



## Zanzibar: Assessment of Human Resource Capacity in Public Health Supply Chain Management



**APRIL 2015**

This publication was produced for review by the U.S. Agency for International Development. It was prepared by the USAID | DELIVER PROJECT, Task Order 4.



# **Zanzibar: Assessment of Human Resource Capacity in Public Health Supply Chain Management**

The authors' views expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development or the United States Government.

## **USAID | DELIVER PROJECT, Task Order 4**

The USAID | DELIVER PROJECT, Task Order 4, is funded by the U.S. Agency for International Development (USAID) under contract number GPO-I-00-06-00007-00, order number AID-OAA-TO-0-00064, beginning September 30, 2010. Task Order 4 is implemented by John Snow, Inc., in collaboration with PATH; Crown Agents Consultancy, Inc.; Eastern and Southern African Management Institute; FHI 360; Futures Institute for Development, LLC; LLamasoft, Inc.; The Manoff Group, Inc.; Pharmaceutical Healthcare Distributors (PHD); PRISMA; and VillageReach. The project improves essential health commodity supply chains by strengthening logistics management information systems, streamlining distribution systems, identifying financial resources for procurement and supply chain operation, and enhancing forecasting and procurement planning. The project encourages policymakers and donors to support logistics as a critical factor in the overall success of their healthcare mandates.

### **Recommended Citation**

USAID | DELIVER PROJECT, Task Order 4. 2015. *Zanzibar: Assessment of Human Resource Capacity in Public Health Supply Chain Management*. Arlington, Va.: USAID | DELIVER PROJECT, Task Order 4.

### **Abstract**

This report explains the methods and processes used to arrive at the findings and recommendations to improve the human resource capacity of the public health supply chain in Zanzibar. It will be particularly useful to human resource managers, policymakers, managers in the Ministry of Health, partners, and others working with either public health supply chain management or, more broadly, human resources for health.

Cover photo: Validation meeting, Dar es Salaam, 2014. Counterparts from the Ministry of Health and Social Welfare consider and validate assessment findings. (USAID | DELIVER PROJECT 2014)

## **USAID | DELIVER PROJECT**

John Snow, Inc.  
1616 Fort Myer Drive, 16th Floor  
Arlington, VA 22209 USA  
Phone: 703-528-7474  
Fax: 703-528-7480  
Email: [askdeliver@jsi.com](mailto:askdeliver@jsi.com)  
Internet: [deliver.jsi.com](http://deliver.jsi.com)

# Contents

Acknowledgments .....	v
Acronyms.....	vii
Executive Summary .....	ix
Selected Findings.....	ix
Introduction .....	i
Country Profile Summary .....	i
Methodology .....	5
Assessment Team.....	6
Component I. Powerful Constituencies.....	11
Introduction .....	11
Findings.....	11
Component II. Policies and Plans.....	13
Introduction .....	13
Findings.....	14
Component III. Workforce Development.....	17
Introduction .....	17
Findings.....	17
Component IV. Workforce Performance Management.....	21
Introduction .....	21
Findings.....	21
Component V. Professionalization .....	25
Introduction .....	25
Findings.....	25
Recommendations .....	27
References .....	31
Appendices	
A. Key Terms.....	33
B. Focus Group Discussion Participant List .....	37
C. Validation Meeting Participation List .....	39
Figures	
1. Public-Health Sector Referral System in Zanzibar.....	2
2. Components of the HR Assessment Tool.....	5
3. Gender Split in Focus Group Discussion .....	7
4. District-Level Dashboard.....	8

5. Zonal-Level Dashboard .....	9
6. Central-Level Dashboard .....	9
7. District-Level Component I Findings .....	11
8. Zonal-Level Component I Findings .....	12
9. Central-Level Component I Findings .....	12
10. District-Level Component II Findings .....	14
11. Zonal-Level Component II Findings .....	14
12. Central-Level Component II Findings .....	15
13. District-Level Component III Findings .....	17
14. Zonal-Level Component III Findings .....	18
15. Central-Level Component III Findings .....	18
16. District-Level Component IV Findings .....	22
17. Zonal-Level Component IV Findings .....	22
18. Central-Level Component IV Findings .....	23
19. District-Level Component V Findings .....	25
20. Zonal-Level Component V Findings .....	26
21. Central-Level Component V Findings .....	26

## Tables

1. Dimension Rating System .....	6
2. Strategic Interventions, Objectives, and Activities—Zanzibar .....	29

# Acknowledgments

The authors offer their sincere appreciation and thanks to the various groups and individuals who made the assessment of human resource capacity in public-health supply chain management in Zanzibar feasible by offering their time and perspectives. They are very grateful to all individuals who attended the focus group discussions at the district-, zonal-, and central-levels.

Much gratitude is also due to Mr. Zahran A. Hamad, Coordinator Pharmaceutical Services, Ministry of Health (MOH), Chief Pharmacist Office (CPO), Revolutionary Government of Zanzibar, who coordinated the activity and was present during the assessment team's entire visit and helped ensure proper implementation of the activity.

The team would also thanks Kelly Hamblin, MHS, Senior Supply Chain Management Specialist, USAID; and Lulu Msangi Khery, Supply Chain Management Specialist, USAID, who offered their time and support for this activity.





# Acronyms

CMS	Central Medical Store
CPO	Chief Pharmacist Office
DMM	District Material Manager
EHCP	Essential Health Care Package
ESAMI	Eastern and Southern Management Institute
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
HESLB	higher education student loan board
HR	human resources
HRH	Human Resources for Health
HRIS	Human Resource Information System
JSI	John Snow, Inc.
KSA	knowledge, skill, and ability
M&E	monitoring and evaluation
MOH	Ministry of Health
PHCC	Primary Health Care Center
PHCU	Primary Health Care Unit
PHCU+	Primary Health Care Unit - Plus
PtD	People that Deliver
RGOZ	Revolutionary Government of Zanzibar
SC	supply chain
SCM	supply chain management
SOP	standard operating procedure
USAID	U.S. Agency for International Development
WHO	World Health Organization
ZILS	Zanzibar Integrated Logistics System



# Executive Summary

A well-trained, professional workforce is the foundation of any health system. Because of this, in 2007, the World Health Organization (WHO) included workforce performance as one of six building blocks in its health system framework needed to strengthen health systems. Similarly, ensuring the continuous availability of commodities is a critical element of a well-functioning public health system if it is to provide health workers and customers with vital public health products. To ensure commodity security (CS), a supply chain must engage the right people, in the right quantities, with the right skills, in the right place, at the right time to follow the procedures that direct supply chain operations and ensure the supply of health products. An undisputed requirement of supply chain human resource (HR) strengthening is high-level champions. Toward this end, it has become increasingly apparent to the USAID | DELIVER PROJECT that our HR work must ask for input and support from supply chain managers at the highest level (Proper 2014).

To respond to widespread and systemic human resource weaknesses within health systems, a broad group of governments and organizations created a joint initiative—People that Deliver (PtD)—which aims to strengthen supply chain personnel capacity while encouraging the professionalization of their role within the health system. This global initiative, in association with the USAID | DELIVER PROJECT (a U.S. Agency for International Development–funded project), developed a human resource assessment guide and tool to gather data on human resource opportunities and challenges associated with supply chain management (SCM). The data collected are expected to strengthen the capacity of supply chain personnel by working with host countries to build human resource systems and advocate for the professionalization of supply chain management. Strengthening the capacity of public health supply chain personnel from the top down will ensure that the supply chains and health systems operate more effectively, improving access to health supplies and saving lives.

The USAID | DELIVER PROJECT, to improve Zanzibar’s health commodity supply chains, strengthened the human resources (HR) for SCM. To understand constraints and guide solutions that support Zanzibar’s supply chain human resources, an assessment team used the Human Resource Capacity Development in Public Health Supply Chain Management: Assessment Guide and Tool to conduct an HR for SCM assessment; it included a desk review of relevant materials and three separate focus group discussions with health workers from the district-, zonal-, and central-levels. This tool evaluates the capacity of supply chain human resource management, based on five important dimensions, or human resource components: (1) powerful constituencies, (2) policies and plans, (3) workforce development, (4) workforce performance management, and (5) professionalization.

These five components are essential as the workforce develops a comprehensive approach to building HR capacity for supply chain management in Zanzibar.

## Selected Findings

The assessment team identified HR strengths and areas needing improvement that are specific to the supply chain in Zanzibar. The team conducted focus group discussions with healthcare workers in Zanzibar town during four days, by level (i.e., district, zonal, and central), on separate days. Collaboratively, the team developed recommendations, including actionable interventions, that MOH counterparts presented to other MOH stakeholders for validation and MOH

ownership in Dar es Salaam on October 22, 2014. The results of the assessment include findings, recommendations, and interventions, as well as recommendations. Generally, the team found that while Human Resource for Health (HRH) is promising in Zanzibar, the HRH strategic plan does not include HR for supply chain management, most posts that require SCM-skilled staff are vacant; and there are no pre-service education opportunities for supply chain skills.

Following are aggregated, high-level findings on the HR for SCM in Zanzibar:

- National medicine policy addresses some SC aspects.
- Chief Pharmacist and Central Medical Store (CMS) Director advocating for SCM have a medium-level of decisionmaking power.
- Standard operating procedures (SOPs) for SC functions are available.
- Recruitment is not done based on the competency needed.
- A performance-based financing scheme is being piloted.
- No performance management policies or guidelines are available.
- Supportive supervision visits are not coordinated.
- Retention strategies are ad hoc and are not specific to supply chain personnel.
- There is no SC cadre and SC is not a licensed profession.
- The existing HRH strategic plan does not include SC.

More detailed analysis of the data can be found in the technical report. Based on the assessment, the team recommends the below initiatives:

Supply chain HR management interventions:

1. Establish a supply chain cadre and SCM as a licensed profession.
2. Implement incentives at all levels.
3. Allocate funds to absorb donor-supported SC activities at the MOH level.
4. Increase funding from government support for HR for SC.

HR for SCM operational interventions:

1. Establish an SCM unit to coordinate SC activities across all programs and all levels.
2. Integrate SC courses in all schools of health.
3. Include SCM in the HRH strategic plan.
4. Integrate SC in the pre-service curriculum at all health care training institutions.
5. Create job descriptions for SC tasks at all levels.
6. Include SCM in the HRH strategic plan.

Performance Management Interventions:

1. Introduce staff development plan and retention schemes at all levels.
2. Coordinate and integrate the general supervision visits at the district level.

# Introduction

The objectives of this supply chain HR assessment were to—

- Document the state of Zanzibar’s public health SC HR management and capacity.
- Identify opportunities to build the organizational and individual capacity of supply chain human resources by attracting, motivating, developing, and retaining new and existing talents.
- Align the HR for supply chain to the broader HRH activities of the MOH.
- Document professionalization efforts of personnel working across Zanzibar’s public health supply chains at the central-, zonal-, and district-levels.

## Country Profile Summary

Zanzibar, a semi-autonomous region within The United Republic of Tanzania, comprises two main islands—Unguja and Pemba—and a number of low-density satellite islands. After Tanganyika’s 1964 revolution, Zanzibar and Tanganyika joined together to form the United Republic of Tanzania.

The population of Zanzibar is 1,303,568, with a crude birth rate of 38.1 births per 1,000 live births and a total fertility rate of 5.3 children. Life expectancy at birth has shown a positive upward trend from 53 years (2003) to 60 years (2008).

Zanzibar has its own government, the Revolutionary Government of Zanzibar (RGOZ), which is responsible for all non-union affairs, including the public health sector. Unguja Island is approximately 1,464 square kilometers and Pemba Island is approximately 864 square kilometers. Five administrative regions—three in Unguja and two in Pemba—are subdivided into 10 districts.

The delivery of public health services in Zanzibar is divided into primary-, secondary-, and tertiary-levels of healthcare. These levels correspond closely to the current civic administration system. There are about 145 health facilities in the country, with slightly more facilities in Unguja than Pemba. New facilities continue to be built, mainly using funds collected from community-based initiatives and civic organizations.

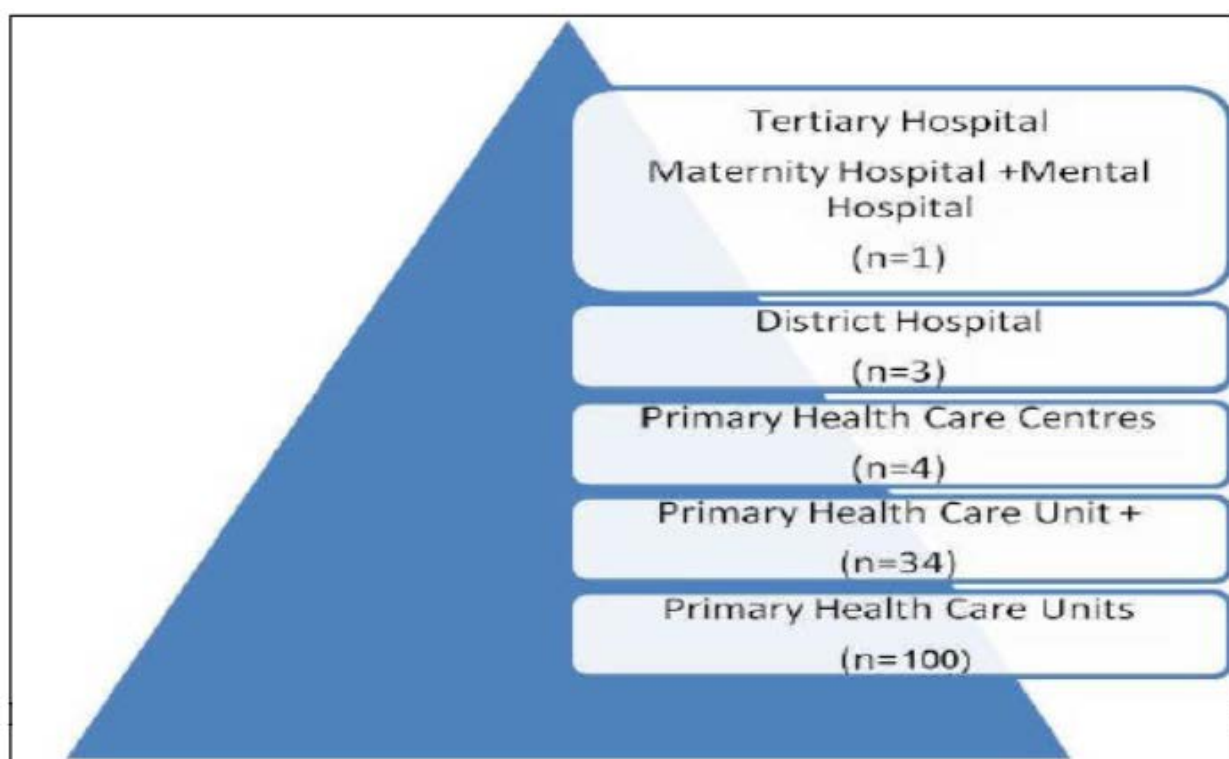
The distribution of health service delivery points allows for more than adequate access to primary healthcare. Currently, 95 percent of the population lives within less than 5 kilometers of the nearest public-health facility. However, private healthcare facilities are found predominantly in major towns and municipalities in both Unguja and Pemba.

The first point of contact with the formal public-health system is through primary healthcare units (PHCU), which offer a basic range of health services for minor ailments and health promotion; they are typically staffed with senior nursing officers. Health facilities at this level provide preventive treatment and care services for diseases and health conditions, including malaria, upper respiratory infections, injuries, and water and food-borne diseases.

The full range of primary-care services are defined in the minimum Essential Health Care Package (EHCP). An extended range of services, including basic routine antenatal care, delivery, dental, and laboratory services can be accessed through special primary-care facilities known as

Primary Health Care Centers+ (PHCU+). PHCCs act as mini-referrals for PHCU and PHCUs+. PHCCs have additional diagnostic services (e.g., x-ray imaging) and a 30-bed capacity for short-term admissions. As of 2013, there were about 100 PHCUs, 34 PHCUs+, and four PHCCs. Secondary care is delivered through a network of district- and cottage hospitals, with a capacity of about 80–120 beds. A broader range of specialized clinicians is usually available at this level for broader medical and surgical disciplines, such as psychiatry and pediatrics. Tertiary care facilities include two specialized hospitals and one referral hospital (see figure 1).

**Figure 1. Public-Health Sector Referral System in Zanzibar**



The Ministry of Health (MOH) comprises a number of operating departments and programs, including—

1. policy, planning, and research
2. administration and human resource
3. preventive services and health education
4. curative services
5. Central Medical Store
6. Mnazi Mmoja Hospital
7. health coordinator–Pemba
8. Chief Government Chemist
9. Chief Pharmacist.

The Government of Zanzibar, through the MOH, faces several challenges, but development partners' support has allowed several initiatives to be undertaken:

- infrastructure enhancement for CMS warehouses
- enhancement of mSupply, a warehouse management information system at the CMS
- strengthening CMS operations management
- distribution system optimization for commodities delivery to health facilities
- design and rollout of the Zanzibar Integrated Logistics System (ZILS)
- implementation of new budget allocation formula at the district- and facility-level for health commodities.





# Methodology

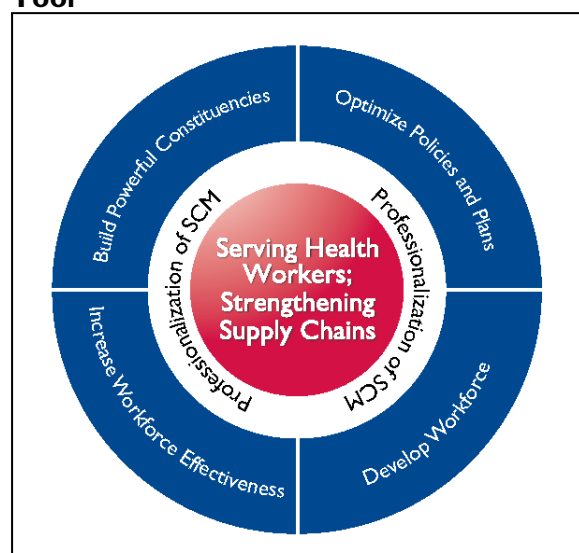
To understand constraints and guide solutions that support supply chain human resources, an assessment team conducted a desk review of a number of documents. The team also used the *Human Resource Capacity Development in Public Health Supply Chain Management: Assessment Guide and Tool* during focus group discussions to conduct the human resources (HR) capacity for supply chain management (SCM) assessment in Zanzibar. The focus group discussions with SCM stakeholders were conducted during four days, for the three levels: central, zonal, and district (see appendix B).

The tool evaluates the capacity of supply chain human resource management, based on five important drivers, or human resource components (see figure 2):

- *Building Powerful Constituencies*: technical leadership in supply chain management, advocacy, communication strategies, and coalitions
- *Optimizing Policies and Plans*: health teams, financing, human resource management (HRM), and Human Resource Information Systems (HRIS)
- *Developing Workforce*: recruiting, competency modeling and development, pre-service education, and in-service education
- *Increasing Workforce Effectiveness or Performance Management*: performance management, retention, supervision, mentoring, coaching, productivity, and task-shifting
- *Professionalization*: networks and processes for creating a professional cadre for supply chain personnel.

Each focus group provided information and reached a consensus on the different dimensions of each building block; they identified strengths, areas of improvement, and recommendations. Each group also ranked the maturity of the dimensions, which would allow for the analysis of the quantitative data, based on a maturity rating system from 0–4, as displayed in table 1.

**Figure 2. Components of the HR Assessment Tool**



**Table 1. Dimension Rating System**

Score	Score Dimension
0	Dimension does not exist.
1	Dimension is being developed and/or exists but is outdated or inappropriate to current system requirements.
2	Dimension is developed but not consistently or uniformly applied.
3	Dimension is fully developed and has stakeholder support, but lacks requisite funding.
4	Dimension is developed and consistently and uniformly applied with full funding and stakeholder support (as appropriate).

## Assessment Team

The assessment team included—

- three technical advisors: USAID | DELIVER PROJECT, Arlington, Virginia office
- three representatives: USAID | DELIVER PROJECT, Dar es Salaam field office.

The team conducted an in-brief with the project's country director and USAID | DELIVER PROJECT staff, MOH officials, and the USAID activity manager. The assessment team met to review the schedule and tools to be used, and determined roles and responsibilities for each team member. The team finalized the list of focus group participants.

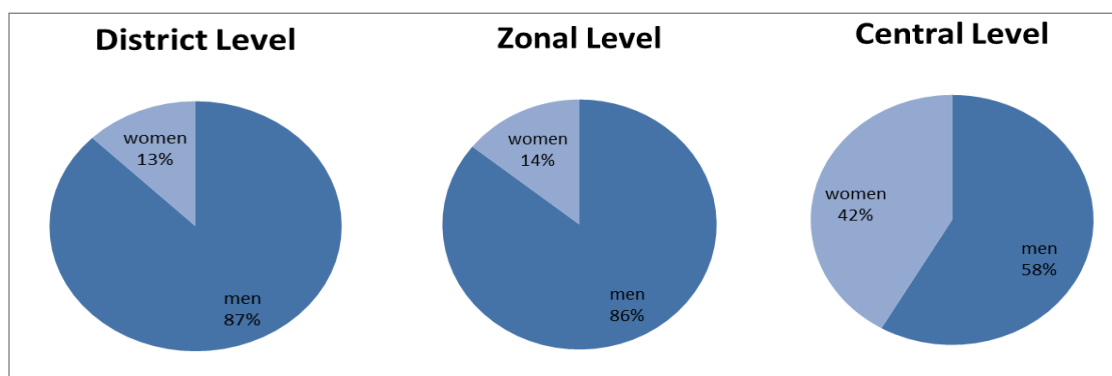
## Data Collection

**Desk review:** The assessment team conducted a desk review of relevant HR materials, as well as country-specific background resources. The team also outlined an assessment schedule and scheduled in-country activities (i.e., focus group discussions).

**Focus group discussions:** Three separate focus group workshops were held at the Oceanview Hotel conference center. Each group represented a level in the public health structure: zonal, district, and central. The stakeholder groups included 7 to 11 participants, with both men and women present. The gender mix of the levels reflected a more prominent representation of women at the central level and one representative at the district level (see figure 3). The assessment team identified people who are involved in SCM HR and who are familiar with the key components of this assessment. Participants included senior level managers from the Ministry of Health, including representatives from chief pharmacist's office, HR division, procurement management, M&E, Central Medical Stores, training unit, and planning unit). Please see appendix B for a list of participants in the focus group discussion (FGD), at all levels.

**Central-level validation workshop:** A validation workshop will be held for key stakeholders, including high-level government authorities, to review data, confirm findings, validate recommendations, and determine next steps and follow-up action.

**Figure 3. Gender Split in Focus Group Discussion**



The findings from the group discussions—quantitative data (dashboard and graphs)—were shared with each group.

The intervention plan was developed after all the findings from the group discussions were analyzed. It was shared with the central-level group and presented during the validation workshop on October 22, 2014, in Dar es Salaam.

The validation workshop was held for key stakeholders, including high-level government authorities (see appendix C) to review data, confirm findings, validate recommendations, and determine next steps and follow-up actions.

## Findings

This section provides a snapshot of higher-level findings, which will be followed by an exploration of focus groups findings, by level: district, zonal, and central.

General findings include—

- The National Medicine Policy addresses some SC aspects.
- The Chief Pharmacist and CMS Director advocate for SCM with a medium-level of decisionmaking power.
- The SC functions have some standard operating procedures (SOPs).
- Recruitment is not done based on the competency needed.
- A performance-based financing scheme is being piloted.
- There are no performance management policies or guidelines.
- Supportive supervision visits are not coordinated.
- Retention strategies are ad hoc and not specific to supply chain personnel.
- There is no SC cadre and SC is not a licensed profession.
- The existing Human Resources for Health (HRH) strategic plan does not include SC.

## General Recommendations

Based on an assessment of data analysis, the following initiatives are recommended:

- Establish SCM unit to coordinate SC activities across all programs and all levels.

- Integrate SC courses in all schools of health.
- Create job descriptions for SC tasks at all levels.
- Implement incentives at all levels.
- Allocate funds to absorb donor-supported SC activities at the MOH level.
- Introduce staff development plan and retention schemes at all levels.
- Include SCM in the HRH strategic plan.
- Integrate SC in the pre-service curriculum at all healthcare training institutions.
- Increase funding from government support for HR for SC.
- Coordinate and integrate the general supervision visits at the district level.
- Establish a supply chain cadre as a licensed profession.

These recommendations, as well as specific and targeted short- and mid-term interventions, are listed in table 2.

The focus group discussions produced a consensus ranking for the maturity of each indicator, for each of the five building block dimensions. Indicators were assessed by how they compared to a definition of *fully developed*, rank of 4; or 100 percent mature. Following is a high-level snapshot of the five building blocks for each level (see figures 4, 5, and 6). A detailed discussion of each building block, by level, follows.

**Figure 4. District-Level Dashboard**

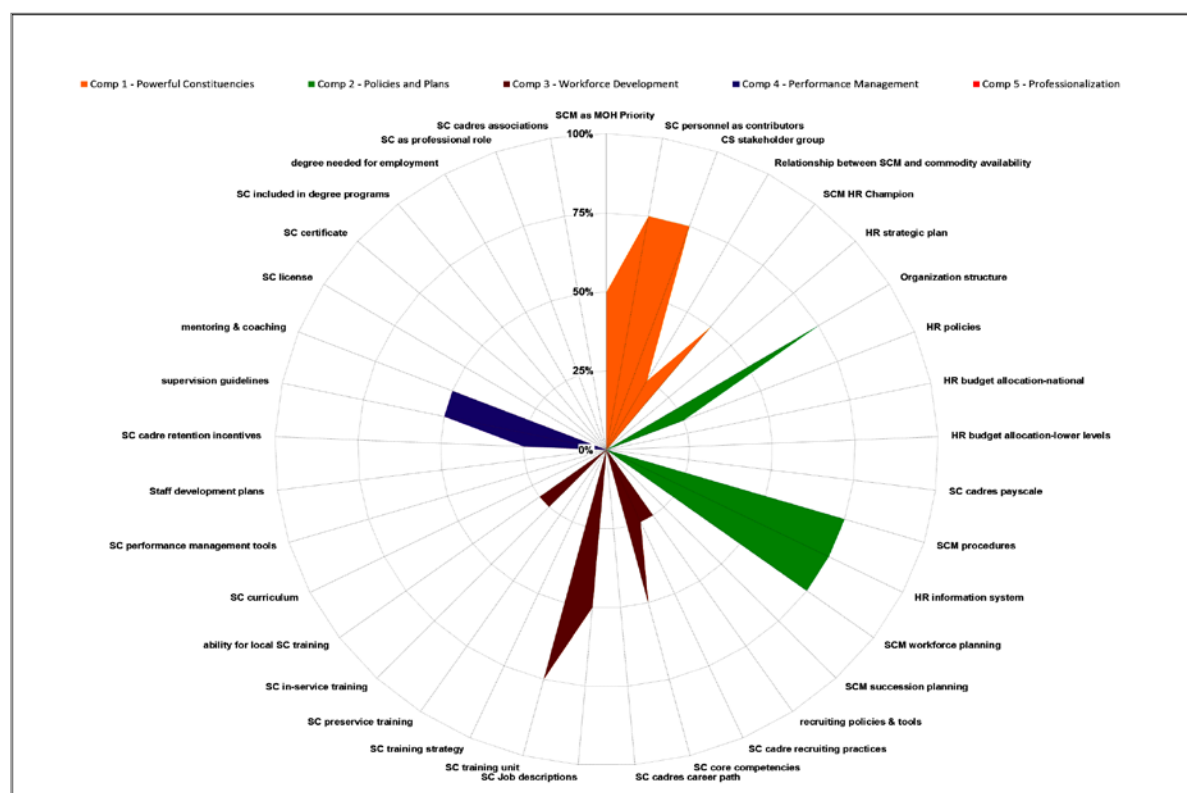


Figure 5. Zonal-Level Dashboard

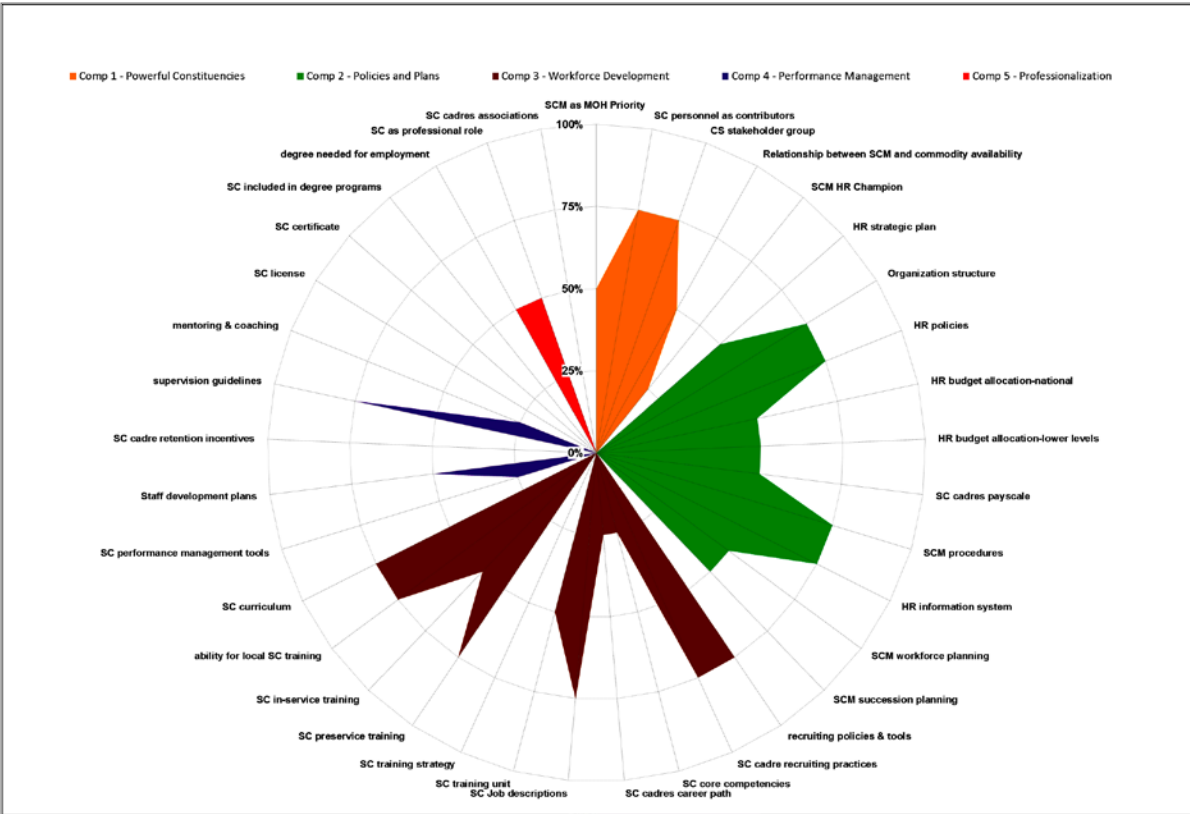
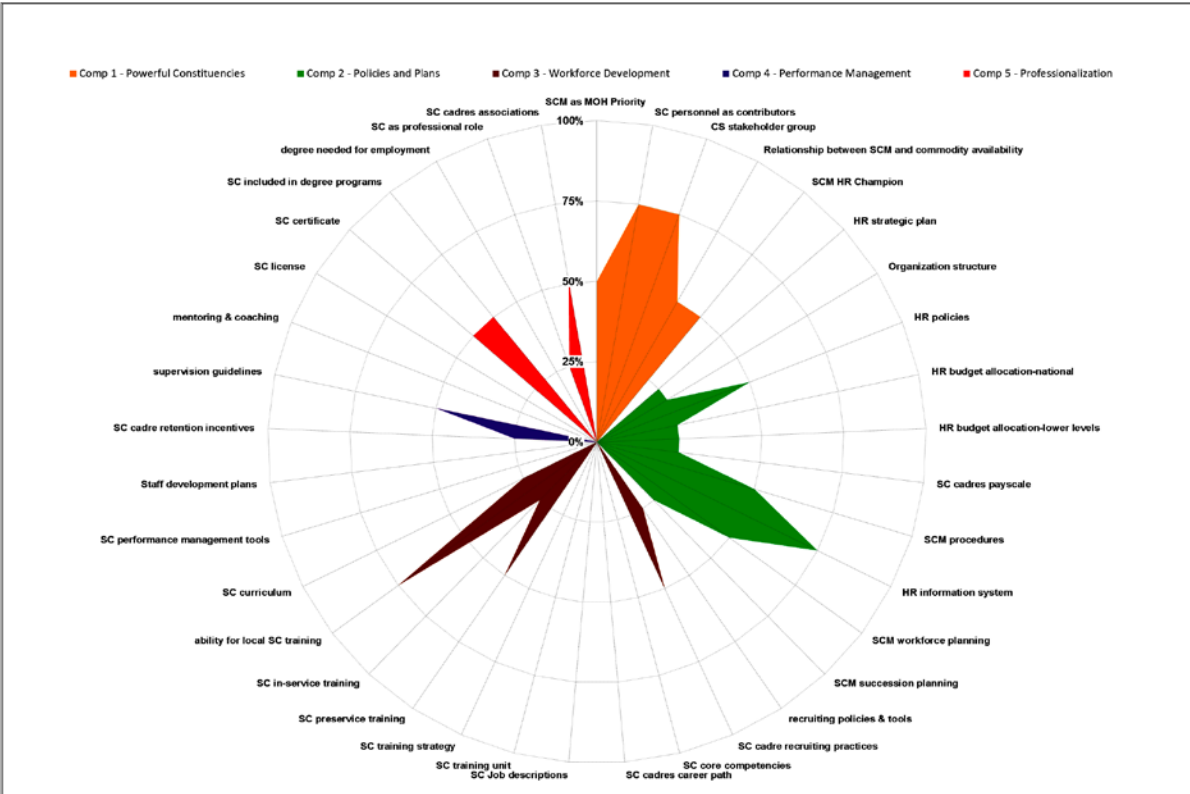


Figure 6. Central-Level Dashboard





# Component I. Powerful Constituencies

## Introduction

Powerful constituencies refer to stakeholders from organizations, institutions, or stakeholder groups that play various roles in supporting and advocating for the importance of supply chain functions and human resources for the supply chain in public health. This is accomplished through funding, management, communication strategies, and building coalitions.

The assessment team reviewed key dimensions related to this component, which include supply chain management as an MOH priority; SCM personnel, as involved contributors in decisionmaking; commodity security stakeholder groups; and the relationship between improved SCM workforce and improved commodity availability; and last, the presence of key figures in the MOH advocating for HR for SCM.

Powerful constituencies play a key role in SCM and they will be instrumental in improving HR for SCM.

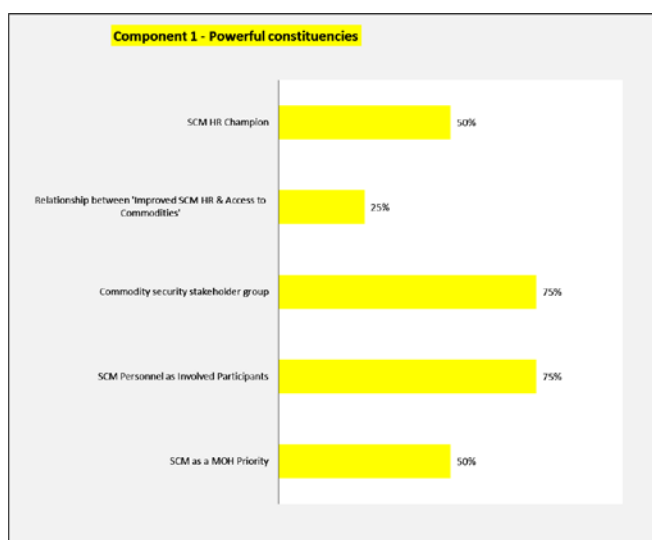
## Findings

### District Level

Figure 7 shows a summary of the focus group discussion on the status of powerful constituencies from the perspective of district-level stakeholders.

Participants found that HR for SCM is a priority and there is a champion for it at the MOH; however, they scored both dimensions as “developed but not consistently or uniformly applied,” because funding for SCM and the champion’s decisionmaking power were found to be insufficient. They found the commodity security stakeholder group and SCM personnel involvement to be fully developed and having full stakeholder support, but still lacking funding. On the other hand, they determined there is still a major gap between the connection of HR for SCM and access to commodities.

**Figure 7. District-Level Component I Findings**



### Zonal Level

Figure 8 shows a summary of the focus group discussion on the status of powerful constituencies from the perspective of the zonal-level stakeholders. They scored SCM as a priority—the same as the district-level participants—but, they perceived the SCM HR champion to be much less empowered (25 percent). Similar to the district-level group, they scored the

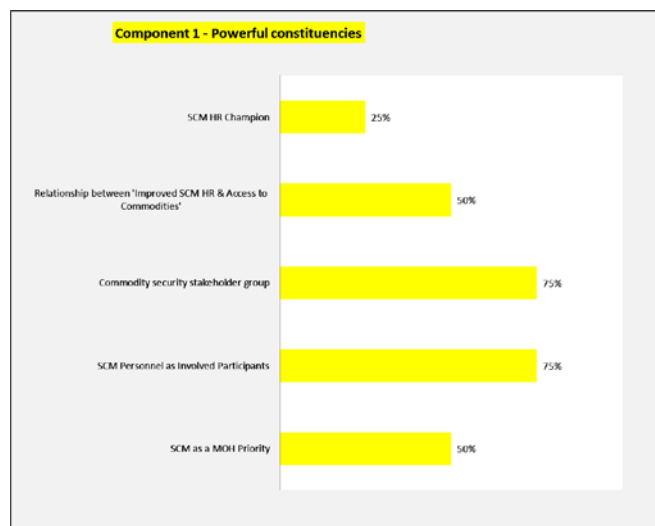
commodity security stakeholder group and SCM personnel involvement to be fully developed and having full stakeholder support, but still lacking funding. Regarding the connection of HR for SCM and access to commodities, the zonal-level group acknowledged that it existed, but could still use improvement (50 percent).

## Central Level

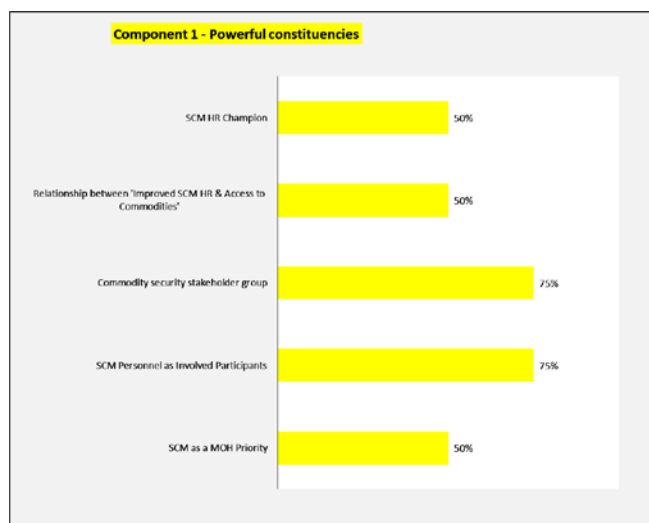
Figure 9 shows the findings from the central focus group discussions, in which participants scored SCM as a priority and the presence of a champion for HR for SCM similar to the district level: *developed but not consistently or uniformly applied*.

They also gave the same score to the connection between HR for SCM and access to commodities. The central-level group found the CS stakeholder group and SCM personnel involvement as developed, as did the district- and zonal-level groups.

**Figure 8. Zonal-Level Component I Findings**



**Figure 9. Central-Level Component I Findings**





# Component II. Policies and Plans

## Introduction

Supply chain management HR policies help to—

- Develop priorities and objectives for strengthening a SC workforce to operate the health commodity supply chain system by articulating strategies for recruitment, retention, productivity, performance, and deployment.
- Specify the resources required to meet the objectives.
- Support decisionmaking at the different levels of the SCM system.
- Provide a framework for evaluating the SC workforce and SCM system performance.

The HR plans support these policies by providing the SC workforce procedures and steps on how the policies will be implemented.

The assessment team reviewed key dimensions related to this component, which include—

- HR strategic plan for SC
- organizational structure
- human resource policies
- SCM HR budget allocation—national
- SCM HR budget allocation—lower levels
- SC personnel pay scale
- SCM SOPs
- HRIS
- SCM workforce planning
- SCM succession planning.

Policies and planning provide a “system of human resource practices for a particular job or collection of jobs aimed at [facilitating] the best employee performance possible to meet [an organization’s] ultimate goals” (USAID and GFATM 2013). To enact human resource policies and plans, an organization must have adequate financing. Financing human resource capacity development often represents one of the costliest elements in providing health services in a developing country context, such as Zanzibar. It includes costs associated with salaries, allowances, education, and incentive packages.

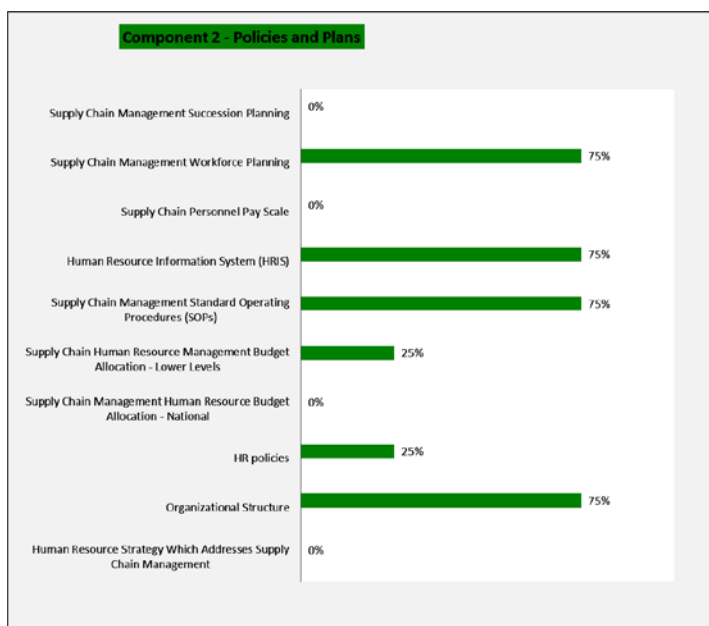
The assessment team examined the types of policies, plans, tools, and resources that can strengthen human resource capacity in public-health supply chains.

## Findings

### District Level

From the perspective of the district stakeholders, the state of policies and plans for the SCM succession planning, SC personnel pay scale, SCM HR budget allocation—national, and HR strategic plan for SC do not exist (0 percent). Both SCM HR budget allocation—lower levels and human resource policies are considered to be unevenly applied or inappropriate for current needs (25 percent), because there is only a general HR policy guiding document that is not specific to SC personnel; and there is no specific line item at the lower level for SCM. All other areas are considered to be developed, but lack funding (75 percent). See figure 10.

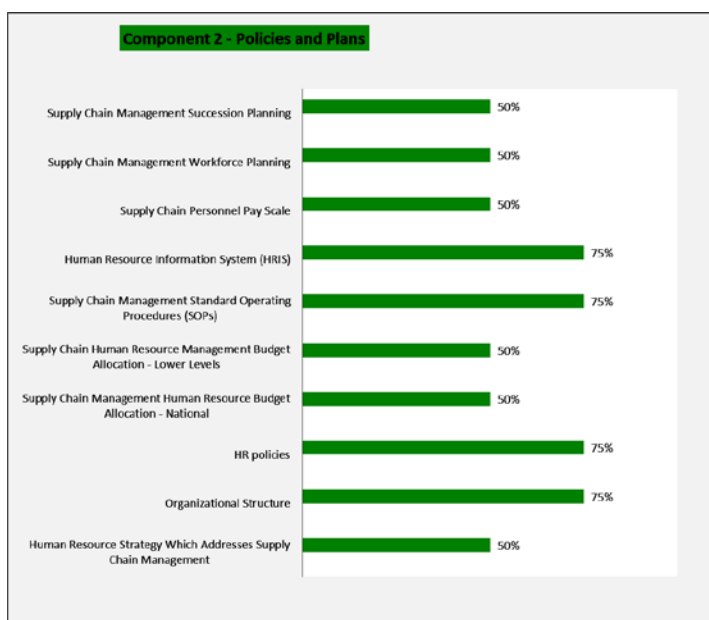
**Figure 10. District-Level Component II Findings**



### Zonal Level

Overall, the zonal-level participants were confident in the policies and plans dimensions development, rating them as either developed and not consistently applied (2 or 50 percent) or fully developed with restricted funding (3 or 75 percent) across the board (see figure 11). The zonal-level group reported dimensions, such as *SCM succession planning*, *pay scale*, *SC HR management budget at the national- and local-levels*, and an *HR strategy addressing SCM* as developed, but needing increased support; where the district-level rated those dimensions as not existing.

**Figure 11. Zonal-Level Component II Findings**

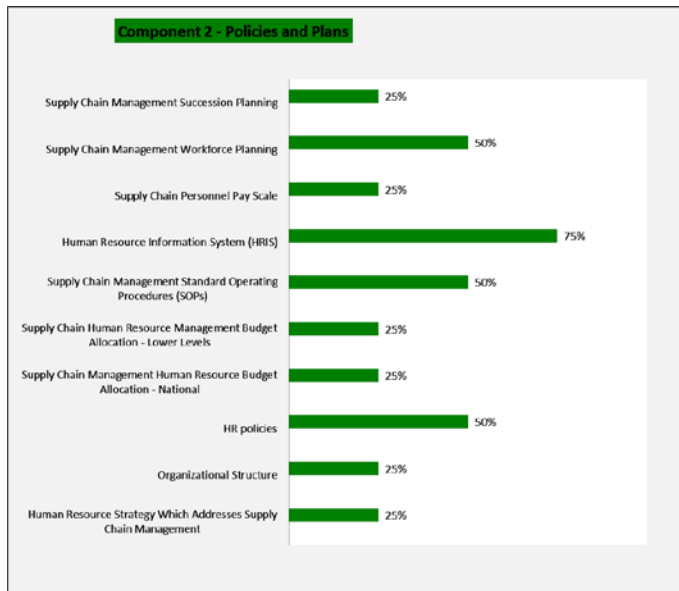


### Central Level

The unifying feature across all levels is a functional HRIS, although it does not include SCM (75 percent) or a workforce plan that is updated annually (50 percent). See figure 12.

The central-level group found dimensions, such as *SCM succession planning*, *SC personnel pay scale*, *SCM HR budget allocation at the national- and local-level*, as well as an HR strategy that addresses SCM to exist; but, inappropriate to the current requirement, either because plans and pay scale are not specific to SCM personnel or because of funding constraints.

**Figure 12. Central-Level Component II Findings**





# Component III. Workforce Development

## Introduction

In public-health sectors, a well-functioning supply chain requires well-designed systems and adequately trained and managed supply chain workers. The supply chain workforce may include pharmacists, logisticians, supply chain managers, data managers, and nurses; as well as warehouse and transport personnel. The workforce supporting supply chain activities needs to be adequately trained and supported if medicines and other health commodities are to be accessible to all customers at the right time, in the right quantity, in the right place, at the right price, and in the right condition. Therefore, it is essential that the supply chain tasks be defined and articulated in SOPs and that these SOPs are institutionalized at all levels.

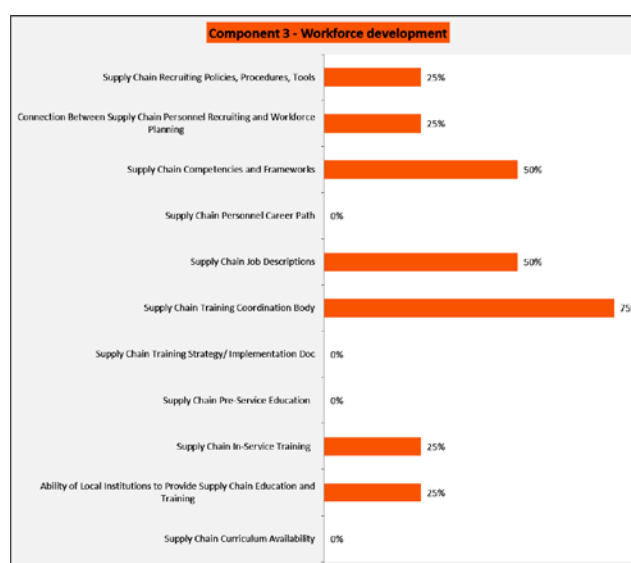
Workforce development is a long-term process by which an organization builds the knowledge, skills, and attributes needed to fulfill its mission; in this case, to help the supply chain operate efficiently and effectively. It is imperative that SCM tasks are clearly defined and that mechanisms are put in place to train, monitor, and mentor staff carrying out these important public health SC activities, regardless of their primary training and other professional responsibilities. Some of the basic elements needed to build an effective SC workforce are clearly defined educational pathways that result in recognized credentials, competency frameworks, comprehensive job descriptions, opportunities for continuing professional development, coordinated SC curricula with local institutions able to deliver the curricula, and a regular schedule of trainings.

## Findings

### District Level

The indicators *supply chain personnel career path*, *supply chain training strategy*, *pre-service education and curriculum availability* were rated as nonexistent primarily because there is no SC cadre. Four indicators are rated nonexistent (0 percent); the existence of a *SC training coordination body* was rated as fully developed, but challenged, due to funding constraints (75 percent). Certain skills, such as those of a pharmaceutical technician, are required to perform SC tasks at the district level, but there is no competency model and job descriptions for District Material Manager (DMM); therefore, the group agreed to rate the dimensions *competency framework and job descriptions* at 50 percent. The remaining four indicators are in an emerging stage or not relevant to the current systems (25 percent). See figure 13.

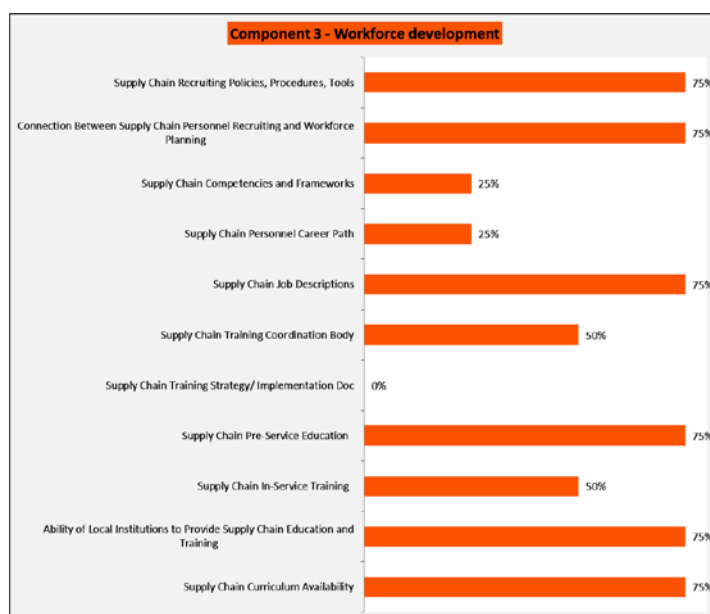
**Figure 13. District-Level Component III Findings**



## Zonal Level

Zonal-level stakeholders continue to perceive *the state of HR for SCM* in a more positive light, with only one (0 percent) rating for *SC training strategy/implementation document*. *SC competencies and frameworks*, and *SC personnel career path* dimensions are rated as being developed and existing, but outdated. Although there was a consensus that there was no career path for health cadres, there are policies in place that guide promotions (see figure 14). It was noted that implementing these policies is a challenge. Although developed, areas that need attention in terms of consistency and uniformity in their application are SC training coordination and in-service training. Participants agreed the MOH training unit offers trainings when there are changes to the system; but, at the national level, there is no training calendar. The remaining six indicators are considered developed for the health sector and adequately supported, but they lack requisite funding and are not specific for SCM (75 percent).

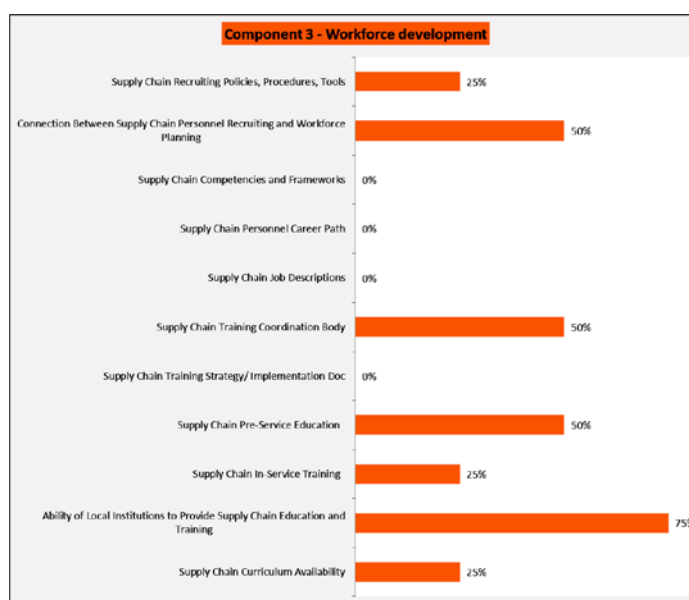
**Figure 14. Zonal-Level Component III Findings**



## Central Level

Central-level stakeholders are balanced in their opinion of strengths and weaknesses of HR for SCM in Zanzibar. *Competency frameworks*, *career path*, *job descriptions for SCM*, *SC training strategy*, or *implementation documents* do not exist. General procedures are available for hiring health personnel, but they are not robust and comprehensive. Some in-service training opportunities, such as SC courses with the Eastern and Southern Management Institute (ESAMI), are available; but in-service training programs are not organized for SC personnel. In addition, no local body coordinates the education of supply chain personnel and there is no SC curriculum; only a few SC aspects are included in some higher-education curriculum. As such, all these dimensions were rated at 25 percent (as existing, but outdated or inappropriate to current system requirements). However, the HR division does coordinate trainings and advertises when opportunities are available (SC training body—50 percent). To meet the objective of the existing workforce plan, procurement, pharmacists, and pharmaceutical technicians are recruited to perform the supply chain tasks; which resulted in

**Figure 15. Central-Level Component III Findings**



the rating of 50 percent for the dimension of the relationship between SC personnel recruiting and workforce planning (see figure 15).

For pre-service education, though not specific to SC, the Ministry of Education advertises opportunities for study abroad and Mbweni College provides education with some supply chain concepts. Support for pre-service education is also coordinated with mainland training institutions; the higher education student loan board (HESLB) provides loans to finance it. Local institutions provide some SC courses annually and the MOH has been involved in the review of the curriculum for health sciences training institution. Competency-based supply chain aspects were added to the curriculum (rating of 75 percent).





# Component IV. Workforce Performance Management

## Introduction

Workforce performance management, a systematic process, is essential to ensure that the human resource capacity/workforce is performing according to the goals and objectives set by the organization. Performance criteria are established in competency models, embedded in job descriptions, and linked to organizational objectives. Rather than being an isolated effort, performance management is a continuous process that includes guidance, supervision, and coaching/mentoring, as and when required, to enhance performance. To adequately incentivize the workforce, recognition and rewards are given when there is sustained good performance to motivate continued performance excellence.

Ultimately, to positively impact supply chain performance, the objective of performance management is to link individual employee goals and performance to organizational goals and performance through competency-based assessment.

The workforce performance management building block has the following five dimensions:

1. Performance management policies, procedures, and tools
2. Staff development plans
3. Retention and performance incentives
4. Supportive supervision guidelines and implementation
5. Mentoring and coaching.

## Findings

### District Level

Two related dimensions *supportive supervision guidelines and implementation* and *mentoring and coaching* were rated at 50 percent, or existing; but not uniformly applied, because, usually, the monthly supervision visits are comprehensive. However, there is a recent directive from the ministry for these visits to focus on SC and mentoring; coaching was considered to exist because some coaching is done by SCM advisors and CMS under ZILS.

*Performance management tools and policies*, as well as *staff retention and performance incentives*, are considered inadequate (25 percent). Last, staff development plans are perceived to be non-existent (0 percent). See figure 16.

## Zonal Level

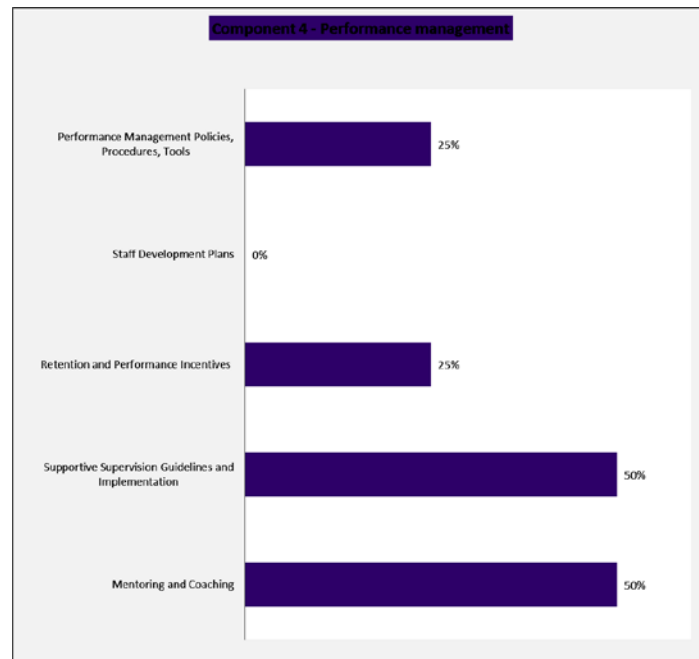
The dimension *supportive supervision guidelines and implementation* was rated even higher than in the district discussion group (75 percent) because, although the guidelines are not specific for SCM, they do exist (see figure 17). The zonal level rated staff development plans at 50 percent because they exist, but recognized they are not specific to SCM. On the other hand, the group rated performance management policies, procedures, tools, and mentoring and coaching at 25 percent; some performance assessment of the healthcare system and services provided is done; coaching is conducted during the supervision visits. The zonal-level group agreed that retention and performance incentives did not exist.

## Central Level

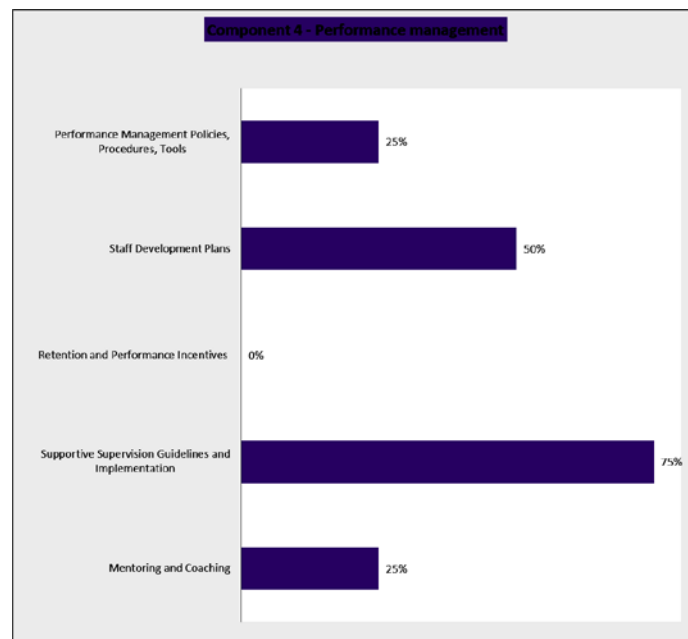
The central-level discussion group determined that the system has neither staff development plans nor formal mentoring and coaching (see figure 18). The group agrees with the district-level group by rating the *retention and performance incentives* dimension at 25 percent. There was a consensus that these plans and incentives (e.g., risk allowance) are in place but are inadequately implemented and not specific to SC personnel. Another dimension similarly rated to the district- and zonal-levels is the existence of performance management policies, procedures, and tools.

*Supportive supervision guidelines and implementation* is rated at 50 percent, or existing, but not uniformly applied, because general and program specific guidelines are present and implemented at all levels, but they are not specific to SCM.

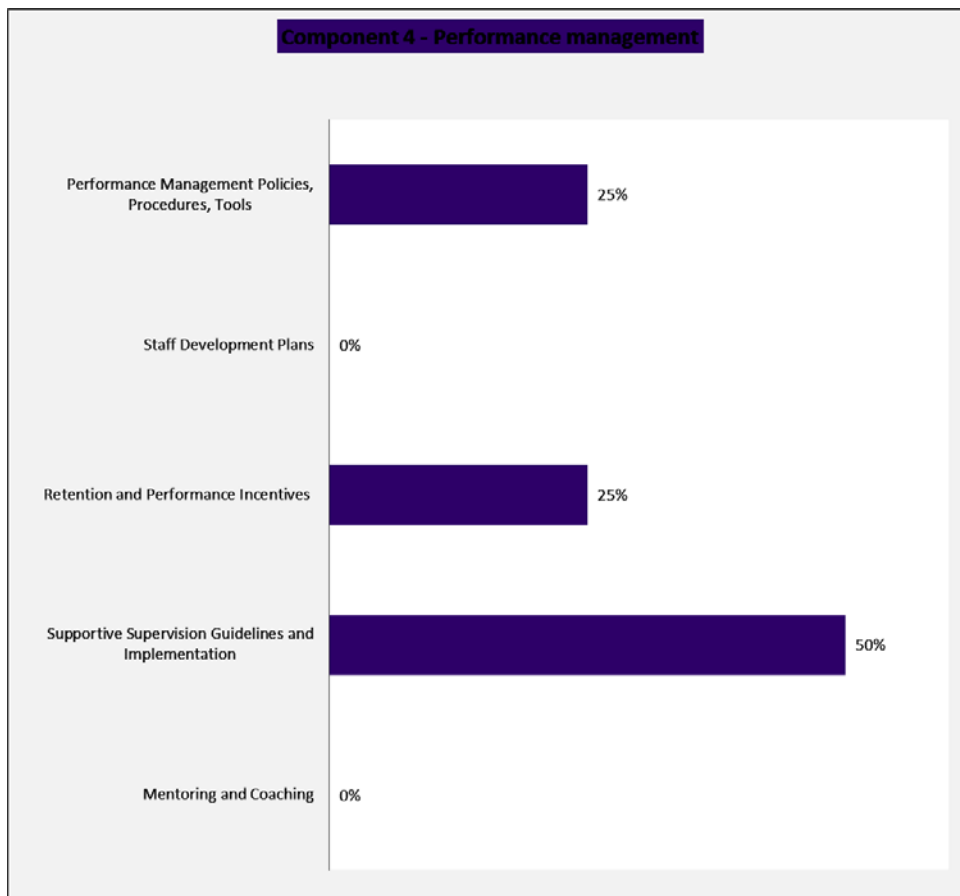
**Figure 16. District-Level Component IV Findings**



**Figure 17. Zonal-Level Component IV Findings**



**Figure 18. Central-Level Component IV Findings**





# Component V.

## Professionalization

### Introduction

A profession is an occupation, practice, or vocation that requires mastery of a complex set of knowledge and skills through formal education and/or practical experience. It is more than a job; it is a career. Workers adopting the career are obligated to behave in accordance with the ethical requirements of that specific profession. Generally, an organized profession is governed by its professional body.

Public-health supply chain workers ensure that medicines and other health commodities reach the people who need them. To achieve an effective public-health supply chain, the tasks ensuring the appropriate product selection, forecasting, procurement, storage, and distribution need to be carried out by specialized, competent, motivated, and well-supported personnel; with sufficient knowledge and background in the supply chain of health commodities. To improve the delivery of supply chain services, further efforts must be made to professionalize supply chain roles and tasks through education and licensure, and the development of a professional association.

The professionalization dimension of an HR for SCM has six indicators:

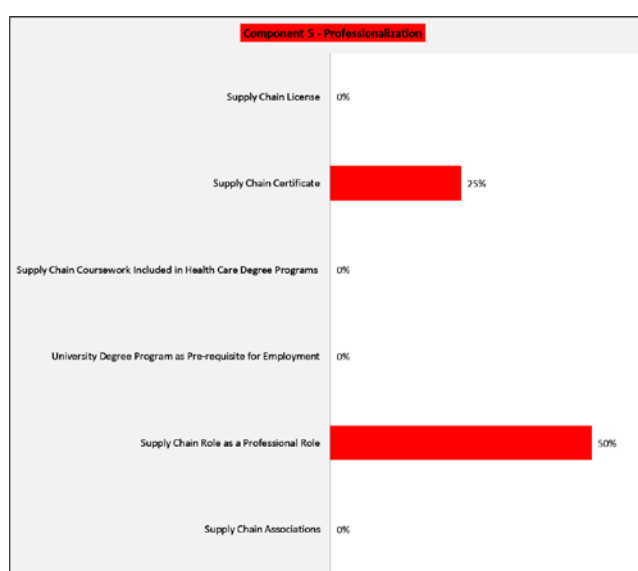
- Supply chain license
- Supply chain certificate
- Supply chain coursework included in health care degree programs
- University degree program as pre-requisite for employment
- Supply chain role as a professional role
- Supply chain associations.

### Findings

#### District Level

The district-level participants agreed that there is no licensure in SC (0 percent) in Zanzibar (see figure 19). In addition, from the district-level purview, SC coursework is not included in healthcare degree programs (0 percent). Although no known SC certificates are awarded, the group decided to rate the dimension at 25 percent, because certificates are awarded for attendance after trainings for particular logistics systems (e.g., ZILS). The district-level participants

**Figure 19. District-Level Component V Findings**



rated the *supply chain as a professional role* at 50 percent, because dedicated logistics officers at the central level have university degrees.

## Zonal Level

For the most part, the zonal-level participants indicated that *professionalization of SC in public health* is a growth area. The two areas where the zonal participants indicated that SC professionalization developed, but not uniformly applied, are the dimensions *university degree program as pre-requisite for employment* and *SC as a professional role* (50 percent). Existing supply chain personnel are graduates and postgraduates; as such, the group determined that the university degree program is required for employment. See figure 20.

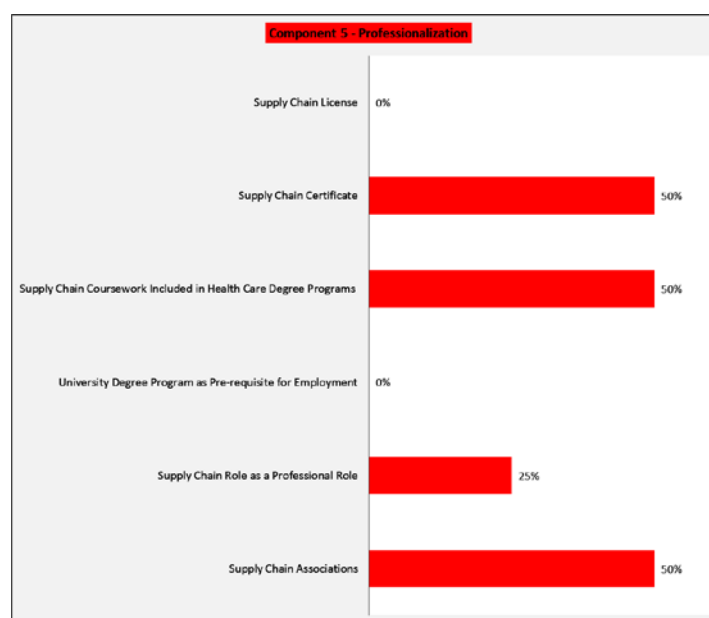
**Figure 20. Zonal-Level Component V Findings**



## Central Level

As the district level group noted, the central-level participants also found the certificate provided after training on a system such as ZILS, and after in-service training, both justify ranking the existence of a SC certificate at 50 percent developed (see figure 21). They also rated the dimension *SC coursework included in health degree programs* as developed, but not consistently or uniformly applied (50 percent); because the certain supply chain aspects, such as ZILS, pharmacovigilance, and rational use of medicines, have been included in the diploma program (pharmaceutical technician). The group also rated similarly *SC professional associations*. *Supply chain role as a professional role* was rated at 25 percent, because there are only two SC personnel (through donor support) at the central level (CMS and programs).

**Figure 21. Central-Level Component V Findings**



# Recommendations

This assessment provides a snapshot of the state of HR for SC in Zanzibar across three levels of the healthcare system. It identifies strengths and challenges that will need to be addressed as the logistics system is being designed. Given the relatively strong state of HRH, Zanzibar is poised to make great strides if attention is paid to a few key areas to build the capacity for HR for SC. At this important time, it is imperative for SC champions within the MOH to follow up on this collaborative effort. See table 2.

The MOH will play the crucial role of coordinating the efforts of all stakeholders to improve the SC human and institutional capacities in Zanzibar, which will better serve its citizens.

Following, the findings of our analysis are aggregated to indicate recommendations and short- and medium- to long-term initiatives to build on the strengths already existing in the HR for the supply chain in Zanzibar.

In the short-term, the MOH can focus on—

- Establish a SCM unit to coordinate SC activities across all programs and all levels.
- Integrate SC courses in all schools of health.
- Create job descriptions for SC tasks at all levels.
- Include SCM in the HRH strategic plan.
- Coordinate and integrate the general supervision visits at the district level.

In the medium-term, the MOH will need to mobilize resources to—

- Implement incentives at all levels.
- Introduce staff development plan and retention schemes at all levels.
- Increase funding from government support for HR for SC.

In the long-term, the MOH should—

- Establish a supply chain cadre and SCM as a licensed profession.
- Allocate funds to absorb donor-supported SC activities at the MOH level.





**Table 2. Strategic Interventions, Objectives, and Activities—Zanzibar**

<b>Building Blocks</b>	<b>Strategic Interventions</b>	<b>Objectives</b>	<b>Activities</b>
<b>Powerful Constituencies</b>	Advocate for human resource (HR) for SC	To promote and support HR for SCM to become a high priority on the MOH's agenda	Increase funding from government and other stakeholders for sustained support toward HR for SCM
			Establish a SC cadre
			Establish a SCM unit to coordinate supply chain activities across all programs and all levels
			Establish TWGs to discuss issues around SCM and commodity availability at the zonal-, district-, and program-levels.
<b>Policies and Plans</b>	Ensure HR for SCM is integrated in the policy of the MOH (2011)	To highlight HR for SCM in the HRH strategic plan and guarantee adequate resources to sustain it	Integrate HR for SCM in the HRH strategic plan
			Generate and allocate funds to absorb donor-supported supply chain activities at the MOH level
<b>Workforce Development</b>	Maximize the SC workforce to be a critical support to the health system	To ensure the SC workforce has the necessary capacity and tools to perform SC tasks.	Develop a competency framework that will inform recruiting and the development of training curricula
			Create job descriptions for supply chain tasks
			Coordinate the general supervision visits at the district level
<b>Workforce Performance Management</b>	Increase productivity by establishing an evaluation process linked to competency	To implement a competency- based performance assessment and supervision guidelines	Institute supervision of personnel at the central level
		To establish a system of rewarding for good performance	Implement incentives, such as the proposed responsibility and risk allowances, at all levels
			Introduce staff development plan and retention schemes at all levels
			Develop a formal mentoring and coaching process

<b>Building Blocks</b>	<b>Strategic Interventions</b>	<b>Objectives</b>	<b>Activities</b>
<b>Professionalization</b>	Create a skilled SC workforce	To integrate supply chain coursework into schools of health to build a new SC workforce	Assess and review the curricula of schools of health sciences to add supply chain content
			Incorporate supply chain in the pre-service curriculum at all healthcare training institutions
		To create means for SC professional development	Establish an association for supply chain personnel

# References

- Proper, Walter. 2014. “A Chair at the Top? The Importance of Leadership for Public Health Supply Chains.” Website of the USAID | DELIVER PROJECT. Arlington, Va.: USAID | DELIVER PROJECT (<http://deliver.jsi.com/>).
- Revolutionary Government of Zanzibar (RGoZ). October 2011. *The Zanzibar Strategy for Growth and Reduction of Poverty: 2010-2015 (ZSGRP II) - MKUZA II*. Zanzibar: RGoZ.
- Revolutionary Government of Zanzibar (RGoZ). Ministry of Health, Human Resource for Health Division. December 2013. *Human Resource for Health Update*. Zanzibar: RGoZ.
- Revolutionary Government of Zanzibar (RGoZ). Ministry of Health, Human Resource for Health Division. 2014. *Minimum Staffing Requirements*. Zanzibar: RGoZ.
- United States Agency for International Development (USAID) and Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM). November 2013. *Zanzibar: Strategic Review of the National Supply Chain for Health Commodities*. Washington, DC: USAID and GFATM.
- USAID | DELIVER PROJECT, Task Order 4. 2013. *Human Resource Capacity Development in Public Health Supply Chain Management: Assessment Guide and Tool*. Arlington, Va.: USAID | DELIVER PROJECT, Task Order 4.



# Appendix A

## Key Terms

**career development:** The process by which individuals establish their current and future career objectives and assess their existing skills, knowledge, or experience levels and implement an appropriate course of action to attain their desired career objectives.

**career mobility:** The propensity to make several career changes during an individual's lifetime instead of committing to a long-term career within a specific occupational field.

**career path:** The progression of jobs in an organization's specific occupational fields ranked from lowest to highest in the hierarchical structure.

**career planning:** The process of establishing career objectives and determining appropriate educational and developmental programs to further develop the skills required to achieve short- or long-term career objectives.

**competency.** Knowledge, skills, and abilities required to perform a specific task or function; also, a set of defined behaviors with a structured guide that can be used to identify, evaluate, and develop the behaviors in individual employees.

**competency model:** A model that identifies the competencies needed to perform a specific role in a job, organization, or profession; refers to a group of competencies required in a particular job.

**competency framework:** A structure that sets out and defines each individual competency (such as problem solving or people management) required by individuals working in an organization or in part of an organization.

**development program:** Training or educational programs designed to stimulate an individual's professional growth by increasing his or her skills, knowledge, or abilities.

**employee retention:** Organizational policies and practices designed to meet the diverse needs of employees and to create an environment that encourages employees to remain employed.

**employee retention:** Organizational policies and practices designed to meet the diverse needs of employees and to create an environment that encourages employees to remain employed.

**human capital:** The collective knowledge, skills, and abilities of an organization's employees.

**human resources (HR):** The function dealing with the management of people employed within an organization.

**human resource planning:** The process of anticipating future staffing needs and ensuring that a sufficient pool of talent possessing the skills and experience needed will be available to meet those needs.

**human resource specialist:** A term that defines someone who has expertise and responsibility for specific areas or functions in the field of HR (i.e., compensation, benefits, employee relations, etc.).

**in-service training:** Capacity- and skills-building that occurs while an individual is employed within a particular field. Skills-building opportunities are often shorter in nature or provided on-the-job so the individual can return to their position and immediately apply the lessons learned.

**incentive pay:** Additional compensation used to motivate and reward employees for exceeding performance or productivity goals.

**job description:** A written description of a job that includes information about the general nature of the work to be performed, specific responsibilities and duties, and the employee characteristics required to perform the job.

**knowledge, skills and abilities (KSAs):** The attributes required to perform a job; generally demonstrated through qualifying experience, education, or training.

**organization chart:** A graphic representation outlining how authority and responsibility are distributed within an organization.

**organizational unit:** Any component that is part of the contractor's corporate structure. In a traditional organization, it could be a department, division, section, branch, or group. In a less traditional organization, it could be a project team or job family.

**performance-based pay:** A variable pay strategy that pays employees based on their individual performance and contributions, rather than the value of the job they are performing.

**performance improvement plan:** A plan implemented by a manager or supervisor that provides employees with constructive feedback, facilitates discussions between an employee and his or her supervisor regarding performance-related issues, and outlines specific areas of performance that must improve.

**performance management:** The process of maintaining or improving employee job performance through the use of performance assessment tools, coaching and counseling, as well as providing continuous feedback.

**performance standards:** The tasks, functions, or behavioral requirements established by the employer as goals the employee must accomplish.

**pre-service training:** Capacity- and skills-building that occurs prior to an individual joining the workforce, or prior to their *service* in the field of study.

**privacy:** Refers to information about an employee that he or she regards as personal or private—i.e., medical information, financial data, etc.—and the right of that individual to have the information kept private.

**professionalization:** A process by which a role or set of responsibilities or competencies are made into or established as a profession.

**policy/procedures manual:** A detailed written document that assists managers and supervisors in carrying out their day-to-day responsibilities by acquainting them with all the organization's policies and procedures required to implement those policies.

**recognition:** An acknowledgement of an employee's exceptional performance or achievements expressed in the form of praise, commendation, or expressed gratitude.

**recruitment:** The practice of soliciting and actively seeking applicants to fill recently vacated or newly created positions using a variety of methods (i.e., internal job postings, advertising in newspapers or electronic job boards/sites, utilizing search firms, or listing position with trade and professional associations, etc.).

**reward system:** A formal or informal program used to recognize individual employee achievements, such as accomplishing goals or projects, or submitting creative ideas.

**salary grade.** A compensation level expressed as a salary range that has been established for each position within the organization.

**salary range:** A range of pay rates, from minimum to maximum, set for a specific pay grade.

**salary structure:** A structure of job grades and pay ranges established within an organization. Can be expressed as job grades or job evaluation points.

**selection process:** Any step, combination of steps, or procedure used to make any employment decision; including, but not limited to, informal or casual interviews, unscored application forms, paper and pencil tests, performance tests, training programs, probationary periods, and physical, education and work experience requirements, as well as the decisionmaking process used to determine whether or not to hire or promote.

**skills training.** Training provided to employees to help them determine the skills and knowledge necessary to perform their current jobs; also used to retrain when new systems or processes are introduced.

**staffing.** The function within an organization that is responsible for recruitment, screening, and selection of employees. Often, staff in this area may also be responsible for other areas of employment, such as orientation, retention, training, and termination of staff.

**stakeholder:** Someone with a vested interest in the successful completion or outcome of a project.

**strategic HR:** The process of taking a long-term approach to HR management by developing and implementing HR programs that address and solve business problems and directly contribute to major long-term business objectives.

**strategic planning:** The process of identifying an organization's long-term goals and objectives and then determining the best approach for achieving those goals and objectives.

**strategic staffing:** The practice of hiring smaller core numbers of permanent employees and utilizing temporary employees to fill more highly specialized positions within the organization.

**supply chain manager:** A person with the responsibility of implementing supply chain activities and functions that ensure the availability of health supplies at service facilities, including procurement, quality assurance, warehousing, distribution, logistics information management, and monitoring.

**supervise:** To oversee—a process, work, workers, etc.—during execution or performance; have the oversight and direction for the performance.

**supervision:** The act or function of supervising.

**supportive supervision:** The process that promotes quality by strengthening relationships within the system, focusing on the identification and resolution of problems; and helping to optimize the allocation of resources, promoting high standards, teamwork, and better two-way communication.

**training:** Education or instruction provided to employees to take them to an agreed-to standard of proficiency, with the potential for promotion into supervisory or managerial-level positions within the organization, or it can be used as a remedy for performance-related issues.

**training and development:** A process dealing primarily with transferring or obtaining knowledge, attitudes, and skills needed to carry out a specific activity or task.

**turnover:** Changes in the work force resulting from voluntary or involuntary resignations.

**turnover rate:** The number of separations during a month, including both voluntary and involuntary terminations (excluding layoffs). The turnover rate is calculated by taking the number of separations during a month divided by the average number of employees on the payroll multiplied by 100.

**wage structure:** The range of pay rates to be paid for each grade for positions within the organization.

**workforce analysis:** A study of a listing of each job title as the title appears in the applicable payroll records ranked from the lowest to the highest paid within each department, including supervision department or unit.

**workforce development:** The implementation of an integrated strategy or system designed to increase workplace productivity by developing improved processes for developing and utilizing people with the required skills and aptitude to meet current and future business needs.

**workforce planning:** The assessment of current workforce content and composition issues; used to determine what actions must be taken to respond to future needs.



## Appendix B

# Focus Group Discussion Participant List

### District level, September 15, 2014, Ocean View Hotel, Zanzibar

S/N	Name	G	Title	Mob. Phone	Email
1	Said Mansour	M	District Material Manager	0777 410201	saidmansour18@yahoo.com
2	Ali Mzee Suleiman	M	District Material Manager	0777 492990	mzeeali@yahoo.com
3	Khalfan Mattar Nassor	M	District Material Manager	0777 436692	
4	Mkubwa Habib Khamis	M	Clinical Officer	0778 856500	
5	Suleiman Mohamed Rakwe	M	Psychiatric Nurse	0777 866764	
6	Hamdan Sultan Omari	M	District Material Manager	0776 161851	
7	Hamad Khamis Ali	M	Clinical Officer	0773 822448	
8	Riziki Yussuf Haji	F	Clinical Officer	0777 765925	riyou87@yahoo.com

### Zonal level, September 16<sup>th</sup>, 2014, Ocean View Hotel, Zanzibar

S/N	Name	G	Title	Mob. Phone	Email
1	Ahmada Muharami	M	Assistant incharge – Mnazi Mmoja Hospital	0775 249923	ahmfauam@yahoo.com
2	Kassim Dhahir Khamis	M	Assistant incharge – Chake Chake Hospital	0772 434260	gmail.comkassimdhalir@
3	Biubwa Khamisi	F	Zonal Materials Managers Unguja	0777 414031	biubwakhamis@gmail.com
4	Dr Faki H Yussuf	M	Zonal Medical Officer Pemba	0777 427410	fakehdhmt@yahoo.com
5	Ali Bakar Mmanga	M	Zonal Materials Managers Pemba	0777 202243	albakaris@yahoo.com
6	Zahran A. Hamad	M	Pharmaceutical Services Coordinator–CPO MOH	0777 428872	zaphamars@yahoo.com
7	Abdul Mzale		SCMA	0773 320001	amzale@tz.pfscm.org

**Central level, September 17–18, 2014, Ocean View Hotel, Zanzibar**

<b>S/N</b>	<b>Name</b>	<b>G</b>	<b>Title</b>	<b>Mob. Phone</b>	<b>Email</b>
1	Salma M. Said	F	Pharmacist - Chief Pharmacist Office	0777 418170	smsaid68@yahoo.com
2	Bernard Mtuta	M	Administrator - Central Medical Store	0774 354777	bernardmtuta@yahoo.com
3	Aisha A. Mohamed	F	M&E Officer - Ministry of Health	0772 788443	aishuu76@yahoo.com
4	Omar A. Abdala	M	Economist - Planning Unit - MOH	0777 098671	almuntas@yahoo.com
5	Abdul Mzale	M	SCMA	0773 328007	amzale@tz.pfscm.org
6	Jafari Bulembo	M	Logistics Expert HIV & TB – Global Fund	0717 193155	bulembo@yahoo.com
7	Zainab H. Abdulla	F	Head Procurement Management Unit - MOH	0773 092956	zhajiabdulla@yahoo.com
8	Zahran A. Hamad	M	Coordinator Pharmaceutical Services - CPO	0777 428872	zapharmas@yahoo.com
9	Khadija Kassim	F	Head Training Unit - MOH	0777 822525	khadijakak@yahoo.co.uk
10	Attiya J Shaa	F	Statistician - MOH	0777 412551	athyis02@yahoo.co.or
11	Ramadhan Hamza	M	Head – Human Resource, MOH	0777 432592	ramahamza@yahoo.com

## Appendix C

# Validation Meeting Participation List

**October 22, 2014, Double Tree Hotel, Dar es Salaam**

S/N	Name	G	Region	Title	District	Facility	Mob. Phone	Email
1	Dr. Mohamed S. Jiddawi	M	Urban	Principal Secretary	West	MOHZ	0777 410954	mjiddawi@hotmail.com
2	Dr. Jamala A. Taib	M	Urban	Ag. Director General	West	MOHZ	0777 432465	jamalataib@gmail.com
3	Dr. Slim Rashid Juma	M	Urban	Chief Govt. Chemistry	West	MOHZ	0773 078134	slimjuma@yahoo.com
4	Habib A. Shariff	M	Urban	Chief Pharmacist	West	MOHZ	0777 424082	kijip60@hotmail.com
5	Aisha Abdallah Mohamed	F	Urban	M&E Officer	West	MOHZ	0772 788443	aishuu76@yahoo.com
6	Shija J. Shija	M	Urban	Pharmacist-ZAMEP	West	MOHZ	0773 097321	shijashija@yahoo.com
7	Mwantoum R. Mussa	M	Urban	Human Resource Unit	West	MOHZ	0777 480695	mmwantoum@gmail.com
8	Farhan A. Yusuf	M	Dar es Salaam	SCMA	Kinondoni	JSI	0784 675599	fyusuf@tz.pfscm.org
9	Lea Teclemariam	F	Dar es Salaam	Logistics Advisor	Kinondoni	JSI	0685 071969	lteclema@jsi.com
10	Zahrn A. Hamad	M	Urban	Pharmacist Coordinator	West	MOHZ	0777 428872	zapharmas@yahoo.com
11	Abdul Mzale	M	Urban	SCMA - Zanzibar	West		0773 328002	amzale@tz.pfscm.org



For more information, please visit [deliver.jsi.com](http://deliver.jsi.com).

**USAID | DELIVER PROJECT**

John Snow, Inc.

1616 Fort Myer Drive, 16th Floor

Arlington, VA 22209 USA

Phone: 703-528-7474

Fax: 703-528-7480

Email: [askdeliver@jsi.com](mailto:askdeliver@jsi.com)

Internet: [deliver.jsi.com](http://deliver.jsi.com)