZEN ToT 2017/2018)

	Pre		Post		Effect size (Δ)
	Average	Standard Deviation	Average	Standard Deviation	
5th ToT	68.0%	11.2364	81.2%	9.3891	1.18 (Large)
6th ToT	67.4%	14.6073	83.2%	12.3624	1.08 (Large)

If Δis higher than 0.50, it has meaning (Koizumi & Katagiri, 2007) |.20|≦small<|.50|, |.50|<medium<|.80|, |.80|≦large
Koizumi, R., & Katagiri, K. (2007). Changes in speaking performance of Japanese high school students: The case of an English course at a SELHi. ARELE, 18, p.81-90.

Additionally, for promoting mutual learning by exchanging experience and ideas for further improvement among the participants, the project started taking the following approaches from the fifth KAIZEN ToT:

(1) Requesting some hospitals to have a presentation on good practices of 5S-KAIZEN activities;
   - In the fifth ToT, MNH and Ligula RRH prepared presentations.
   - In the sixth ToT, Bugando Medical Center (BMC) prepared the presentation.

(2) Displaying progress reports on the 5S-KAIZEN-TQM approaches from participating hospitals. The project team requested all participating hospitals, including the hospitals from foreign countries, to develop a progress report on the 5S-KAIZEN-TQM approach, and display the reports in the training venue.

These approaches were repeatedly taken until the tenth KAIZEN ToT in 2019.

2.6.2.3. KAIZEN ToT 2018

The outline of KAIZEN ToT in fiscal year 2018 is shown in Table 2-30.

Table 2-30: Outline of KAIZEN ToT 2018

Round	Venue	Period	Participant including observers (total number)	
7th ToT	MNH, Dar es Salaam	November 5 to 9, 2018	63 participants	・ 18 RRHs (57) ・ Observers (6); MNH, JOCV
8th ToT	MZRH, Mbeya	November 12 to 16, 2018	55 participants	・ 10 RRHs (36) ・ 4 foreign country (8) ・ Observers (11); MZRH, MoHCDGEC, Mzumbe University

Each participating RRH selected its own KAIZEN theme to tackle after the ToT, based on the results of the latest EHPA, and the same as the last year's KAIZEN ToT. As effect size (Δ) was

calculated based on pre- and post-course assessments (see Table 2-31 for details), it seems that both KAIZEN ToTs were successfully done for improving knowledge of the participants.

Table 2-31: Pre- and post-course assessment results (KAIZEN ToT 2018)

	Pre		Post		Effect size (Δ)
	Average	Standard Deviation	Average	Standard Deviation	
7th ToT	70.9%	10.86	78.7%	9.818	0.72 (Medium)
8th ToT	72.7%	10.9341	82.1%	9.7345	0.87 (Large)

If Δis higher than 0.50, it has meaning (Koizumi & Katagiri, 2007) |.20|≦small<|.50|, |.50|<medium<|.80|, |.80|≦large
Koizumi, R., & Katagiri, K. (2007). Changes in speaking performance of Japanese high school students: The case of an English course at a SELHi. ARELE, 18, p.81-90.

2.6.2.4. KAIZEN ToT 2019

The outline of KAIZEN ToT in fiscal year 2019 is shown in Table 2-32.

Table 2-32: Outline of KAIZEN ToT 2019

Round	Venue	Period	Participant including observers (total number)	
9th ToT	MNH, Dar es Salaam	June 17 to 21, 2019	70 participants	・ 16 RRHs (50) ・ Observers (20); MoHCDGEC, MNH, BMC, Mzumbe University, PHCI Iringa, CEDHA, JOCV
10th ToT	Mkapa Hall, Mbeya	June 24 to 28, 2019	60 participants	・ 12 RRHs (36) ・ 8 foreign country (14) ・ Observers (10); MZRH, CEDHA, Tosamaganga DDH, JOCV

Each participating RRH selected its own KAIZEN theme to tackle after the ToT, based on the results of the latest EHPA, and the same as the last year's KAIZEN ToT.

As effect size (Δ) was calculated based on pre- and post-course assessments (see Table 2-33 for details), it seems that KAIZEN ToTs in MNH were successfully done for improving knowledge of the participants. However, effect size of KAIZEN ToT in Mbeya was only 0.44 which shows small size effectiveness. There were 21 participants who decreased the post-course assessment score compared to the score of the pre-course assessment. Training materials, training methodologies, and training facilitator teams were almost the same as KAIZEN ToT in MNH. One of the differences between the training in MNH and Mbeya was the main languages used during the trainings: Kiswahili for the training in MNH and English for the training in Mbeya. This might be one obstacle for Tanzanian participants from properly understanding, as well as for

accurately teaching facilitators. The training facilitator team should have checked the level of understanding among the participants more frequently during the training.

Table 2-33: Pre- and post-course assessment results (KAIZEN ToT 2019)

	Pre		Post		Effect size (Δ)
	Average	Standard Deviation	Average	Standard Deviation	
9th ToT	55.7%	8.6752	62.6%	9.3520	0.80 (Large)
10th ToT	58.2%	11.1209	63.0%	10.2624	0.44 (Small)

If Δis higher than 0.50, it has meaning (Koizumi & Katagiri, 2007) |.20|≦small<|.50|, |.50|<medium<|.80|, |.80|≦large
Koizumi, R., & Katagiri, K. (2007). Changes in speaking performance of Japanese high school students: The case of an English course at a SELHi. ARELE, 18, p.81-90.

2.6.2.5. Facilitator Meetings for Effective KAIZEN ToT

Since there were differences in capacity among 5S-KAIZEN national facilitators, the project always conducted facilitator training in every KAIZEN ToT, aiming to even the competency differences among the selected facilitators for each training, as follows:

- Facilitator's preliminary meeting (one day before KAIZEN ToT) to share the purpose and objectives of the training, overview and methodologies, points to be emphasized during the training etc. with all training facilitators.
- Facilitator's meeting (after every training day in each KAIZEN ToT) to review the way of teaching and facilitation on that day, and agree on the methods for the next day.

2.6.2.6. Continuous Improvement of Training Materials for KAIZEN ToT

The project had been continuously renewing content of the training materials after every KAIZEN ToT based on the content the facilitators/lecturers found difficult to deliver and the participants were not able to fully understand. The project aimed to make the training materials user-friendly and distribute the training materials to all participants and facilitators in every training session. The last version of the training materials is now used for the training which the MoHCDGEC and/or the RRHs organize by themselves.

2.6.3. Consultation Visit for the 5S-KAIEN-TQM Approach

2.6.3.1. Outline of Consultation Visits

In the second year of the project, CVs for the 5S-KAIZEN-TQM approach were conducted to monitor the progress of the 5S-KAIZEN activities in each target hospital as described in Table 2-34.

Table 2-34: Outline of CVs in the second year of the project

Implementation period of CVs		Target hospitals
2017 (1)	March to June 2017	28 RRHs, 1 NH and 3 Zonal Hospitals
2017 (2)	October 2017 to January 2018	28 RRHs, 1 NH and 3 Zonal Hospitals
2018	May to June 2018	1 NH and 3 Zonal Hospitals
	September to November 2018	28 RRHs
2019	February to May 2019	28 RRHs, 1 NH and 3 Zonal Hospitals

CV teams were composed of the national facilitators who were selected by the project team and assigned by the MoHCDGEC. CV teams spent two days for each RRH and three days for each national hospital and zonal hospital because the national hospital and zonal hospitals are bigger than RRHs. In every CV, the QIT function and implementation progress of the 5S-KAIZEN activities in each target hospital were monitored, and technical advice was given by the CV team for further improvements. The tools used for CVs are listed below:

- 5S-KAIZEN M&E check sheet
- QIT function sheet
- KAIZEN progress check sheet
- KAIZEN supportive supervision checklist

Note that the project decided to stop scoring on the 5S-KAIZEN M&E check sheet because hospital staff in the majority of the RRHs started to forget the purpose of the 5S-KAIZEN-TQM approach and focused on getting high scores on the check sheet. Moreover, the project also tried to build the capacities of the national facilitators during each CV, such as monitoring and evaluation skills, basic knowledge of, and providing technical advice etc.

2.6.3.2. Progress of QI Implementation Structure and 5S-KAIZEN Activities Observed during Consultation Visits

As a result of CVs, the changes in the status of the QI implementation structure and implementation of 5S-KAIZEN activities are reported below:

(1) QI implementation structure

Changes in evaluation scores of the QI implementation structure are reported in Table 2-35. From the results in 2019, 22 out of 28 RRHs improved in the function of QI implementation structure compared to 2018 scores. There were seven RRHs with a score higher than 75%; this means that the QI implementation structure in those seven RRHs was almost functioning. On the other hand, although a number of RRHs got a score higher than 75%, which was an

increase compared to 2017, it was clarified that 21 RRHs were still having challenges in managing their own QI implementation structure.

Table 2-35: Changes in QIT function score (%)

#Sq	RRH	2017 (1)	2017 (2)	2018	2019	Comparison*
1	Amana RRH	74.7	57.4	75.0	82.8	↑
2	Temeke RRH	27.1	42.1	54.1	64.3	↑
3	Mwananyamala RRH	57.8	54.7	45.0	47.6	↑
4	Tumbi RRH	50.3	50.7	58.6	64.6	↑
5	Morogoro RRH	62.4	57.8	80.7	71.8	↓
6	Sokoine RRH	57.1	39.3	40.5	46.1	↑
7	Ligula RRH	47.3	23.0	43.1	47.3	↑
8	Iringa RRH	48.4	46.3	43.9	52.0	↑
9	Njombe RRH	43.7	48.1	29.6	46.8	↑
10	Songea RRH	53.8	51.0	36.9	56.7	↑
11	Mbeya RRH	41.5	40.3	59.9	60.7	↑
12	Sumbawanga RRH	75.4	68.6	76.2	68.7	↓
13	Dodoma RRH	51.0	44.5	83.9	80.5	↓
14	Singida RRH	97.1	82.0	88.5	94.3	↑
15	Manyara RRH	49.8	50.4	60.1	63.5	↑
16	Kitete RRH	36.2	33.5	60.9	59.8	↓
17	Maweni RRH	40.4	30.1	59.6	74.2	↑
18	Mpanda RRH	50.6	55.0	43.2	71.6	↑
19	Tanga RRH	51.3	54.6	60.1	56.2	↓
20	Mawenzi RRH	49.8	53.8	61.4	41.9	↓
21	Mt. Meru RRH	74.8	71.3	73.1	77.3	↑
22	Sekou-Toure RRH	56.2	67.7	78.4	84.4	↑
23	Shinyanga RRH	48.1	42.1	55.4	58.8	↑
24	Songwe RRH	23.4	24.1	33.2	56.7	↑
25	Musoma RRH	44.0	38.7	68.2	76.3	↑
26	Bariadi RRH	51.4	39.4	20.4	53.5	↑
27	Bukoba RRH	35.0	47.1	58.0	70.5	↑
28	Geita RRH	51.7	35.9	58.0	79.1	↑
Average		**51.8**	**48.2**	**57.4**	**64.6**	↑

* ↑: The score of 2019 increased comparing with the score of 2018, ↓: The score of 2019 decreased comparing with the score of 2018

(2) Trained staff on 5S and KAIZEN and implementation status of 5S and KAIZEN activities

Since the opportunities for external training organized by the MoHCDGEC and the project were limited, it can be easily assumed that RRHs made the effort to conduct in-house training because the number of trained staff for 5S and KAIZEN activities increased among the 28 RRHs as shown in Figure 2-16.

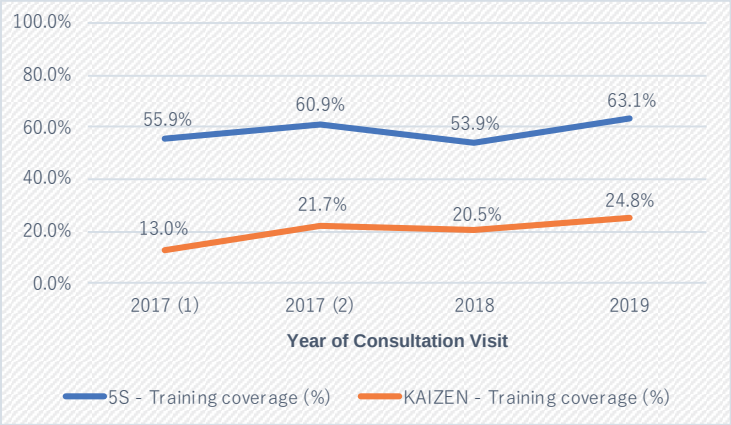


Figure 2-16: Average training coverage of 5S and KAIZEN among 28 RRHs (%)

Moreover, the average area coverage of practicing 5S activities among 28 RRHs also increased; the last average is 97.5% which shows almost all sections of the 28 RRHs were practicing 5S activities (see Figure 2-17).

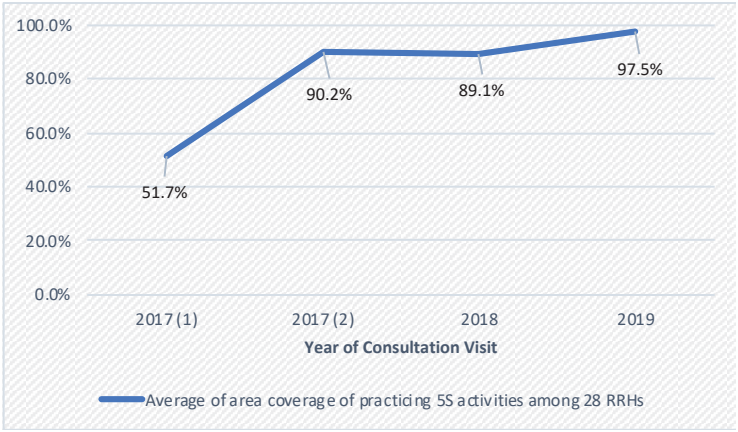
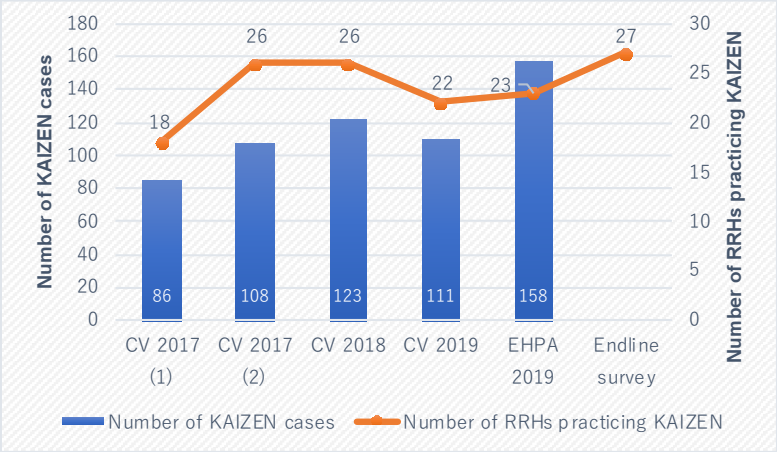


Figure 2-17: Average area coverage of 5S activities being practiced among 28 RRHs (%)

(3) Changes in the number of KAIZEN cases and the number of RRHs practicing KAIZEN activities

Both the number of KAIZEN cases and the number of RRHs practicing KAIZEN increased compared to the second year of the project in 2017. By the end of the survey, 27 RRHs were practicing at least one KAIZEN case which is equivalent to 96.4%; this means that the target of Output 4 was achieved.



(Note that number of KAIZEN cases was not counted during the end line survey)

Figure 2-18: Number of KAIZEN cases and RRHs practicing KAIZEN

(4) KAIZEN for improving healthcare waste management

Although the KAIZEN theme of "Healthcare waste management is improved" was determined as a yearly theme in 2016/2017 for all RRHs, the theme continued to be selected by several sections of the majority of the RRHs. The project continuously monitored the progress of KAIZEN related to healthcare waste management during the CVs and through self-administrative questionnaires pertaining to KAIZEN activities (distributed to all RRHs in November 2019). As a result of the monitoring, the following observations were found:

- 26 RRHs have at least one section practicing KAIZEN activities for improving healthcare waste management.
- Among those 26 RRHs, it was found that seven KAIZEN cases for improving waste management were completed. Progress of the KAIZEN was not confirmed for the rest of the 22 RRHs due to no records on and/or stagnation of the KAIZEN process.
- All seven KAIZEN cases improved healthcare waste segregation successfully by eliminating the vital few of the problem. The highest reduction rate was 85.7% (Singida RRH) and the lowest reduction rate was 52% (Musoma RRH). See Table 2-36 for detailed achievements of the seven RRHs.
- Since there is evidence that KAIZEN worked for improving healthcare waste management at seven RRHs, it is recommended for other RRHs to use the KAIZEN approach to improve their own waste management.

Table 2-36: Achievements by seven RRHs for improving healthcare waste management by using the KAIZEN approach

RRHs	KAIZEN themes	Vital few of the contributing factors	Frequency of the vital few (cases before and after KAIZEN)		
			Before	After	**Reduction**
Amana	**Waste segregation is improved**	(1) Infectious waste mixed with non-infectious waste	30	5	83.3%
		(2) First dust bin mostly become full than others	20	3	85%
		Total	50	8	**84%**
Geita	**Waste segregation is improved**	(1) Number of cases wastes are mixed	40	7	82.5
		Total	40	7	**82.5%**
Mt. Meru	**Waste segregation is improved**	(1) Number of shift blood soiled wastes in yellow bin and blue bin	17	9	47.1%
		(2) Number of shifts that non-infectious materials are observed in blue bins	12	4	66.7%
		(3) Number of shifts left over foods improper disposed in red bins	8	4	50%
		Total	37	17	**54.1%**
Musoma	**Waste segregation is improved**	(1) Number of infectious wastes mixed into non-infectious wastes	14	7	50%
		(2) Number of improper arrangement of dusts in the ward	11	5	54.5%
		Total	25	12	**52%**
Singida	**Waste segregation in paediatric ward is improved**	(1) Non-infectious waste in infectious waste bin	25	4	84%
		(2) Infectious wasted in non-infectious waste bin	17	2	88.2%
		Total	42	6	**80.8%**
Sumbawanga	**Adherence to standard of waste segregation at laboratory is improved**	(1) Case of highly infectious wastes found in infectious wasted containers	26	5	80.8%
		(2) Cases of non-sharp wastes found in sharp containers	18	4	77.8%
		Total	44	9	**79.5%**
Sokoine	**Waste segregation is improved**	(1) Number of days highly infectious waste mixed with non-infectious	14	6	57.1%
		Total	14	6	**57.1%**

2.6.4. Development of Implementation Guidelines for 5S-KAIZEN-TQM and Good Practice Booklet of 5S-KAIZEN Activities

Implementation Guideline for 5S-KAIZEN-TQM Approach in Tanzania (3rd edition) was reviewed for the following purposes:

- To update the contents of the guideline for easy understanding and develop of a 4th edition.
- To integrate the guideline with the *KAIZEN Handbook* (MoHSW, 2014).

The project team drafted the 4th edition of the implementation guideline and good practice booklet of 5S-KAIZEN activities. The project team conducted a workshop from July 15 –19, 2019 in Dar es Salaam to review the drafts of the 4th edition of the guideline and the good practice booklet of 5S-KAIZEN activities, which is an attachment to the guideline. Fifteen people from the MoHCDGEC, Kilimanjaro Christian Medical University Collage, MNH, MZRH, BMC, and the project participated. After the workshop, all inputs made by the participants and other national facilitators were considered for the final version.

The 4th edition was endorsed by the management of the MoHCDGEC in December 2019 and printed in January 2020. Then, the new guideline and good practice booklet were distributed to all RRHs through the final seminar of the project.

2.6.5. Strengthening Sustainability of the 5S-KAIZEN-TQM Approach in RRHs

The second week of the two-week HMT training package which the project handed over to the training institutions (CEDHA, PHCI Iringa and Mzumbe University) was for equipping a participant with basic knowledge and practical skills to utilize the 5S-KAIZEN-TQM approach. Through continuous HMT training by the training institutions, it is expected that HMT and the point person for quality management in the RRHs will be continuously trained on the 5S-KAIZEN-TQM approach. This strategy will strengthen the sustainability of using the 5S-KAIZEN-TQM approach at the RRHs; however, it was also observed that there will still be some challenges at those training institutions in teaching 5S-KAIZEN activities, such as insufficient facilitation skills to make participants recognize problems related to quality management in their respective hospitals, inexperience with implementing the 5S-KAIZEN-TQM approach, etc.

2.7. Activities related to Output 5

2.7.1. Training of RRHMTs on RRHABs

The initial plan envisioned that the project would include training for HABs, but HAB guidelines stipulate that HAB members need to be replaced every three years. Even if the current members are trained, new members must be trained every three years. In addition, it takes time to select and approve the new members, and the timing of starting HAB activities varies by RRH. Therefore, the project has changed the strategy to train members of the RRHMTs who are core members of the HAB. The training will include how to establish and operate a HAB, and then these members can train newly appointed HAB members.

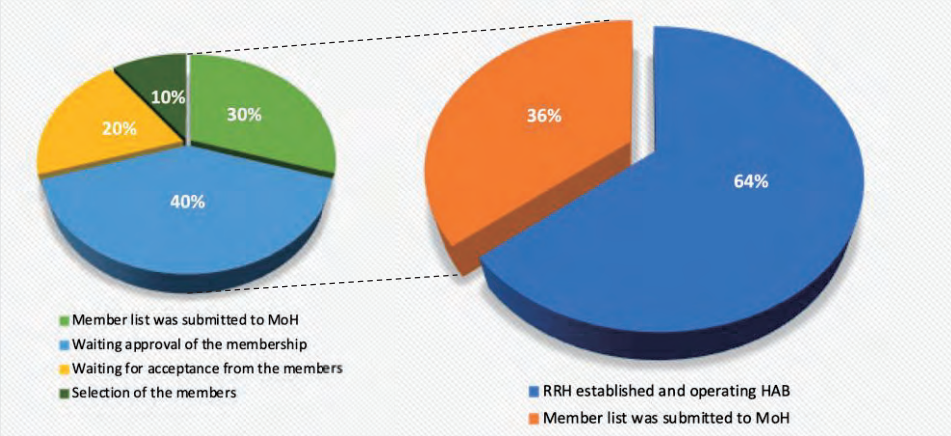
Training materials for HAB establishment and operation were developed based on the content of the RRHAB guideline. HAB training was conducted for 109 participants from February 8–10, 2019. The Medical Officer In-Charge and Hospital Secretary for each RRH were selected as a target for HAB training. Additionally, the Regional Medical Officers were also invited to the HAB orientation.

2.7.2. Follow-up of the RRHAB Activities

The establishment and functionality of the HAB were monitored through the scores of EHPA item 8.2.1 (it is about the list of HAB members, HAB meetings, and training for HAB) and item 8.2.2 (it is about community's opinions and feedback). Additionally, a HAB self-performance checklist developed by the project was used for monitoring the performance.

Indicator 1: "Number of RRHs organizing HAB meetings based on planned schedules increased from 40% to 80%", is monitored by EHPA checklist item 8.2.1.2: "Do HAB members attend scheduled/extraordinary meetings?". In EHPA 2017, 15 out of 28 RRHs scored three (highest score) in item 8.2.1.2. The number of RRHs that scored a three increased from 18 RRHs (64%) in 2018 to 22 RRHs (78.6%) in 2019. In HAB self-monitoring, 76% of RRHs scored two (highest score) in item 3 "Are RRHABs meeting quarterly to monitor progress of CHOP implementation?" indicating an increase in the number of RRHs that held HAB meetings according to the planned schedule. Therefore, Indicator 1 for Output 5 has been achieved.

According to self-assessments in June 2019, 17 out of 28 RRHs established a HAB. Those 17 RRHs conducted self-assessments of the HAB performance, and 94% of the RRHs rated their HAB functionality higher than standard. Based on the report from the DCS in November 2019, 18 out of 28 RRHs have established functional HABs. The remaining ten RRHs are in the process of establishing new HABs. The 18 RRHs that succeeded in establishing HABs conducted a self-evaluation and 72% reported that their HAB was functioning well (scored more than 81).



(Source: Self-monitoring by RRHMT in November 2019)

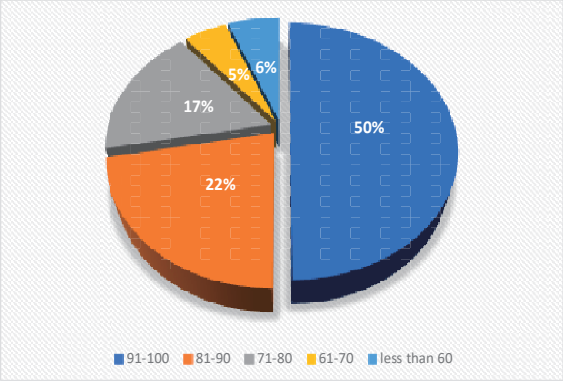


Figure 2-19: Status of HAB establishment and its function

2.8. Activities related to Output 6

2.8.1. Progress Report Meeting for 5S-KAIZEN-TQM Approach

The second progress report meeting (PRM) to discuss the 5S-KAIZEN-TQM approach was held from July 10–12, 2017 in Dar es Salaam. People from all RRHs and the MoHCDGEC participated, along with JICA volunteers who participated as observers. Although the invitation was sent from the MoHCDGEC to the PO-RALG, no officers from PO-RALG participated.

Each RRH had its own presentation on the results of ISS and internal evaluation of 5S-KAIZEN activities. Through the presentations, it was revealed that there are common challenges when implementing 5S-KAIZEN activities among the majority of RRHs, such as difficulties for hospital staff to transform knowledge which they obtained during a training to actual practices in own working place, inappropriate functions of QIT and Working Improvement Teams (WITs), and weak organization of knowledge obtained about quality management, including the 5S-KAIZEN-TQM approach.

During the PRM, the tenth anniversary ceremony of the 5S-KAIZEN-TQM approach in Tanzania was recognized, and the MoHSW and the project held two award ceremonies as follows:

- Great Achievement Award for two officers from MZRH who rendered remarkable achievement with the dissemination of the 5S-KAIZEN-TQM approach in Tanzania since 2007.
- Best KAIZEN Award for three RRHs based on the results of CVs.

2.8.2. Receiving Participants from Foreign Countries to KAIZEN ToT

As the reports on KAIZEN ToT mentioned above, the MoHCDGEC and the project received participants from foreign countries to KAIZEN ToT. There were 51 participants from 13 countries attending KAIZEN ToT five times in total.

All participants were requested to report on the progress of 5S and KAIZEN activities practiced at their own organizations within six months of attending the respective KAIZEN ToT. Twenty-eight out of 51 participants sent a progress report of their 5S-KAIZEN activities to the project. According to the reports, the majority of the participants reported good 5S practices and relevant information on quality management, which they observed during the field visits in the training, were useful for introducing and implementing 5S activities at the respective hospitals. Moreover, they also reported that KAIZEN activities started at their own organizations by using acquired knowledge and skills from KAIZEN ToT. The detailed number of hospitals practicing KAIZEN activities and the total number of KAIZEN cases reported are shown on Figure 2-20.

Table 2-37: Participants from foreign countries to KAIZEN ToT

Round	Venue	Period	Participant from foreign country
3rd ToT	AMO Mbeya, Mbeya	November 28 to December 2, 2016	14 participants from 7 countries: Burundi, Egypt, Kenya, Malawi, Senegal, Sudan, Zimbabwe
4th ToT	KCMC, Moshi	March 20 to 24, 2017	4 participants from Uganda
5th ToT	MNH, Dar es Salaam	December 4 to 8, 2017	11 participants from 6 countries: Bangladesh, Burundi, Kenya, Sierra Leone, Sudan, Zimbabwe
8th ToT	MZRH, Mbeya	November 12 to 16, 2018	8 participants from 4 countries: Burundi, Kenya, Uganda, Zimbabwe
10th ToT	Mkapa Hall, Mbeya	June 24 to 28, 2019	14 participants from 8 countries: Benin, Ghana, Liberia, Malawi, Sierra Leone, Sudan, Uganda, Zimbabwe
		Total	51 participants from 13 countries

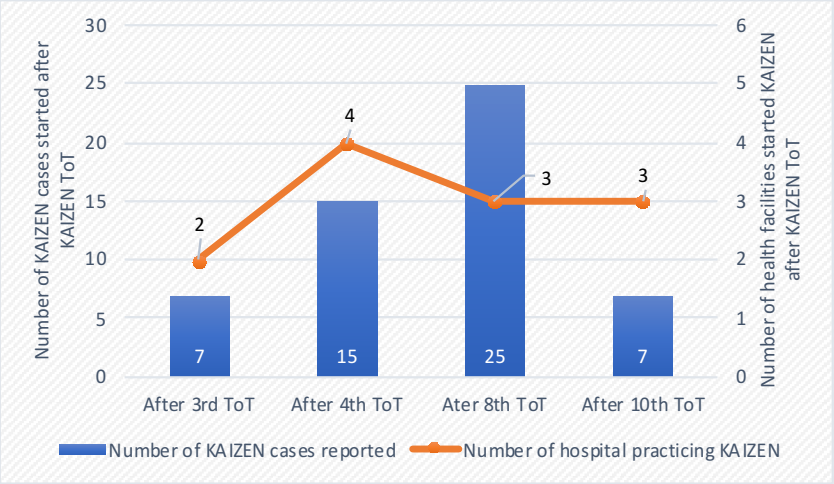


Figure 2-20: Number of hospitals practicing KAIZEN and KAIZEN cases reported after KAIZEN ToT

2.8.3. Receiving Study Tours on 5S-KAIZEN-TQM Approach from Foreign Countries

In the second year, the MoHCDGEC and the project received study tour requests about quality improvement and the 5S-KAIZEN-TQM approach from three foreign countries: Bangladesh, Ghana, and Benin. Receiving study tour group from foreign countries was a beneficial opportunity for the MoHCDGEC and the RRHs to deepen their knowledge of the 5S-KAIZEN-TQM approach, as well as providing intrinsic encouragement by introducing the approach's progresses and activities to other organizations.

2.8.3.1. Study Tour of the KAIZEN Approach in Bangladesh

The study tour group was composed of members of the MoH in Bangladesh, some hospitals, and the JICA Bangladesh office and visited Tanzania from July 8–12, 2019. The main purpose of the study tour was to learn about the KAIZEN approach and its application in the hospital setting in Tanzania, so the project team provided lectures on the TQM concept and KAIZEN approach. During the lectures, there was confusion among the participants between "KAIZEN with QC story" which the project introduced in the study tour and "PDCA for Quality Improvement" which the Bangladesh MoH already introduced as a problem-solving methodology with some QC tools. Therefore, the project always emphasized importance of always having the "KAIZEN-mind" which is described as a people's mind-set for always changing own situation for better in order to achieve own purpose and objectives.

2.8.3.2. Study Tour of Quality Improvement in Healthcare in Ghana

Ghana Health Services MoH in Ghana organized a study tour to Tanzania from March 2–9, 2019 for learning about the implementation of the 5S-KAIZEN-TQM approach at different levels of hospitals in Tanzania. Eleven people participated in the study tour, and they visited Muhimbili National Hospital, Mbeya Zonal Referral Hospital, META hospital, Ifisi District Hospital, and Amana RRH. During the study tour, they learned how to establish and operate quality management structures in a health facility. Lectures included the basics of the 5S-KAIZEN-TQM approach and how the MoHCDGEC officially supports the 5S-KAIZEN-TQM approach as one of the national level health organizations.

2.8.3.3. Study Tour of the 5S-KAIZEN-TM Approach in Benin

The JICA Benin field office organized a study tour from November 18–22, 2019 to Tanzania by inviting eight key persons from the MoH in Benin and their pilot hospitals that would be disseminating the 5S-KAIZEN-TQM approach in Benin. The project assisted the study tour team by providing essential lectures related to quality management and the 5S-KAIZEN-TQM approach and by conducting field visits to MNH and Amana RRH to illustrate implementation structures for QM in each hospital and actual applications of the 5S-KAIZEN activities for improving healthcare quality.

2.8.4. Application of the 5S-KAIZEN-TQM Approach to Improve Health Commodity Management at Council Level

The reports from the Council Health Management Teams (CHMTs) are inconsistent with the results of the M&E conducted during the follow-up visits mentioned below; hence, the quality of information is regarded as unreliable. However, according to a report from the Pharmaceutical Service Unit (PSU), the MoHCDGEC reported that 69% (473 of 681) of trained primary healthcare facilities have been practicing 5S activities to improve health commodity management as of September 2019. The proportion of trained health facilities that adhere to good storage standards increased to 77.6% (367 of 473) from 66.7% (212 of 318) in the first report from January to March in 2018.

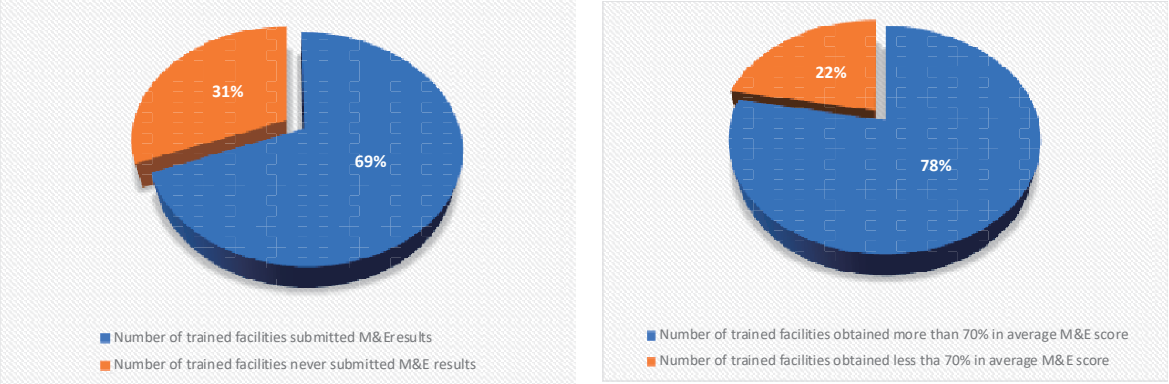


Figure 2-21: Current state of 5S activities on commodity management at primary healthcare facilities

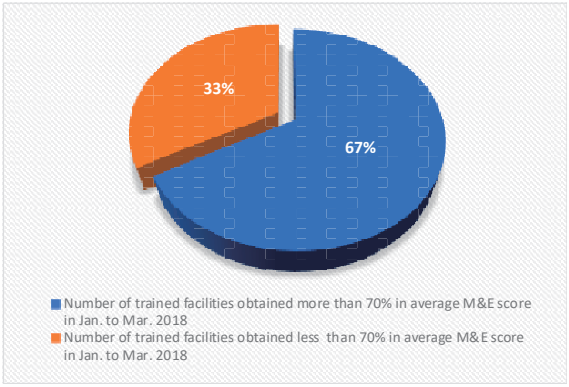


Figure 2-22: The state of 5S activities on commodity management at primary healthcare facilities in Jan–Mar 2018

Due to difficulties in understanding the situation from the reports submitted improperly by the CHMTs, the project decided to conduct field visits to monitor the current state of the 5S activities for commodity management at the council level. The field visits were conducted from May–June 2019. The field survey teams composed of project and PSU members visited 36 primary healthcare facilities in five regions (Mwanza, Shinyanga, Simiyu, Singida, and Tabora) as sample facilities.

The average M&E score from the field visits was 58.2%, while the average M&E score recently reported by the CHMTs was 78.2%. Although the average M&E score from the field visits was calculated based on the results of the limited facilities visited, there is a gap in the results. It is possible that M&E by the CHMTs was not always conducted properly. Some district pharmacists raised the issues of transportation arrangement, securing budgets, and allocation of time as obstacles to the improper execution of the M&E.

At the healthcare facility level, it was observed that some facilities seemed to have problems, such as a lack of 5S knowledge among staff. One possible reason observed for this lack of knowledge was that 34% of staff trained in 5S activity in 2017 was transferred to other facilities. However, no correlation was found between the M&E score and retention rate of the trained staff. It could be suggested that the staff with 5S knowledge was not always engaged in 5S implementation. On the other hand, there was a correlation between the M&E score and QIT function. Therefore, health facility management was expected to consider how the knowledge of 5S training participants should be utilized for strengthening the QIT function, rather than leaving the knowledge sharing method to the discretion of the individual staff.

It is clear that 5S activity could be one of the most useful tools for improving commodity management considering there was a correlation between the M&E score for 5S activity and commodity management. However, it has also become clear that 5S activity alone was not enough to sufficiently improve commodity management. This is because the correlation is not found between the score of the M&E for 5S and the score of M&E's category number 2, which is about properly filling in local requisitions and issue vouchers. For properly filling in those forms, the minimum rules of commodity management are required to be set, such as forms to be used,

the timing of the ordering from each department, how to order items from each department, and so on.

2.8.5. Newsletter for the Project's Progress and Activities

The project edited and distributed the newsletter called "RRHMP Newsletter" (volumes 4–7) for sharing the project's progress and appealing to stakeholders. The major topics of each volume are listed in Table 2-38.

Table 2-38: List of the Project Newsletters

Volume number	Month of issue	Major topics
Volume 4	November 2017	・ Introduction of EHPA ・ Linkage among CHOP and M&E tools for RRHs ・ Findings from 5S-KAIZEN Consultation Visit
Volume 5	April 2018	・ Introduction of CHOP and QPR, and its assessment results ・ BHMT and AHMT ・ HRHIS training ・ KAIZEN mind-set
Volume 6	November 2018	・ Results of EHPA 2018 ・ Consultation Visit for 5S-KAIZEN activities and its latest results
Volume 7	July 2019	・ Handing over of BHM Training to TIs ・ CHOP QPR assessment results ・ EHPA ・ 5S activity for Health Commodity Management ・ KAIZEN Training of Trainers

2.9. Preparation of the project's final seminar

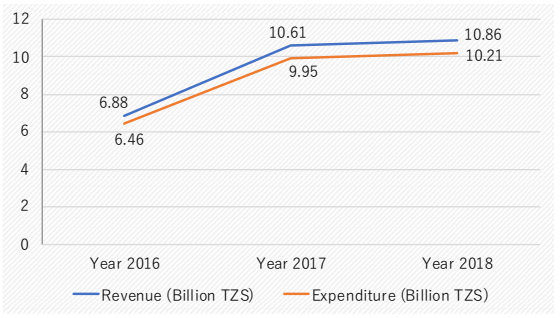
For the closing of the project, a final seminar is planned to share the achievements of the project and sustainable mechanism for effective outputs of the project with the MoHCDGEC, RRHs, and other relevant authorities and organizations. Timetable, a list of participants and invitees, and a presentation summarizing the project's results are developed as a part of preparation for the seminar. Additionally, some RRHs are requested to make a presentation that summarizes their good practice for the seminar.

2.10. Achievement of the Project Purpose

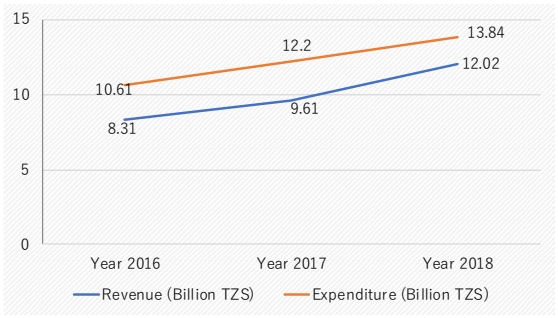
Based on the achievements of each expected output and the achievements of the indicators for the project purpose, we conclude that the project purpose, "Hospital management is improved at RRHs", has been achieved.

Indicator 1: Hospital revenue is increased

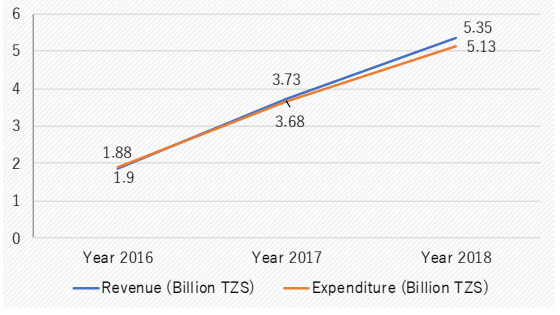
Based on the end line survey report, it was reported that the average revenue collection of RRHs has improved since 2016 as shown in Figure 2-23.



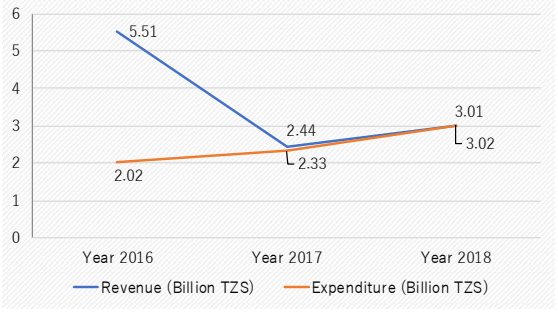
NHIF* collection and expenditure trends at RRHs located in big cities



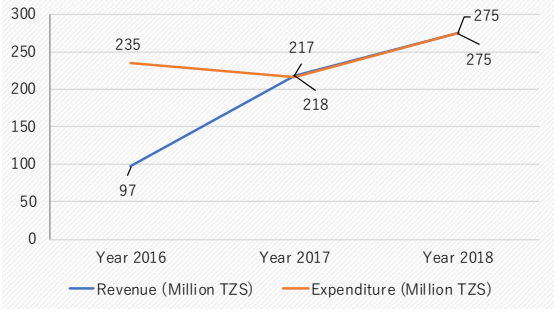
User-fee collection and expenditure trends at RRHs located in big cities



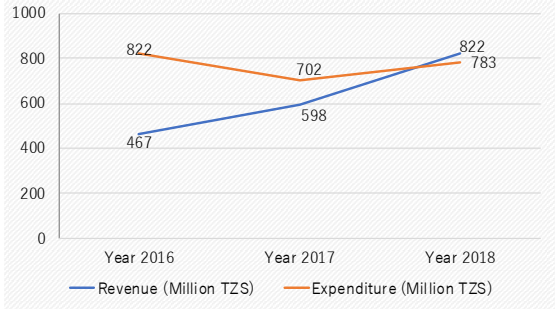
NHIF collection and expenditure trends at RRHs located in remote regions



User-fee collection and expenditure trends at RRHs located in remote regions



NHIF collection and expenditure trends at RRHs located in new regions



User-fee collection and expenditure trends at RRHs located in new regions

*NHIF is "National Health Insurance Fund

Figure 2-23: Collection and expenditure trends of NHIF and user-fees at RRHs

Indicator 2: 70% of RRHs obtain more than 70% of EHPA average scores

According to EHPA 2019, 82.1% of RRHs (23 of 28) scored over 70%. This showed improvement from the previous years: 60.7% of RRHs (17 RRHs) were over 70% in EHPA 2018 and 28.6% of RRHs (8 RRHs) were over 70% in EHPA 2017 (see Figure 2-24).

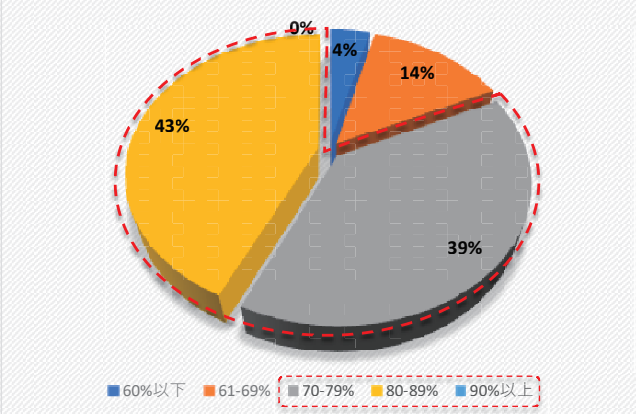
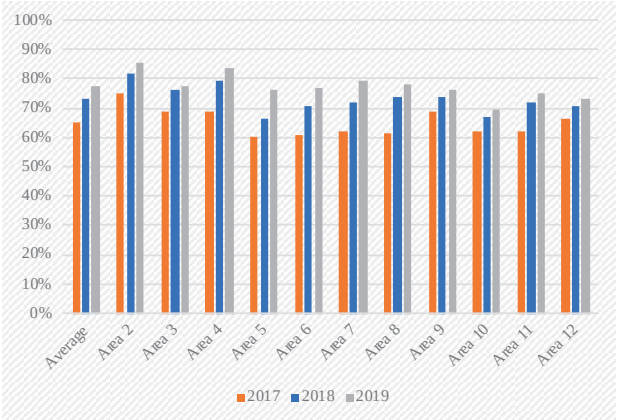


Figure 2-24: Proportion of RRHs in EHPA 2019

There are 12 areas in EHPA checklist. As Figure 2-25, All areas have been improved comparing with the baseline score in 2017.



Area 1	Legality	Area 7	Client Focus
Area 2	Hospital Management	Area 8	Social Accountability
Area 3	Use of Hospital Data for Planning and Service Improvement	Area 9	Hospital Infrastructure
Area 4	Staff Performance Assessment	Area 10	IPC, Safety Measures and Risk Management
Area 5	Organization of Service	Area 11	Clinical service
Area 6	Handling Emergencies and Referral	Area 12	Clinical Support Service

Figure 2-25: Average score of each area in EHPA checklist

2.11. PDM Modification

The project conducted a retreat meeting from May 18-19, 2017 in Bagamoyo, in order to review the progress of the project and discuss issues with project activities with stakeholders. Through the discussion, some amendments of the verifiable indicator in Project Design Matrix (PDM) version 2 were proposed. The newly suggested indicators were explained during the sixth JCC in November 2017, and the JCC members suggested how the amendments could be made in the areas agreed upon. The seventh JCC meeting endorsed the changes made to the verifiable indicators as instructed by the sixth JCC. The Permanent Secretary of the MoHCDGEC (JCC Chairperson) and the Chief Representative of JICA Tanzania Office signed off on the revised PDM indicators.

2.12. End Line Survey

2.12.1. Selection of Local Consultants for the End Line Survey

The project developed a short list of four institutions based on the expertise and experience in the implementation of the baseline survey, end line and/or relevant survey, and sent terms of reference of the assignment for a consultancy to those institutions. Enhance Tanzania Foundation (ENTAF) was selected as a contracting partner from a comprehensive prospective based on technical and financial assessments of the proposals submitted by the institutions.

2.12.2. Review of Survey Tools

The review workshop for the end line survey tool was held on September 30 and October 1, 2019 at the National Institute of Medical Research, Dar es Salaam. During the workshop, the basic hospital information sheet and key informant interview sheet were reviewed by the ENTAF, the project members, and the MoHCDGEC officials. Moreover, the participants identified additional useful information to be collected during the end line survey.

2.12.3. Surveyors Training

End line surveyors training was conducted from October 2–4, 2019 at CEEMI in Dar es Salaam. At the beginning of the training, the outline of the project was explained to make the participants understand the project activities and what they need to collect and measure during the end line survey. Then, the survey tools were introduced to the participants. ENTAF also introduced the new data collection software called Open Data Kits (ODK) for accelerating the data collection

and reducing mistakes in data collection and compilation. Surveyors were supposed to be well trained on using ODK during the training.

2.12.4. Conduct the End Line Survey

End line survey tools were piloted in three RRHs in Dar es Salaam (Mwananyamala, Amana, and Temeke RRHs) and Tumbi RRH from October 21–24, 2019. Then, the tools were fine-tuned based on the findings from the pilot testing by the consultants, the project members, and the MoHCDGEC officials. After the completion of the survey tool adjustment, data collection teams were formulated and dispatched to all RRHs for data collection from October 28 to November 29, 2019. Then, all collected data and information was compiled and analyzed by focusing on priority indicators of interests.

2.12.5. Results of the End Line Survey

(1) Relevance

All informants of the RRHs visited mentioned that the project's interventions were relevant to the improvements in the RRH's performance. The project enabled RRHMTs to focus on quality improvement, obtain additional management knowledge, strengthen their resource management, as well as enhance supervision, leadership, planning, and reporting skills. The project's interventions brought useful experience for RRHMTs, and also brought lessons on how to design, operationalize, and monitor capacity building.

(2) Effectiveness

All project activities for each output were implemented effectively. Ninety percent of the planned targets were met except for the targets relevant to planning and reporting, and the existence of functioning RRHABs. Planning capacity is still weak among clinicians and nurses, and therefore, the larger workload for planning is still left to Hospital Health Secretaries. RRHs also struggle with executing reporting activities. Nevertheless, great improvements in the reporting activities by RRHMTs were observed compared with the baseline status. With regards to HABs, delays in the approval process at the national level is a challenge, as well as getting appropriate people to apply for becoming RRHAB members.

(3) Improvements to RRH Performance

[Financial management]

Although the end line survey found great improvement in the availability of financial information in RRHs compared to the baseline survey, the recording of financial management is still a problem in the RRHs. There were RRHs able to record both revenues and expenditures of NHIF and user-fees, while some RRHs could only present partial financial information, and others could not record any financial information at all.

[Planning and reporting]

Although there were many improvements observed in the RRH's performance in planning activities, especially in CHOP, it was established that the planning capacity is still unsteady. While the baseline survey established that the existing guidelines of CHOP were not user-friendly, in the end line survey, there were no complaints from the RRHs about the clarity of the guidelines; instead the complaints were more about the commitments among the members at respective hospitals during the planning process of CHOP.

[Monitoring]

The end line survey also noted another important contribution by the project, which is hospital performance assessment at the facility level. At the time of the baseline survey, the majority of RRHs were not performing internal monitoring activities. Out of 28 RRHs, 96.4% conducted ISS and reported assessment results on the quality of healthcare services at least quarterly. Only one facility (Njombe RRH) did not conduct ISS because the hospital was newly established. Moreover, the results of the EHPA indicated improved performance of RRHs from 65.1% to 77.3%. Facilities that were poor performers had follow-up support.

[Key performance indicators]

The project prepared key performance indicators (KPIs) for measuring the status of the RRHs management and healthcare services provision. Not all RRHs submitted all KPIs every quarter. The evaluation team assessed the available KPIs and established the following:

- It was noted that some RRHs had limited understanding of the meaning and usefulness of KPIs.
- It was found that some RRHs copied and pasted KPIs across the QPRs.

KPIs that were recorded and analyzed effectively provided very important information for managerial and technical decision making.

[5S-KAIZEN-TQM approach]

Despite the 5S-KAIZEN-TQM approach being part of the quality management system suggested by the MoHCDGEC, it was not applied by the majority of RRHs until 2017. According to the project report, area coverage of 5S implementation (proportion of the areas practicing 5S activities to the total number of sections in a hospital) has been increasing at the regional, national, and zonal levels since 2017. The average area coverage of 5S implementation among all 28 RRHs has increased from 47.7% in 2016 to 97.5% in 2019. Moreover, the empirical data collected during the end line survey indicated the number of RRHs practicing the KAIZEN approach (QC story) was 96.4%.

[Quality management]

There was an improvement in terms of the establishment and functionality of QIT. The evaluation noted that, currently, some RRHs have already established quality improvement units (QIUs). With regards to having QIUs, 89.3% of the RRHs (25 of 28) have QIUs with permanent staff, while the remaining 10.7% (3 of 28) have not established QIUs, but they do have QIT. Out of those 25 RRHs, 96.4% conducted and reported internal assessments of quality of services at least quarterly.

[Hospital Advisory Boards]

Sixty-eight percent of RRHs have a functional RRHAB. This situation is below the baseline number of 82%. It was also found that 64% of the HABs meet on a regular schedule. It was established that 53% of the facilities show that there has been documented HAB activities in the past six months. Approval delays of board members at the national level are a great challenge. The functionality of a RRHAB is affected by its nature, since it can be viewed as an advisory position with little motivation for people to sit on these boards.

[Client satisfaction]

There is considerable improvement in almost all parameters identified for measuring client satisfaction at the end line compared to the baseline survey. About 80% of clients enrolled in

exit interviews reported that doctors did a physical examination. Of the clients interviewed, 93% confirmed that staff and healthcare professionals were all respectful. Eighty-three percent confirmed that all investigations requested by the doctor were performed. Most clients (97%) interviewed were directed where to go after they reached reception, and 86% reported being able to see clear and proper sign postings to guide them where to get all the services they required. Ninety-one percent confirmed that providers were friendly enough that they felt comfortable to seek support whenever they needed. With regard to facility cleanliness, 70% perceived that facilities were fairly clean, 24% perceived that facilities were very clean, and 6% thought they were not clean at all. With regard to receiving appropriate information about illnesses, 83% of the clients interviewed reported that they were given clear information regarding their illnesses, and 87% received clear information about how they should be treated. Seventy percent of exit interview respondents reported receiving all the medicines which were prescribed, while 30% got only some of the medicines prescribed. Most clients (93%) reported that they were well guided on how to use medications, whereas 59% were asked about the medication they had been using before.

(4) Impact

The impact of this project is derived from the contribution it has made on identifying capacity elements for RRHs. This includes the development of several guidelines, training materials, and other relevant references for RRHs in areas of management, planning, and quality management. Furthermore, it has contributed to the RRHs performance tracking tools and mechanisms. Introducing ISS and EHPA are among the contributions that this evaluation considers having long-lasting potential. Revenue collection data indicates increasing trends with more improvement to financial recording and utilization of mechanisms that reduce any mistake in completion and submission processes of an application forms. Such improvements have the potential of improving the capacity of RRHs to sustain their operations. Furthermore, the project has demonstrated a theory of change for building capacity of hospitals nationwide in a resource-constrained environment.

(5) Conclusion

This evaluation concluded that this project was successful and has brought relevant experience to hospital staff who need to implement hospital reform successfully. The success of the project is also attributed to good leadership and support accorded to the project by the government. Other factors include:

- Strong project management demonstrated by Fujita Planning Co., Ltd. and hard work of the entire project staff
- Appropriate follow-up and feedback mechanisms built into the project design
- Implementation of the project activities were adopted and integrated into the mainstream government structure
- Continuous engagement of stakeholders
- Committed beneficiaries

Table 2-39: Indicators set for each output and its achievement

Indicators set for each output		Achievement
Overall Goal	Patient/client satisfaction is improved at target hospitals	Expected to be achieved (P. 72)
Project Purpose	(1) Hospital revenue (Total cash revenue collection, Total cost sharing revenue, Total NHIF revenue collection and Total amount of out-of-Pocket collection) is increased.	Achieved (P. 63)
	(2) 70% of RRHs obtain more than 70% of EHPA average score.	82.1%
Output 1	Results of external managerial capacity assessment of RRHMT are improved.	75%
Output 2	(1) The number of CHOPs which are submitted timely is increased from 48% to 100%	89.3%
	(2) Average score of CHOP assessment is increased from 52% to 90%	78.5%
	(3) 100% of QPR is submitted on time	96.4%
	(4) More than 80% of QPRs obtains more than 70% of the average of 4 QPR scores	78.5%
Output 3	Number of EHPA reports reviewed by the stakeholders is increased	100%
Output 4	Proportion of RRHs implementing KAIZEN activities is increased from 7% to 85% by December 2019	96%
Output 5	(1) Number of RRH organizing Hospital Advisory Board (HAB) meetings based on planned schedule is increased from 40% to 80%	64%
	(2) Proportion of RRHs with functional HAB is increased from 40% to 80%	68%
Output 6	(1) Total number of KAIZEN activities are increased in participating countries.	Achieved (P.62)
	(2) Good practices shared within and outside of Tanzania is increased.	Achieved (P.50)
	(3) 70% of trained primary level health facilities adhere to good storage standards	Achieved (P.64)

Source: End-line survey report

3. Results of Joint Review

3.1. Results of Review based on DAC Evaluation Criteria

Evaluation Criteria	Level of Achievement	Progress
The perspective of Relevance	High	The strengthening of the regional referral health services is still an important strategy of the MoHCDGEC and will carry over to HSSP V. In January 2020, the MoHCDGEC organized a policy and budget meeting in Dodoma. In this meeting, all RRHMTs were instructed to redevelop five-year strategic plans to align with the new health policy and HSSP V. Then, use CHOP to plan the activities to operate the hospital in an efficient manner.
The perspective of Effectiveness	High	All planned activities have been implemented effectively, however, only planned activities were not sufficient to achieve the set project purpose. Therefore, the project conducted many additional activities to achieve the set indicators and project purpose. The reason the project had to conduct additional activities was influenced by a change of ownership in RRHs, and it was necessary to adjust the project implementation structure with the new MoHCDGEC operational structure. As a result of this flexible response, 90% of the indicators were achieved, which was considered to be a very effective approach to achieving the project purpose.
The perspective of Efficiency	High	All planned activities have been implemented within the project timeframe and budget, and the interventions by the project were well managed. There were many additional ad hoc events during the project period that were also well managed to not disturb the implementation of the planned activities.
The perspective of Impact	Moderate	The actual intervention was just over three years with relevant guidelines and tools developed in the first year and then disseminated in the second year. Changing the management style of the RRHs was not easy, and it will take a few more years of observing significant results of the changed management; however, the intervention of the project has influenced many positive attitudes with hospital managers, and the development and introduction of the relevant guidelines and tools for proper hospital management have had a profound effect on RRH reform.
The perspective of Sustainability	Moderate	**Policy and strategies issues** The preparation of HSSP V is currently in progress, and enhancements to the project's outputs, such as CHOP and EHPA, are to be included in HSSP V. Additionally, a Hospital Operation Guide for RRHs is established, and all outputs from the project are included in the guide. Therefore, the outputs of the project are continuously expected to be essential at the national and regional levels.

Evaluation Criteria	Level of Achievement	Progress
		Financial issues RRHMTs are in the process of revising their five-year strategic plans to align with the new health policy and HSSP V. Based on this movement, they are also changing the strategy for the development of CHOP 2020-2021 and trying to allocate budgets to the activities for contributing to the objectives of HSSP V. **Structural issues** The MoHCDGEC established the RRHs unit under the DCS to take over all outputs of the project. Officers in this unit are well trained by the project to confidently work with RRHMTs. **Technical issues** The implementation skills of the EHPA and assessment skills of CHOP and QPR are transferred to the staff of the RRH unit and DPP. Therefore, assessment work can be expected to be carried out properly. BHMT and 5S-KAIZEN training skills are transferred to tutors of CEDHA, PHCI Iringa, and Mzumbe University. If they work together with the national facilitators of the BHMT and the 5S-KAIZEN-TQM approach, the training will be carried out effectively and efficiently for RRHMT members.

3.2. Key Factors Affecting Implementation and Outcomes

In November 2017, the President's office officially announced the shift in ownership of the RRHs from the PO-RALG to the MoHCDGEC. Based on this movement in the regional health system, the structure in the MoHCDGEC was also changed. The DHQA in the MoHCDGEC was dismantled and became one of the units in the DCS. In addition, the RRH unit was established in the DCS to oversee the management of the RRHs. Many Ministry officers have also been transferred. Therefore, the project had to develop working relations with new sections and units of the MoHCDGEC.

3.3. Evaluation of the Results of the Project Risk Management

During the implementation period of the project since October 2016, there were many risks and changes affecting the operations and activities of the project, such as frequent personnel transfers of the Ministry's management members, ownership changes of RRHs from the PO-RALG to the MoHCDGEC, different interests and priorities among the Ministry's departments, etc. The

project was always able to cope with these changes by being flexible and managing the risks (e.g., by changing training and assessment methodologies, changing the targets of several training objectives, involving several stakeholders from different organizations in the assessment work, etc.). Since over 90% of the expected output indicators were achieved, we conclude that the project risk management was done appropriately.

3.4. Lessons Learned and Suggestions

- The project disseminated knowledge and skills about essential activities related to RRHs hospital management, such as planning, reporting, assessment work, etc. during several workshops, training sessions, and follow-up activities. However, the knowledge and skills were not shared very well within the hospitals or the Ministry. Therefore, when people who have the knowledge and skills are transferred or retire, the quality and progress of the work is greatly affected. Additionally, in-house training mechanisms within RRHs are not well established. Therefore, the MoHCDGEC should provide guidance to strengthen institutional memory[3] and in-house training mechanism in RRHs so that RRHs can be operated without any disturbance from the frequent turnover of staff.
- There is need to capacitate and strengthen the newly established RRH Unit at the MoHCDGEC with sufficient HRH to be able to effectively oversee and manage the RRHs.
- It might be better to separate RRH management into its own forum because Technical Working Group-1 is mostly dominated by district health issues.
- Strengthening RRHs operation is one of the top priorities of the MoHCDGEC. Therefore, the MoHCDGEC is expected to utilize CHOP properly to allocate necessary budgetary resources to the RRHs. On the other hand, all RRHMTs need to start revising their five-year strategic plans to align with the new health policy and HSSP V, and utilize the five-year strategic plan for development of CHOP.
- A new version of CHOP was modified in 2016 and introduced in 2017. The quality of CHOP is getting better year by year as RRHMTs are getting used to developing CHOP based on actual expenditures from the previous financial year. It is expected that all RRHMTs will

[3] "Institutional memory" is the collective knowledge and learned experiences of a group. As turnover occurs among group members, these concepts must be transitioned. Knowledge management tools aim to capture and preserve these memories. (https://bit.ly/2xetnJD)

make resource allocations more realistic and adequate by continuously improving the quality of CHOP.

- It is necessary to standardize the capacities of RRHs, such as organizational structure, bed capacity, clinical service provisions, requirement facilities and equipment, etc.
- It is suggested that budgetary funds be allocated for up-grading the HRHIS. The system is getting old and slow, which is affecting the utilization of the HRHIS in HRH management.
- To enhance the capabilities of RRHs hospital management, the project developed several guidelines and standardized tools, and disseminated them to all RRHs through workshops, training, and follow-up activities; however, some RRHMTs have still lagged behind in strengthening their own hospital management.
  - RRHs in the newly established regions took time to change the management from the district health system to the RRHs, which heavily affected the capacity building of RRHMTs.
  - If we had more time and money for follow-up activities, the project would have been able to individually support the weaknesses of each hospital.
- It was observed that tutors from the training institutions are still facing challenges in teaching the 5S-KAIZEN activities from the hospital management training package. Therefore, the training institutions collaborating with the MoHCDGEC and 5S-KAIZEN national facilitators need to develop a practical plan to enhance the teaching abilities of the tutors.
- Rather than relying on individuals to share information within the MoHCDGEC, we should have adopted a way to share information with a wide range of stakeholders. If we had such a mechanism, the project outputs could be disseminated more effectively.

4. Achievement of Overall Goals

4.1. Prospects to Achieve the Overall Goal

The project can achieve its overall goal – Quality of health services are improved at RRH. The RRHMTs have been strengthened and are showing indicators of good performance. If sufficient resources are allocated when needed and support for the improvement of technical services are properly provided, the overall project goal can be achieved in the next five to seven years.

4.2. Plan of Operation and Implementation Structure of the Tanzanian Side to Achieve the Overall Goal

The MoHCDGEC established the RRH unit under the DCS, and competent staff have been allocated to this unit. Therefore, all technical and administrative outputs from the project will be transferred to this unit, and they will be carried over to support the 28 RRHMTs to operate the RRHs effectively and efficiently. However, many challenges remain to hinder their ability to provide high-quality, safe healthcare services. Thus, the RRH unit will disseminate the hospital operation guide to ensure appropriate hospital management is implemented and the quality and safety of healthcare services are maintained through the EHPA, other technical supportive supervision, and training.

4.3. Recommendations for Tanzania

The performance of the RRH unit is key for improving healthcare services in the RRHs. Therefore, the MoHCDGEC management needs to inject some more resources to optimize the unit. For the optimization of the RRH unit, the following interventions could be useful:

- Develop a strategic plan and operational plan for the section.
- Clarify the mechanism of hospital assessments and share it among stakeholders.
- Enhance technical capacity on CHOP, QPR assessment, EHPA implementation, analysis of findings, KPI analysis, etc.
- Strengthen the data and information management obtained from RRHs.
- Recommend that the group training schemes of JICA be used, such as the hospital management course and the quality and safety improvement course.

4.4. Monitoring Plan from the End of the Project to Ex-post Evaluation

As mentioned in the above discussion, all project outputs are going to be transferred to the RRH unit. The CHOP and QPR assessments and the EHPA will be carried out by the RRH unit, and the hospital management training is going to be carried out by CEDHA, PHCI Iringa, and Mzumbe University, in collaboration with the Department of Human Resources in the MoHCDGEC. Monitoring of those activities will be conducted by responsible units, sections, and departments in the MoHCDGEC. On the other hand, the RRHMTs are responsible for monitoring their own performance through ISS and self-monitoring the 5S-KAIZEN activities, and reporting those results through the QPR submissions.

4.5. Closing of the project

Due to the global spread of COVID-19, the date of closing RRHMP activities was forced to change from the middle of May to the end of March 2020. Therefore, the final seminar, which was planned as the culmination of the project interventions is not being conducted. In addition, the technology transfer to the RRH unit was also planned during the remaining activity period. However, it could not be completed. Conducting the final seminar is considered as very important for sharing the outputs of the project for strengthening the sustainability of the project outputs.

Annex 1. Result of the Project

(1) Input by the Japanese Side

Planned	Actual
1. Dispatch of Experts	
(1) Chief Advisor / Hospital Management	**Hisahiro ISHIJIMA** *Completed;* - 1st dispatch in 2016 - 2nd and 3rd dispatch in 2017 - 4th to 6th dispatch in 2018 - 7th dispatch in 2019 - 8th dispatch from 2019 to 2020
(2) 5S-KAIZEN-TQM 1	**Noriyuki MIYAMOTO** *Completed;* - 1st dispatch in 2016 - 2nd and 3rd dispatch in 2017 - 4th and 5th dispatch in 2018 - 6th and 7th dispatch in 2019 - 8th dispatch in 2020
(3) 5S-KAIZEN-TQM 2	**Nao YANASE** (Predecessor) *Completed;* - 1st dispatch in 2016 - 2nd and 3rd dispatch in 2017 - 4th dispatch in 2018 **Takahiko MINASE** (Successor) - 1st dispatch in 2019
(4) Hospital Planning	**Shuichi SUZUKI** *Completed;* - 1st dispatch in 2016 - 2nd and 3rd dispatch in 2017 - 4th dispatch in 2018
(5) Training Management	**Yasuko KASAHARA** *Completed;* - 1st dispatch in 2016 - 2nd and 3rd dispatch in 2017 - 4th dispatch in 2018 - 5th and 6th dispatch in 2019 - 7th dispatch in 2020
2. Equipment and Material	
(1) Necessary equipment and materials for the project activities	Office equipment has been provided as follows; - one (1) paper shredder - two (2) laptop computers *Equipment and materials having provided in the Phase 1* - one (1) laptop computer - two (2) multimedia projector - one (1) air conditioning machine - two (2) vehicles

3. Local Costs	
(1) Trainings, workshops, consulting visits, External hospital progress assessments, seminars (cost sharing with MoHCDGEC and RRHs.)	- Paid most of the costs for conducting the trainings, workshops and seminars - Paid necessary costs in cost sharing system. Details are described in “Sustainability” in “4. Self-evaluation based on DAC evaluation criteria”
(2) Training material printing cost	All costs for printing training materials were borne by the Japanese side.
(3) Other activity costs	Paid office relocation costs.

(2) Input by the Tanzanian Side

Planned	Actual
1. Counterparts	
(1) Project Director	Assigned as planned; (Predecessor) Dr. Mpoki Ulisubisya Permanent Secretary (Successor) Dr. Zainab A. S. Chaula Permanent Secretary
(2) Project Manager	Assigned as planned; (Predecessor) Mr. Bernard Konga Director, Policy and Plannning (Successor) Mr. Edward N. Mbanga Director, Policy and Planning
(3) Other personnel mutually agreed upon as needed.	MoHCDGEC officials, PO-RALG officials and health managers from health facilities, who have been trained as national facilitators thorough the project, are actively participated in the project activities and support to improve RRH management capacities.
2. Facilities, Equipment and Materials	
(1) Office space for the project	Provided and the project had to relocate the office in August 2019 because of the transfer of MoHCDGEC Head Quarter Office from Dar es Salaam to Dodoma.
(2) Necessary equipment and materials for the project activities	Provided electricity and water supply, internet access, desks, chairs and shelfs.
3. Local Costs	
(1) Operational costs for implementing seminars (cost sharing with MoHCDGEC and RRHs)	Paid necessary costs in cost sharing system. Details are described in “Sustainability” in “4. Self-evaluation based on DAC evaluation criteria”

(3) List of Activities

Planned	Actual
Output 1: Basic management capacity (leadership, planning, M&E, human resource management, financial management, resource management, information management) of HMTs is improved.	
1-1 Situation analysis and benchmarking is conducted on management capacities of RRHs.	*Implemented in phase 1 (from June to August 2015)* - Preparatory workshop for baseline survey in June 2015 - Baseline survey in June and July 2015 - Feedback workshop in August 2015
1-2 Existing training programs and materials on hospital management is reviewed.	*Implemented in phase 1 (September 2015)* - Reviewing workshop on findings of baseline survey
1-3 Training institutions and facilitators are identified and oriented.	*Implemented in phase 1 (September 2015)*
1-4 Training modules (basic and applied) and materials are consolidated.	*Implemented in phase 1 (October 2015)* - Workshop on modifying hospital management program and teaching materials
1-5 National facilitators are trained on hospital management in ToT manner.	*Implemented in phase 1 (May2016)* - Facilitator training was implemented *Implemented as planned* - Basic Hospital Management Facilitators Training
1-6 Hospital management training is conducted to RRHMTs.	*Implemented as planned* - Basic Hospital Management Training in 2017 - Basic Hospital Management Training in 2018 - Applied Hospital Management Training on ISS - Applied Hospital Management Training on monitoring and evaluation - Applied Hospital Management Training on new CHOP and QPR
1-7 Institutionalization of hospital management training program is promoted and facilitated.	*Implemented as planned* - Hospital Management Training handing over workshop (program development and BHMT) - Hospital Management Training handing over workshop (5S-KAIZEN) - Hospital Management Training (1st pilot) @CEDHA - Hospital Management Training (2nd pilot) @PHCI - Review workshop on pilot HMTs - Capacity building workshop for Training institutions
1-8 Training effectiveness is assessed.	*Implemented as planned* - EHPA 2017 - EHPA 2018 - EHPA 2018 data compilation workshop - EHPA 2019 - EHPA 2019 data compilation workshop
Output 2: Planning and reporting capacity of RRHs is improved.	
2-1 CHOP (Comprehensive Hospital Operation Plan) and	*Implemented in phase 1 (September 2015)* - Workshop on reviewing Hospital Performance Assessment Tool

Planned	Actual
related management structure are reviewed.	
2-2 CHOP guideline and formats are revised accordingly.	*Implemented in phase 1 (September 2015)* - CHOP guideline and format were revised in August 2016. *Implemented as planned* - CHOP guideline and format were revised in May 2019.
2-3 Training on CHOP is conducted. (as in 1-5 and 1-6)	*Implemented as planned* - CHOP Training
2-4 Data management for CHOP development and monitoring is improved. (in line with 3-1 and 3-2)	*Implemented as planned* - CHOP 2017-2018 Assessment - CHOP 2018-2019 Assessment - CHOP 2019-2020 Assessment - CHOP 2020-2021 Assessment - QPR 2017-2018 Q1 Assessment - QPR 2017-2018 Q2 Assessment - QPR 2017-2018 Q3 Assessment - QPR 2017-2018 Q4 Assessment - QPR 2018-2019 Q1 Assessment - QPR 2018-2019 Q2 Assessment - QPR 2018-2019 Q3 Assessment - QPR 2018-2019 Q4 Assessment - QPR 2019-2020 Q1 Assessment - QPR 2019-2020 Q2 Assessment - QPR 2019-2020 Q3 Assessment - CHOP Assessment Training for Assessors - QPR Assessment Training for Assessors
2-5 Data management tool for human resources for health (HRHIS) is introduced.	*Implemented as planned* - HRHIS Operation and HRM Training - HRHIS Supportive Supervision 2018 - HRHIS Supportive Supervision 2019
2-6 Mentoring support on planning and reporting is strengthened.	*Implemented as planned* - Applied Hospital Management Training on new CHOP and QPR - CHOP 2017-2018 Assessment - CHOP 2018-2019 Assessment - CHOP 2019-2020 Assessment - CHOP 2020-2021 Assessment - QPR 2017-2018 Q1 Assessment - QPR 2017-2018 Q2 Assessment - QPR 2017-2018 Q3 Assessment - QPR 2017-2018 Q4 Assessment - QPR 2018-2019 Q1 Assessment - QPR 2018-2019 Q2 Assessment - QPR 2018-2019 Q3 Assessment - QPR 2018-2019 Q4 Assessment - QPR 2019-2020 Q1 Assessment - QPR 2019-2020 Q2 Assessment - QPR 2019-2020 Q3 Assessment - CHOP Assessment Training for Assessors

Planned	Actual
	- QPR Assessment Training for Assessors
2-7 Report formulating skills and reporting structure are reviewed and strengthened.	*Implemented as planned* - Applied Hospital Management Training on new CHOP and QPR - CHOP 2017-2018 Assessment - CHOP 2018-2019 Assessment - CHOP 2019-2020 Assessment - CHOP 2020-2021 Assessment - QPR 2017-2018 Q1 Assessment - QPR 2017-2018 Q2 Assessment - QPR 2017-2018 Q3 Assessment - QPR 2017-2018 Q4 Assessment - QPR 2018-2019 Q1 Assessment - QPR 2018-2019 Q2 Assessment - QPR 2018-2019 Q3 Assessment - QPR 2018-2019 Q4 Assessment - QPR 2019-2020 Q1 Assessment - QPR 2019-2020 Q2 Assessment - QPR 2019-2020 Q3 Assessment - CHOP Assessment Training for Assessors - QPR Assessment Training for Assessors
Output 3: Monitoring and Evaluation of RRHs is strengthened.	
3-1 Tools for internal hospital performance assessment within RRH are reviewed, developed and utilized.	*Implemented as planned* - ISS/EHPA guideline finalization workshop - Applied Hospital Management Training on ISS - Applied Hospital Management Training on monitoring and evaluation - After ISS training, the RRHs used the developed ISS tools for internal monitoring and evaluation.
3-2 Tools for external hospital performance assessment by MoHCDGEC /PO-RALG through RHMT are reviewed, developed and utilized.	*Implemented as planned* - ISS/EHPA guideline finalization workshop - EHPA Pilot assessment - EHPA Facilitators Trainings - EHPA Training for RHMT Kilimanjaro - EHPA orientations for RHMT - The developed ISS tools were using in EHPA
3-3 Results from hospital performance assessment (internal and external) are analyzed and publicized.	*Implemented as planned* - RRH Managers meeting for dissemination of EHPA-findings - Meeting with Medical Officer In-Charge for dissemination of EHPA-findings
3-4 RMSS-H, mentoring and other support activities to RRHs are strengthened, based on the results of hospital performance assessment.	*Implemented as planned* - RRH Managers meeting for dissemination of EHPA-findings - Meeting with Medical Officer In-Charge for dissemination of the EHPA-findings - EHPA Follow-up for 9 RRHs
3-5 RHMT's monitoring and evaluation capacity of	*Implemented as planned* - RHMT training on 5S-KAIZEN M&E

Planned	Actual
5S-KAIZEN-TQM activities is strengthened.	- EHPA Training for RHMT Kilimanjaro - EHPA orientation to RHMTs
Output 4: Resource management and quality improvement activities are strengthened through KAIZEN approach.	
4-1 Application of KAIZEN approach in improvement of hospital management is conceptualized.	*Implemented in phase 1* - KAIZEN training materials were reviewed and revised. - Development of KAIZEN ToT Facilitator's Guide
4-2 QIT and WIT are oriented on hospital management.	*Implemented as planned* - Consultation Visits were conducted in each year for all RRHs and 4 national hospitals.
4-3 Target managerial areas for quality improvement at each RRH is identified by the result from hospital performance assessment.	*Implemented in phase 1* Target areas were identified and reflected in the creation of facilitator guidelines.
4-4 KAIZEN ToT is conducted to National Facilitators, focusing on improvement of hospital management.	*Implemented as planned* - KAIZEN ToT was conducted in every year. - Workshop on 5S-KAIZEN Skill building was conducted for national facilitators.
4-5 KAIZEN training is conducted to RRHMTs.	*Implemented as planned* - KAIZEN ToT was conducted in every year.
4-6 KAIZEN activities in target managerial areas are conducted at each RRH.	*Implemented as planned* - National KAIZEN Themes are set as follows. RRHs have been able to carry out the KAIZEN activities under the clear theme. (2015/2016) "Revenue collection of NHIF is improved" (2016/2017) "Healthcare waste management is improved" (2017/2018) Each RRH set own theme individually based on the results of EHPA. (2018/2019) MoHCDGEC encouraged each RRH to set own KAIZEN theme based on the results of EHPA.
4-7 Progress of KAIZEN activities is monitored.	*Implemented as planned* - Consultation Visits were conducted each year. - A poster for 5S-KAIZEN-TQM Approach was developed in March 2018. - Current situation of MoHCDGEC and RRHs, and Lessons learned from Consultation Visit were used to finalize the implementation guideline of 5S-KAIZEN-TQM Approach (4th edition).
4-8 Institutionalization of KAIZEN ToT is promoted and facilitated.	*Implemented as planned* - The project was designed to strengthen RHMT (PO-RALG) and maintain a training program after the project was completed. However, RRH was transferred under MoHCDGEC in 2018. Although it is difficult to include RHMT personnel into the CV team,

Planned	Actual
	the project has continuously tried to involve RHMT even after the transferring of RRHs. - For sustainable implementation of KAIZEN ToT, the project accommodated the contents of KAIZEN ToT in the program of Hospital Management Training - Hospital Management Training handing over workshop was conducted. - The pilot training course on Hospital Management at CEDHA was conducted. - The pilot training course on Hospital Management at PHCI was conducted.
4-9 Impact of KAIZEN approach for hospital management is assessed and reviewed.	- The project has started compiling and analyzing impacts of KAIZEN approach especially towards improving healthcare waste management in RRHs.
Output 5: Governance of RRHs is strengthened.	
5-1 Guideline and assessment tools for Hospital Advisory Boards (HAB) is reviewed and revised.	*Implemented in phase 1*
5-2 Orientation training materials and program for HAB is developed, reviewed and revised.	*Implemented in phase 1*
5-3 Training for capacity building of HAB on governance and leadership is implemented.	*Implemented as planned* - HAB training facilitators orientation - HAB training
5-4 Regular assessment of HAB functionality and supportive interventions to HAB are conducted.	*Implemented as planned* - Functionality of HAB at RRHs has been monitored in EHPA, QPRs and self-evaluation by RRHMTs.
5-5 Recommendations from HAB report are reviewed and enhanced to improve hospital performance.	*Implemented as planned* -The project has provided technical advices through EHPA and other opportunities such as AHMT and Medical Officer In-Charge meeting.
Output 6: Tanzania's experience and knowledge on hospital management and QI are shared within Tanzania and with other African countries.	
6-1 Annual Quality Improvement Coordination Forum (QI Forum) is organized jointly by stakeholders.	*Implemented in phase 1*
6-2 Horizontal learning among RRHs is enhanced.	*Implemented as planned* - Progress Report Meeting - Meeting with Medical Officer In-Charge for dissemination of EHPA-findings
6-3 5S-KAIZEN-TQM training with a focus on commodity management is conducted to	*Implemented in phase 1* - Developed guideline and posters - BRN Facilitators Training

Planned	Actual
primary level health facilities and CHMTs.	- BRN Trainings were conducted in Mwanza *Implemented as planned* - BRN Facilitators Training - BRN Trainings were conducted in Singida, Simiyu, Tabora and Shinyanga - Follow up visits focusing on 5S-implementation in Health Commodity Management to 36 district health facilities in 5 regions
6-4 Networking and knowledge sharing with other African countries implementing 5S-KAIZEN-TQM Approach are encouraged.	*Implemented as planned* - KAIZEN ToT for international participants: (1) November to December 2016 14 participants from 7 countries; Egypt, Sudan, Kenya, Malawi, Zimbabwe, Burundi and Senegal (2) March 2017 4 participants from Uganda (3) December 2017 11 participants from 6 countries; Burundi, Kenya, Sierra Leone, Sudan, Zimbabwe and Bangladesh (4) November 2018 8 participants from 4 countries; Burundi, Kenya, Uganda and Zimbabwe (5) June 2019 14 participants from 8 countries; Benin, Ghana, Liberia, Malawi, Sierra Leone, Sudan, Uganda and Zimbabwe - Study tours from other countries: (1) March 2019 11 participants from Ghana (2) July 2019 7 participants from Bangladesh
6-5 Regional KAIZEN ToT Training Program is acknowledged by stakeholders.	*Implemented as planned* - Good practices of 5S and KAIZEN activities had been continuously collected through the Consultation Visits - The workshop for developing 5S-KAIZEN implementation guideline (4th edition) and good practice booklet - The implementation guideline and the good practice booklet is under approval process in MoHCDGEC
6-6 Regional KAIZEN ToT Training is conducted with participation of other African countries.	*Implemented as planned* Same as [6-4: KAIZEN ToT for international participants]

(4) Executive summary of RRHMP activities in phase 2

#	Output	Activities	Period of event	# of participants	# of observers	# of facilitators	RRHMP staff	RRHMP Experts	Total amount of expenditure (TSH)	Exchange rate of the month (JICA)	Total amount of expenditure (JPY)
1	6	BRN Facilitators skill building workshop	15-18 Nov. 2016	19	4	8	3	3	24,000,000	0.049320	1,183,680
2	-	JCC (4th)	17 Nov. 2016	19	-	-	5	3	1,000,000	0.049320	49,320
3	2	CHOP Training	21-24 Nov. 2016	82	-	10	4	2	105,000,000	0.049320	5,178,600
4	4, 6	KAIZEN Training of Trainers (3rd)	28 Nov. - 02 Dec. 2016	56	9	7	5	3	75,000,000	0.052820	3,961,500
5	6	BRN Training in Singida	23 Jan. - 10 Feb. 2017	265	0	9	1	1	185,000,000	0.055110	10,195,350
6	3	EHPA / ISS guideline and tool finalization Workshop	23-27 Jan. 2017	15	-	2	2	1	24,000,000	0.055110	1,266,480
7	-	Technical Working Group (Quality) Meeting	1-3 Feb. 2017	(40)	-	-	1	1	1,000,000	0.052770	52,770
8	5	HAB training	7-10 Feb. 2017	109	2	7	3	1	118,000,000	0.052770	6,226,860
9	1, 3	ISS Training	13-16 Feb. 2017	82	3	8	3	1	90,000,000	0.052770	4,749,300
10	3	Material Development Workshop for 5S-KAIZEN M&E Training for RHMTs	20-22 Feb. 2017	7	0	0	1	3	4,000,000	0.052770	211,080
11	3	EHPA pilot assessment	20-24 Feb. 2017	10	0	0	1	1	6,400,000	0.052770	337,728
12	6	BRN Training in Shinyanga	27 Feb.-17 Mar. 2017	217	9	9	1	1	162,000,000	0.052770	8,548,740
13	4	KAIZEN Facilitator Training	28 Feb. - 2 Mar. 2017	7	0	4	2	2	7,000,000	0.051060	357,420
14	4, 6	KAIZEN Training of Trainers (4th)	20-24 Mar. 2017	46	13	9	3	2	65,800,000	0.051060	3,359,748
15	6	BRN Training in Simiyu	25 Mar. - 13 Apr. 2017	204	0	9	1	1	145,000,000	0.050710	7,352,950
16	1	BHMT Facilitators Training	27-31 Mar. 2017	10	0	3	3	1	20,000,000	0.051060	1,021,200
17	1	BHMT	2-7 Apr. 2017	42	0	8	3	1	51,000,000	0.050710	2,586,210
18	2	CHOP Assessment	10-14 Apr. 2017	5	0	0	2	1	4,700,000	0.050710	238,337
19	-	JCC (5th)	20 Apr. 2017	15	-	-	2	2	8,400,000	0.050710	425,964

#	Output	Activities	Period of event	# of participants	# of observers	# of facilitators	RRHMP staff	RRHMP Experts	Total amount of expenditure (TSH)	Exchange rate of the month (JICA)	Total amount of expenditure (JPY)
20	6	BRN Training in Tabora	23 Apr. -18 May. 2017	301	6	9	1	1	220,000,000	0.050460	11,101,200
21	1	BHMT	23-29 Apr. 2017	36	0	6	3	1	63,000,000	0.050710	3,194,730
22	1	BHMT	8-13 May. 2017	42	0	6	3	2	69,000,000	0.050460	3,481,740
23	-	Retreat Workshop	18-19 May. 2017	17	1	-	3	4	24,000,000	0.050460	1,211,040
24	3	BHMT	22-27 May. 2017	48	0	6	3	1	81,000,000	0.050460	4,087,260
25	4	CV for 5S-KAIZEN 2017 1st	Feb. - Jun. 2017	-	-	15	2	2	71,000,000	0.05017	3,562,070
26	3	RHMT training on 5S-KAIZEN M&E	6-9 Jun. 2017	75	0	8	2	3	94,400,000	0.05017	4,736,048
27	4	National Facilitators' skill building workshop	13-16 Jun. 2017	24	0	3	2	2	31,000,000	0.05017	1,555,270
28	3	EHPA Facilitator's training	19-23 Jun. 2017	20	0	10	5	2	27,500,000	0.05017	1,379,675
29	6	Progress Report Meeting (2nd)	10-12 Jun. 2017	56	13	12	3	3	91,500,000	0.05082	4,650,030
30	3	EHPA (1st round) - Baseline	Jul. - Oct. 2017	-	-	11	4	1	162,000,000	0.05073	8,218,260
31	4	Pilot test of new CV tool	19-20 Sep. 2017	7	0	0	1	1	1,300,000	0.04916	63,908
32	3	EHPA Workshop on finalization of guideline and tool	9-13 Oct. 2017	10	0	1	2	1	33,500,000	0.05073	1,699,455
33	2	HRHIS Training 1	9-13 Oct. 2017	12	-	1	2	0	84,000,000	0.04864	4,085,760
34	2	HRHIS Training 2	23-27 Oct. 2017	14	-	1	2	0			
35	2	HRHIS Training 3	13-17 Nov. 2017	14	-	1	1	0			
36	2	HRHIS Training 4	27 Nov. - 1 Dec. 2017	16	-	1	2	0			
37	4	CV for 5S-KAIZEN 2017 2nd	Sep. - Nov. 2017	-	-	15	-	2	91,000,000	0.05158	4,693,780
38	3	Integration workshop of 5S-KAIZEN-TQM Approach in EHPA	8-10 Nov. 2017	9	0	0	1	2	7,600,000	0.05158	392,008

#	Output	Activities	Period of event	# of participants	# of observers	# of facilitators	RRHMP staff	RRHMP Experts	Total amount of expenditure (TSH)	Exchange rate of the month (JICA)	Total amount of expenditure (JPY)
39	-	JCC (6th)	16 Nov. 2017	9	0	-	2	2	9,200,000	0.05158	474,536
40	4	KAIZEN Training of Trainers (5th)	4-8 Dec. 2017	61	6	10	3	2	81,400,000	0.05000	4,070,000
41	3	EHPA Training for RHMT Kilimanjaro	18-21 Dec., 2017	6	0	3	2	0	5,000,000	0.05000	250,000
42	1	BHMT material review	22-27 Jan. 2018	12	0	0	5	2	26,500,000	0.05092	1,349,380
43	3	Dissemination of EHPA Baseline Survey Findings to RRH Managers	29-31 Jan. 2018	38	0	7	5	2	44,800,000	0.05092	2,281,216
44	1	BHMT	12-17 Feb. 2018	34	0	6	2	2	66,800,000	0.04864	3,249,152
45	3	Dissemination of EHPA Baseline Survey Findings to RRH Managers	19-21 Feb. 2018	21	0	4	5	1	22,600,000	0.04864	1,099,264
46	1	BHMT	26 Apr. - 3 Mar. 2018	35	5	6	4	1	69,000,000	0.04864	3,356,160
47	3	Dissemination of EHPA Baseline Survey Findings to RRH Managers	7-9 Mar. 2018	24	0	4	4	0	39,000,000	0.04769	1,859,910
48	1	BHMT	12-17 Mar. 2018	40	1	6	4	1	65,800,000	0.04769	3,138,002
49	4	KAIZEN Training of Trainers (6th)	19-23 Mar. 2018	52	8	8	1	2	86,500,000	0.04769	4,125,185
50	-	JCC (7th)	5 Apr. 2018	14	0	-	2	3	6,000,000	0.04722	283,320
51	1	BHMT	9-14 Apr. 2018	31	0	8	4	2	60,000,000	0.04722	2,833,200
52	2	CHOP QPR Assessment (Q1, Q2 and Q3 2017)	16-22 Apr. 2018	8	0	-	3	0	10,000,000	0.04722	472,200
53	-	TWG-Quality Meeting	4th May. 2018	(40)	-	-	-	1	1,000,000	0.04806	48,060
54	1	BHMT Facilitator's Manual Development Workshop	7-11 May. 2018	11	0	2	4	1	20,000,000	0.04806	961,200
55	1	AHMT (Monitoring and Evaluation)	15-17 May. 2018	26	3	6	4	2	35,700,000	0.04806	1,715,742
56	1	AHMT (Monitoring and Evaluation)	22-24 May. 2018	28	0	6	3	2	33,300,000	0.04806	1,600,398

#	Output	Activities	Period of event	# of participants	# of observers	# of facilitators	RRHMP staff	RRHMP Experts	Total amount of expenditure (TSH)	Exchange rate of the month (JICA)	Total amount of expenditure (JPY)
57	4	CV for 5S-KAIZEN 2018 1st (Only for National Hospitals)	May. to Jun. 2018	-	-	5	1	1	15,000,000	0.04792	718,800
58	2	HRHIS SS 2018	Jun. to Jul. 2018	-	-	7	0	0	12,000,000	0.04792	575,040
59	2	CHOP QPR Assessment (Q3 2017)	4-8 Jun. 2018	8	-	-	3	0	8,600,000	0.04792	412,112
60	3	EHPA Facilitator's training	2-6 Jul. 2018	12	0	4	5	2	21,300,000	0.04862	1,035,606
61	3	RHMT training on PDCA and EHPA	9-13 Jul. 2018	42	0	4	4	1	22,600,000	0.04862	1,098,812
62	3	RHMT training on PDCA and EHPA	16-20 Jul. 2018	36	0	4	4	1	22,100,000	0.04862	1,074,502
63	3	EHPA 2018	28 Jul. - 7 Sep. 2018	-	-	9	2	1	85,500,000	0.04884	4,175,820
64	4	CV for 5S-KAIZEN 2018 2nd	Sep. - Nov. 2018	-	-	15	1	1	53,700,000	0.0489	2,625,930
65	3	EHPA data compilation and analysis	10-14 Sep. 2018	10	0	-	3	1	13,000,000	0.0489	635,700
66	1	Workshop on handing over BHMT to institutions	15-19 Oct. 2018	15	1	3	4	2	27,300,000	0.04954	1,352,442
67	-	DCS meeting	10 Oct. 2018	10	1	2	3	3	2,000,000	0.04954	99,080
68	1	Meeting of RRH Medical Officer In-charge	29-30 Oct. 2018	28	6	3	3	3	41,000,000	0.04954	2,031,140
69	-	JCC (8th)	1 Nov. 2018	16	0	0	3	3	1,500,000	0.04932	73,980
70	4	KAIZEN ToT in Dar	5-9 Nov. 2018	57	6	8	3	3	81,600,000	0.04932	4,024,512
71	4, 6	KAIZEN ToT in Mbeya	12-16 Nov. 2018	38	11	9	3	3	62,000,000	0.04932	3,057,840
72	2	CHOP 2018 QPR 1 assessment	19-25 Nov. 2018	8	0	-	3	0	19,000,000	0.04932	937,080
73	1	KAIZEN training for TIs	21-25 Jan. 2019	9	0	3	1	1	24,600,000	0.04837	1,189,902
74	2	CHOP 2018 QPR 2 assessment	28 Jan. - 1 Feb. 2019	10	0	-	3	0	14,000,000	0.04837	677,180
75	4	CV for 5S-KAIZEN 2019	Feb. - May. 2019	-	-	15	2	1	64,000,000	0.04737	3,031,680
76	3	EHPA Follow-up visit	18 Feb. - 8 Mar.	-	-	4	3	0	12,000,000	0.04738	568,560

#	Output	Activities	Period of event	# of participants	# of observers	# of facilitators	RRHMP staff	RRHMP Experts	Total amount of expenditure (TSH)	Exchange rate of the month (JICA)	Total amount of expenditure (JPY)
			2019								
77	6	Ghana MoH Study tour	4-8 Mar. 2019	11	0	1	2	1	1,000,000	0.04738	47,380
78	-	Dissemination meeting to MoH	2 Apr. 2019	20	0	2	3	1	3,500,000	0.04751	166,285
79	2	CHOP 2019-20 assessment	8-16 Apr. 2019	10	0	-	3	0	15,500,000	0.04751	736,405
80	2	QPR 3 in 2018-19 assessment	29 Apr. - 3 May. 2019	10	0	-	3	0	15,600,000	0.04861	758,316
81	2	HRHIS SS 2019	May. to Jun. 2019	-	-	7	-	0	21,800,000	0.04861	1,059,698
82	1	Hospital Management Training pilot training in CEDHA	20-31 May. 2019	38	5	7	3	2	38,500,000	0.04861	1,871,485
83	2	AHMT (CHOP/ QPR)	11-13 Jun. 2019	84	15	4	5	1	102,000,000	0.04785	4,880,700
84	4	KAIZEN ToT in Dar	17-21 Jun. 2019	50	18	11	5	2	90,000,000	0.04785	4,306,500
85	4, 6	KAIZEN ToT in Mbeya	24-28 Jun. 2019	50	14	12	4	2	76,000,000	0.04785	3,636,600
86	6	BRN follow-up visit	May. to Jun. 2018	-	-	37	1	1	34,600,000	0.04785	1,655,610
87	6	Bangladesh study tour	8-12 Jul. 2019	9	0	2	2	2	0	0.04699	0
88	4	Workshop on 5S-KAIZEN implementation guideline and good practice booklet	15-19 Jul. 2019	9	0	-	1	2	13,000,000	0.04699	610,870
89	2	QPR4 in 2018-19 assessment	22-26 Jul. 2019	20	0	5	4	0	31,000,000	0.04699	1,456,690
90	-	JCC (9th)	29 Jul. 2019	14	0	0	5	2	3,200,000	0.04699	150,368
91	3	EHPA refresher's' training	30 Jul. to 1 Aug. 2019	15	0	0	5	1	10,800,000	0.04699	507,492
92	3	EHPA 2019	Aug. to Sep. 2019	-	-	9	4	1	133,800,000	0.04699	6,287,262
93	3	EHPA compilation Workshop	16-24 Sep. 2019	11	0	-	2	1			
94	-	End-line survey tool finalization Workshop	30 Sep. - 01 Oct. 2019	5	0	1	2	2	11,000,000	0.04635	509,850
95	-	End-line surveyor training	2-5 Oct. 2019	28	0	1	2	2	3,500,000	0.04707	164,745
96	1	Review Workshop for pilot Hospital Management	16-17 Oct. 2019	15	0	1	1	3	14,000,000	0.04707	658,980

#	Output	Activities	Period of event	# of participants	# of observers	# of facilitators	RRHMP staff	RRHMP Experts	Total amount of expenditure (TSH)	Exchange rate of the month (JICA)	Total amount of expenditure (JPY)
		Training									
97	-	ODK seminar	24-25 Oct. 2019	0	0	1	1	3	240,000	0.04707	11,297
98	2	CHOP 2020-21 QPR Q1 assessment	28 Oct.-1 Nov. 2019	21	0	-	4	0	22,000,000	0.04745	1,043,900
99	-	MOI meeting	26-28 Nov. 2019	83	0	-	5	3	98,000,000	0.04745	4,650,100
100	1, 4	Capacity building Workshop for TIs	2-13 Dec. 2019	13	0	7	3	2	49,000,000	0.04789	2,346,610
101	-	Orientation on RRHMP to DCS and DPP	16-17 Dec. 2019	20	0	-	5	2	13,500,000	0.04789	646,515
102	2	Health Policy dissemination to RRHs	8-11 Jan. 2020	90	0	-	3	0	80,000,000	0.04799	3,839,200
103	-	JCC (10th)	15 Jan. 2020	12	0	-	5	2	6,400,000	0.04799	307,136
104	2	CHOP 2019 QPR Q2 assessment	27-31 Jan.2020	15	0	-	4	0	14,000,000	0.04799	671,860
105	-	Documentation Workshop	3-7 Feb. 2020	10	0	-	3	0	12,000,000	0.0475	570,000
106	1, 4	Hospital Management Training at CEHDA	10-21 Feb. 2020	-	6	2	3	2	25,000,000	0.0475	1,187,500
107	2	CHOP Assessment Training and CHOP 2020-21 assessment	19-31 Mar. 2020	20	0	2	4	0	64,000,000	0.0479	3,065,600
108	2	QPR assessment Training and CHOP 2019-20 QPR3 assessment	14-21 Apr. 2020	19	0	1	4	0	27,400,000	0.0469	1,285,060

Annex 2. List of products produced by the project

Name of Documents			Technical Outputs
Output 1	BHMT	Basic Hospital Management Training for Regional Referral Hospitals Facilitators' Guide	✓
		Basic Hospital Management Training for Regional Referral Hospitals The Participants' Manual	✓
		BHMT Package for TIs	✓
		Report on Effectiveness of the Project Intervention (BHMT)	✓
		Hospital Operation Guide (Swahili version)	
Output 2	CHOP	Guideline for Developing Comprehensive Hospital Operation Plan (CHOP) for Regional Referral Hospitals	✓
Output 3	EHPA	Guideline for Internal Supportive Supervision (ISS) and External Hospital Performance Assessment (EHPA) for Regional Referral Hospitals	✓
		Report on Effectiveness of the Project Intervention (EHPA)	✓
		EHPA 2017 Report	
		EHPA 2018 Report	
		EHPA 2019 Report	
		Training materials for ISS (AHMT)	
Output 4	5S-KAIZEN-TQM	Implementation Guideline on 5S-KAIZEN-TQM Approach in Tanzania 4th edition	
		Good Practice of 5S-KAIZEN Activities	✓
		Report on Effectiveness of the Project Intervention (KAIZEN)	✓
Output 5	HAB	Guideline for Regional Referral Hospital Advisory Board (RRHAB)	✓
		HAB Training Materials	✓
Output 6	BRN	Report on Follow up visit for 5S-KAIZEN-TQM Approach to Improve Health Commodities Management at council health facilities	
Base line survey		Report on the base line survey	✓
End line survey		Report on end-line survey	✓

Annex 3. Project Design Matrix

(1) Version 0

Project Design Matrix

Project Title: Project for Strengthening Hospital Management of Reginal Referral Hospitals — **Version 0**

Implementing Agency: Ministry of Health and Social Welfare (MOHSW), PMO-RALG — **Dated October 15th, 2014**

Target Group: Regional Referral Hospitals

Period of Project: March 2015 - February 2020

Project Site: Tanzania Mainland Model Site:

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal Quality of health service is improved at Regional Referral Hospitals (RRHs).	(1) Patient/client satisfaction is improved in the target hospitals (2) Number of outpatient and inpatient is increased	(1) Patient/client satisfaction survey (2) Hospital statistics	
Project Purpose Hospital management is improved at RRHs.	(1) Total hospital revenue is increased (2) Number of outpatient and inpatient per hospital staff is increased (3) Proportion of personnel expenditure to total hospital expenditure is improved	(1) Hospital performance assessment (2) Hospital performance assessment (3) Hospital performance assessment	1. Changes in the national policy and strategies in health sector do not affect implementation of the project activities. 2. There is no negative fluctuation in budget of RRHs. 3. Resource (human, medicine, equipment, infrastructure etc.) is adequately allocated. 4. Planned budget is properly secured and timely disbursed.

Outputs	Results of Internal and external managerial capacity assessment of RRHMT are improved.	Internal and external capacity assessment of RRHMT	1. Quality staffs are adequately allocated. 2. HAB members are elected properly and committed to work proactively. 3. Internal communication in MOHSW is smoothly managed. 4. Dialogue between MOHSW and PMORALG is regularly and smoothly conducted and managed. 5. Commitment from Regional Secretariat is properly enhanced.
Output 1: Basic management capacity (leadership, planning, M&E, human resource management, financial management, resource management, information management) of HMTs is improved.			
Output 2: Planning and reporting capacity of RRHs is improved.	(1) Qualified CHOPs are increased. (2) Qualified quarterly reports are increased.	(1) CHOP evaluation (2) Quarterly report evaluation	
Output 3: Monitoring and Evaluation of RRHs is strengthened.	Number of reports on hospital performance assessment reviewed by the stakeholders is increased.	Project document	
Output 4: Resource management and quality improvement activities are strengthened through KAIZEN approach.	KAIZEN activities in hospital management are increased at RRHs.	KAIZEN Progress Report	
Output 5: Governance of RRHs is strengthened.	(1) Number of HAB minutes of meetings publicly reviewed is increased. (2) Evaluation of HAB's function is improved.	(1) Number of HAB minutes of meetings publicly reviewed (2) HAB assessment report	
Output 6: Tanzania's experience and knowledge on hospital management and QI are shared within Tanzania and with other African countries.	(1) Total number of KAZEN activities are increased in participating countries. (2) Good practices shared within and outside of Tanzania is increased.	(1) Reports from participating countries (2) Progress Report Meetings	
Activities	**Inputs**		**Pre-Conditions**
Output 1: Basic management capacity (leadership, planning, M&E, human	The Japanese Side	The Tanzanian Side	1. RRHMT members are adequately assigned.

resource management, financial management, resource management, information management) of HMTs is improved.			2. HAB members are adequately nominated. 3. Responsible C/Ps are assigned for each output. 4. Budget allocation to RRH is sustained. 5. Policy for decentralization by devolution is maintained. 6. Technical working groups under SWAP mechanism are sustained.
1-1 Situation analysis and benchmarking is conducted on management capacities of RRHs. 1-2 Existing training programs and materials on hospital management is reviewed. 1-3 Training institutions and facilitators are identified and oriented. 1-4 Training modules (basic and applied) and materials are consolidated. 1-5 National facilitators are trained on hospital management in TOT manner. 1-6 Hospital management training is conducted to RRHMTs. 1-7 Institutionalization of hospital management training program is promoted and facilitated. 1-8 Training effectiveness is assessed.	<u>Dispatch of Experts</u> 1. Chief Advisor / Hospital Management 2. Quality management (5S-KAIZEN-TQM) 3. Training Management 4. Monitoring 5. Project Coordinator / Training Management <u>Equipment and Material</u> 1. Necessary equipment and materials for the project activities <u>Trainings</u> 1. Necessary trainings. <u>Local Costs</u> 1. Trainings, workshops, seminars (cost sharing with MOHSW, RHMTs, RRHs, etc.) 2. Training material printing cost 3. Other activity costs	<u>Counterparts</u> 1. Project Director 2. Project Manager 3. Other personnel mutually agreed upon as needed <u>Facilities, equipment and materials</u> 1. Office space for the Project 2. Necessary equipment and materials for the project activities 3. Local Costs 4. Operational costs for implementing activities	
Output 2: Planning and reporting capacity of RRHs is improved.			**<Issues and countermeasures>**
2-1 CHOP and related management structure are reviewed. 2-2 CHOP guideline and formats are revised accordingly. 2-3 Training on CHOP is conducted. (as in 1-5 and 1-6) 2-4 Data management for CHOP development and monitoring is			

improved. (in line with 3-1 and 3-2)			
2-5 Data management tool for human resources for health (HRHIS) is introduced.			
2-6 Mentoring support on planning and reporting is strengthened.			
2-7 Report formulating skills and reporting structure are reviewed and strengthened.			
Output 3: Monitoring and Evaluation of RRHs is strengthened.			
3-1 Tools for internal hospital performance assessment within RRH are reviewed, developed and utilized.			
3-2 Tools for external hospital performance assessment by MOHSW/PMO-RALG through RHMT are reviewed, developed and utilized.			
3-3 Results from hospital performance assessment (internal and external) are analyzed and publicized.			
3-4 RMSS-H, mentoring and other support activities to RRHs are strengthened, based on the results of hospital performance assessment.			
Output 4: Resource management and quality improvement activities are strengthened through KAIZEN approach.			
4-1 Application of KAIZEN approach in improvement of hospital management is conceptualized.			

4-2 QIT and WIT are oriented on hospital management.			
4-3 Target managerial areas for quality improvement at each RRH is identified by the result from hospital performance assessment.			
4-4 KAIZEN TOT is conducted to National Facilitators, focusing on improvement of hospital management.			
4-5 KAIZEN training is conducted to RRHMTs.			
4-6 KAIZEN activities in target managerial areas are conducted at each RRH.			
4-7 Progress of KAIZEN activities is monitored.			
4-8 Institutionalization of KAIZEN TOT is promoted and facilitated.			
4-9 Impact of KAIZEN approach for hospital management is assessed and reviewed.			
Output 5: Governance of RRHs is strengthened.			
5-1 Guideline and assessment tools for Hospital Advisory Boards (HAB) is reviewed and revised.			
5-2 Orientation training materials and program for HAB is developed, reviewed and revised.			
5-3 Training for capacity building of HAB on governance and leadership is implemented.			

5-4 Regular assessment of HAB functionality and supportive interventions to HAB are conducted.			
5-5 Recommendations from HAB report are reviewed and enhanced to improve hospital performance.			
Output 6: Tanzania's experience and knowledge on hospital management and QI are shared within Tanzania and with other African countries.			
6-1 Annual Quality Improvement Coordination Forum (QI Forum) is organized jointly by stakeholders.			
6-2 Horizontal learning among RRHs is enhanced.			
6-3 Networking and knowledge sharing with other African countries implementing 5S-KAIZEN-TQM approach are encouraged.			
6-4 Regional KAIZEN TOT Training Program is acknowledged by stakeholders.			
6-5 Regional KAIZEN TOT Training is conducted with participation of other African countries.			

(2) Version 2

Project Design Matrix

Project Title: Project for Strengthening Hospital Management of Reginal Referral Hospitals — **Version 02**
Implementing Agency: Ministry of Health and Social Welfare (MOHSW) — **November 19th, 2015**
Target Group: Regional Referral Hospitals
Period of Project: March 2015 - May 2020
Project Site: Tanzania Mainland Model Site:

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal Quality of health service is improved at Regional Referral Hospitals (RRHs).	(1) Patient/client satisfaction is improved in the target hospitals (2) Number of outpatient and inpatient is increased	(1) Patient/client satisfaction survey (2) Hospital statistics	
Project Purpose Hospital management is improved at RRHs.	(1) Total hospital revenue is increased (2) Number of outpatient and inpatient per hospital staff is increased (3) Proportion of personnel expenditure to total hospital expenditure is improved	(1) Hospital performance assessment (2) Hospital performance assessment (3) Hospital performance assessment, Quarterly technical and financial report	1. Changes in the national policy and strategies in health sector do not affect implementation of the project activities. 2. There is no negative fluctuation in budget of RRHs. 3. Resource (human, medicine, equipment, infrastructure etc.) is adequately allocated. 4. Planned budget is properly secured and timely disbursed.
Outputs	Results of Internal and external	Internal and external capacity	1. Quality staffs are adequately

Output 1: Basic management capacity (leadership, planning, M&E, human resource management, financial management, resource management, information management) of HMTs is improved.	managerial capacity assessment of RRHMT are improved.	assessment of RRHMT	allocated. 2. HAB members are elected properly and committed to work proactively. 3. Internal communication in MOHSW is smoothly managed. 4. Dialogue between MOHSW and PMORALG is regularly and smoothly conducted and managed. 5. Commitment form Regional Secretariat is properly enhanced.
Output 2: Planning and reporting capacity of RRHs is improved.	(1) Number of hospitals with qualified (good quality and approved) CHOPs are increased. (2) Number of hospitals with qualified (good quality and approved) quarterly reports is increased.	(1) CHOP evaluation (2) Quarterly report evaluation	
Output 3: Monitoring and Evaluation of RRHs is strengthened.	Number of reports on hospital performance assessment reviewed by the stakeholders is increased.	Project document	
Output 4: Resource management and quality improvement activities are strengthened through KAIZEN approach.	KAIZEN activities are implemented in 80% of RRHs.	KAIZEN Progress Report	
Output 5: Governance of RRHs is strengthened.	(1) Number of HAB minutes of meetings publicly reviewed is increased. (2) Evaluation of HAB's function is improved.	(1) Number of HAB minutes of meetings publicly reviewed (2) HAB assessment report	
Output 6: Tanzania's experience and knowledge on hospital management and QI are shared within Tanzania and with other African countries.	(1) Total number of KAZEN activities are increased in participating countries (2) Good practices shared within and outside of Tanzania is increased. (3) 85% of trained primary level	(1) Reports from participating countries (2) Progress Report Meetings, Reports from participating countries (3) Sampling survey of trained primary level health facilities	

	health facilities adhering to good storage standards.	and CHMT's, report from Big Results Now Office	
Activities	**Inputs**		**Important Assumption**
Output 1: Basic management capacity (leadership, planning, M&E, human resource management, financial management, resource management, information management) of HMTs is improved.	The Japanese Side	The Tanzanian Side	
1-1 Situation analysis and benchmarking is conducted on management capacities of RRHs. 1-2 Existing training programs and materials on hospital management is reviewed. 1-3 Training institutions and facilitators are identified and oriented. 1-4 Training modules (basic and applied) and materials are consolidated. 1-5 National facilitators are trained on hospital management in TOT manner. 1-6 Hospital management training is conducted to RRHMTs. 1-7 Institutionalization of hospital management training program is promoted and facilitated. 1-8 Training effectiveness is assessed.	<u>Dispatch of Experts</u> 1. Chief Advisor / Hospital Management 2. Quality management (5S-KAIZEN-TQM) 3. Training Management 4. Monitoring 5. Project Coordinator / Training Management <u>Equipment and Material</u> 1. Necessary equipment and materials for the project activities <u>Trainings</u> 1. Necessary trainings <u>Local Costs</u> 1. Trainings, workshops, seminars (cost sharing with MOHSW, RHMTs, RRHs, etc.)	<u>Counterparts</u> 1. Project Director 2. Project Manager 3. Other personnel mutually agreed upon as needed <u>Facilities, equipment and materials</u> 1. Office space for the Project 2. Necessary equipment and materials for the project activities <u>Local Costs</u> Operational costs for implementing activities	
Output 2: Planning and reporting capacity of RRHs is improved.			**Pre-Conditions**
2-1 CHOP and related management structure are reviewed. 2-2 CHOP guideline and formats are			1. RRHMT members are adequately assigned. 2. HAB members are

revised accordingly. 2-3 Training on CHOP is conducted. (as in 1-5 and 1-6) 2-4 Data management for CHOP development and monitoring is improved. (in line with 3-1 and 3-2) 2-5 Data management tool for human resources for health (HRHIS) is introduced. 2-6 Mentoring support on planning and reporting is strengthened. 2-7 Report formulating skills and reporting structure are reviewed and strengthened. Output 3: Monitoring and Evaluation of RRHs is strengthened. 3-1 Tools for internal hospital performance assessment within RRH are reviewed, developed and utilized. 3-2 Tools for external hospital performance assessment by MoHSW/PMO-RALG through RHMT are reviewed, developed and utilized. 3-3 Results from hospital performance assessment (internal and external) are analyzed and publicized. 3-4 RMSS-H, mentoring and other support activities to RRHs are strengthened, based on the results of hospital performance assessment. 3-5 RHMT's monitoring and evaluation capacity of 5S-KAIZEN-TQM activities is strengthened.	2. Training material printing cost 3. Other activity costs		adequately nominated 3. Responsible C/Ps are assigned for each output. 4. Budget allocation to RRH is sustained. 5. Policy for decentralization by devolution is maintained. 6. Technical working groups under SWAP mechanism are sustained. **<Issues and countermeasures>**

Output 4: Resource management and quality improvement activities are strengthened through KAIZEN approach.			
4-1 Application of KAIZEN approach in improvement of hospital management is conceptualized.			
4-2 QIT and WIT are oriented on hospital management.			
4-3 Target managerial areas for quality improvement at each RRH is identified by the result from hospital performance assessment.			
4-4 KAIZEN TOT is conducted to National Facilitators, focusing on improvement of hospital management.			
4-5 KAIZEN training is conducted to RRHMTs.			
4-6 KAIZEN activities in target managerial areas are conducted at each RRH.			
4-7 Progress of KAIZEN activities is monitored.			
4-8 Institutionalization of KAIZEN TOT is promoted and facilitated.			
4-9 Impact of KAIZEN approach for hospital management is assessed and reviewed.			
Output 5: Governance of RRHs is strengthened.			
5-1 Guideline and assessment tools for Hospital Advisory Boards (HAB) is reviewed and revised.			

5-2 Orientation training materials and program for HAB is developed, reviewed and revised.			
5-3 Training for capacity building of HAB on governance and leadership is implemented.			
5-4 Regular assessment of HAB functionality and supportive interventions to HAB are conducted.			
5-5 Recommendations from HAB report are reviewed and enhanced to improve hospital performance.			
Output 6: Tanzania's experience and knowledge on hospital management and QI are shared within Tanzania and with other African countries.			
6-1 Annual Quality Improvement Coordination Forum (QI Forum) is organized jointly by stakeholders.			
6-2 Horizontal learning among RRHs is enhanced.			
6-3 5S-KAIZEN-TQM training with a focus on commodity management is conducted to primary level health facilities and CHMTs.			
6-4 Networking and knowledge sharing with other African countries implementing 5S-KAIZEN-TQM approach are encouraged.			
6-5 Regional KAIZEN TOT Training Program is acknowledged by stakeholders.			

6-6 Regional KAIZEN TOT Training is conducted with participation of other African countries.			

(3) Version 3

Project Design Matrix

Project Title: Project for Strengthening Hospital Management of Reginal Referral Hospitals **Version 3**
Implementing Agency: Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) **Dated 5th April, 2018**
Target Group: Regional Referral Hospitals
Period of Project: March 2015 - May 2020
Project Site: Tanzania Mainland Model Site:

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal Quality of health service is improved at Regional Referral Hospitals (RRHs).	Patient/client satisfaction is improved in the target hospitals.	Patient/client satisfaction survey, End line survey report	
Project Purpose Hospital management is improved at RRHs.	(1) Hospital revenue (Total cash revenue collection, Total cost sharing revenue, Total NHIF revenue collection and Total amount of out-of-Pocket collection) is improved. (2) 70% of RRHs obtain more than 70% of EHPA average score.	(1) CHOP Assessment Report, Quarterly Progress Report (2) EHPA report	1. Changes in the national policy and strategies in health sector do not affect implementation of the project activities. 2. There is no negative fluctuation in budget of RRHs. 3. Resource (human, medicine, equipment, infrastructure etc.) is adequately allocated. 4. Planned budget is properly secured and timely disbursed.
Outputs	Results of external managerial	EHPA Report	1. Quality staffs are adequately

Output 1: Basic management capacity (leadership, planning, M&E, human resource management, financial management, resource management, information management) of HMTs is improved.	capacity assessment of RRHMT are improved		allocated. 2. HAB members are elected properly and committed to work proactively. 3. Internal communication in MOHSW is smoothly managed. 4. Dialogue between MOHSW and PMORALG is regularly and smoothly conducted and managed. 5. Commitment form Regional Secretariat is properly enhanced.
Output 2: Planning and reporting capacity of RRHs is improved.	(1) Number of CHOPs which have been submitted timely is increased from 48% to 100%. (2) Average score of CHOP assessment is increased from 52% to 90%. (3) 100% of QPR is submitted on time. (4) More than 80% of QPRs obtains more than 70% of the average of 4 QPR scores.	(1) CHOP assessment reports, Quarterly Progress Report (2) CHOP assessment reports, Quarterly Progress Report (3) CHOP assessment reports, Quarterly Progress Report (4) CHOP assessment reports, Quarterly Progress Report	
Output 3: Monitoring and Evaluation of RRHs is strengthened.	Number of EHPA reports reviewed by the stakeholders is increased	Project activity reports, EHPA Report	
Output 4: Resource management and quality improvement activities are strengthened through KAIZEN approach.	Proportion of RRHs implementing KAIZEN activities is increased from 7% to 85% by December 2019.	5S-KAIZEN Consultation Visit Report, ISS Report, Quarterly Progress Report, EHPA Report	
Output 5: Governance of RRHs is strengthened.	(1) Number of RRH organizing HAB meetings based on planned schedule is increased from 40% to 80%. (2) Proportion of RRHs with functional HAB is increased from 40% to 80%.	(1) EHPA Report, Quarterly Progress Report (2) EHPA Report, Quarterly Progress Report	

Output 6: Tanzania's experience and knowledge on hospital management and QI are shared within Tanzania and with other African countries.	(1) Total number of KAZEN activities are increased in participating countries. (2) Good practices shared within and outside of Tanzania is increased. (3) 70% of trained primary level health facilities adhere to good storage standards.	(1) Reports from participating countries (2) Progress Report Meetings, Reports from participating countries (3) Sampling survey of trained primary level health facilities and CHMT's report from MoHCDGEC Office	
Activities	**Inputs**		**Important Assumption**
Output 1: Basic management capacity (leadership, planning, M&E, human resource management, financial management, resource management, information management) of HMTs is improved.	The Japanese Side	The Tanzanian Side	
1-1 Situation analysis and benchmarking is conducted on management capacities of RRHs. 1-2 Existing training programs and materials on hospital management is reviewed. 1-3 Training institutions and facilitators are identified and oriented. 1-4 Training modules (basic and applied) and materials are consolidated. 1-5 National facilitators are trained on hospital management in TOT manner. 1-6 Hospital management training is conducted to RRHMTs. 1-7 Institutionalization of hospital management training program is	<u>Dispatch of Experts</u> 1. Chief Advisor / Hospital Management 2. Quality management (5S-KAIZEN-TQM) 3. Training Management 4. Monitoring 5. Project Coordinator / Training Management <u>Equipment and Material</u> 1. Necessary equipment and materials for the project activities <u>Trainings</u>	<u>Counterparts</u> 1. Project Director 2. Project Manager 3. Other personnel mutually agreed upon as needed <u>Facilities, equipment and materials</u> 1. Office space for the Project¥ 2. Necessary equipment and materials for the project activities <u>Local Costs</u> Operational costs for implementing activities	

promoted and facilitated. 1-8 Training effectiveness is assessed. Output 2: Planning and reporting capacity of RRHs is improved. 2-1 CHOP and related management structure are reviewed. 2-2 CHOP guideline and formats are revised accordingly. 2-3 Training on CHOP is conducted. (as in 1-5 and 1-6) 2-4 Data management for CHOP development and monitoring is improved. (in line with 3-1 and 3-2) 2-5 Data management tool for human resources for health (HRHIS) is introduced. 2-6 Mentoring support on planning and reporting is strengthened. 2-7 Report formulating skills and reporting structure are reviewed and strengthened. Output 3: Monitoring and Evaluation of RRHs is strengthened. 3-1 Tools for internal hospital performance assessment within RRH are reviewed, developed and utilized. 3-2 Tools for external hospital performance assessment by MoHSW/PMO-RALG through RHMT are reviewed, developed and utilized. 3-3 Results from hospital performance assessment (internal and external) are analyzed and publicized.	1. Necessary trainings. <u>Local Costs</u> 1. Trainings, workshops, seminars (cost sharing with MOHSW, RHMTs, RRHs, etc.) 2. Training material printing cost 3. Other activity costs		**Pre-Conditions** 1. RRHMT members are adequately assigned. 2. HAB members are adequately nominated. 3. Responsible C/Ps are assigned for each output. 4. Budget allocation to RRH is sustained. 5. Policy for decentralization by devolution is maintained. 6. Technical working groups under SWAP mechanism are sustained. **<Issues and countermeasures>**

3-4 RMSS-H, mentoring and other support activities to RRHs are strengthened, based on the results of hospital performance assessment.			
3-5 RHMT's monitoring and evaluation capacity of 5S-KAIZEN-TQM activities is strengthened.			
Output 4: Resource management and quality improvement activities are strengthened through KAIZEN approach.			
4-1 Application of KAIZEN approach in improvement of hospital management is conceptualized.			
4-2 QIT and WIT are oriented on hospital management.			
4-3 Target managerial areas for quality improvement at each RRH is identified by the result from hospital performance assessment.			
4-4 KAIZEN TOT is conducted to National Facilitators, focusing on improvement of hospital management.			
4-5 KAIZEN training is conducted to RRHMTs.			
4-6 KAIZEN activities in target managerial areas are conducted at each RRH.			
4-7 Progress of KAIZEN activities is monitored.			
4-8 Institutionalization of KAIZEN TOT is promoted and facilitated.			
4-9 Impact of KAIZEN approach for			

hospital management is assessed and reviewed.			
Output 5: Governance of RRHs is strengthened.			
5-1 Guideline and assessment tools for Hospital Advisory Boards (HAB) is reviewed and revised.			
5-2 Orientation training materials and program for HAB is developed, reviewed and revised.			
5-3 Training for capacity building of HAB on governance and leadership is implemented.			
5-4 Regular assessment of HAB functionality and supportive interventions to HAB are conducted.			
5-5 Recommendations from HAB report are reviewed and enhanced to improve hospital performance.			
Output 6: Tanzania's experience and knowledge on hospital management and QI are shared within Tanzania and with other African countries.			
6-1 Annual Quality Improvement Coordination Forum (QI Forum) is organized jointly by stakeholders.			
6-2 Horizontal learning among RRHs is enhanced.			
6-3 5S-KAIZEN-TQM training with a focus on commodity management is conducted to primary level health facilities and CHMTs.			
6-4 Networking and knowledge sharing			

with other African countries implementing 5S-KAIZEN-TQM approach are encouraged.			
6-5 Regional KAIZEN TOT Training Program is acknowledged by stakeholders.			
6-6 Regional KAIZEN TOT Training is conducted with participation of other African countries.			