



## Examples of effective supply chain outsourcing

# Zambia



This case study describes various good practices that create an enabling environment for private sector participation and the delivery of improved health care outcomes through the supply chain.

## Executive summary

The Government of Zambia is receptive to outsourcing to the private sector. This is evidenced by the national policies and regulatory frameworks that support and guide the achievement of Vision 2030. This case study describes various good practices that create an enabling environment for private sector participation and the delivery of improved health care outcomes through the supply chain.

Zambia has several examples of effective outsourcing to the private sector. This includes:

- MSL entering into a lease agreement for warehousing with a third-party private sector player in remote underserved areas of the country
- MSL utilising third-party logistic providers for the delivery of time-critical stock between hubs in the supply chain.
- MSL outsourcing its management to a private company (Crown Agents) between 2004 and 2013

In-sourced functions:

- Forecasting
- Procurement
- Warehousing – part outsourced (see below)
- Distribution – part outsourced (see below)

Out-sourced functions:

- The distribution between central warehouses and hubs or hub staging sites is partially outsourced to private sector logistics service providers
- Some parts of MSL's cold chain distribution is outsourced. Short shelf life laboratory reagent products need to be transported under temperature-controlled conditions within a short time frame
- MSL lease private-sector owned storage facilities in remote areas for the storage of medical commodities

The Zambian government has also implemented IT-based integrated stock management and a manual resupply reporting system which was supported through implementation by private sectors parties. These tools act as good-practice examples to further inform the toolkit for outsourcing to private sector players.

# Health sector policy

Vision 2030 is the overarching long-term development plan for Zambia that aspires to provide equitable access to quality healthcare to all Zambians by 2030 to ensure a healthy population, specifically without HIV/AIDS, Malaria, and TB. The Zambia Health Strategic Plan (2017-2021) allocates exclusive responsibility for provincial and district health services to the respective local administrations.

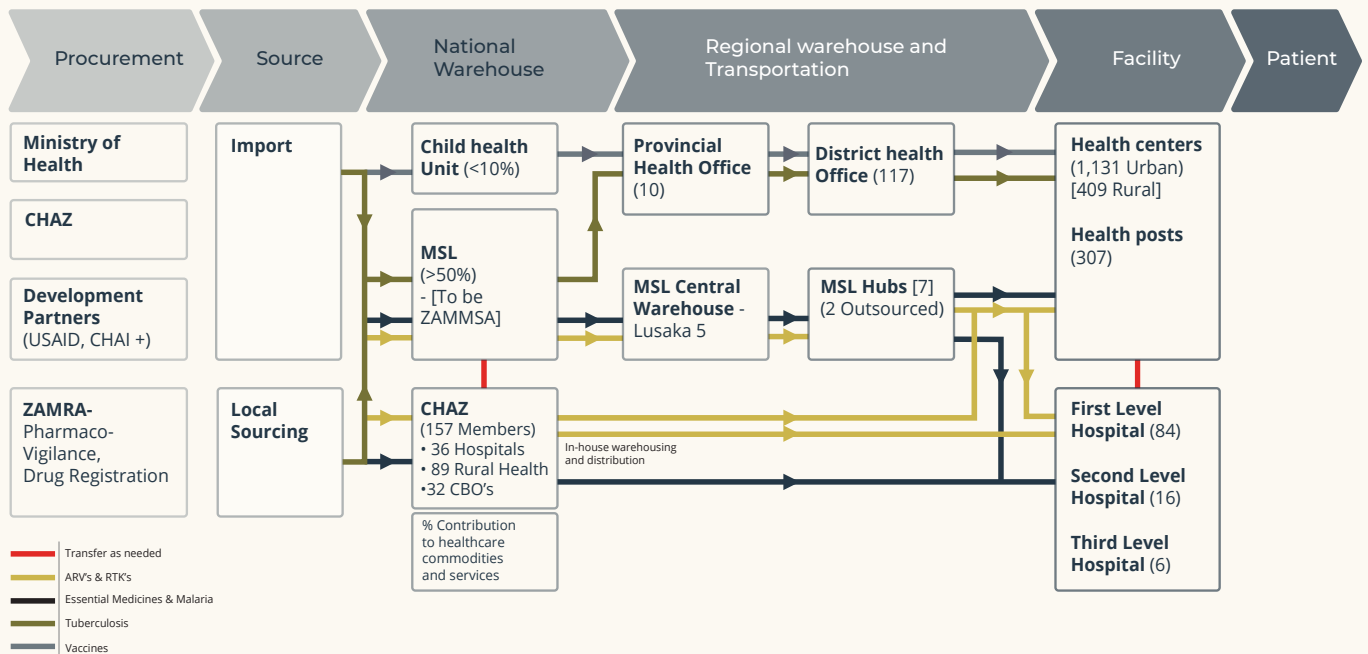
The Public-Private Partnership Act (established 2008, amended 2018) promotes and facilitates the implementation of privately financed delivery of social services in Zambia through the Public-Private Partnership (PPP) Unit and PPP Council. It governs PPPs in terms of procurement, contracting, and management that removes barriers to private sector participation to enhance fairness, transparency, and long-term sustainability.



## The healthcare supply chain

The Zambian healthcare supply chain has five key stakeholders: the Ministry of Health, MSL (soon to become Zambia Medicines and Medical Supplies Agency, Zambia Medicines Regulatory Authority, the Child Health Unit, and CHAZ. The development partners, such as USAID, EU, the United Nations system, The Global Fund, UKAID, World Bank, etc, provide resources, advisory, advocacy, and technical assistance and support. MSL is a parastatal institution responsible for warehousing and distributing medical commodities in Zambia. The private sector participates in storage and distribution of medical commodities in Zambia. Currently, MSL outsources distribution services between central warehouses and hubs to local private sector 3PL providers and last mile delivery to health facilities in some areas.

THE ZAMBIA HEALTHCARE SUPPLY CHAIN MAP



## PRIVATE SECTOR OUTSOURCING – EXAMPLES

This section shares examples drawn from a combination of desktop research and interviews of outsourcing to private sector partners.

### i. Medical stores management: Crown Agents

#### **Context**

Crown Agents partnered with the Government of Zambia from 2004 to 2013, by being placed in control of the management of the medical stores. Crown Agents is an international company who provide capacity building and institutional development services in procurement, public financial management, revenue enhancement, governance, and expenditure management. They work for the public and private sectors in more than a hundred countries, as well as for international development agencies and institutions.

#### **Outcomes and benefits**

Crown Agents successfully led the development of new supply system and network of hubs. In 2004, Crown agents were given control of MSL. Crown Agents identified areas that required urgent attention – infrastructure rehabilitation, development of new packaging system, packing system, construction of more suitable storage and administrative facilities, computerising of the management system. They also highlighted the need to improve the performance and reliability of the delivery service while improving data transparency with their clients (i.e. stock levels, order timings etc.). Crown Agents' impact resulted in the reduction of distribution costs by 32%, improved on-time delivery rates (increased to 95%) and the doubling of stock availability at the central level. These improvements were supported through capital investments from donors and management reforms.

### ii. Outsourced distribution of health products - Third-Party Logistics Services

#### **Context**

The MSL, with support from USAID, set up 3PL services for general medicines to deliver to the MSL cross-docking hubs, see Figure 1. These 3PL contracts were set and managed by John Snow Incorporated (JSI). Deliveries from hubs to health facilities were carried out by MSL using its own dedicated vehicles.

#### **Outcomes and benefits**

The 3PL distributors performed within the KPIs stated within the contractual agreement – sufficient rates of on-time deliveries and successful deliveries. As a result of the successful performance by the 3PLs, at the end of 2016, the 3PL contracts were extended to cover last mile delivery to referral hospitals at province and district levels.

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### iii. Outsourced time critical temperature controlled requirement

#### **Context**

MSL need to move short shelf life laboratory reagent products under temperature-controlled conditions. MSL has an in-house cold chain capability for vaccines but the monthly MSL schedule is not able to move them within the required timeframe. As a result, JSI and MSL have contracted with several private sector logistics service providers.

#### **Outcomes and benefits**

Lechwe Express brings relevant expertise and skills for the transport of reagent products. Lechwe Express has a good network in Zambia, a range of temperature-controlled vehicle types and experience in dealing with pharmaceuticals. They use an electronic USB data logger, which captures temperature data every few minutes and provides an audit trail which is reviewed by JSI prior to issuing payment. To date, there have been no significant failures in terms of product integrity or late delivery.

#### iv. The essential medicines logistics improvement program: JSI

##### **Context**

In Zambia, healthcare facilities have experienced high rates of stock-outs. Between 2009 and 2013, the Ministry of Health, with the support from the World Bank, developed the Essential Medicines Logistics Improvement Programme which later was piloted with the support from USAID, through its implementer, JSI. It is a manual pull re-supply system whereby each individual health facility sends routine monthly consumption data to MSL.

##### **Outcomes and benefits**

Following the initial rollout to 27 districts, central stock-outs were reduced from c.50% in 2012 to c.28% in 2013 (USAID, 2014). Using this information, MSL now picks and packs for each individual facility, rather than at the district level. With the re-development of the MSL warehouse stock holding and management system carried out with support from the United Nations Procurement Division, the Global Fund, USAID, and the European Union, most of the operations are automated requiring reduced human intervention.

## Conclusion

The Government of Zambia is has shown high support for outsourcing to the private sector, which is shown in the Vision 2030, National Health Strategic Plan, the Public-Private Partnership Act and the National Health Care Waste Management Plan. Private sector players, such as Crown Agents and JSI, have been involved in administrative functions of the Zambian health supply chain.

The Zambian government, in partnership with JSI, implemented IT-based integrated stock management and a manual resupply reporting system to reduce rates of stockouts and automate some functions. Operationally, MSL outsources warehousing by entering into a lease agreement with third-party private sector players and utilise third-party logistic providers for the delivery of time-critical stock between hubs in the supply chain.

While not in operation today the Crown Agent-MSL alliance (2004-2013) evidenced public-private partnering where Crown provided resources and supply chain expertise, management, and oversight of the network to strengthen performance before handing these responsibilities back to MSL. During this alliance, the MSL board was strengthened as a new board was formed with strong representation from different sectors. Members of the new board underwent formal training on corporate governance.

## References

*Zambian Ministry of Health, 202*

*Chikuta Mbewe – MD of MSL (29/06/2020)*

*Marlon Banda – CHAZ (26/06/2020)*

*Lubinda Nyambe – CHAI (26/06/2020)*

*Tania Nyirongo – Horizon Distributors Ltd. (18/06/2020)*

*Bonface Fundafunda – ARC (08/06/2020)*

*Richard Mtisi – Sky Pharmaceutical (09/06/2020)*

*Thomas Brown – World Bank (20/06/2020)*

*NSCA Zambia Assessment Report 2018 World Bank Zambia Ministry of Health Zambia National Health Strategic Plan, 2017-2021*

*Zambia National Health Policy, 2011*

*Health Sector Supply Chain Strategy Implementation Plan Zambia*

*The 2012 List of Health Facilities in Zambia – Ministry of Health Improving Supply Chain for Essential Drugs in Low-Income Countries: Results from a Large Scale Randomized Experiment in Zambia GAVI Study –Outsourcing the Distribution Component of Vaccine and Medicine Supply Chains*

*Crown Agents World Bank: Health Financing in Zambia (2019) CHAZ Annual Report (2018)*

