

A Need for Speed

Visibility, Efficiency, and Self-Reliance at
the Last Mile

Improving Public Health Supply Chains in Niger

PMI

L'INITIATIVE PRÉSIDENTIELLE
DES ÉTATS UNIS
CONTRE LE PALUDISME

DIRIGÉ PAR



Malaria: A Significant Health Challenge in Niger

- Malaria remains the second leading cause of death in Niger with almost 1/4 (24,49%) of all deaths in Niger caused by severe malaria and the first cause of morbidity with 33,39% (Niger Health Statistics, 2021).
- It accounts for a substantial portion of the country's health burden, with children under five bearing about 50% of the malaria burden (Niger Health Statistics, 2021).
- From 2009 to 2019, there was a remarkable reduction of 86.0 deaths per 100,000 individuals due to malaria (healthdata.org).
- In a broader context, Niger accounted for 3.2% of global malaria cases and 3.9% of global deaths due to malaria in 2021 (Severe Malaria Observatory).



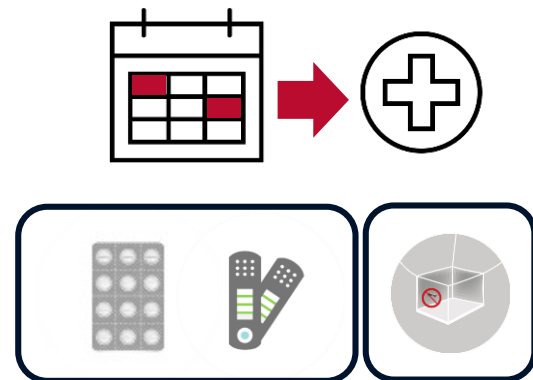
GHSC-PSM: What we do in Niger

- Funded by PMI (U.S. President's Malaria Initiative)
- Support the fight against Malaria
- Partnerships with the MoH, in particular :
 - National Malaria Control Program (NMCP)
 - Nigerien Agency for the Regulation of the Pharmaceutical Sector (ANRP)
 - National Pharmaceutical and Chemical Products Office (ONPPC)
- Comprehensive supply chain support, including:
 - Forecasting and supply planning
 - Warehousing and Last-Mile Delivery in the PMI-focus regions of Dosso and Tahoua
 - Management of unusable pharmaceutical products (UPPs)
 - Coordination of supply chain partners and stakeholders
 - Capacity Building of MoH stakeholders

GHSC-PSM LAST-MILE DELIVERY PILOT GOAL

Implementation of last mile delivery model in PMI-focus regions

- Monthly push system
- Facilities receive needed quantities of commodities
- One delivery per month for each commodity group:
 1. Pharmaceuticals
 2. LLINs (long-lasting insecticidal nets)



Working with the Ministry of Health, our goal was to significantly reduce stockouts by improving supply chain efficiency, thereby optimizing distribution for potential scale-up.

SUPPLY CHAIN CHALLENGES (PRE-INTERVENTION)



Suboptimal transportation capacity

Health facilities lack a dedicated fleet of vehicles and the operational and maintenance capabilities to ensure consistent last-mile distribution.



Limited health infrastructure

Last-mile health facilities are small and rely on districts with variable storage capacity. A regional depot-based last-mile strategy improves supply chain efficiency.



Limited inventory visibility

Lack of real-time data on last-mile inventory levels and average monthly consumption rates.

GHSC-PSM INTERVENTION OBJECTIVES



**Improve Inventory
Collection**



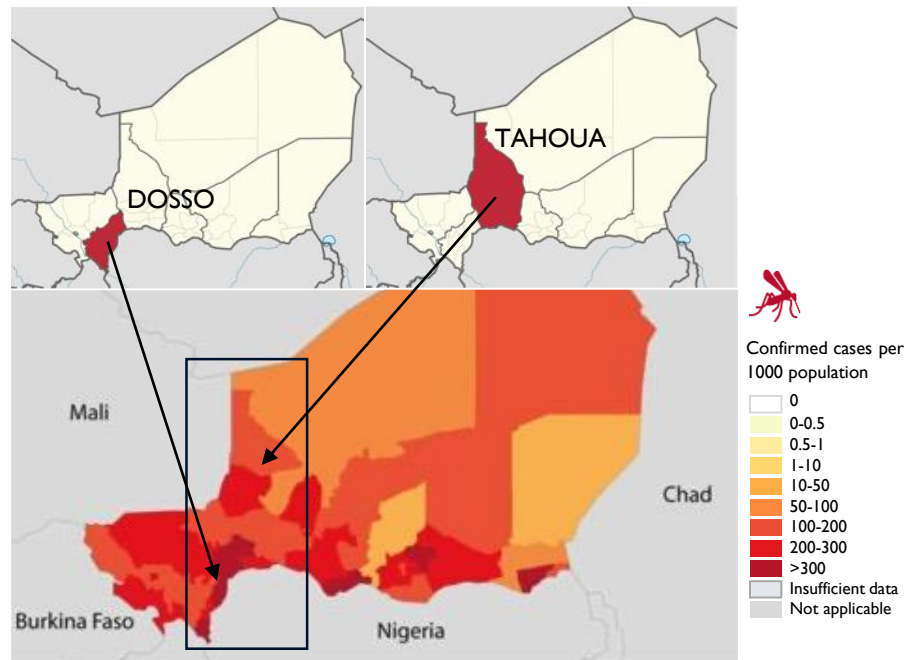
**Leverage high-
performing 3PLs**



**Centralize distribution
for greater efficiency**

KEY OPERATIONAL CHALLENGES

- **Geographical coverage:** Operations in Dosso and Tahoua, (regions larger than Greece), serving 461 health facilities.
- **Security concerns:** Regions vulnerable to security challenges.
- **Health Burden & Accessibility Challenges:** Dosso and Tahoua have the highest malaria burden in the country, but the population faces significant accessibility challenges.
- **Seasonal constraints:** Deteriorating road conditions during the rainy season, which coincides with peak malaria activity.



Data: World Malaria Report 2018, Niger country profile

METHODOLOGY



Call center to collect monthly inventory

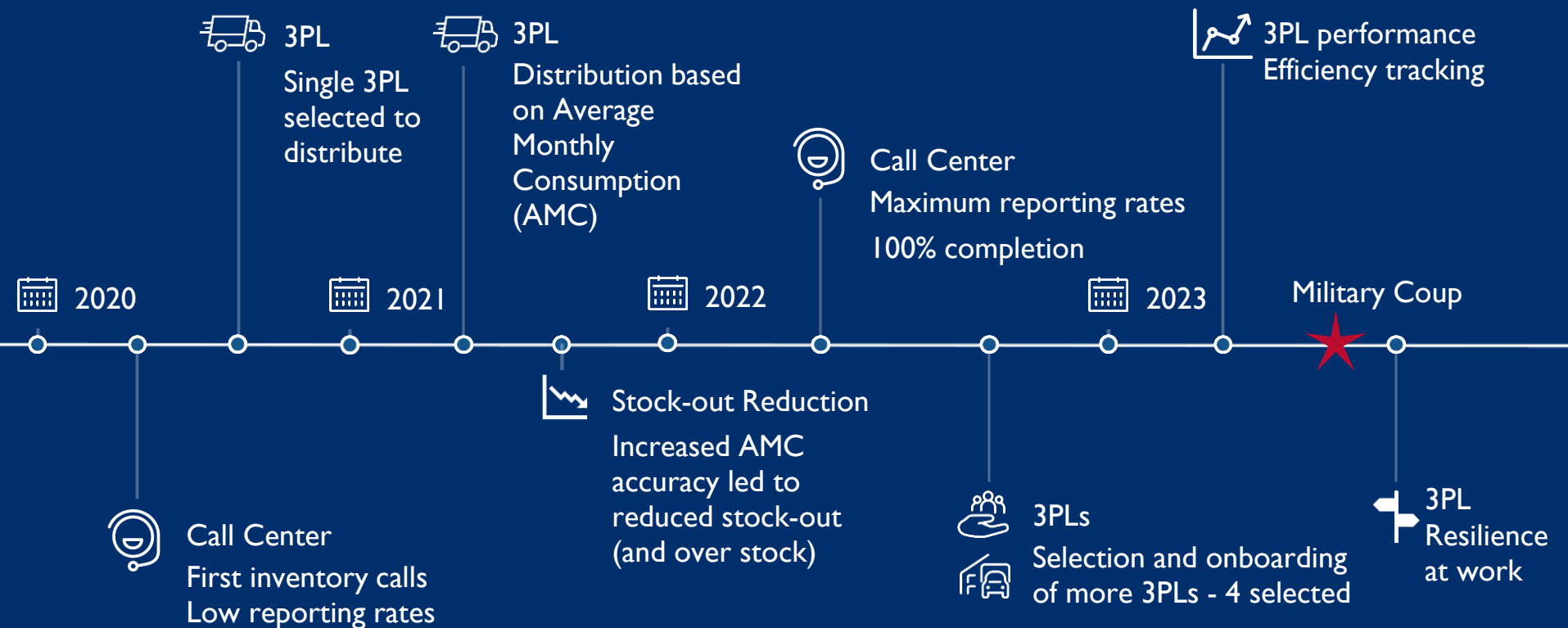
A call center was established to collect monthly inventory data from health facilities in Dosso and Tahoua, improving the ability to calculate monthly consumption by facility and commodity.



Expanded number of 3PLs

Strategic partnerships with four third-party logistics providers were developed to increase transportation capacity and efficiency for last-mile delivery of malaria commodities.

TIMELINE



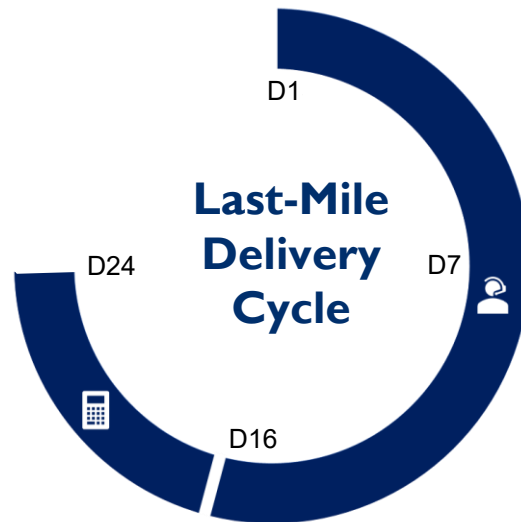
INVENTORY VISIBILITY: KEY for optimal performance



Site Inventories: Collect inventories from all sites



Extraction of inventory data and development of distribution plans based on AMC calculated from call center inventories



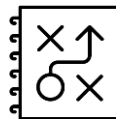
■ Planning

PRIVATE SECTOR ENGAGEMENT STRATEGY



Proactive Outreach and Selection

Conduct proactive outreach to identify and select appropriate 3PL partners. Focus on aligning these partnerships with the specialized logistics needs of the healthcare sector.



Operational alignment

Onboard selected 3PLs and establish operational protocols. Establish initial performance metrics and align administrative processes to project specific requirements.







Strategic Partnership

Deepen relationships with 3PL providers into long-term strategic partnerships. Conduct regular performance reviews and collaborate on continuous improvement initiatives.

3PL REPORTING REQUIREMENTS

Before, During and after each delivery cycle

	Driver, Convoy, and Vehicle Manifest	48 hours prior to any transportation activity
	Daily Activity Updates	Daily
	Delivery Completion Summary	24h after last delivery
	Problems and Incidents Report	Within 24 hours of the incident

3PL KPIs

1. On time submission of driver, conveyor, and vehicle manifest.

- **Objective:** Measure responsiveness and availability of 3PL fleet
- **Measure:** Manifest to be provided 48 hours (2 business days) prior to departure
- **Data Source:** Email from 3PL
- **Penalty:** Exclusion from next month's distribution of the same type of product

2. On-Time Route Completion

- **Objective:** Measure responsiveness and availability of 3PL fleet
- **Measure:** Percentage of routes completed with successful delivery to all specified service points within the timeframe specified in the subtask order.
- **Data Sources:** GPS trackers, vehicle logs, distribution plans, invoices or proofs of delivery with no unexplained changes/corrections
- **Target:** 80%.
- **Penalty:** Indication of underperformance in the subcontractor's long-term record and considered in subcontract award.



3PL KPIs

3. Deliveries Within Business Hours

- **Objective:** Ensure proper receipt and documentation of deliveries.
- **Measure:** Percentage of deliveries made to service delivery points between 08AM and 05PM.
- **Data Sources:** GPS trackers, vehicle logs, invoices or proofs of delivery with no unexplained notes/corrections.
- **Target:** 95%.
- **Penalty:** Financial liability for the commercial value of products lost due to out-of-hours delivery if not covered by liability insurance as required in contract.

IMPACT

Improved Data Visibility

Leveraging the Call Center to gain visibility into stock levels and supply chain operations.

Increased Transportation Capacity

Expanding the number of 3PL to reduce risk and improve efficiency with KPIs to standardize distribution operations.

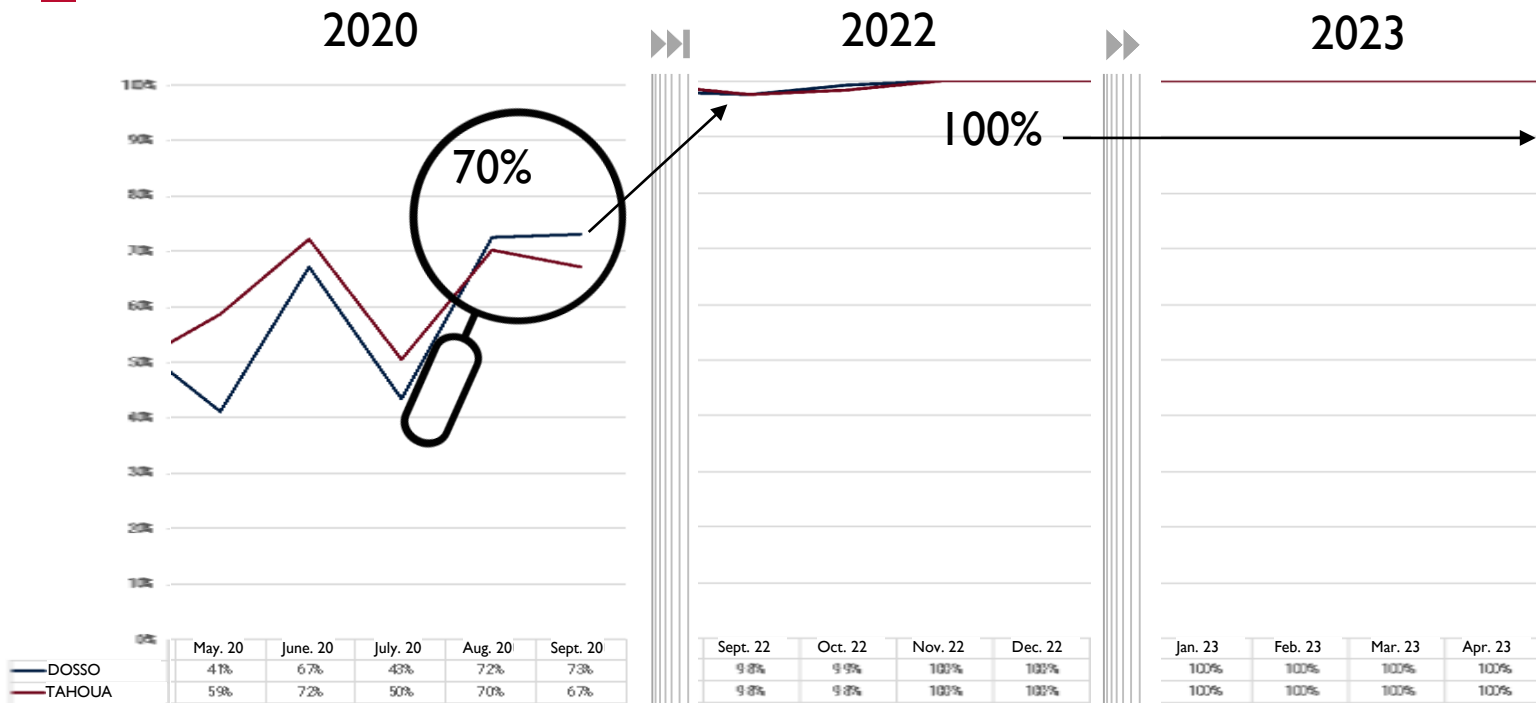
Accurate Commodity Needs

Calculating average monthly consumptions to distribute the most accurate quantity needed of commodities to reduce stockouts

Efficient Last-Mile Distribution

Optimizing delivery of medical commodities from regional warehouses directly to health clinics.

INVENTORY VISIBILITY IMPROVEMENTS



September 2023



461 facilities

INCREASED TRANSPORTATION CAPACITY AND PERFORMANCE

Increased transport Capacity



2 by region: Pharma + LLINs

Reporting Performance



Daily activity updates throughout the distribution process

100%

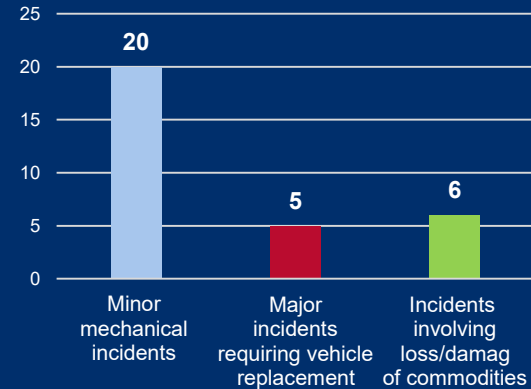
Summary of in-transit monitoring 24 h after the end of the distribution cycle

100%



Incidents

Incidents by type, all 3PLs
January-September 2023 (9 months)



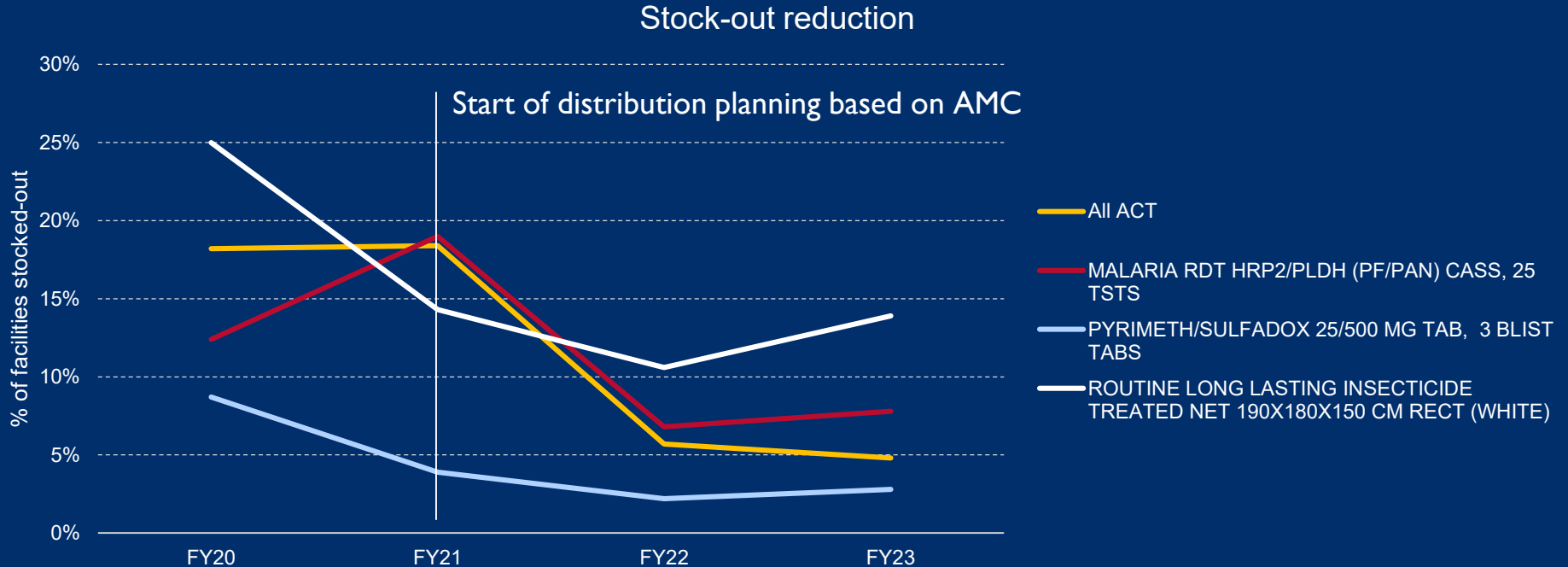
INCREASED TRANSPORTATION CAPACITY & PERFORMANCE



KPIs by 3PL

	On time submission of driver, conveyor, and vehicle manifest	On-Time Route Completion (Target 80%)	Deliveries Within Business Hours
A 3PL	86%	86%	100%
B 3PL	71%	100%	100%
C 3PL	50%	100%	100%
D 3PL	100%	100%	100%

REDUCED STOCK-OUTS at the last mile





KEY TAKEAWAYS

Systematic collection of inventories and analysis of consumption data

Collecting inventories in a planned and organized way helped assess needs.

Private sector engagement

Involving private transporters was critical to respond effectively to the logistics challenges of last-mile deliveries.



Thank you
Questions?