



Ministry of Health



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Resilient nations.

2018 Annual Report

Cover Page

Implementing Agency/Agencies): United Nations Development Programme

Project Title: Strengthening Supply Chain Management in the Health Sector in Zambia Project No(s): 00104048

Project Start Date: 17th March 2017

Project End Date: 31 December 2019

Fiscal Year: 2018

Reporting Period: 1 January 2018 to 31 December 2018

Project Expenditures (US\$) for the Reporting Period

	Expenditures 2018 (US\$)
Core/Trac Resources (UNDP):	106,865.27
Donor 1: Medical Stores Limited - Design and Construction of Extension to MSL Central Medical Warehouse in Lusaka, Zambia. Phase II (MSL/EU)	4,120,787.76
Total Expenditure (US\$):	\$4,227,653.03

Submission Date: 28th February 2018

Contact Details:

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1. Executive Summary

After years of dramatic growth in the public health total commodity supply volumes handled by Medical Stores Limited (MSL) central warehouse, MSL was faced with serious capacity challenges. There was need for expanding and strengthening the public health supply chain systems, as articulated in the National Supply Chain Strategy (NSCS) 2015-2017. This included investments in expanding central warehousing capacity and construction of a number of regional hubs, as a relay for distribution of health products to the outlying health facilities. In addition, the need was identified for investments in information technology systems to support the supply chain management operations.

In 2015, MSL in collaboration with UNDP and other Cooperating Partners (CPs) developed a MSL Master Plan (MMP) to address the capacity challenges in the short, medium and longer term. The NSCS Implementation Plan articulated a number of priority areas across the public health sector. The MSL Master Plan 2015 proposed the following key priority areas:

- a) Urgent upgrade of MSL existing infrastructure as part of the efforts to maintain and improve the quality of logistics services provided to the public health sector.
- b) Implementation of a modern Enterprise Resource Planning (ERP) systems; which include a new Warehouse Management System (WMS), Electronic Logistics Management Information Systems (eLIMS) and automation of other warehouse processes and techniques such as barcode reading.
- c) Construction of a new dispatch warehouse and offices at Medical Stores Limited at central warehouse compound.
- d) Expansion of the Central Warehouse in Lusaka from the current 7,000m² to approximately 22,000m².
- e) Construction of a second central warehouse (6,000m²) on the Copperbelt Province in Luanshya district.
- f) Construction of regional hubs at selected sites and district stores.

The proposed set up was to allow for each of the elements to be funded by different donors/grants, but have the implementation take place within the master plan framework. Each step aimed at providing incremental improvements in storage space, quality of service, and technical capacity, while allowing MSL to continue with its normal operations for providing logistical services.

This annual report covers the Design and Construction of Extension to MSL Central Medical Warehouse, administration support and customer service buildings Phase II, in Lusaka, Zambia and installation of specialist equipment in 2018.

UNDP signed the original Cost Sharing Agreement (CSA) for these works with the Medical Stores Limited in December 2017. UNDP conducted the international competitive process and signed the contract for the main works with the contractor on 28th February 2018. The contract start date was 7th March 2018 with the expected completion date of 7th October 2018. The contract was extended to 7th December 2018 after additional works (administration support and customer service buildings) were included through a contract amendment 1.

The new very narrow aisle (VNA) warehouse, dangerous goods store, driver's waiting room, administration support and customer support buildings were completed and handed over as of 31st December 2018. Due to delayed handover by MSL to the contractor of the existing warehouse for renovation works to commence, a no-cost extension was issued with a new contract end date 31st March 2019. Full progress details are contained in the attached December 2018 project monthly report.

3. Background and Purpose of Programme/Project

After years of dramatic growth in the public health total commodity supply volumes handled by Medical Stores Limited (MSL) central warehouse, MSL was faced with serious capacity challenges. There was need for expanding and strengthening the public health supply chain systems, as articulated in the National Supply Chain Strategy (NSCS) 2015-2017. This included investments in expanding central warehousing capacity and construction of a number of regional hubs, as a relay for distribution of health products to the outlying health facilities. In addition, the need was identified for investments in information technology systems to support the supply chain management operations.

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3. Progress against Planned Results/Implementation

Country Programme Outcome(s) the programme/Project contributes to: By 2021 national institutions at all levels target, manage, coordinate and account for resources for equitable service delivery and economic growth that is based on reliable data.

Country Programme Output (s) wholly or partially attributed to the programme/project: Countries have strengthened institutions to progressively deliver universal access to basic services.

Country Programme Outputs	Attribution (Partial/ Whole)	Output Indicator(s)	Baseline	Target	Progress Attained	Reasons if progress is below target	Remedial measures/ Action
1.1 Storage capacity increased	Wholly	Central warehouse building extended	7,000m2 storage capacity	21,000 storage capacity	21,000 storage capacity		

Programme/Project Specific or Joint Programme Outputs (If joint programme outputs contribute to Country Programme Outputs, Updated Annually but outputs can be stated in quarterly reports)

Output	Output Indicator(s)	Baseline	Target	Progress Attained	Reasons if progress is below target	Remedial measures/ Action
1.1.1 Storage capacity increased	Central warehouse building extended	7,000m2 storage capacity	21,000 storage capacity	21,000 storage capacity		

Progress on Implementation of Activities (Quarterly based on agreed quarterly work plan)

Main Activity	Target	Progress against planned activities and targets	Planned Completion Date	Implementation Status (Completed, Ongoing-On Track, Ongoing-Off Track & Cancelled)	Reason (s) for slippage (if progress and implementation is not on track) and remedial measures taken	Budget & Expenditure Monitoring Framework		
						Budget (US\$)	Expenditure (US\$)	Commitments (US\$)
1.1.1.1 Construction of MSL Central Stores - Phase II	Construction of new VNA washhouse and Administration support units	Construction of VNA washhouse and Administration support units completed and handed over	December 2018	VNA washhouse and admin support units completed and handover by December 2018	Delayed handover of the existing warehouse to the contractor for renovations by MSL Contractor given no cost extension to March 2019	5,071,225.00	4,120,787.76	857,059.56

4. Progress towards achievement of results

APR and Annual Reports:

During the reporting period the following constructions were completed and successfully handed over and accepted by Medical Stores Limited as of 31st December 2018.

1. The main very narrow aisle (VNA) warehouse
2. Dangerous goods store
3. Driver's waiting room
4. Maintenance support building
5. Customer services

Challenges and constraints experienced during the project phase are highlighted in the attached practical handover reports for each site respectively.

5.0 Key Development Drivers and Cross Cutting themes

The new VNA warehouse is a state-of-the-art warehouse and the first of its kind in the region. It is specifically designed and constructed for pharmaceutical use. The construction materials include self-regulating temperature control materials (isowalls) for both side walls and roofing. As the racking in the new warehouse will go up 16 meters high, the floor is meeting some of the highest standards available worldwide (DM1), thereby joining a very select group of warehouses in Africa.

The new VNA warehouse will be highly mechanized with modern materials handling equipment thereby eliminating the current manual handling of inbound, instore inventory and out bound logistics.

The main warehouse air-conditioning units are also energy efficient in operations. They operate in such a pattern that when the outside of the warehouse is cooler it only blows cold air to the inside of the warehouse thereby saving energy that could have been used in the normal cooling operation.

The ceiling of the warehouses are fitted with heavy (thick) insulation to with low thermal conductivity. The insulation contributes to prevention of the transfer of heat to the inside of the warehouses and so reduces the energy required to raise temperatures and protects medicines and health products from heat damage.

Heat shielding paint with low thermal conductivity has also been used to paint the outside of the roofing materials for the warehouses.

6.0 Key Lessons learnt and Best Practices

The use of the experienced UNDP focal contract management Staff to monitor progress of the projects was seen to be more beneficial during the contract execution period. Other key best practices include:

1. **Timely engagement of qualified and experienced contract managers.**
During the implementation, a full-time technical project manager was timely engaged at the beginning of the project resulting in a much more effective contract management processes from inception.
2. **Formation of the multi-discipline contract management team (including the end users).**
At the start of the projects multi-discipline direct contract management supervision team was formed. This included the end user Medical Stores Limited (MSL) project Staff, UNDP,

European Union technical representatives and independent consultants. The contract management team was able to address contract challenges immediately they occurred. As result handover of the first completed structures by December 2018 was very smooth.

3. Pre-contract start negotiations

The holding of the pre-contract commencement meetings were very helpful in explaining and understanding the scope of the works from both the Contractor's and Client's perspective. These meeting mitigated misunderstand of the contract scope and prevented would be contract disputes. This was the core of the smooth progression of the contract.

4. Establishments of a risk log resister and mitigation measures

The establishment and regular review of the risk log was key during the project, as it helped in anticipating potential risks and taking mitigation measures to correction risk situations.

5. Scheduled regular contract management and site meetings.

The technical team was able to meet daily to resolve any arising technical matters.

Scheduled weekly (every Fridays) contract management meetings were held and attend by the MSL, UNDP and the Contractor's and its sub-contractors. During this meeting works progress was reviewed and contractual issues were are addressed.

Monthly meetings are held and attended by a wider audience including EU (financiers) high level officials, MSL senior management, Ministry of Health, UNDP, USAID and the contractor. UNDP chairs and presents the month's progress report.

The quarterly meeting is third tier and much higher-level meeting and is chaired by MSL. In this meeting project progress is reported to top level management of EU, the Ministry of Health, UNDP, USAID and other sector wide cooperating partners. UNDP prepares the quarterly contract progress report which is presented in the meeting.

All meetings start with a guided tour of the project sites to have an appreciation of the physical progress of the construction works. Issues requiring addressing are raising and decision made in each level meeting respectively.

6. Arranging customs preclearance of imported goods

An arranged was made to have the goods cleared before the consignments reached the Zambian border. This ensured that no delays were experienced at the border as consignments were precleared before arrival at the border.

7.0 Project Expenditure as of 31 December 2018

Output Details	Budget	Expenditure	Commitments	Balance	Delivery (%)
Outcome 1					
Output 1.1 Storage capacity increased	5,071,225	4,120,788	857,060	93,378	98%

8.0 Success Stories

In accordance with its mission statement;

“to provide a reliable and accountable one-stop public health supply chain services for a healthier and productive nation.”

The newly constructed VNA warehouse at central level within MSL compound in Lusaka is to be the backbone of the supply chain system and increases capacity from the current 8,000 m² to 32,000 pallet pace (9 high pallets), sufficient for the next couple of years.

With completion of the new VNA warehouse located within the MSL central compound in Lusaka, all stock in a number of currently leased warehouses in Lusaka will be brought back under one roof. This will result in considerable cost savings, smoother operations and increased security of the stocks, as the need for renting external warehouses will be eliminated.

With the completion of the new VNA warehouse and other buildings, MSL will be able to improve its overall operations and increase public value through its services, as was foreseen in the 2015 MSL Master Plan.

This is also a great success for UNDP, as it has shown that through joined efforts, working closely with MSL, UNDP was able to manage and successfully complete within budget and within a record time of one year (since we signed the agreement with MSL), a completely new pharmaceutical grade VNA warehouse and additional supporting structures.

The successfully cooperation between UNDP and the Government of Zambia has already received attention from the region. In November we hosted representatives from Mozambique MSL (at the request of our colleagues from UNDP Mozambique) and also other delegations (including from DRC MSL) have already visited the construction works at MSL. At the commissioning of the new MSL warehouse by the President of Zambia, delegations from the whole SADC region are expected to attend.

9.0 Next Year's (2019) Focus and Priority (APR & Annual Reports)

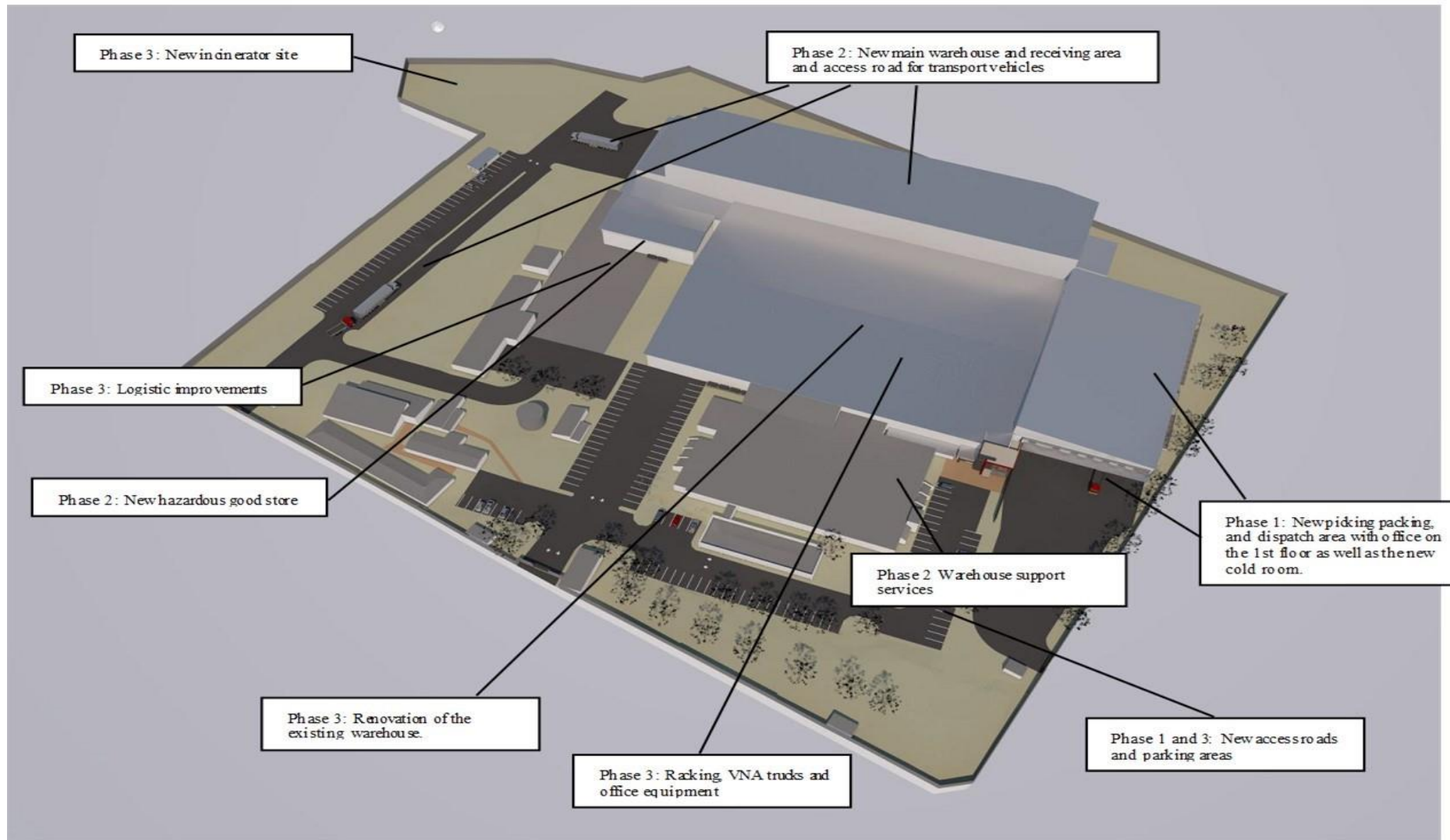
Planned activities in 2019 include:

1. Completion of the renovation works to the existing warehouse
2. Procurement of VNA racks, moving equipment (trucks) and sprinkler system
3. Construction of the additional works for the sprinkler system bases.
4. Management of the defect liability period for buildings.
5. Engagement of and Individual contract to manage the technical aspect of the defect liability period.
6. To conduct an end of project review and final handover of the projects.

Annex 1: December 2018 Monthly Progress Report

Refer to attached December 2018 Monthly Progress Report

Annex 2 – Progress in Pictures





Main Warehouse Receiving Bay Front End of December 2018



Main Warehouse DM1 Floor



Hazardous Goods Store



Customer Service Building – Side/Front View



Maintenance Building – Side/Front View