



Federal Ministry of Health
National Medical Supplies Fund
Sudan

I. TRAINING STRATEGY 2017-2021

Human Resources for Supply Chain Management

March 31, 2017



Human Resources for Supply Chain Management

A collaboration between

National Medical Supplies Fund (NMSF), Sudan

and

The People that Deliver (PtD) Initiative

Documents in this series:

- I. Training Strategy 2017-2021
- II Annual Training Plan
- III. Competency Framework
- IV. Job Descriptions

Further information:



info@nmsf.gov.sd
www.nmsf.gov.sd



info@peoplethatdeliver.org
www.peoplethatdeliver.org

Table of Content

- PART I. BACKGROUND 1**
- 1 OBJECTIVES 1**
 - 1.1 Introduction.....1
 - 1.2 Terms of Reference1
- 2 METHODOLOGY 2**
 - 2.1 PtD Four-Stepped Approach.....2
 - 2.2 Competency-Based Training.....2
 - 2.3 The PtD Competency Framework3
- 3 THE NATIONAL MEDICAL SUPPLIES FUND (NMSF) 4**
 - 3.1 Brief History.....4
 - 3.2 Organizational Structure4
 - 3.3 Suppliers and Customers.....5
 - 3.4 Human Resources (HR).....6
 - 3.5 HR Capacity Development.....7
 - 3.5.1 Findings from the 2014 TNA7
 - 3.5.2 Investing in Training7
 - 3.5.3 Training Coordination8
 - 3.5.4 Training Practice.....9
 - 3.5.5 CPD10
 - 3.5.6 MoUs.....10
 - 3.6 New NMSF Training Centre11
 - 3.7 Performance Management12
 - 3.7.1 Public Sector PM Procedures12
 - 3.7.2 NMSF Internal PM System12
- PART II. TRAINING STRATEGY 14**
- 4 GUIDING PRINCIPLES 14**
 - 4.1 Organizational Objectives14
 - 4.2 Continuous Improvement14
 - 4.3 Training Terminology.....15
 - 4.3.1 Knowledge, Skills, Attitudes.....15
 - 4.3.2 Curricula, Syllabi, Modules.....16
 - 4.4 In-House Learning16
 - 4.5 Long Term vs. Short Term Training17
 - 4.6 Career Progression17
 - 4.7 Strategic Partnerships17
- 5 PLAN OF ACTION 18**
 - 5.1 Training Requirements18
 - 5.1.1 Training Needs Assessment18
 - 5.1.2 Training Options and Delivery Mechanisms20
 - 5.1.3 Trainer Requirements20

5.1.4	Content Design and Development.....	21
5.2	Annual Training Plan.....	21
5.3	On-Boarding of New Recruits.....	21
5.3.1	Existing System.....	21
5.3.2	Mentorship Programme.....	21
5.3.3	NMSF Driver’s Licence.....	22
5.4	Training of Trainers	23
5.4.1	The ToT Concept	23
5.4.2	Financial Incentives.....	24
6	MONITORING AND EVALUATION.....	25
6.1	Introduction.....	25
6.2	Key Training Indicators	25
6.2.1	Process Indicators	25
6.2.2	Outcome Indicators.....	26
7	RECOMMENDATIONS.....	27
7.1	Monitoring Implementation.....	27
7.2	Training Management Support	27
7.3	Training Management System	27
7.4	Revised Job Descriptions	28
7.5	Performance Management	28
7.6	Supportive Supervision.....	29
7.7	HR Newsletter	30
7.8	Organizational Design.....	30
7.9	Training Strategy and TNA Update.....	31
	REFERENCES	32
	ANNEXES	33
	Annex 1: Health Supply Chain Competency Framework for Managers & Leaders (PtD).....	33
	Annex 2: Unique NMSF Staff Positions.....	34
	Annex 3: Baseline Indicators and Targets.....	38
	Annex 4: Training Satisfaction Survey	40
	Annex 5: Customer Satisfaction Survey.....	44
	Annex 6: Mentorship Assessment Form.....	45
	Annex 7: Technical Specifications for a Training Management System	46
	Annex 8: Map of Sudan	47
	Annex 9: Sudan States and Districts	48
	Annex 10: Key Contacts	50

List of Tables

TABLE 1	PTD 4-STEP APPROACH TO HR CAPACITY DEVELOPMENT	2
TABLE 2	NMSF STAFF ESTABLISHMENT.....	6
TABLE 3	NMSF STAFF CATEGORIES	6
TABLE 4	NMSF PERFORMANCE EVALUATION FORMS	12
TABLE 5	NMSF COMPETENCY DOMAINS: RELEVANCE TO NMSF FUNCTIONAL AREAS	19
TABLE 6	RECOMMENDED RATING SCALES FOR PERFORMANCE ASSESSMENT	29

List of Figures

FIGURE 1	NMSF ORGANOGRAM (CURRENT)	5
FIGURE 2	NMSF TRAINING BUDGET.....	7
FIGURE 3	NUMBER OF TRAINING COURSES.....	8
FIGURE 4	NUMBER OF INDIVIDUALS TRAINED	8
FIGURE 5	NMSF WORKFORCE CONTINUOUS IMPROVEMENT CYCLE	14
FIGURE 6	NMSF DRIVER'S LICENCE	22
FIGURE 7	LINK BETWEEN JOB DESCRIPTIONS, PERFORMANCE ASSESSMENT AND TRAINING.....	28
FIGURE 8	SUPPORTIVE SUPERVISION AND PERFORMANCE MANAGEMENT	29
FIGURE 9	BRANCHES: IMPORTANCE OF TRAINING	42
FIGURE 10	BRANCHES: QUANTITY AND QUALITY OF TRAINING.....	42
FIGURE 11	BRANCHES: PROPORTION OF STAFF TRAINED AND MENTORED	43

Acronyms

APICS	American Production and Inventory Control Society
CI	Continuous Improvement
CIPS	South African Production and Inventory Control Society
CMS	Central Medical Stores Public Corporation
CoAcS	Commercial and Academic Services
CPD	Continuous Professional Development
DG	Director General
ERP	Enterprise Resource Planning
FMOH	Federal Ministry of Health
GF	Global Fund
GoS	Government of Sudan
HERA	Health Research for Action
HINARI	Health Inter-network Access to Research Initiative
IAPHL	International Association of Public Health Logisticians
MOH	Ministry of Health
MOU	Memorandum of Understanding
MSH	Management Sciences for Health
NCIHD	Nuffield Centre for International Health and Development
NMSF	National Medical Supply Fund
PM	Performance Management
PSA (1)	Pamela Steele Associates
PSA (2)	Pharmaceutical Systems Africa
PSM	Procurement and Supply Management
PtD	People that Deliver
SAPICS	South African Production and Inventory Control Society
SCM	Supply Chain Management
SDG	Sudanese Pound
TNA	Training Needs Assessment
TOT	Training of Trainers
TQM	Total Quality Management
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UoB	University of Bradford

Executive Summary

Strong supply chains are essential for positive health outcomes and require a competent, recognized and supported workforce with significant technical and managerial capacity. The People that Deliver (PtD) Initiative, a global partnership of organizations committed to promoting and supporting workforce excellence in supply chain management (SCM), launched its new “country partnership program” in June of 2016. Through this program, PtD provides a service that supports Ministries of Health, NGOs and implementing partners to plan, implement, and sustain reforms which strengthen human resources (HR) for health SCM. PtD is the “broker of services” whereby it matches country needs with funding and/or PtD member organizations that can provide the service.

The Sudan National Medical Supplies Funds (NMSF) is a PtD board member organization and joined the initiative in 2013. NMSF is the first organization to participate in this program and requested PtD to conduct a comprehensive study of their staff management and development practices. PtD, through UNICEF Supply Division, responded by identifying and recruiting two consultants: Bastiaan Rimmelzwaal, an experienced supply chain management professional and Jean Blackstock, an experienced organizational design and HR management professional.

The consultants were tasked with developing a comprehensive five-year supply chain training strategy that encompassed NMSF and its state branches. In addition they were asked to develop a competency framework for NMSF leadership and NMSF employees at state levels, as well as update job descriptions and developing a costed and resourced annual training plan in line with the strategy and competency gaps.

The methodology chosen for developing these deliverables is based on PtD’s Four-Stepped Approach, a systematic approach to developing professional HR for health logistics and supply chain management. In order to structure the task, the consultants adopted the PtD competency framework. The assignment was jointly steered by the PtD Secretariat based at UNICEF Supply Division in Copenhagen and NMSF in Khartoum, Sudan.

This project comes at an important time for NMSF. The deliverables of the study are supporting the newly built “Abdulhameed Ibrahim Training Centre” on the compound of NMSF in Khartoum. This state-of-the-art Training Centre is set to become not only a focal point for NMSF staff capacity development, but also has the potential to grow into a Centre of Excellence for Supply Chain Management in the region and beyond. The official inauguration takes place on April 17, 2017.

Part I of this document provides the objectives, context and methodology for the study. Part II outlines the Training Strategy, Plan of Action and M&E procedures. Part II concludes by making recommendations for follow-up technical assistance to the training function of NMSF, including to the organization as a whole.

A key philosophy behind the development of this strategy is the principle of Continuous Improvement (CI). Studies of companies and organizations have consistently found a strong correlation between structured capacity development, employee engagement, client satisfaction and business results. What keeps most employees engaged is a fundamental purpose and meaning to their work. The anticipated result of applying the principles of CI is a motivated, high-performance workforce committed to building an efficient, profitable and competitive company.

PtD expresses their wish that this intervention will contribute to increasing morale, motivation and productivity of all NMSF employees. The desired outcome of this strategy is an engaged and motivated workforce performing effectively to the best of their ability. This, in turn, will contribute to fulfilling the mandate of NMSF, which is to ensure that the population of Sudan has ready access to quality medicine at an affordable price.

Acknowledgements

The successful completion of this assignment is the result of a collaborative effort. We express special appreciation and gratitude to many people at NMSF, most notably Dr. Gamal Khalafalla Mohamed Ali and his competent team of Directors and Managers. We also acknowledge NMSF Branch Managers in the states of River Nile and Red Sea, who generously shared data, information, time and active participation in this undertaking. Their names are listed in an Annex to this report. Throughout the exercise, we were given VIP treatment and well looked after in terms of transport, accommodation, food and entertainment.

We are also grateful for the support and contributions from key stakeholders, in particular all NMSF Branch Managers, NMSF clients and the UNICEF Sudan Country Office. We look forward to building on this team effort and support NMSF in their quest for excellence.

Financial support was generously provided by Gavi – the Vaccine Alliance, UNFPA and NMSF.

The PtD Team

Dominique Zwinkels, Executive Director

Bastiaan Remmelzwaal, Consultant

Jean Blackstock, Consultant



NMSF Khartoum, March 2017

PART I. BACKGROUND

1 OBJECTIVES

1.1 Introduction

NMSF aims to become an efficient and cost-effective organization, while adhering to its public objective of operating in the best interest of the population of Sudan. A key element of achieving this objective is to develop and maintain a motivated and engaged workforce. In 2014, a Training Needs Assessment (TNA) was carried out by the Nuffield Centre for International Health and Development (NCIHD). The objectives of that mission were to identify the training needs and to propose how these could be addressed. As such, the 2014 TNA included these recommendations:

1. The HR department of NMSF should establish a long-term (five year) training strategy linked to their overall strategy, the mandate of the organization and its objectives. This would help to identify the long-term staff and training needs of the organization.
2. The enrolment of new staff needs to be strengthened, particular if the agency becomes an independent social enterprise. HR should offer mentoring for all staff and coaching for staff in leadership positions.
3. The identification of training needs should be linked to a specific job description for each position, a regular job review and performance assessment with identification of trainings needs. This process can serve as a basis for the development of the annual training plan.

1.2 Terms of Reference

The objective of this consultancy is to advance NMSF Sudan's ability to serve its customers through the development of a capable and competent supply chain workforce. One of the outputs of the TNA conducted in 2014 was a training gap analysis of NMSF staff, including staff at state level MSF stores. The report included a set of ten recommendations. Three of those recommendations are moved forward with this consultancy:

1. Establish a **five-year training strategy** linked to the overall CMS strategy, to help identify training needs of the organization.
2. **Improve onboarding** of new staff; HR department should offer **mentoring** for all staff and coaching for staff in leadership positions.
3. Identification of training needs should be linked to a specific job description for each position, a regular job review and performance assessment with identification of trainings needs. This process can serve as a basis for the development of the **annual training plan**.

This assignment is jointly steered by the PtD Secretariat based at UNICEF Supply Division in Copenhagen and the HQ of NMSF in Khartoum, Sudan.

2 METHODOLOGY

2.1 PtD Four-Stepped Approach

The methodology for developing this strategy and subsequent operational plan is based on the PtD Four Stepped Approach to HR capacity development in health supply chain systems. For each step of the process documentation is available to serve as a guideline for implementation.

TABLE 1 PtD 4-STEP APPROACH TO HR CAPACITY DEVELOPMENT

Step	Relevant Guidelines
Step 1: Assess current approach and status of HR in health SCM	Human Resource Capacity Development in Health SCM: Assessment Guide and Tool (USAID, 2013)
Step 2: Develop a competency map for all staff engaged in health SCM activities	The PtD Competency Compendium for Health SCM (PtD, 2014) The PtD Health SC Competency Framework for Managers & Leaders (PtD, 2015)
Step 3: Prepare a Health SC strategic plan with a strong HR component	Process Guide and Toolkit for Health Supply Chain Systems Strengthening (UNICEF, 2016)
Step 4: Assemble costed and funded operational plans that align with Step 1 and 3	Country Guide: Applying for Health Supply Chain Management Development Funds (PtD, 2014)

A more detailed explanation of the PtD stepped approach is available on the PtD website (www.peoplethatdeliver.org). During the preparatory phase, the team decided on the scope of the assignment, involving all stakeholders. For Step 2, the team developed the necessary tools for data collection. Data collection was performed in several phases; by way of desk review (refer to References Section), interviews (refer to Annex: Key Contacts), visits to key locations and workshops. Key informant interviews were conducted with selected staff performing or involved in supply chain functions. The consultants travelled to two states outside Khartoum (River Nile and Red Sea). The analysis of the information, gathered throughout this process, guided the development of strategic priorities.

2.2 Competency-Based Training

NMSF training interventions will be geared towards competency-based curricula and training plans. A competency is defined as being the blend of knowledge, skills and abilities, needed to perform a specific task. Worldwide, the traditional approach to education in the health sector has been for trainers to determine what content needs to be learned, teach it, and then test to see whether the content was learned. This approach, though long established, does not guarantee that trainers use content that reflects the needs of the workplace. Traditional teaching and training methods usually rely on passive memorization from lectures as the dominant learning method for trainees.

Educational reforms support the application of competency-based approaches, i.e. defining, teaching, and assessing competencies and subsequently assessing student performance in relation to these, thus focusing on the outcome of the training, rather than on the process (applying knowledge and skills rather than merely gaining knowledge).

A competency-based education model starts by asking the question: What must the trainee be able to do on the job, after the training? Then, appropriate training and assessment methods are developed that will ensure reaching the objectives. Finally, an evaluation is conducted to ensure that students have mastered the desired competencies.

2.3 The PtD Competency Framework

The term ‘competency’ may be defined as a cluster of related knowledge, skills and abilities that affects a major part of one’s job. The PtD Competency Framework for Managers and Leaders is shown in Annex 1. With reference to this framework, developed by PtD in 2015, competency areas are **not outlined by particular cadres or job titles** (i.e. warehouse manager, dispensing officer, etc.), but rather they are listed by particular **supply chain functions**. This is an important observation. As such, it was decided to consider job functions, rather than job titles or professional titles. Functional areas typically reflect a defined task or set of tasks for either one person or a dedicated team of persons. Increasingly, within the public health sector, stakeholders are beginning to focus on workload modelling to determine the number of staff required within a system design approach (Village Reach, 2014). This approach can lead to a rethinking of the types and numbers of staff needed to manage logistics tasks.

3 THE NATIONAL MEDICAL SUPPLIES FUND (NMSF)

3.1 Brief History

The National Medical Supplies Fund (NMSF) is the national hub for procurement and distribution of medicines in Sudan. In line with the objective of the Global Fund (GF), the mandate of NMSF is to ensure that essential medicines and medical supplies of proven safety, efficacy and quality are available to the population at reasonable prices. NMSF is the successor of the Central Medical Supplies Public Corporation (CMS) which was established in 1991 as a semi-autonomous organization tasked with the selection, procurement, storage and distribution of medical supplies for the public sector in Sudan (NMSF, 2015). While the main focus of NMSF is to supply the public sector, it also serves the private pharmaceuticals sector. One constraint that NMSF has had to deal with is that procurement of medicines and other health commodities for the public sector is challenged by poor access to convertible currency and international banking transactions.

NMSF's status as a parastatal organization allows it, to a large extent, to develop its own workforce policies without necessarily having to follow standard government workforce policies. This has allowed NMSF to be more flexible in its approach to staff management and development.

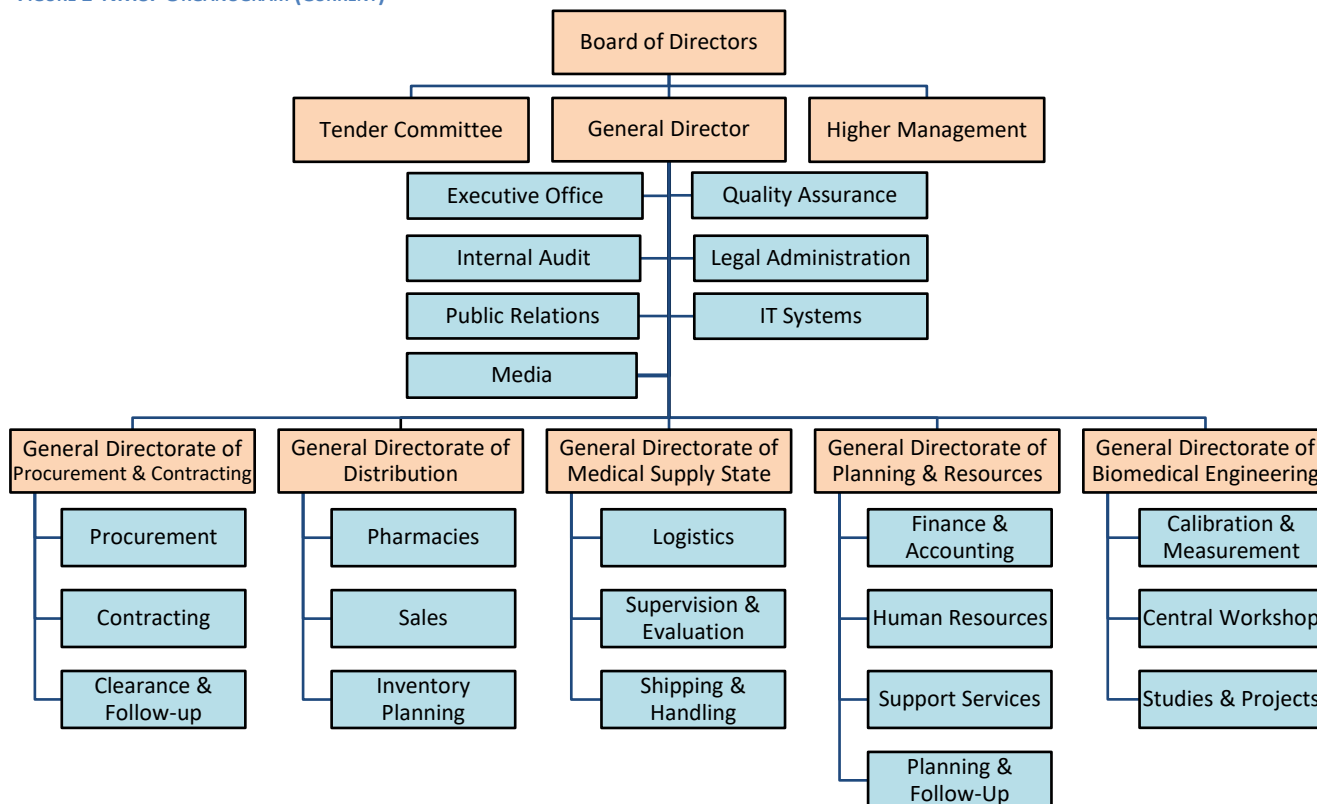
NMSF joined the People that Deliver (PtD) Initiative in 2013. The PtD Initiative was established in 2011 as a global partnership of organizations focusing on professionalization of supply chain personnel by advocating for a systematic approach to HR for Supply Chain Management.

3.2 Organizational Structure

Until 2011, the organizational structure of the NMSF comprised eight General Directorates and five specialised Departments. Following a reform programme, this structure was revised. Currently, NMSF is overseen by an Administrative Board, comprising of nine members and chaired by the federal Minister of Health. The Director General (DG) of NMSF is responsible for the day to day running of the organization. There are currently five General Directorates, each with specialized Departments and various Technical Committees.

The HR Department resorts under the Directorate Planning and Resources and is responsible for the management and development of the NMSF workforce. The Personnel Unit within this Department deals with the appointment, administration and promotion of staff, based on public sector regulations combined with NMSF internal performance evaluation systems.

FIGURE 1 NMSF ORGANOGRAM (CURRENT)



NMSF has signed agreements for establishing Branches with 16 out of 18 State Governments, for the purpose of providing logistical, managerial, training and supervisory support to each State. NMSF aims to extend this support to the two remaining states (Khartoum and Aljazeera).

3.3 Suppliers and Customers

Sudan depends for its supplies of pharmaceutical products mainly on import from various countries. Following a routine tendering process, drug consignments are imported at periodic intervals. Imported drugs are transported by sea to the sea port of Port Sudan, from where they are transported by vehicle to the NMSF warehouses in Khartoum and then distributed to the various destinations in the country. The importation and distribution process is hindered by extreme climatic conditions in Sudan, in terms of temperature and humidity. In order to combat this challenge, NMSF has signed an agreement with the mail company Sudapost, to transport pharmaceuticals in temperature-controlled vehicles. NMSF supplies medical products to a range of customers, including Military, Police, Security, National Health Insurance, Under-5 Programme, UNFPA, NGOs and others (see Annex 5).

The United Nations Development Programme (UNDP) plays a role in the provision of procurement support services to the Federal Ministry of Health of Sudan. In March 2016, an agreement was signed on procurement support between the MoH, NMSF and UNDP, with a total budget of USD 60 million for a duration of three years.

3.4 Human Resources (HR)

The majority of NMSF staff are civil servants, governed by Public Service. This means that NMSF has only limited influence on the selection of its personnel and its qualification and experience. The Training Needs Assessment (TNA) carried out in 2014 recommended that NMSF, as semi-autonomous enterprise, should be allowed to recruit its own staff, based on person specifications for specific jobs with essential and desirable attributes.

According to the enterprise-wide ERP¹ system, NMSF currently comprises 411 employees², mainly pharmacists. In addition, there are biomedical engineers, administrators, accountants and storekeepers. The TNA, carried out as integral part of this assignment, focused on ‘unique positions’, or ‘functional roles’ within the organization. All 123 unique staff positions are salaried by NMSF, except the legal advisor. The 3 unique positions in the localities (Pharmacist, Assistant Pharmacist and Medical Assistant) are salaried from State MoHs.

TABLE 2 NMSF STAFF ESTABLISHMENT

Functional Level	National (HQ)		States (Branches)		Localities
	Unique Positions	Actual Positions	Unique Positions	Actual Positions	Unique Positions
Corporate [COR]	17	32	6	16	0
Planning and Resources [PLR]	25	76	0	0	0
Distribution [DIS]	18	136	0	0	0
Supply, Logistics, Transport [SLT]	12	20	8	224	3
Biomedical Engineering [BIO]	8	24	2	2	0
Quality Assurance [QAS]	8	13	0	0	0
Procurement [PRO]	12	22	0	0	0
Generic [GEN]	4	129	0	0	0
Totals	104	452	16	240	3

The total number of unique positions is 123 (104 + 16 + 3). Refer to Annex 2 for details. The Table below shows the same 123 unique positions, differentiated by category (again, Annex 2 refers).

TABLE 3 NMSF STAFF CATEGORIES

Functional Level	National (HQ)	States (Branches)	Districts (Localities)	Total
Director [D]	6 ³	0	0	6
Manager [M]	45	7	0	52
Specialist [S]	12	2	1	15
Officer [O]	24	6	2	32
Assistant [A]	11	0	0	11
Worker [W]	6	1	0	7
Totals	104	16	3	123

¹ NMSF has acquired the Enterprise Resource Planning (ERP) software in 2010 which allows the processing of financial, stock and human resource data.

² NMSF ERP System, January 2017. The updated figure is 435 (February 2017), which includes recent recruits from Ministry of Finance.

³ Includes the General Director.

The NMSF has developed job descriptions for its employees, specifying their roles and responsibilities. Job descriptions are broad written statements of specific functions within the organization. They form the basis for supportive supervision and for periodic individual performance evaluation. Job descriptions ensure that staff is fully informed and aware of their responsibilities.

3.5 HR Capacity Development

3.5.1 Findings from the 2014 TNA

In 2014, the Nuffield Centre for International Health and Development (NCIHD) carried out a Training Needs Assessment of staff at the Central Medical Supplies Public Corporation (CMS), now named NMSF.

It was found that around 90% of survey respondents mentioned the need to learn more about leadership, communication, planning, time management and monitoring skills at the workplace. There was a general consensus among those interviewed of the importance of teamwork within departments, directorates and the organization as a whole. Other areas of importance included: analysing complex problems, facilitating meetings, problem solving and decision making. Technical areas of importance were analysing health policy and system issues, e.g. essential medicines list, standard treatment guidelines and regulation, as well as understanding workforce legislation and ethical issues.

The 2014 TNA indicated that it is generally very difficult to influence staff attitudes in short training courses. What has a greater impact on staff behaviour is an organizational culture with clear values, principles, attitudes and beliefs where leaders set clear examples how this culture can be put into practice (TNA, 2014).

3.5.2 Investing in Training

Training of staff at NMSF has a high degree of priority, as it is regarded as a key motivator for individuals. There has been a gradual increase in training investment over recent years. The annual budget for staff training increased from USD 40,000 in 2010 to USD 750,000 in 2016.

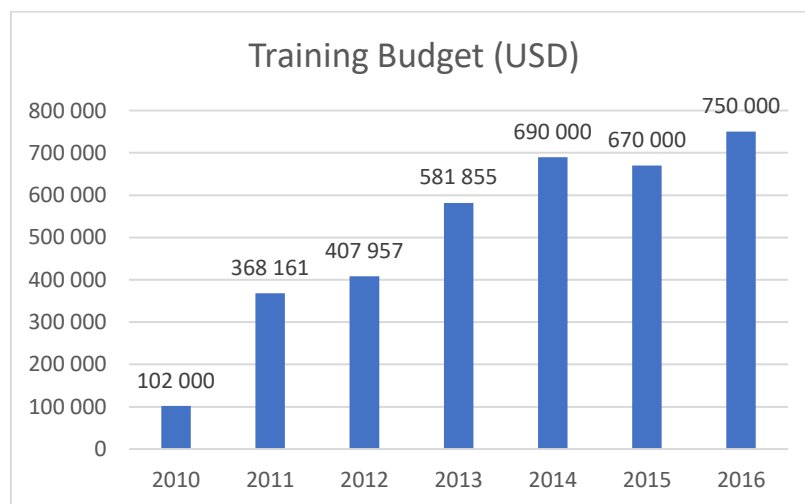


FIGURE 2 NMSF TRAINING BUDGET

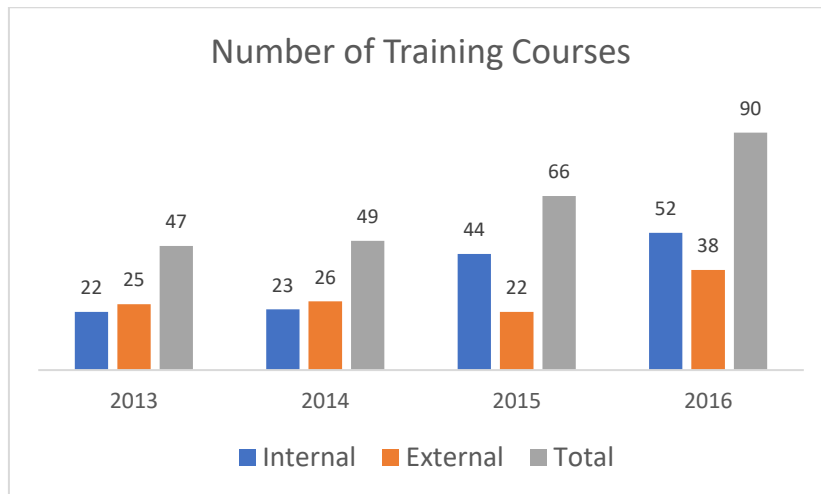


FIGURE 3 NUMBER OF TRAINING COURSES

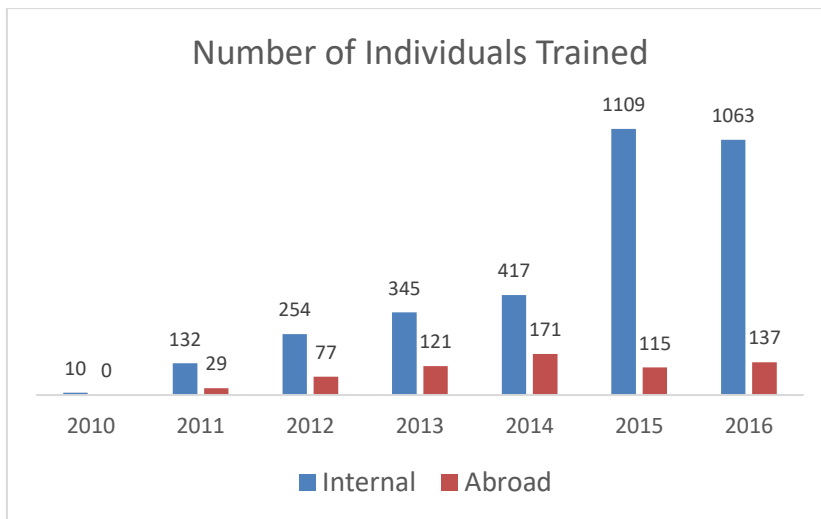


FIGURE 4 NUMBER OF INDIVIDUALS TRAINED

The above Figure (Number of Individuals Trained) includes duplicate counts for when individuals are trained on more than one occasion. The graph also includes training of MoH pharmacists who are not directly employed by NMSF.

3.5.3 Training Coordination

The Training Management section at NMSF resorts under the HR Department, within the Directorate of Planning and Resources. Coordination and oversight of all training-related activities is the responsibility of the Training Manager and includes:

- 1) Determining training needs
- 2) Developing annual training plans and budgets
- 3) Monitoring implementation of training plans
- 4) Maintaining a training calendar
- 5) Informing all sections of training events

- 6) Identifying training opportunities within Sudan
- 7) Identifying training capacity regionally and globally
- 8) Assisting in the preparation and updating of job descriptions

Currently, the annual training plan is developed based on the expressed training needs of staff and the agreement of the respective line manager. Selection of individuals for training follows a process of first informing all Directorates of an upcoming training event. In collaboration with the Directorates, the Training Manager selects candidates, considering various factors, applying a scoring system. Decision factors include the candidate's job description, training history and job performance.

3.5.4 Training Practice

Proposed training options and training delivery mechanisms will be based on current NMSF practices, which entails a variety of methods both for internal and external training. This includes one-to-one training, in-service sessions, local short courses, online training, long master courses and other types of training. NMSF aims to collaborate with academic institutions to obtain academic recognition for its own courses and to identify suitable master courses for the development of senior staff members. Internal training for NMSF employees is currently delivered in a variety of ways, including:

- Training in soft skills, such as communication, problem solving and interpersonal skills, is normally given in the Arabic language. Trainers are derived from accredited training institutions in the region.
- Training in specialised skills, such as supply chain related and IT skills, are typically delivered by NMSF in-house staff with the relevant skills. Training given by NMSF staff to NMSF staff is currently not incentivised; it is part of their job descriptions and expected duties.
- Training for NMSF staff from the states is also given by NMSF staff from HQ. Examples: Good Distribution Practice, Planning, Supervision Checklist, etc. This training is often includes a practical session, such as a visit to a warehouse or to the sales department.

Pharmacy training in Sudan is patient-focussed (Mohamed, 2011). There exists a limited range of postgraduate pharmaceutical services and supply chain management courses with an academic qualification, among the academic institutions in Sudan.

- University of Khartoum, College of Pharmacy
- Sudan Medical Pharmacy Board (offers Fellowship in Supply Chain Management)
- University of Africa, Pharmacy Section
- National University, Khartoum

Sudan institutions train a large number of pharmacists with an estimated annual output of about 1000 new pharmacists. This pre-graduate training is not matched by a similar increase of post-graduate courses (NCIHD, 2014). In other words, supply chain related training opportunities at pharmaceuticals sections of local institutions of higher education are limited, due to the fact that post-graduate training at those institutions focuses virtually exclusively on clinical aspects of pharmaceuticals⁴. Collaboration with those institutions does exist, in that NMSF staff periodically visits them to deliver introductory sessions on the NMSF Supply Chain,

⁴ One potential postgraduate training option is the Doctorate of Pharmacy (4 years) which is developed by the Sudan Pharmacy Specialization Board as part of the Medical Specialization Board. However, neither the fellowship nor the doctorate appears to be internationally recognised.

the purpose of which is mainly to promote NMSF. At times, a university sends a group of students to NMSF, for orientation, to give them insight in supply chain logistics. A list of local training institutions is included in the document NMSF Annual Training Plan. In addition to internal training, selected NMSF staff are also trained externally:

- Selected NMSF staff attends short or long training courses outside Sudan.
- Depending on the number of participants, an external consultant may be contracted to deliver the training at NMSF, or at a hotel venue⁵.

Training facilitation and support may be sourced locally, regionally, internationally, as well as through Health Development Partners. Training Providers are institutions or organizations that possess expertise and have the capacity to assume responsibility for long and/or short term training. A list of training providers is included in the NMSF Annual Training Plan.

3.5.5 CPD

Continuous Professional Development (CPD) is commonly referred to as training designed to go beyond the professional knowledge and skills learned in a pre-service training program, refresher course or internship. CPD is an addition to routine professional obligations and responsibilities. CPD at NMSF resorts under the Training Management Section and targets the entire pharmaceutical profession in Sudan. The purpose of CPD is to “ensure that pharmacists maintain their knowledge, skills and competencies to practice throughout their careers... and to enhance their career progression”. Pharmacists are encouraged to engage in a variety of career enhancing learning activities, including:

- Participation in conferences
- Self-directed learning
- Giving lectures and presentations
- Conducting training courses
- Publish articles

NMSF has established an agreement with Commercial and Academic Services (CoAcS), a private limited company founded in 1992, with offices in UK, Australia and the United Arab Emirates. Pharmacists wishing to enhance their professional skills are able to participate in online self-directed training, complemented by face-to-face training sessions at NMSF.

3.5.6 MoUs

NMSF has signed capacity development MoUs (Memorandums of Understanding) with a number of international institutions:

- HERA - Health Research for Action (Belgium)
- NCIHD – Nuffield Centre of International Health and Development, University of Leeds (UK)
- I+Solution (Netherlands)
- Imperial for Health (South Africa)
- PSA - Pharmaceutical Systems Africa (USA)

⁵ With the completion of the construction of the NMSF Training Centre, there will no longer be a need for a hotel venue.

Further details and scope of activities of those agencies are given in the NMSF Annual Training Plan. The agreements continue to assist NMSF with HR developmental activities. To date, several collaborative projects were undertaken:

- Training Needs Assessment (2014)
- Training courses related to Supply Chain Management
- Public Health consultancies
- External post-graduate training
- Contribute to the design of the new NMSF Training Centre
- Various research projects

3.6 New NMSF Training Centre

The NMSF has established a state-of-the-art Training Centre, on the premises of the NMSF HQ in Khartoum. The construction of the centre by a Chinese company started in April 2015. The official opening of the *Abdulhameed Ibrahim Training Centre* is scheduled to take place in April 2017. The facility is unique in Africa, in that it is dedicated specifically to cater for the development of the supply chain community in Sudan, as well as in other countries in the region. Characteristics of the physical infrastructure are impressive:

- Facilities for formal training, group work, self-study
- Four training rooms, 30 seats with desks
- Common hall with smart screens and projectors
- Conference hall with 265 fixed seats
- Computer laboratory with 25 computers
- Video conferencing facilities
- Electronic library with access to journals
- Physical library with study space
- WiFi and on-location IT support

The scope of training targets a range of stakeholders, including:

- Professional development and capacity building programs for all NMSF staff
- Training programs for individuals and organizations involved in pharmaceutical SCM
- CPD-related activities

As well as providing postgraduate training and continual education for professionals, the centre supports a range of self-education and online learning activities.

3.7 Performance Management

The management of employee performance at NMSF is two-fold: (i) Government of Sudan, Public Sector Performance Management Procedures, and (ii) NMSF Internal Performance Management System.

3.7.1 Public Sector PM Procedures

A compulsory assessment is common to all Government of Sudan public sector entities and involves a formal assessment for government employees who aspire to promote and move up in salary scale. Sudan Public Service Regulations state that the evaluation and selection of competing candidates for ordinary promotion shall be based on merit, and in accordance with the following elements of evaluation: 1) 70% for on-the-job performance, 2) 20% for scientific qualifications, and 3) 10% for seniority. The procedure is applied annually or once every two years to eligible staff.

3.7.2 NMSF Internal PM System

NMSF has developed its own internal performance management system, which came into use in 2012. The system is based on monthly performance indicators applied to all staff members. There are three different performance evaluation forms, applying to different groups of workers.

TABLE 4 NMSF PERFORMANCE EVALUATION FORMS

Type 1	Evaluation Criteria	Score
Evaluation of Heads of Directorates and Heads of Corporate Sections by General Director	Delivery of periodic reports	20%
	Attend meetings	10%
	Timely completion of assignments	30%
	Regular meeting of department	10%
	Good attitude and manners	10%
	Fulfilment of administration plan	20%
	Total	100%
Type 2	Evaluation Criteria	Score
Evaluation of Departmental Heads by Heads of Directorates	In office during official working hours	20%
	General look	10%
	Accomplishment of assignments	40%
	Cooperation with colleagues	5%
	Cooperation with subordinates	5%
	Problem solving	10%
	Keep work secrets	10%
	Total	100%
Type 3	Evaluation Criteria	Score
Evaluation by Workers (Office Assistants, Drivers, Store Workers) by Heads of Section	In office during official working hours	15%
	General look	10%
	Accomplishment of assignments	50%
	Cooperation with colleagues	5%
	Problem solving	20%
	Total	100%

The monthly performance scores of individuals determines the amount of their ‘performance allowance’, which is a top-up to their civil service salary. A score of 95% or more entitles staff to the maximum allowance.

A score below 95% translates into a proportional reduction in top-up allowance⁶. No allowance is given for a score below 70%.

In its current form, there are two potential problem areas with this system. One issue is that some of the indicators used are rather subjective. For example, how do we judge whether someone has the right general appearance and is able to keep secrets? The second issue is that supervisors or managers are often reluctant to provide a candid opinion and are finding it difficult to have honest discussion with employees for fear of reprisal or damaging relationships.

⁶ For example: A score of 85% means that the employee receives 85% of the top-up allowance.

PART II. TRAINING STRATEGY

4 GUIDING PRINCIPLES

4.1 Organizational Objectives

NMSF has a supply chain strategy that is updated periodically by the Director General. The strategy covers all internal operations, including workforce management and development. In the strategy, the workforce needs and plans are tied to overall organizational objectives and resource availability. The NMSF strategy includes workforce training plans and overall staffing needs.

The strategic objectives pertaining to training, as well as the annual training implementation plan are guided by the overall objective of the NMSF organization, which is ensuring that essential medicines and medical supplies of proven safety, efficacy and quality are available to the population of Sudan at reasonable prices.

4.2 Continuous Improvement

Continuous Improvement (CI) is a method for identifying opportunities for streamlining work and reducing waste. The principle may be used for organizations of any type. The practice originates from the Japanese 'Kaizen' concept in manufacturing and business. Kaizen simply means 'change for the better'. The concept is used by thousands of companies all over the world to identify savings opportunities and increase efficiency.

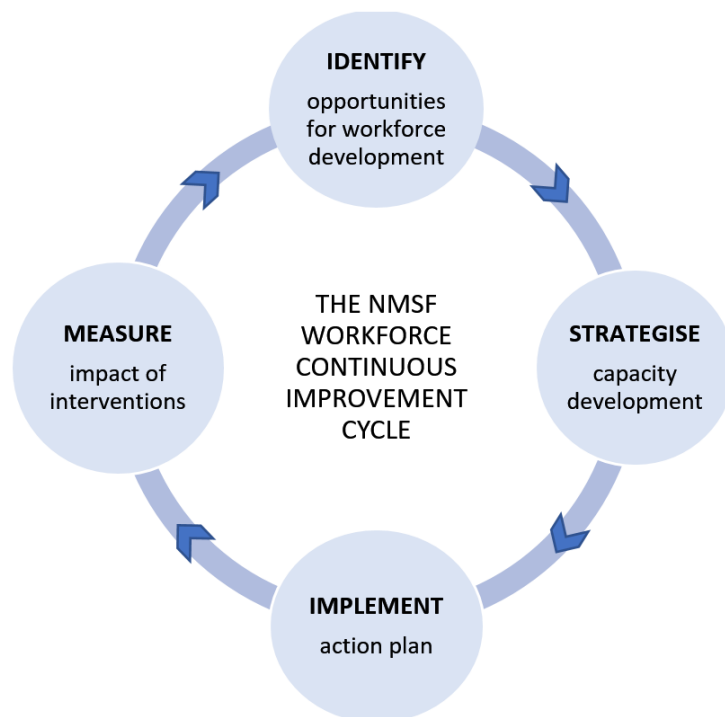


FIGURE 5 NMSF WORKFORCE CONTINUOUS IMPROVEMENT CYCLE

CI is linked to the concept of Total Quality Management (TQM), which is a system of management based on the principle that every staff member must be committed to maintaining high standards of work in every aspect of a company's operations.

The principles of the CI Model will be used to improve the workforce efficiency at NMSF through a process of continual training. CI involves identifying benchmarks of excellent practices and instilling a sense of employee ownership of the process. With time and dedication, the CI cycle becomes self-sustaining as success inspires greater engagement. If done methodically, a culture of CI will spread throughout the organization, touching every process.

4.3 Training Terminology

4.3.1 Knowledge, Skills, Attitudes

With respect to training practice, it is important to differentiate between knowledge, skills and attitudes. **Knowledge** refers to the 'cognitive domain' and specifically to a person's understanding of facts and procedures. **Skills** refer to the capacity of an individual to perform specific actions in order to achieve a specific goal. **Attitudes** refer to the 'affective domain' that includes the learner's values, beliefs, biases, emotions, and role expectations that may influence his/her performance.

There is clear evidence from teaching practice that knowledge *alone* is not enough to bring about better management or better delivery of service. Although learners often tend to like formal lectures, the unidirectional transfer of knowledge using formal lectures is not, by itself, effective in increasing competence by those doing the learning. Contemporary training methodologies which emphasize interactivity have shown to be a more effective basis for increasing competence in all cadres of supply chain workers and employees in general.

The outcome of effective training methodologies is that the learners are provided with knowledge, skills and attitudes that enables them to manage or practice aspects of the supply chain more competently. The training methodologies that a trainer selects should be in accordance with predefined training objectives.

Methods to facilitate learner 'attitude openness' and 'introspection' include individual exercises in self-reflection, group discussion and focus groups. Training exercises must be designed to expose learners to situations where they have to reflect on or confront their own beliefs, values and attitudes. The trainer provides structure to the learning process and is alert to the possible need for guidance.

A few basic ingredients are key to the success of any training session. These include:

- 50% of the training includes interaction between trainer and trainees, such as role play, video, interviews, group discussion, etc.
- A clear presentation of the training objectives is given to the learners at the beginning of each training session.
- The completion of each training course is followed by an evaluation of the course by the trainees.
- Training is based on a bottom-up participative teaching style.
- Training build on existing knowledge and experience of trainees.
- Whenever possible, the ratio of trainers to trainees of should be 1:10 or better.

4.3.2 Curricula, Syllabi, Modules

The term **curriculum** is generally understood as the subjects and materials to be taught by an educational institution; typically it is listed as a set of subjects, but also may include the learning experiences, skills, and abilities students are expected to learn. A **syllabus** refers to the content or subject matter of an individual subject.

A curriculum can be arranged in modules, which can be organised as **general modules**, which are considered necessary in order to build the basis for what needs to be taught, and **modules on specific themes**. Each module can be used on its own; however it is recommended that general modules are taught before introducing specific modules. **Modules** are normally organised as follows :

- At the beginning of each module an entry scenario is provided. It can be used throughout the session to illustrate specific issues and aspects of the theme
- Reference modules are given for specific topics, in order to show where to refer to for further details
- Each module is preceded by a statement of 2-3 major overall goals, which define the desired outcome on completion of the module
- **Learning objectives are always expressed from the point of view of the learner** and relate to the different dimensions of learning : cognitive (knowledge), affective (attitudes) or of technical competence (skills)

Modules should be designed to allow for flexible use. For instance, with an audience of procurement specialists, it may be appropriate to spend a half day sessions on general procurement topics and then several days on issues specifically related to NMSF procurement practice.

Documentation plays a fundamental role in the process of developing quality learning materials. The outcome of the training implementation stands or falls with the quality of the documented learning materials produced. For this reason, trainers and facilitators will ensure that the quality of materials used and produced complies with acceptable norms and standards.

4.4 In-House Learning

Training employees in-house has distinct advantages. Technically, in-house training may be defined as any training that is held within the company premises in order to educate, develop or improve employees' competence. Internal training uses real life examples, problems and challenges that participants encounter every day at work. Successful internal training identifies the exact skills and knowledge that participants need to succeed in their jobs. A distinction is made between mentoring and coaching (Heathfield, 2016).

Mentoring requires a trusted environment where the mentee shares whatever issues affect his or her professional and personal success. Although specific learning goals or competencies may be used as a basis for creating the relationship, its focus goes beyond these areas to include work/life balance, self-confidence, self-perception, and how personal well-being influences professional performance. Mentoring is typically long term. For mentoring to be successful, it requires time in which both parties learn about one another and build a climate of trust that creates an environment in which the mentee feels secure in sharing the real issues that impact his or her success.

Coaching focuses on concrete issues, such as managing more effectively, speaking more articulately, and learning how to think strategically. This requires a content expert (coach) who is capable of teaching the coachee how to develop these skills. Coaching is typically short term. A coach can successfully be involved with a coachee for a short period of time, even just a few sessions. The coaching lasts for as long as is needed, depending on the purpose of the coaching relationship.

4.5 Long Term vs. Short Term Training

This Training Strategy recommends that training of NMSF employees should be two-pronged, whereby the workforce will be developed through short term training courses, while some individuals will benefit more from long-term training for the purpose of re-professionalization. Within the scope of this Strategy, short term training is typically up to one month in length, while long term training has a minimum duration of three months.

4.6 Career Progression

Organizations must establish logistics-focused positions, and graduates of training programs must be able to secure relevant employment and receive ongoing support. A logistics-related career ladder encourages staff retention and promotion (PtD, 2013). Conversely, a lack of those may lead to workers feeling trapped in their positions, which makes them more susceptible to looking for employment elsewhere. Supply chain workers often serve in the same position for years without any promotion or increment. This is likely to have a negative impact on job satisfaction and motivation and thus on job performance.

NMSF currently has no well-defined and documented career path for its employees. One outcome of this assignment is a recommendation for career progression paths based on a logical progression, requiring defined levels of competency. Reference is made to the document NMSF Job Descriptions.

4.7 Strategic Partnerships

Generally speaking, a solid partnering strategy is essential to guide organizations to make robust choices on its investments in collaboration. Partnering is both challenging and resource-intensive. Choosing the right partners ensures the greatest value to the organization. Collaboration with other capacity development agencies is a proven method of addressing specific shortcomings in staff competencies. There are many aspects to inter-agency collaboration for the purpose of workforce development. Some examples are:

- Prepare future leaders by sharing in the development of promising individuals
- Sharing the costs of training for individuals and groups of employees
- Allowing employees to visit other organizations to gain skills and insight
- Influence the types of courses offered by internal and external educational institutions
- Exchange advisory services pertaining to staff development and retention

NMSF already has agreements for collaboration with a number of national and international partners. With respect to training and capacity building of NMSF employees, this training strategy promotes a more rigorous approach to establishing collaboration with suitable partners, for mutual benefit.

5 PLAN OF ACTION

5.1 Training Requirements

5.1.1 Training Needs Assessment

Different jobs require different levels of competency for successful performance. Not all jobs will require the highest levels of competency and some may not require certain competencies at all. In order to arrive at a comprehensive training plan, tailored to the NMSF organization, a Training Needs Assessment (TNA) was carried out. In order to do so it was, first of all, essential to decide on a suitable competency framework that would reflect the entire range of competencies applicable to the NMSF staff establishment. Once the decision was made to adopt the PtD Competency Framework, the team determined unique job functions within the NMSF organization.

By way of a questionnaire-type survey administered among all Directorates and Branches, it was determined for the unique 123 staff positions which of the competencies were missing, in terms of the gap between the required level of competence and the actual current level of competence of representative individuals.

As mentioned earlier, the Competency Compendium for Health Supply Chain Management, developed by People that Deliver (PtD, 2015), presents a compilation of competency areas with associated behavioural competencies (Annex 1). The competency areas are not categorised by specific cadres (i.e. job titles). Rather, they are categorised by supply chain *functions*. This allows users of this framework to select the competencies relevant to their cadres and levels of the supply chain. Using this Competency Compendium as a point of departure, a framework was developed tailored to the specific needs of NMSF.

A distinction was made between three distinct competency Areas: (i) Technical, (ii) Managerial and (iii) Organizational and Personal. The relevance of competency domains for the different functional areas of the NMSF organization are reflected in the Table below.

Key to abbreviations

COR	Corporate	QAS	Quality Assurance
PLR	Planning and Resources	PRO	Procurement
DIS	Distribution	GEN	Generic
SLT	Supply, Logistics, Transport	BRA	Branches
BIO	Biomedical Engineering		

TABLE 5 NMSF COMPETENCY DOMAINS: RELEVANCE TO NMSF FUNCTIONAL AREAS

Competency Domains	Functional Areas								
	COR	PLR	DIS	SLT	BIO	QAS	PRO	GEN	BRA
Technical									
Selection and Quantification				■	■	■	■		■
Procurement					■	■	■		
Storage and Distribution			■	■		■			■
Customer Care			■			■			
Order Processing			■			■	■		
Programme Coordination				■		■			■
Compliance Monitoring and Supervision				■		■			■
Medical Devices			■		■	■			■
Managerial									
Operational Planning	□	□	□	□	□	□	□		□
Management of Resources and Finances	□	□	□	□	□	□	□		□
People Management	□	□	□	□	□	□	□		□
Risk Management Activities	□	□	□	□	□	□	□		□
Organizational and Personal									
Computing and data skills	■	■	■	■	■	■	■	■	■
Communication and interpersonal skills	■	■	■	■	■	■	■	■	■
Problem solving and decision making	■	■	■	■	■	■	■	■	■
Teamwork	■	■	■	■	■	■	■	■	■
Accountability and responsibility	■	■	■	■	■	■	■	■	■
Initiative and creativity	■	■	■	■	■	■	■	■	■
Conflict management	■	■	■	■	■	■	■	■	■

□ Applicable to Directors and Managers only

■ Applicable to all staff

A detailed tailored competency framework, providing the basis for developing job descriptions and career progression is given in a separate document: NMSF Competency Framework. Details and results of the survey and gap analysis are included in the NMSF Annual Training Plan.

5.1.2 Training Options and Delivery Mechanisms

Depending on whether the predominant objective of the training concerns **'knowledge'**, **'attitudes'**, or **'skills'**, a suitable training method will be selected.

The following methodologies are suitable for teaching **'knowledge'**:

1. Formal lecture (unidirectional monologue)
2. Mini lecture
3. Interactive lecture with active breaks (bilateral exchange)
4. Reading
5. Audiovisual materials (e.g. online videos)
6. Case studies
7. Individual research (e.g. internet libraries, literature review)
8. Group discussion
9. Field work (observations, discussions, etc.)

The following are suitable for teaching **'skills'**:

1. Simulations (role plays, games, etc.)
2. Practical exercises with evaluation
3. Study guidelines for good practice (including check lists and handouts)
4. Group discussion
5. Field work (observations, discussions with experts, etc.)

The following methodologies are suitable for learning about **'attitudes'**:

1. Group discussion
2. Exploration of personal attitudes
3. Focus groups
4. Promotion of attitudes such as 'openness' and 'introspection'
5. Field work (observations, discussions, etc.)

5.1.3 Trainer Requirements

All training whether done in-house or externally, will be conducted by institutions duly accredited by an established accreditation authority. In cases where training is provided by individual specialist trainers, care will be taken that these trainers meet the minimum criteria required for the specific training interventions. Reference checks should be conducted to validate the trainers' track record. Local training providers will be given preference over external providers, provided that the locally available service is of the required quality standard.

The role of a trainer is to provide efficient and effective training activities within the overall framework of the NMSF Training Programme. The following pointers suggest the elements of the role of the trainer.

1. The role of a trainer (or however they may be designated) is to offer and provide efficient and effective training programmes aimed at enabling the participants to learn the knowledge, skills and attitudes required of them.

2. The trainer plans and designs the training programmes, or otherwise obtains them (for example, distance learning or online programmes), in accordance with the requirements identified from the results of the TNA (Training Needs Assessment) for the staff concerned.
3. Following discussion with or directed by the Training Manager, the trainer decides on the most appropriate training method in a given situation.
4. The trainer designs the training programme using the most effective approaches, techniques and methods.
5. The trainer designs the training evaluation method before the start of the training intervention.

Different circumstances will require adaptation and modifications of these roles.

5.1.4 Content Design and Development

The NMSF Annual Training Plan gives details of required competencies and training needs for all cadres of staff, i.e. for each of the 123 unique staff functional positions. It is recommended that for each training event a course specification is developed, to serve as a reference for NMSF and as a guideline for training facilitators. The development of content of all training courses is outside the scope of this assignment⁷.

5.2 Annual Training Plan

As described earlier in this document, NMSF currently adopts a training plan that is produced in a bottom-up manner. The purpose of this assignment is to develop a strategic top-down medium and long-term HR training plan to develop the necessary workforce for NMSF. For a costed and resourced annual training plan, refer to the NMSF Annual Training Plan.

5.3 On-Boarding of New Recruits

5.3.1 Existing System

In order for new recruits to familiarise themselves with the workings of the organization, new recruits are given a printed copy of the 'NMSF Operational Manual', which is in Arabic language. They are asked to read the document carefully. The manual also contains job descriptions. Then follows a 3-month induction period during which the new recruits are attached for some time to different sections of the organization, in order to get familiar with the scope of activities of the various departments of the organization. Starting point is the Planning Directorate, whereby new recruits are told about the structure of the organization.

5.3.2 Mentorship Programme

One option for providing training to newly recruited NMSF staff is mentoring, or coaching, done by senior and/or experienced NMSF staff, or by experts employed by NMSF's partner agencies. Mentoring engages in-house expertise to promote cost-effectiveness and sustainability of in-service training. NMSF may draw on experience from its development partners in order to establish the necessary procedures for mentorship programmes.

For mentees, the benefits of mentoring can be huge. They receive focused coaching from a skilled, knowledgeable and experienced individual, and they also obtain assistance and advice in navigating tricky situations that can arise in the workplace. This can help them work more effectively, overcome obstacles,

⁷ The NMSF Training Plan gives an example of such training specifications.

and break through blockages that would otherwise preclude them from attaining their work goals and objectives.

The existing system of introducing new staff to the NMSF organization lends itself well for a more formal mentorship system for new recruits. The mentorship programme would also apply to existing staff members who are in need of in-house training or refreshment of knowledge and skills. The term ‘buddy system’ could be used to describe the relationship between mentor and mentee.

No stringent conditions are attached to the educational background of in-house trainers and mentors. However, the prerequisite for anyone acting as such is two-fold: (i) Have the appropriate knowledge and skill in a specific subject area, relevant to the trainees and mentees, and (ii) Have attended a Training of Trainer course prior to any training and/or mentoring being delivered. The NMSF will facilitate that in-house trainers are given relevant instruction, to ensure that training is delivered according to acceptable pedagogical standards.

An example of a ‘Mentorship Assessment Form’ is included in Annex 6. The form could include a section on ‘number of hours mentored’, as a basis for determining the financial incentive.

5.3.3 NMSF Driver’s Licence

This section introduces the concept of an online proficiency test for new recruits, i.e. an entrance test for applicants wishing to join the NMSF workforce. The NMSF Driving Licence is meant to be a complementary part of the existing induction process for new recruits.

How it works:

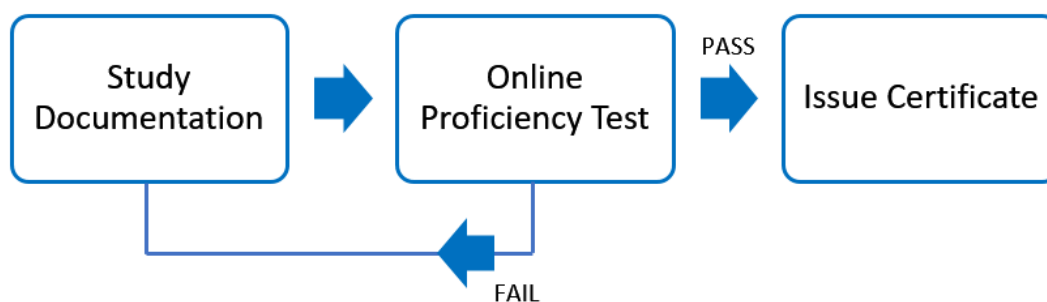


FIGURE 6 NMSF DRIVER’S LICENCE

Step 1. New recruits are given the NMSF Operations Manual to read, as well as any other relevant documentation that explains the workings of the organization and the principles of the supply chain. The documentation may be made available as online reading or download, or presented to the candidates as printed copies. The content of the documentation will be updated periodically, as required.

Step 2. New recruits do the online proficiency test. If their score is below a certain level, then they can do the test again, but only after a certain minimum period of time, so as to allow them to study the documentation in more detail.

Step 3. The online system generates and issues a 'Certificate of Competence' for successful candidates, that is for those who scored a minimum of 75%. The test can be repeated as often as needed, until the learner has passed the minimum required standard. The certificate will have the name and designation of the staff member printed on it, as well as the date and test results.

The online proficiency test will have the following features:

- User friendly
- Self-registration of users
- Extensive database of questions, a selection of which will be randomly presented to the candidate
- Different categories of questions, tailored to the organization, for example 'technical', 'managerial' and 'personal/workplace'
- Questions are multiple choice
- Different questions may have a different 'weight', meaning that some questions are more important than others
- There is a time-limit for each question
- Generates a personalised certificate upon successful completion of the test, including the name and test score of the candidate

The proficiency test will also be applicable to existing employees, who need refreshing their skills and knowledge of the organization. For example, directors and managers may require their staff to complete the proficiency test with 3-year intervals. The principle of periodic proficiency tests may also apply to improving computer skills of employees.

5.4 Training of Trainers

5.4.1 The ToT Concept

Each department within NMSF should identify one or two staff members with training and mentoring skills. These trainers and mentors will be subjected to a preparatory Training of Trainers (ToT) course, so as to ensure that quality training will be delivered. For example, subject experts will need to prepare lesson plans, trainee evaluation forms and ensure that the aims and objectives of the training are well-defined.

A two-day training course (one day for theory and one day for practical) will be instituted for selected experts drawn from different departments within the NMSF (or from elsewhere if necessary) and will cover basic teaching methodologies which are relevant and appropriate to the main areas or modules within the Training Plan. The goal of the preparatory training is to create a pool of in-house trainers and mentors who will be available as and when necessary to deliver training and mentoring. The ToT course may cover the following topics:

- The principles of teaching and learning
- Key concepts used in adult (andragogy) learning
- Setting SMART objectives for learners
- Different teaching methods
- How to prepare training materials

5.4.2 Financial Incentives

NMSF will consider financial compensation, a training allowance, for trainers and mentors. Mentoring with a financial compensation aims to encourage the development of a training culture among senior NMSF staff. The financial incentive will be in the form of a 'Facilitator Fee', or 'Training Allowance', the amount of which is to be agreed upon and standardised for all in-house trainers. The allowance will be reviewed on an annual basis. NMSF will endeavour to engage in-house trainers from different functions and cadres, in a transparent manner, so as to promote equal opportunities and fairness among their staff.

6 MONITORING AND EVALUATION

6.1 Introduction

The NMSF Planning Department maintains a list of 18 key performance indicators, most of which are associated with the procurement, clearance, storage and quality control of pharmaceutical supplies. This Section introduces a set of key indicators to monitor training implementation and impact. As such, a distinction is made between process (or output) indicators and outcome (or impact) indicators.

6.2 Key Training Indicators

6.2.1 Process Indicators

Process indicators describe the processes that contribute to the achievement of outcomes. While they do not guarantee the achievement of outcomes, they do monitor the activities of the NMSF training section that are expected to lead to desirable outcomes in terms of improved business performance, profit and staff morale.

The existing NMSF key performance indicator related to training determines the percentage of staff responsible for procurement and supply management (PSM) who have been trained in PSM. A broader range of training process indicators were defined, related to the 12-month period leading up to the assessment, or related to the most recent calendar year for which figures are available.

- 1) **Training days per employee.** Total number of training days of all employees combined, divided by the total number of employees, gives average number of training days per NMSF employee.
- 2) **Internal training ratio.** The total number of internal training courses relative to the total number of training courses (internal plus external).
- 3) **Training implementation rate.** Number of training events implemented divided by total number of training courses planned.
- 4) **Trainees committed.** Total number of trainees trained, divided by total number of trainees planned to be trained.
- 5) **CPD activity.** Number of active accounts, divided by total number of accounts (active plus non-active combined).
- 6) **Training budget of total NMSF budget.** Percentage of total NMSF budget allocated to training.
- 7) **Training cost per day.** The total annual training budget divided by the total number of training days (of all trainees combined), gives the average cost of training per day of training.

The application of the above indicators results in a comprehensive set of baseline indicators, which will be useful as a benchmark for the future monitoring training implementation and impact.

Baseline indicators for 2016 and targets for 2017 to 2021 are given in Annex 3.

6.2.2 Outcome Indicators

Two indicators were used to determine the outcome or impact of the activities of the NMSF Training Unit. Both indicators refer to the 12 month period leading up to the survey.

- **Training Satisfaction**

This indicator measures the level of satisfaction of NMSF Branch Managers, of training given to their subordinates. Heads of Branches were asked whether they were satisfied with the quantity and quality of training available to them and their subordinates. A questionnaire was used as an online anonymous survey (Annex 4). Note: The same questionnaire may be used for a survey among Directors and Managers at HQ level.

- **Customer Satisfaction**

Happy customers are extremely valuable to any company. The purpose of this indicator is to gauge the level of satisfaction of NMSF customers, i.e. receivers of goods and services. An effective customer satisfaction survey was used, administering a limited number of questions relating to service delivery, customer experience and overall satisfaction (Annex 5).

Baseline indicators for 2016 and targets for 2017 to 2021 are given in Annex 3, while Annexes 4 and 5 provide a more detailed analysis of responses received from Branch Managers and NMSF Customers.

7 RECOMMENDATIONS

7.1 Monitoring Implementation

It is recommended that the Training Strategy and corresponding Training Plan are adopted for implementation. It is further recommended that process and outcome indicators are used to monitor progress with implementation. Annual training performance indicators are to be incorporated in the NMSF Annual Report.

7.2 Training Management Support

This Strategy will guide the Training Coordination and Management function of the NMSF. In addition, it is recommended that external expertise is contracted to support the development of additional training management systems and materials, including:

- Training Curricula. Standard training course specifications for all topics to be trained, in all competence areas. Training specifications include the topic, training objectives, target audience and duration of the courses.
- Training Facilitators Guidelines. This includes formats/templates for lesson plans and reporting procedures.
- Guideline for choosing suitable training delivery methodologies.
- Template for training proposal by training providers.
- Training Calendar. Dynamic system of online calendarised training events.
- Mentorship and coaching procedures.
- Online database of staff training (update or replace existing system).
- Online database of learning materials.

7.3 Training Management System

There is a need for the introduction or further development of a professional Training Management System which will be used to plan, coordinate and monitor training-related information and activities. Currently insufficient analysis of the data is undertaken for the purpose of forecasting training needs, monitoring training history of employees, etc. It is imperative that a Training Management System is identified and adopted. Such a system will have a minimum set of features, which includes:

- Keep employee details
- Maintain training records
- Training Provider records
- Completed training records
- Schedule trainings in advance
- Exams and tests
- Standard and customized reports
- User access levels

Annex 7 gives the minimum technical specifications for such a Training Management System⁸.

⁸ It may be that the current ERP System will be able to manage these functions; this needs further investigation.

7.4 Revised Job Descriptions

Job descriptions provide the criteria against which to appraise employee's performance. One of the deliverables of this assignment is to update these job descriptions, so as to reflect actual responsibilities of individual staff, according to their unique functional role within the organization. This Strategy makes a clear link between job descriptions, performance assessment and training needs. Updated job descriptions are given in a separate document: NMSF Job Descriptions. It is recommended that these updated job descriptions are adopted and used for both recruitment and staff appraisal purposes.

7.5 Performance Management

Performance monitoring, also referred to as worker appraisal, is an essential part of optimising productivity and quality of work of the workforce. Employees need to know what is expected of them; they need the right skills, training, tools, equipment, direction and authority to do their work; and they require clear feedback on their performance. Performance management must have strong links with training and development initiatives. The objective of performance monitoring is to create opportunities to improve knowledge, skills and performance, which the aim to increase a health worker's motivation and job satisfaction.

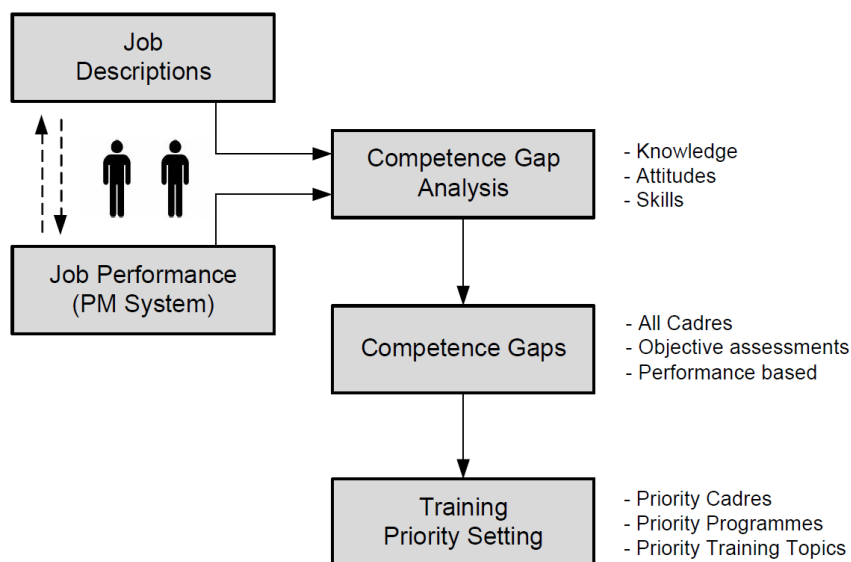


FIGURE 7 LINK BETWEEN JOB DESCRIPTIONS, PERFORMANCE ASSESSMENT AND TRAINING

Performance evaluation is typically done once a year, rather than once a month as is currently the case at NMSF⁹. NMSF performance assessment is currently used to assess employee behaviour such as punctuality, general looks and cooperation with colleagues. There currently is no clear link between performance assessment and individual job descriptions. It is recommended that a connection is made between individual job descriptions, their performance assessment and training provision. This echoes the recommendation made by the 2014 Training Needs Assessment.

It is recommended that NMSF moves away from subjective opinions and ratings and move towards evidence-based performance reviews. In order to improve efficiency of the organization, a consistent approach is

⁹ This is because currently, at NMSF, monthly top-up allowances are determined on a monthly basis

needed to individual performance assessment, using discreet rating scales to assess performance against outputs (responsibilities) and competencies specified in individual job descriptions.

TABLE 6 RECOMMENDED RATING SCALES FOR PERFORMANCE ASSESSMENT

Rating Scale for Outputs	Rating Scale for Competencies
Did not achieve outputs	Not proficient
Partially achieved outputs	Developing proficiency
Fully achieved outputs	Proficient
Exceptional outputs achieved	Highly proficient

An individual development plan is prepared by the employee in partnership with his or her supervisor. The plan is based upon the needs of the employee, and his/her position within the organization. A good individual development plan will be interesting, achievable, practical and realistic. It is implemented with the approval of the employee's supervisor.

The process of assessing performance should allow for the employee being assessed to have input at all stages of the assessment. Performance management needs to be a continuous and regular face-to-face dialogue that strengthens employee-manager relationships and drives the organization forward. This approach enables managers to give candid feedback and have honest discussions with employees, without fear of damaging relationships.

7.6 Supportive Supervision

Traditionally, supervision is associated with ‘inspection’ and ‘control’. More recently, supervision is viewed as a mechanism for bringing about change and improvement. Supervision, when done properly, has the potential to improve motivation, work satisfaction and performance improvement of the individual. It can reinforce communication and counselling, reflection and learning, especially among inexperienced workers, helping them to improve their knowledge and skills.

The current system at NMSF of supervision at national, state and district level is based on supervision checklists that are used during monitoring visits to verify whether activities have been implemented correctly. This type of supervision is referred to as traditional, bureaucratic or authoritarian supervision. This Strategy promotes the development of a *Supportive Supervision* system, also referred to as democratic supervision. Supportive supervision is ongoing throughout the year and is closely related to the performance management system of the organization.

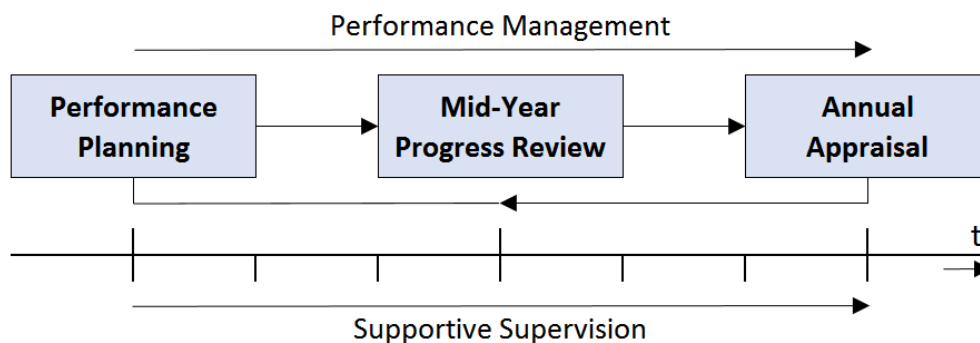


FIGURE 8 SUPPORTIVE SUPERVISION AND PERFORMANCE MANAGEMENT

Supportive supervision is an iterative process of helping staff to improve their work performance. It is carried out in a respectful and non-authoritarian way with a focus on using supervisory visits as an opportunity to improve staff performance. Supportive supervision is based on a constructive dialogue between a supervisor and an employee and gives the employee opportunity to indicate problem areas, as well as training needs.

7.7 HR Newsletter

Newsletters serve numerous purposes, such as disseminating information, motivating performance, promoting unity and improving morale among employees. Given the importance of training and staff development throughout the NMSF organization, consideration should be given to a periodic newsletter available to all employees and interested external stakeholders. The newsletter could be online or in print and issued quarterly or bi-annually. It would promote the activities of the NMSF Training Unit. Ideas for topics to include in a newsletter:

- What's new
- Upcoming training events
- Training Centre details
- Training statistics
- Collaborating partners
- Success stories
- Staff vacancies
- Contact details

7.8 Organizational Design

The objective of this assignment was to produce a Training Strategy, Training Plan, Competency Framework and updated Job Descriptions. During the course of carrying out this task, the consultants became aware of several organizational design issues, outside the scope of this assignment, that need to be addressed. These issues include:

- Review of organogram of the organization. There are suspected inefficiencies and incidences of duplication in line-management functions. There may be overlaps of responsibilities.
- Review the QA function which is currently a Department, but should rather be a core function common to all sections.
- Revision of staff performance evaluation system. The current system of monthly staff appraisals needs to be reviewed in view of its limited usefulness for improving organizational performance. Refer to the Recommendations section of this document.
- Revision of supervision system. Moving towards supportive supervision principles. Refer to the Recommendations section of this document.

The purpose of addressing these issues is to arrive at an organization that has an organized flow of leadership and authority in which every individual has a clear idea of what they do, whom they supervise, and whom they ultimately report to.

7.9 Training Strategy and TNA Update

It is recommended that this Training Strategy is revised and updated at least once every 5 years. The Training Needs Assessment (TNA) should be carried out once every 3-5 years.

REFERENCES

- GAMAL K M ALI, ABDEEN M OMER. (2011). Privatisation of the Central Medical Supplies (CMS) Public Corporation: Why Not? Research In Pharmaceutical Biotechnology Vol. 3(8), pp. 104-110, August 2011. Available online at <http://www.academicjournals.org/RPB>
- GAMAL K M ALI (2013). CMS Supply Chain Model: States' Medical Supply Fund. April 2013.
- HEATHFIELD S (2016). The Power of Internal Training. Web-based article. October 2016. *Web link*.
- HERA (2014). Mission Report: Options for a possible Training Centre in CMS Sudan. HERA Foundation.
- HERA (2012). CMS Evaluation: Blowing Winds of Change. Mission Report, May 2012.
- KHALID S A (2016). *Pharmacy Education in Sudan is at a Crossroads*. University of Science and Technology, Khartoum, 2016.
- MILLARD M (2014). 6 Principles of the Continuous Improvement Model. *Online Blog*.
- MOHAMED S (2011). *Current State of Pharmacy Education in the Sudan*. Article (PDF Available) in American journal of pharmaceutical education 75(4):65a · May 2011.
- NCIHD (2014). Training Needs Assessment of Central Medical Supplies Public Corporation. Republic of Sudan. Nuffield Centre for International Health and Development. Mission Report 2014.
- NMSF (2015). *Reform of the National Health Supply Chain in Sudan: Achievements, Challenges, Success Factors and Lessons Learned*. 2nd Edition. National Medical Supplies Fund. Khartoum, Sudan. 2015.
- PEOPLE THAT DELIVER (2015a). *Health Supply Chain Competency Framework for Managers & Leaders*, Published by The Australian Institute for Sustainable Communities, University of Canberra, Bruce, ACT. February 2015.
- PEOPLE THAT DELIVER (2015b). Health Supply Chain Case Studies. Unpublished. March 2015.
- PULAKOS E D (2004). *Performance Management: A Roadmap for Developing, Implementing and Evaluating Performance Management Systems*. SHRM Foundation.
- REPUBLIC OF SUDAN (2004). Public Administration Country Profile. Published by United Nations. 2004.
- UNICEF (2016). A Process Guide and Toolkit for Strengthening Public Health Supply Chains through Capacity Development.
- USAID (2013). Human Resource Capacity Development in Public Health Supply Chain Management: Assessment Guide and Tool. June 2013.
- VILLAGE REACH. (2014). *Other Duties as Required: Efficient Use of Human Resources Vaccine Supply Chains: Reaching the Final 20*. Policy Paper Series, May 2014.

ANNEXES

Annex 1: Health Supply Chain Competency Framework for Managers & Leaders (PtD)

	Domain	Description	Competencies
Technical Domains	1. Selection & Quantification	Selection and quantification of supplies	<ul style="list-style-type: none"> ▪ Product selection ▪ Product specifications and quality ▪ Special product considerations ▪ Product forecasting and quantification
	2. Procurement	Procurement of supplies	<ul style="list-style-type: none"> ▪ Costing and budgeting ▪ Supplier relationships ▪ Tendering processes, supplier agreements ▪ Contracts, risk and quality management ▪ Product quality assurance ▪ Import and export of products ▪ Donations of products ▪ Supply during disasters and emergencies ▪ Manufacturing or compounding of products ▪ Re-packing of products
	3. Storage & Distribution	Storage and distribution of supplies, including outsourcing and partnerships	<ul style="list-style-type: none"> ▪ Storage, warehousing, inventory management ▪ Supply commodities to facilities ▪ Transport for commodities ▪ Disposal of products ▪ Dispense or provide commodities to patients/users
	4. Use (at service point)	Treatment and care for patients	<ul style="list-style-type: none"> ▪ Use of medical products including medicines and equipment
Management Domains	5. Resource Management	Management of money, people, information and infrastructure	<ul style="list-style-type: none"> ▪ Project management, planning, implementation ▪ Resource management, including finance ▪ HR management, all aspects ▪ Quality assurance and risk management ▪ Requirements for a sustainable SCM system ▪ Logistic Management Inf. System (LMIS) ▪ Outsourcing SCM functions
	6. Professional & Personal	Manage day-to-day responsibilities, including communication, time and stress management; create a career development path	<ul style="list-style-type: none"> ▪ Basic generic skills, e.g. literacy, numeracy, technology ▪ Communication skills ▪ Problem solving skills ▪ Professional and ethical values ▪ Leadership abilities ▪ Rules/laws/legislation

Annex 2: Unique NMSF Staff Positions

[D] Director [O] Officer
 [M] Manager [A] Assistant
 [S] Specialist [S] Worker

Function/ Process	National (HQ)	No.	States (Branches)	No.	Districts (Localities)	No.
Corporate [COR]	1. General Director [D]	1	1. Branch Manager [M]	16		
	2. Executive Assistant [A]	1	2. IT Officer [O]			
	3. Internal Audit Manager [M]	1	3. Communications Officer [O]			
	4. Internal Auditor [O]	5	4. Internal Auditor [O]			
	5. Public Relations Manager [M]	1	5. Financial Manager [M]			
	6. Public Relations Officer [O]	2	6. Accountant [O]			
	7. IT Manager [M]	1				
	8. IT Programming Manager [M]	1				
	9. IT Programmer [O]	6				
	10. IT Support Manager [M]	1				
	11. IT Support Officer [O]	5				
	12. Legal Counsel [M]	2				
	13. Media Manager [M]	1				
	14. Media Officer [O]	1				
	15. Advertising Executive [S]	1				
	16. Shanghai Industry Manager [S]	1				
	17. Health Ministry Liaison Manager [S]	1				
	Total [COR] Actual NMSF Staff	32		16		0
Planning and Resources [PLR]	1. Director, Planning and Resources [D]	1				
	2. Support Services Manager [M]	1				
	3. Facilities Supervisor [M]	1				
	4. Maintenance Supervisor [M]	1				
	5. Driver Supervisor [M]	1				
	6. Fireman [W]	15				
	7. Facilities Assistant [A]	11				
	8. Mail Room Assistant [A]	3				
	9. Purchasing Specialist [S]	1				
	10. Planning, Research & Statistics Manager [M]	1				

Function/ Process	National (HQ)	No.	States (Branches)	No.	Districts (Localities)	No.
	11. Health Economist [S]	1				
	12. Quality Documentation Controller [S]	1				
	13. Research Officer [O]	1				
	14. Finance and Accounting Manager [M]	1				
	15. Financial Controller [M]	1				
	16. Finance Officer [O]	4				
	17. Accounts Assistant [A]	9				
	18. Accounts Clerk [A]	3				
	19. HR Manager [M]	1				
	20. Training Manager [M]	1				
	21. HR Advisor [M]	1				
	22. HR Officer [O]	5				
	23. Maintenance Technician [W]	9				
	24. Maintenance Craftsman [W]	1				
	25. Training Officer [O]	1				
	Total [PLR] Actual NMSF Staff	76		0		0
Distribution [DIS]	1. Director, Distribution [D]	1				
	2. Special Assistant to Distribution Director [A]	1				
	3. Sales Manager [M]	1				
	4. Pharmacy Channel Manager [M]	1				
	5. Inventory Planning Manager [M]	1				
	6. Sales Accounts Manager [M]	1				
	7. Sales Accountant [O]	10				
	8. Medical Order Manager [M]	1				
	9. Medical Order Specialist [S]	4				
	10. Biomedical Sales Manager [M]	1				
	11. Biomedical Sales Specialist [S]	1				
	12. Stock Control Manager [M]	1				
	13. Inventory Controller [O]	1				
	14. Warehouse Manager [M]	1				
	15. Storekeeper [O]	53				
	16. Stores Worker [W]	53				
	17. Community Pharmacist [S]	2				
	18. Pharmacist Assistant [O]	2				

Function/ Process	National (HQ)	No.	States (Branches)	No.	Districts (Localities)	No.
	Total [DIS] Actual NMSF Staff	136		0		0
Supply, Logistics/ Transportation, Compliance Monitoring/ Supervision (Medical Supply States) [SLT]	1. Director, States Medical Supply [D]	1	1. Supply Manager [M]	16	1. Pharmacist [S]	
	2. Supply Manager [M]	1	2. Supply Program Coordinator [S]	16	2. Assistant Pharmacist [O]	
	3. Supply Programme Manager [M]	1	3. Stock Control Manager [M]	16	3. Medical Assistant [O]	
	4. Supply Program Coordinator [S]	1	4. Warehouse Supervisor [M]	16		
	5. Compliance Monitoring Manager [M]	1	5. Warehouse Assistant [W]	92		
	6. M&E Manager [M]	1	6. Compliance Monitoring Manager [M]	16		
	7. Compliance Manager [M]	1	7. Compliance Monitoring Officer [O]	32		
	8. Compliance Officer [O]	2	8. Logistics Officer [O]	20		
	9. Logistics & Transportation Manager [M]	1				
	10. Logistics Officer [O]	2				
	11. Delivery Assistant [A]	7				
	12. State Finance Manager [M]	1				
	Total [SLT] Actual NMSF Staff	20		224		0
Bio Medical Engineering [BIO]	1. Director, Biomedical Engineering [D]	1	1. Biomedical Manager [M]	1		
	2. Calibration & Measurement Manager [M]	1	2. Biomedical Engineer [S]	1		
	3. Planning & Research Manager [M]	1				
	4. Research and Development Engineer [S]	1				
	5. Biomedical Engineer [S]	13				
	6. Biomedical Technician [O]	2				
	7. Biomedical Craftsman [O]	4				
	8. Central Workshop Manager [M]	1				
	Total [BIO] Actual NMSF Staff	24		2		0
Quality Assurance [QAS]	1. Quality Assurance Manager [M]	1				
	2. Quality Standards Manager [M]	1				
	3. Quality Control Manager [M]	1				
	4. Quality Assurance Officer [O]	1				
	5. Receipt and Inspection Manager [M]	1				
	6. Inspector Officer [O]	3				
	7. Customer Care Manager [M]	1				
	8. Customer Care Officer [O]	4				
	Total [QAS] Actual NMSF Staff	13		0		0
Procurement [PRO]	1. Director Procurement and Contracting [D]	1				
	2. Purchasing Manager- Medicine [M]	1				

Function/ Process	National (HQ)	No.	States (Branches)	No.	Districts (Localities)	No.
	3. Purchasing Officer- Medicine [O]	1				
	4. Purchasing Manager – Equipment [M]	5				
	5. Purchasing Officer- Equipment [O]	1				
	6. Clearance and Monitoring Manager [M]	5				
	7. Monitoring Officer [O]	1				
	8. Clearance Assistant [A]	2				
	9. Guard [W]	2				
	10. Contracts Manager [M]	1				
	11. Contracts Officer [O]	1				
	12. Purchasing Manager [M]	1				
	Total [PRO] Actual NMSF Staff	22		0		0
Generic Jobs [GEN]	1. Secretary [A]	3				
	2. Office Assistant [A]	27				
	3. Administrator [A]	65				
	4. Driver [W]	34				
	Total [GEN] Actual NMSF Staff	129		0		0

Summary

Functional Level	National (HQ)		States (Branches)		Localities
	Unique Positions	Actual Positions	Unique Positions	Actual Positions	Unique Positions
Corporate [COR]	17	32	6	16	0
Planning and Resources [PLR]	25	76	0	0	0
Distribution [DIS]	18	136	0	0	0
Supply, Logistics, Transport [SLT]	12	20	8	224	3
Biomedical Engineering [BIO]	8	24	2	2	0
Quality Assurance [QAS]	8	13	0	0	0
Procurement [PRO]	12	22	0	0	0
Generic [GEN]	4	129	0	0	0
Totals	104	452	16	240	3

Total Unique Positions $104 + 16 + 3 = 123$

Annex 3: Baseline Indicators and Targets

Training Process Indicators

Application of the process indicators results in baseline indicators for the 2016 calendar year, as follows:

- 1) Training days per employee. $450/419 = 1.1$ days
- 2) Internal training ratio. $52/90 = 58\%$
- 3) Training course implementation rate. $90/95 = 95\%$
- 4) Trainees committed. $1200/1250 = 96\%$
- 5) CPD activity. $943/1000 = 94\%$
- 6) Training budget of total NMSF budget. $SDG\ 4,500,000/SDG\ 75,270,000 = 6\%$
- 7) Training cost per day. $SDG\ 4,500,000/450 = SDG\ 10,000$

It is recommended to monitor the above indicators with intervals of one year and include the findings in the NMSF Annual Report.

5-Year Targets 2017-2021

With respect to the training performance indicators we aim for gradual improvement in performance over a 5-year period. Figures for a given year are typically available during the first quarter of the following year.

Process Indicators	Baseline 2016	2017	2018	2019	2020	2021
Training Days per Employee (days)	1.1	1.5	2	2.5	3	3.5
Internal Training Ratio	58%	60%	65%	70%	75%	80%
Training Implementation Rate	95%	95%	95%	95%	95%	95%
Trainees Committed	96%	95%	95%	95%	95%	95%
CPD Activity	94%	95%	95%	95%	95%	95%
Training Budget of Total NMSF Budget	6%	6%	6%	6.5%	6.5%	6.5%
Training Cost per Day (SDG)	10,000	8,000	5,000	4,000	4,000	4,000

Annex 3: Baseline Indicators and Targets (Cont'd)

Outcome Indicators: Branch Managers Training Satisfaction

Outcome Indicators	Baseline 2016	2017	2018	2019	2020	2021
Branch Managers: Training Satisfaction						
Quantity of training	63%	70%	80%	85%	90%	95%
Quality of training	77%	80%	85%	90%	95%	95%
% of Staff Trained ¹⁰	19%	20%	25%	30%	35%	35%
% of Staff Mentored	17%	20%	25%	30%	35%	35%

Outcome Indicators: NMSF Customer Satisfaction*

Outcome Indicators	Baseline 2016	2017	2018	2019	2020	2021
NMSF Customer Satisfaction						
Quality of goods	75%	80%	85%	90%	95%	95%
Range of products	56%	70%	75%	85%	90%	95%
Order compliance	67%	70%	75%	85%	90%	95%
Order lead time	53%	60%	70%	80%	90%	95%
Price of products	61%	65%	70%	75%	80%	85%
Transport service	50%	60%	70%	80%	90%	95%
Communication	81%	85%	85%	90%	90%	95%
e-Ordering (online)	72%	75%	80%	85%	90%	95%
Payment facilities	75%	80%	80%	85%	90%	95%
Overall satisfaction	72%	80%	80%	85%	90%	95%
Likely to recommend	83%	85%	85%	90%	90%	95%

*Note that Outcome Indicators are the result of a combined effort of the organization and not only due to training effort. However, training is regarded as one of the key factors contributing to performance of the organization.

¹⁰ Measured over the previous 12 months (same for Staff Mentored)

Annex 4: Training Satisfaction Survey

ANONYMOUS – Using Online Survey Tool: Google Forms

To: NMSF Directors and Branch Managers¹¹

The National Medical Supplies Fund (NMSF) is carrying out a survey among its Directors and Branch Managers to assess their level of satisfaction with NMSF training provision. The information gathered will be used to improve the NMSF training function. We highly appreciate your collaboration.

Please note:

- This short survey (5-10 minutes) is anonymous and administered by independent consultants.
- Your responses will be treated with confidentiality, used only as aggregated data.
- Should you have questions, kindly contact us at: info@remm.net
- We appreciate your response within 48 hours from receiving this request.

Dr Bastiaan Remmelzwaal
NMSF, Independent Consultant

Q1. In your opinion, is training for you and your staff important?

- Extremely Important Very Important Somewhat Important Slightly Important Not at all Important

Q2. Are you satisfied with the QUANTITY of training that you and your staff receive?

- Very Satisfied Satisfied Neutral Dissatisfied Very Dissatisfied

Comment (optional):

Q3. Are you satisfied with the QUALITY of training that you and your staff receive?

- Very Satisfied Satisfied Neutral Dissatisfied Very Dissatisfied

Comment (optional):

Q4. How many NMSF staff are there in your Directorate or at your Branch (including yourself)?

Q5. How many of them have received some form of FORMAL TRAINING? (during past 12 months)

Q6. How many of them have received some form of FORMAL MENTORING? (during past 12 months)

Q7. Do you have any suggestions on how NMSF can improve training and mentoring for staff?

Q8. Your position

- Director/Manager at HQ Head of Branch (State)

Thank you! We will treat this information in strict confidence.

¹¹ This survey was only carried out among Branch Managers (not HQ Directors)

Annex 4: Training Satisfaction Survey (cont'd)

List of NMSF Heads of Branches for Training Satisfaction Survey

No.	Name	Branch (State)	Phone #	E-MAIL
1.	Anas Elnour Mohamed	Blue Nile	0121991913	bluenile.msf@nmsf.gov.sd
2.	Salih Osman Mohamed	Central Darfur	0913755555	centraldarfur.msf@nmsf.gov.sd
3.	Adam Alameen Abdullah	East Darfur	0114463884 - 0997088944	eastdarfur.msf@nmsf.gov.sd
4.	Siddig Mohammed Eltayeb	Gadarif	0912343042	gadarif.msf@nmsf.gov.sd
5.	Majdi Abdalgadir Ahmed	Kassala	0912297426	kassala.msf@nmsf.gov.sd
6.	Abubakr Mohamed Alhaj	North Darfur	0911102267	northdarfur.msf@nmsf.gov.sd
7.	Adam Ali Adam Siddig	North Kurdofan	0912119824 - 0121767879	northkurdofan.msf@nmsf.gov.sd
8.	Yassir Ahmed Abdalwadod	North State	0910465632	northstate.msf@nmsf.gov.sd
9.	Igbal Mukhtar Mohamed	Red Sea	0912334941	redsea.msf@nmsf.gov.sd
10.	Sawsan Hassan Khidir	River Nile	0918244888	rivernile.msf@nmsf.gov.sd
11.	Abdalnassir	Sinnar	0123324251	sinnar.msf@nmsf.gov.sd
12.	Kamal Aldin Abdalmalk	South Darfur	0122872027	southdarfur.msf@nmsf.gov.sd
13.	Ahmed Ibrahim Ahmed	South Kurdofan	0123288850	southkurdofan.msf@nmsf.gov.sd
14.	Ibrahim Mohamed Ibrahim	West Darfur	0910530097	westdarfur.msf@nmsf.gov.sd
15.	Abdalmoneim Ibrahim Adam	West Kurdofan	0917807098	westkurdofan.msf@nmsf.gov.sd
16.	Zakariya Adam	White Nile	0911277734	whitenile.msf@nmsf.gov.sd

Type of Survey: Anonymous

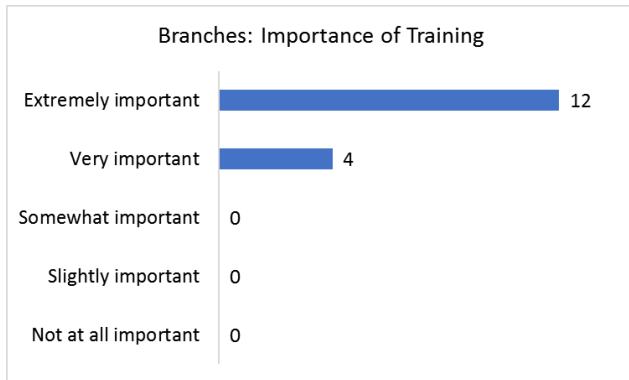
Response Rate: 100 % (16 out of 16).

Annex 4: Training Satisfaction Survey (cont'd)

Findings: Training Satisfaction of Branch Managers

The Training Satisfaction Survey was administered to NMSF Branch Managers in 16 states. The response rate was 100% with 16 out of 16 responses received. The results are given in the graphs below.

All Branch Managers agree that training for their staff is important.



High response rate of 100% (n=16)

FIGURE 9 BRANCHES: IMPORTANCE OF TRAINING

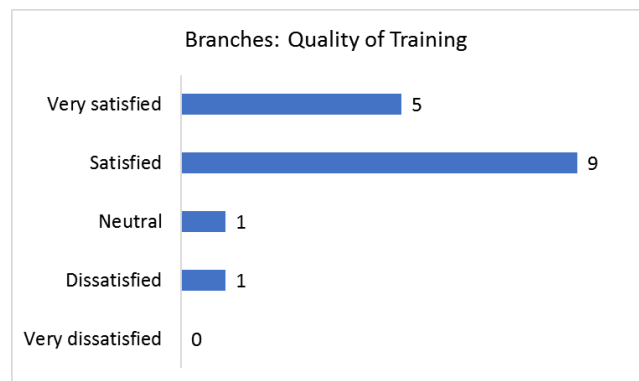
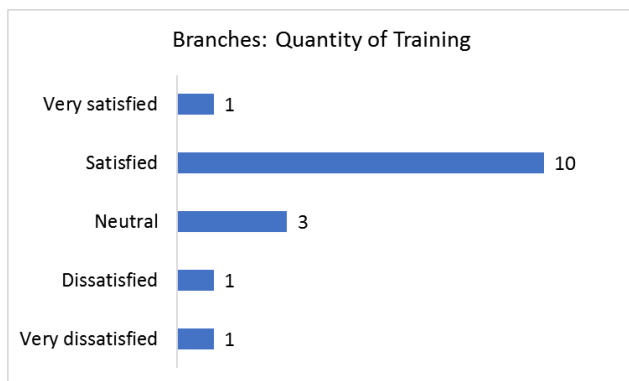


FIGURE 10 BRANCHES: QUANTITY AND QUALITY OF TRAINING

Branch Managers were asked to make comments on training provision by NMSF. Most of them did:

- Training is needed in every State
- Training is needed in all Localities¹²
- Training should be continuous
- The impact of training should be measured during the practice
- NMSF should increase the number of staff with continuous training
- Regular training is needed using suitably qualified trainers
- NMSF should collect data from all Branches to inform training options for specific problems
- Need to increase training opportunities and diversify training programs
- The staff should be classified by their jobs and training should be according to individual needs
- Provide training for staff in the states, including pharmacy technicians, store keepers, store keeper assistants, accountants, etc.

¹² Districts

- Provide on the job training in supervision, ERP system, Computer skills (Excel), Statistics and M&E

Branch Managers were also asked about the proportion of their staff having received training and mentoring during the past 12 months:

Training received: 18 %
Mentoring received: 16 %

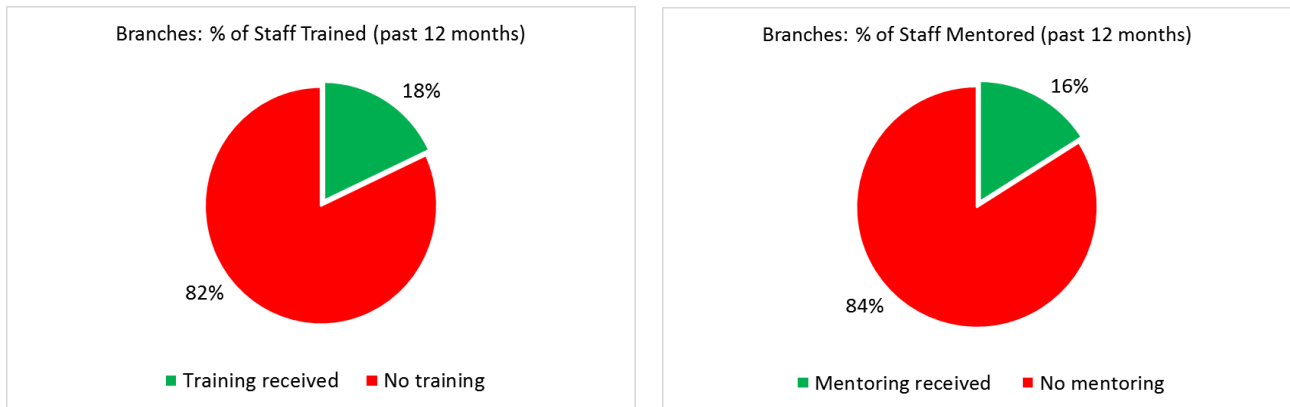


FIGURE 11 BRANCHES: PROPORTION OF STAFF TRAINED AND MENTORED

There is room for improvement both in terms of training and mentoring provision at State level.

A similar survey may be conducted among Directors and Managers at HQ level (the online questionnaire caters for that).

Annex 5: Customer Satisfaction Survey

ANONYMOUS – Using Online Survey Tool: Google Forms

Esteemed Customer!

The National Medical Supplies Fund (NMSF) is carrying out a survey among its customers to assess their level of satisfaction with products and services. The information gathered will be used to improve NMSF Customer Care. We highly appreciate your collaboration.

Please note:

- This short survey (5-10 minutes) is anonymous and administered by independent consultants.
- Your responses will be treated with confidentiality, used only as aggregated data.
- Should you have questions, kindly contact us at: info@remm.net
- We appreciate your response within 48 hours from receiving this request.

Dr Bastiaan Remmelzwaal
NMSF, Independent Consultant

How happy are you with NMSF, in terms of:

		VERY UNHAPPY	UNHAPPY	NEUTRAL	HAPPY	VERY HAPPY
		☹		☺		☺
1	Quality of goods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Range of products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Order compliance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Order lead time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Price of products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Transport service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	e-Ordering (online)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Payment facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Overall satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11 How likely are you to recommend NMSF to others?

VERY UNLIKELY	UNLIKELY	NEUTRAL	LIKELY	VERY LIKELY
☹		☺		☺
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12 How can NMSF do even better?

13 If you could improve one thing at NMSF, what would it be?

Thank you!

We will treat this information in strict confidence.

Annex 6: Mentorship Assessment Form

(Suggested)

MENTORSHIP EVALUATION BY MENTEE & MENTOR					
Mentee Name:			Topic:		
Mentee Signature:			Date(s):		
Mentor Name:			Location:		
Mentor Signature:					
Mentee's grasp of topics (Section to be filled in by MENTEE)					
TOPIC(S) COVERED	Excellent	Very Good	Good	Fair	Poor
1.					
2.					
3.					
4.					
5.					
COMMENTS BY MENTEE					
Mentee's grasp of topics (Section to be filled in by MENTOR)					
TOPIC(S) COVERED	Excellent	Very Good	Good	Fair	Poor
1.					
2.					
3.					
4.					
5.					
COMMENTS BY MENTOR					

Annex 7: Technical Specifications for a Training Management System

(Suggested)

Features of a computerized system to monitor training interventions.

TRAINING RECORDS

- Keep track of all training interventions for all staff
- Keep employee history of training received
- Track trainings needed, scheduled, completed, failed

EMPLOYEE RECORDS

- Record employee names, ID numbers, dates of birth, contact details, job titles, department, supervisor, employee type, location, qualifications and notes
- Upload a photo of each employee
- Display a history of all trainings completed
- Add new job titles, departments, or employee types
- Track skills, education, qualifications and certificates

TRAINING PROVIDER RECORDS

- Names, contact details of training institutions and individuals
- Details of agencies and organizations able to provide training
- Long term and short term training providers

SCHEDULE TRAININGS IN ADVANCE

- Set up approved training providers and trainers
- Schedule training and enroll employees

COMPLETED TRAINING RECORDS

- Insert training completion records for entire groups of employees at once
- Retain training history when an employee completes a training multiple times over the years

EXAMS

- Store exam questions and answers
- Allow employees to take exams electronically
- Electronic exams are scored automatically

STANDARD & CUSTOMISED REPORTS

- Extensive built-in standard reporting functions
- Select date ranges from pop-up calendars for selected reports
- Use the report wizard to design and save customized reports

USER ACCESS LEVELS

- Authorized users are authenticated using usernames and passwords
- Supervisors generate reports for their employees
- Read-only users view but not edit records
- Administrators edit users and user access

Annex 8: Map of Sudan

[Source: www.mapsof.net]



Annex 9: Sudan States and Districts

Total 181 Districts in 18 States. Note: NMSF has contracts with all States, except Khartoum and Al Jazeera.

No.	State	Districts (Localities)						
1	Al Jazeera	Al Kamlin	Al Jazeera East	Al Jazeera North	Al Jazeera South	Al Mahagil	Um Al Qurra	
2	Blue Nile	Al Damazin	Al Roseires	Geissan	Baw	Al Kurumik	Al Tadamun	Wd Al Mahi
3	Sennar	Singa	Ad Dinder	East Sennar	Abu Hajjar	Al Dali Mazmoum	Al Sukki	Sennar
4	White Nile	Rabak	Al Dowaim	Al Gabaleen	Al Gitaina	Al Kawa	Amrita	Gulli
		Kusti	Al Salam					
5	North Darfur	Al Waha	Kurma	Al Laiet	Dar Al Salam	Kalamedo	Al Kuma	Kurma
		Al Taweesa	Al Malha	Eteena	Um Baraw	Karnawi	Al Sirear	Mellit
		Kuttum	Kabkabiya	Al Fasher	Sarf Omra			
6	South Darfur	Al Mlam	Ntiga	Mrenshikh	Al Slam	Blail	Greada	Sherg Al Jebal
		Kass	Shtaaia	Tulus	Damaso	Reheabrdi	Amdafug	Aed Frsan
		Kubam	Kteala	Buram	Al Sunta	Al Radoum	Al Goz Grbi	
7	West Darfur	Al Genina	Krienek	Kolbos	Forbrange	Bieda	Habila	Gbal Moon
8	Central Darfur	Zalingi	Wadi Salih	Mukgar	Tandasi	Um Dukhn	Azum	Central G Marra
		North Gabl Marra	West Gabl Marra					
9	East Darfur	Asalaya	Al Diean	Yaseen	Shareiya	Abu Karinga	Adela	Bahr Al Arab
		Al Firdous	Abu Jabra					
10	Al Qadarif	Al Butana	Gadarif Central	Al Baladya	Baladya Al Qadarif	Al Mafaza	Gala Al Mahl	Basonda
		West Al Galabat	East Al Galabat	Al Farisha	Al Rahd	Al Fashaga		
11	Red Sea	Aqiq	Gubait Al Maeidin	Sawakin	Haya	Dargib Halayeb	Port Sudan	Sinkat
		Tokar						
12	Khartoum	Khartoum	Um Badda	Omdurman	Karary	Bahri	East Nile	Jabal Awlya
13	North Kurdufan	Sowdari	Al Rahad	Um Dam Hag Ahmed	Deirat Al Shiekh	Bara	West Bara	Shikan
		Um Rawaba						
14	South Kurdufan	Abu Karshola	Eastern Rural	Al Dalang	Al Leari	Taloudi	Al Guz	Habiela

No.	State	Districts (Localities)						
		Al Dalani	Qadeer	Al Rahsad	Al Abasseya	Abu Gubeaha	Al Tadamun	Kadugli
15	West Kurdufan	Al Khowayie	Al Awda	Ghubeaish	Abyei	Babanousa	Al Salam	Ab Zaid
		Ab Sunot	Al Nearn	Al Dabb	Lagawa	Al Nihoud	Kailak	Wdbenda
		Al Edia						
16	Northern	Wadi Halfa	Dongola	Merawi	Addabah	Al Golid	Al Bardeib	Delgo
17	River Nile	Atbra	Al Damer	Shendi	Al Mtama	Barber	Abu Hamed	Al Buhera
18	Kassala	Wd Al Hilaw	South Dilta	Kalkuk	Al Girba	Halfa Al Jadeda	Rifi Kassala	Al Gash/Aruma
		Hamash Korieb	West Kassala	Nahr Atbra	Kassala			

Annex 10: Key Contacts

Name	Organization/Unit	Title	Email address	Phone number
NMSF HQ				
Gamal Khalafalla Mohamed Ali	NMSF HQ	Director General	gamalkh@nmsf.gov.sd	+249 183 461 765/(0)912318615
Bashir A. Jabbar	NMSF HQ	Director HR and Planning	bashir.jabbar@nmsf.gov.sd	+249 122 857 992
Tahani A.M. Ahmed	NMSF HQ	Director States Medical Supply	tahani@nmsf.gov.sd	+249 157 972 547
Nawal Altahir Bakry	NMSF HQ	Director Procurement, Contracting	nawal.eltahir@nmsf.gov.sd	+249 918 220 022/122 289 222
Shihabeldin Ali Siddig Ali	NMSF HQ	Director Sales and Distribution	shihab.ali@nmsf.gov.sd	+249 122 210 187/912 111 117
Najla Hamid	NMSF HQ	Director Human Resources	najla.hamid@nmsf.gov.sd	+249 125 353 330
Nawal Elhadi Elnur	NMSF HQ	Manager Quality Assurance	nawal.elhadi@nmsf.gov.sd	+249 912 308 355
Sara Tigani Haidar	NMSF HQ	Training Manager	saratigani@nmsf.gov.sd	+249 912 202 534
Eng. Osman Awad Mohamed	NMSF HQ	Manager Bio-Medical Engineering	osman.awad@nmsf.gov.sd	+249 912 301 022
Salah Rabih	NMSF HQ	Public Relations Manager	salah.rabih@nmsf.gov.sd	+249 912 347 714
NMSF Branch Managers				
Anas Elnour Mohamed	Blue Nile	Branch Manager	bluenile.msf@nmsf.gov.sd	+249 121 991 913
Salih Osman Mohamed	Central Darfur	Branch Manager	centraldarfur.msf@nmsf.gov.sd	+249 913 755 555
Adam Alameen Abdullah	East Darfur	Branch Manager	eastdarfur.msf@nmsf.gov.sd	+249 997 088 944
Siddig Mohammed Eltayeb	Gadarif	Branch Manager	gadarif.msf@nmsf.gov.sd	+249 912 343 042
MajdiAbdalgadir Ahmed	Kassala	Branch Manager	kassala.msf@nmsf.gov.sd	+249 912 297 426
Abubakr Mohamed Alhaj	North Darfur	Branch Manager	northdarfur.msf@nmsf.gov.sd	+249 911 102 267
Adam Ali Adam Siddig	North Kurdofoan	Branch Manager	northkurdofoan.msf@nmsf.gov.sd	+249 912 119 824
Yassir Ahmed Abdalwadod	North	Branch Manager	northstate.msf@nmsf.gov.sd	+249 910 465 632
Igbal Mukhtar Mohamed	Red Sea	Branch Manager	redsea.msf@nmsf.gov.sd	+249 912 334 941
Sawsan Hassan Khidir	River Nile	Branch Manager	rivernile.msf@nmsf.gov.sd	+249 918 244 888
Abdalnassir	Sinnar	Branch Manager	sinnar.msf@nmsf.gov.sd	+249 123 324 251
Kamal AldinAbdalmalk	South Darfur	Branch Manager	southdarfur.msf@nmsf.gov.sd	+249 122 872 027
Ahmed Ibrahim Ahmed	South Kurdofoan	Branch Manager	southkurdofoan.msf@nmsf.gov.sd	+249 123 288 850
Ibrahim Mohamed Ibrahim	West Darfur	Branch Manager	westdarfur.msf@nmsf.gov.sd	+249 910 530 097

Name	Organization/Unit	Title	Email address	Phone number
Abdalmoneim Ibrahim Adam	West Kurdofan	Branch Manager	westkurdofan.msf@nmsf.gov.sd	+249 917 807 098
Zakariya Adam	White Nile	Branch Manager	whitenile.msf@nmsf.gov.sd	+249 911 277 734
NMSF Branch Staff, Other				
Mona Mohamed Babiker	NMSF – Nile River	Supply Manager		
Gasim Ali Fatah	NMSF – Nile River	Supervision Manager		
Noor Alhafiz	NMSF – Nile River	Stock Control Manager		
Suhair Makawy	NMSF – Nile River	Financial Manager		
Moawia Mohamed	Rogya Elawad HC	Med. Assistant		
Sara Elsheikh	Ad Damar Hosp.	Chief Pharmacist		
Amani Elhakeem	Ad Damar Hosp.	Pharmacist		
Rabab Khidir	NMSF – Red Sea	Supply Manager		
Mutaz Mahseldin F. Mohamed	NMSF – Red Sea	Supervision Manager		
Intisar Tag	Osman Digna Hosp.	Pharmacist		
Sitana	Red Sea Emerg. Hosp.	Pharmacist		
Omer Asman Omer	Port Sudan HC	Pharmacy Assistant		
UNICEF Sudan Country Office				
Christopher Adomati	UNICEF CO	Chief, Supply & Logistics	cadomati@unicef.org	+249 912 390 643
Mohamed Abdallah Ramadan	UNICEF CO	National Security Officer	mramadan@unicef.org	+249 912 174 263/912 303 476
Mazen O. Manna	UNICEF CO	Chief of Operations	mmanna@unicef.org	+249 912 167 237
Peta Barns	UNICEF CO	Supply & Logistics	pbarns@unicef.org	+249 912 167 427
UNICEF PtD Consultants Team				
Dominique Zwinkels	UNICEF/PtD	Executive Manager	dzwinkels@unicef.org	+45 51 197 255
Bastiaan Remmelzwaal	UNICEF/PtD	Consultant	bastiaan@remm.net	+27 84 787 1816
Jean Blackstock	UNICEF/PtD	Consultant	jeanblackstockconsulting@gmail.com	+254 727 856 007