

A large, abstract purple graphic on the left side of the page, consisting of a thick curved line that forms a large loop, with a smaller circle attached to it.

Technical Approach to Developing a Strategic Plan to Strengthen the Central Medical Store: The Case of Pharmacie Populaire du Mali

April 2016



USAID
FROM THE AMERICAN PEOPLE

SIAPS 
Systems for Improved Access
to Pharmaceuticals and Services

Technical Approach to Developing a Strategic Plan to Strengthen the Central Medical Store: The Case of Pharmacie Populaire du Mali

April 2016



USAID
FROM THE AMERICAN PEOPLE

SIAPS 
Systems for Improved Access
to Pharmaceuticals and Services

This report is made possible by the generous support of the American people through the US Agency for International Development (USAID), under the terms of cooperative agreement number AID-OAA-A-11-00021. The contents do not necessarily reflect the views of USAID or the United States Government.

About SIAPS

The goal of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program is to ensure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes. Toward this end, the SIAPS results areas include improving governance, building capacity for pharmaceutical management and services, addressing information needed for decision-making in the pharmaceutical sector, strengthening financing strategies and mechanisms to improve access to medicines, and increasing quality pharmaceutical services.

Recommended Citation

This report may be reproduced if credit is given to SIAPS. Please use the following citation.

SIAPS. *Technical Approach to Developing a Strategic Plan to Strengthen the Central Medical Store: The Case of Pharmacie Populaire du Mali*. 2016. Submitted to the US Agency for International Development by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program. Arlington, VA: Management Sciences for Health.

Key Words

central medical stores, supply chain, strategic plan, Pharmacie Populaire du Mali (PPM)

Systems for Improved Access to Pharmaceuticals and Services
Pharmaceuticals and Health Technologies Group
Management Sciences for Health
4301 North Fairfax Drive, Suite 400
Arlington, VA 22203 USA
Telephone: 703.524.6575
Fax: 703.524.7898
E-mail: siaps@msh.org
Website: www.siapsprogram.org

CONTENTS

| | |
|--|----|
| Acknowledgments..... | iv |
| Acronyms | v |
| Executive Summary | vi |
| Introduction..... | 1 |
| Central Medical Stores..... | 1 |
| The CMS Business Environment..... | 1 |
| Strategic Planning | 5 |
| Key Considerations When Developing a CMS Strategic Plan | 5 |
| Function and Capabilities | 6 |
| Enablers and Limitations | 6 |
| Strategic Plan Development Resources | 7 |
| Ownership and Coordination | 7 |
| Beyond the Strategic Planning Phase | 8 |
| The PPM Strategic Plan | 9 |
| Scope (Problem Definition) | 9 |
| Situational Analysis | 11 |
| Prioritizing and Developing Strategic Objectives..... | 13 |
| Development of Implementation Plan and Budget..... | 17 |
| Implementation and Monitoring | 18 |
| Financing and Resources Mobilization..... | 18 |
| Organizational Structure to Implement the Strategic Plan | 18 |
| Monitoring Implementation | 18 |
| Lessons Learned and Recommendations | 19 |

ACKNOWLEDGMENTS

The authors thank consultants Richard Lloyd and Ibrahim Tounkara, who participated in the situational analysis; SIAPS Mali; PPM staff; USAID Mali; workshop participants and key informants; and the document reviewers for their contributions to this report.

ACRONYMS

| | |
|----------|--|
| CMS | central medical store |
| HIV/AIDS | human immunodeficiency virus/ acquired immunodeficiency syndrome |
| KPI | key performance indicator |
| LMIS | logistic management information system |
| MOH | Ministry of Health |
| MOHFW | Ministry of Health and Family Welfare |
| PPM | Pharmacie Populaire du Mali |
| SIAPS | Systems for Improved Access to Pharmaceuticals and Services |
| SOP | standard operating procedure |
| USAID | US Agency for International Development |
| WHO | World Health Organization |

EXECUTIVE SUMMARY

This document describes the techniques and experiences of and lessons learned from developing a strategic plan for the Pharmacie Populaire du Mali (PPM). Technical assistance providers, managers of pharmaceutical supply chain organizations, and consultants can adapt this information to suit local contexts and needs and apply it to their own public health pharmaceutical supply chain strategic plans. The Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program employed a systematic and structured approach to support PPM in developing its first strategic plan, including defining the scope and refining the task of developing a strategic plan through consultation with key stakeholders; conducting a national supply chain situational analysis that included country context (i.e., political, environmental, social, legislative, economic, and ethical factors); identifying gaps between the organization's mission and vision and the expectations of clients and stakeholders; prioritizing and developing strategic objectives; and action planning and budgeting.

INTRODUCTION

A strategic plan is a formal plan or guide to help an organization define its strategy or direction in response to external demands and environment factors and properly allocate its resources to pursue its mission. A strategy generally involves setting goals, determining actions to achieve those goals, and mobilizing resources to execute those actions¹. A strategic plan can strengthen an organization's ability to deliver goods or services and its business position in terms of financial sustainability, return on investment, and risk minimization.

The processes and principles of developing a strategic plan are well known and have been applied in a variety of settings, including health care organizations. SIAPS applied the same principles and processes to help Mali's Ministry of Health (MOH) develop a strategic plan for PPM, which is the country's central medical store (CMS).

Central Medical Stores

In most developing countries, the CMS is used to organize the public medicines supply. Most countries consider the availability of medicines a matter of national security, and therefore, the CMS is usually viewed as a strategic entity within the public health sector that focuses on health commodities procurement, storage, and distribution. In some countries, special MOH authorization is required for those who are not directly involved in public health facilities to access the CMS.

Through procurement, receipt, and storage, a CMS ensures that appropriate quantities of safe, efficacious, and affordable health commodities are constantly available and properly distributed to public health facilities in a timely and cost-efficient manner. Key warehousing functions include receiving and storing stock, maintaining inventory, and managing distribution. CMSs are either government departments or government-owned not-for-profit entities that can be autonomous or semi-autonomous, and they do not sell the commodities they manage. Over time, CMSs have undergone transformations in terms of design and model and have shifted their business focus from receiving subsidies to sales and services.

The CMS Business Environment

Depending on how it is designed, a CMS can operate as a central warehouse that serves the entire country or have a tiered structure with multiple levels of service modeled on the structure of the public health system².

A CMS may serve the general population (without any form of delineated clientele, market, or service agreement), or it may only serve preselected clients (e.g., central or local government health centers; public institutions, such as educational facilities; not-for-profit public health

¹ <http://www.som.cranfield.ac.uk/som/dinamic-content/media/aimss-managementguide.pdf>

² Management Sciences for Health, 2011: Managing access to medicines and other health technologies.

facilities). A CMS is accountable to different government sectors, its clients, development stakeholders and partners, and donors.

Business models differ among CMSs. For example, some countries provide medicines at no cost by subsidizing or purchasing all products that are distributed by the CMS, while others sell some products and distribute others for free.

Regardless of its structure, business model, and environment, a CMS coordinates and collaborates closely with key stakeholders, including government ministries, clients, development partners, suppliers, donors, nongovernmental organizations, vendors and service providers, competitors, and policy makers.

Table 1 compares CMS administrative/governance structures, business relationships, and key stakeholders among selected countries; all of these factors must be taken into consideration when developing a strategic plan³.

³ The information summarized in the table was collected from respondents who provided information direct to the author.

Table 1. CMS Business Environment by Country

| Area of focus | Details | Countries | | | | |
|--|---|---|--|--|-------------------------------|--------------------------------------|
| | | Bangladesh ⁴ | Namibia ⁵ | Sierra Leone ⁶ | Swaziland ⁷ | Tanzania ⁸ |
| Administration | CMS autonomy status ⁹ | Not autonomous | Not autonomous | Autonomous | Not autonomous | Semi-autonomous |
| | Chain of command: To whom does the CMS report? | Directorate General Health Services | Directorate of tertiary health care and clinical support service (MOH and social services) | MOH and board of directors | Health services director | MOH and board of directors |
| Sales and related fees (sales or service fees) | The price mark-up is used for commodity sales | No mark-up charged | No mark-up charged | Not currently, but CMS is targeting 20% (as per CMS plans) | No mark-up charged | 18% of the purchase price |
| | A percentage of the service fee is donated to development programs | No fee charged | No fee charged | Not currently, but CMS is targeting 10% (as per CMS plans) | No fee charged | 6% of the product value |
| | Annual sales turn over | Not applicable (health commodities are free) | 68.4M USD (2015 data) | 20M USD | Data not available | Estimated at approximately 100M USD |
| Stakeholders and strategies | Restriction in types of clients (e.g., public health facilities only) | Only public health facilities | Public, faith-based, and other recognized institutions | Targeting no restrictions | Only public health facilities | Public and faith-based organizations |
| | Presence of a CMS strategic plan | Not currently but working on problems identified by assessments and reviews | Annual plan but no medium or long-term strategic plan | Yes | Yes | Yes (short, medium and long term) |

⁴ Central medical stores department – Bangladesh.⁵ CMS – Namibia.⁶ National pharmaceutical procurement unit - Sierra Leone.⁷ CMS – Swaziland.⁸ Medical Stores Department – Tanzania.⁹ The autonomy in the context refers to organization being independent to make decisions on health supply chain management issues and having to directly report to the MOH in all areas, e.g., planning, budgeting, hiring, and other administrative decisions.

| Area of focus | Details | Countries | | | | |
|---------------|------------------|---|--|---|---|--|
| | | Bangladesh ⁴ | Namibia ⁵ | Sierra Leone ⁶ | Swaziland ⁷ | Tanzania ⁸ |
| | Key stakeholders | Ministry of Health and Family Welfare (MOHFW); development partners (World Bank, USAID, Department for International Development); technical assistance providers (e.g., SIAPS); suppliers/vendors; procurement entities within MOHFW | Ministry of Health and Social Services and its key directorates (e.g., special programs and primary health care); Global Fund; USAID; Centers for Disease Control and Prevention | MOH, Department for International Development, European Union, United Nations Children's Fund, World Bank, United Nations Population Fund | MOH, MSH, Clinton Foundation HIV/AIDS Initiative, UNFPA, Population Services International, WHO | Government health facilities, MOHFW, faith-based organizations, nongovernmental regulatory authorities |

STRATEGIC PLANNING

The previous section shows that CMSs can vary greatly among countries in terms of governance, stakeholders, and financial resources. Despite these differences, the key areas of focus when developing a CMS strategic plan should include:

- Aligning the CMS supply chain objectives with the overall public sector health supply chain strategies
- Ensuring that health commodities are readily available to health facilities and other clients through an uninterrupted supply chain
- Minimizing waste and losses
- Improving business development and financial viability to support organizational growth and the ability to respond to adverse situations without affecting the overall supply chain performance
- Meeting all client needs and expectations

Key Considerations When Developing a CMS Strategic Plan

A good strategic plan requires a comprehensive understanding of the current situation, including challenges/gaps, their root causes, and their related contributory factors; an analysis and selection of appropriate viable intervention option(s) to address the gaps; and an implementation plan that clearly articulates the gaps, solutions, and feasible improvement options¹⁰.

The framework of the strategic plan should focus on improving key public health supply chain functions, such as warehousing, storage, and distribution. Lean management techniques help promote the active elimination of waste and promote continuous improvement.

A good supply chain strategy should have clarity in terms of documented vision, mission, goals, and the pathway for improving the CMS.

To promote ownership and sustainability, the strategic plan should be developed through a collaborative, consensus-based process involving key stakeholders and partners¹¹. The process typically starts with stakeholder mapping of the system, indicator-based measurements of system performance, and a cost analysis. Based on the findings, a number of options may be developed for consideration. The options are analyzed, and a recommendation for action is made, which is

¹⁰ http://fisher.osu.edu/supplements/10/1470/All_Articles.pdf

¹¹ As the Head (President Directeur General) of Mali PPM, Dr. Abdrahamane Tounkara once put it, 'we need to start out by making sure there is a strategic plan or some kind of document developed consultatively by partners, that lays out the vision and pathway for moving from the existing situation to an improved future situation'.

then vetted with stakeholders to secure their commitment to a course of action that is central to success¹². The approach can be adapted and customized to suit the local context and needs.

When developing a long-, medium-, or short-term strategic plan, it is important to define the organization's direction in terms of satisfying clients, internal growth, resilience, and preparedness for adverse events. The CMS vision, mission, and primary goal must be clearly spelled out and understood by key internal and external stakeholders.

Function and Capabilities

In addition to key supply chain functions, there are specific strategies that a CMS should focus on to deliver quality results continuously and sustainably, including:

- Aligning CMS supply chain objectives to the overall national health supply chain strategies
- Addressing supply challenges based on the root cause analysis, context, and feasibility of the proposed intervention
- Increasing the level of service to meet client needs
- Improving organizational efficiency to minimize waste and losses
- Improving business and financial growth
- Strengthening human resource management and development
- Responding to changes in the supply chain (e.g., technology, emerging markets, risk management)

Enablers and Limitations

Strategic planning must be realistic and take into account factors that may facilitate or limit the process. Common challenges that CMSs face include:

- Financial limitations
- Human resource and organizational capacity
- Legislative limitations
- Unrealistic client expectations
- Stakeholder coordination

¹² The SIAPS approach uses a step-wise, structured options analysis process that is conducted in coordination and collaboration with stakeholders.

Strategic Plan Development Resources

Like any planning exercise, strategic plan development requires resources, including technical skills, time, and funding.

Technical Skills

Developing a supply chain strategic plan requires input from stakeholders with expertise in supply chain management, pharmaceutical services, laboratory and biomedical sciences, public health, finance and accounting, and organizational development. These experts may participate as a group or at different stages of the development process. The process should be facilitated by an external facilitator who has a good understanding of public health supply chain management systems and business management.

Time

Developing or expanding a strategic plan is a systematic process. The process needs to be initiated when there is consensus about the need within the CMS and among key partners. In addition, the process is time consuming, and consultations may be needed at various points.

Funding

Like time, funds are key to ensuring that appropriate technical resources are mobilized and adequately compensated and that proper logistical arrangements are in place to achieve the goals of the project. It is important to set aside a realistic budget for the strategic plan development process.

Other Required Resources

- Information: literature about the country's health and economic situation, diseases and health programs, and business environment and any reports that will be relevant for the strategic planning process. In addition, prior to initiating strategic plan development, key logistics data should be collected for review.
- Materials: information technology, such as computers, printers, and telecom facilities.

Ownership and Coordination

Although the process may be facilitated by an external professional and include participation by stakeholders and partners, it should be owned by the CMS.

Beyond the Strategic Planning Phase

Appropriate, measurable standards, including key performance indicators (KPIs) and benchmarks, should be put in place and used to monitor the implementation of the strategic plan. KPIs can cover design, function and process, outputs, outcomes, and impact. KPIs should include high-level, management, and operational indicators and can be revised as needed. When implemented with a continuous quality improvement approach, the metrics help inform the revision of the strategic plan as needed.

THE PPM STRATEGIC PLAN

This section provides guidance on key steps in developing a strategic plan based on PPM's experiences¹³. The process is divided into five key steps, which are summarized in figure 1.

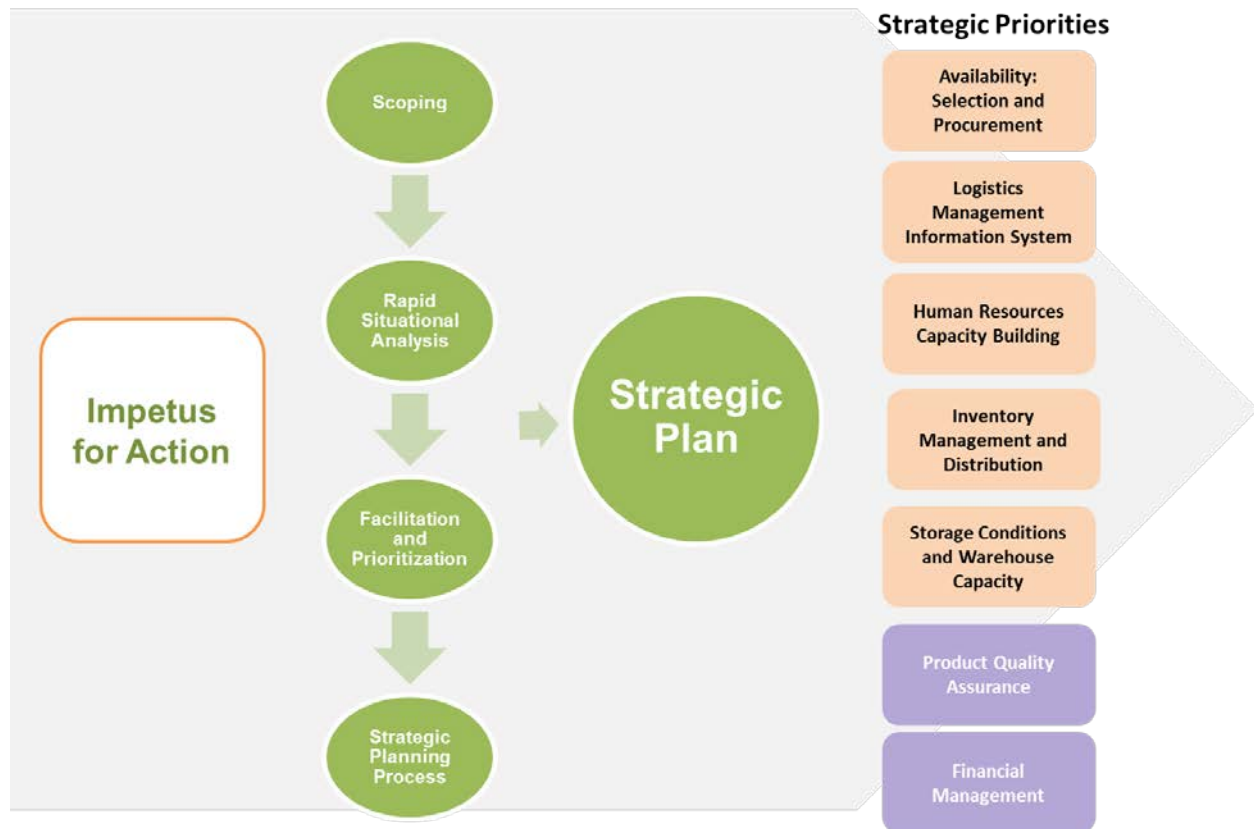


Figure 1. Strategic plan development process. Source: SIAPS

Scope (Problem Definition)

To be effective, a strategic plan must solve identified challenges. Therefore, the CMS needs to first recognize the challenges that affect the organization's ability to meet expectations. In consultations with key stakeholders, the CMS needs to identify or refine its key objectives, commitments, and values. The scope can be developed through consultations, structured focused group discussions, one-on-one interviews, or brainstorming sessions. The process should include:

¹³ SIAPS. 2014. Translated 2015. *2015–2019 Strategic Plan for the People's Pharmacy of Mali*. Submitted to the US Agency for International Development by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program. Arlington, VA: Management Sciences for Health.

- An overview of customer satisfaction in terms of commodities availability; customer service; the CMS financial and compliance situation; client expectations; and whether the CMS understands those expectations (e.g., communication, coordination, availability of supply chain information) is critical.
- Timing: The timing for deciding or framing the need for a strategic plan is very important. There must be an expressed need from a CMS or key stakeholders.
- Required expertise: Stakeholders with varying perspectives and levels of expertise must assess and agree that strategic plan development is feasible.
- There should be a fair mix of representatives within CMS and stakeholders so that the thought process when identifying the gaps and the need for a strategic plan (and its key areas of improvement) is not biased.
- Financial support and facilitation resources must be available before beginning the process.

Table 2 summarizes how the scope of work for the PPM strategic plan was developed.

Table 2. Development of the Scope of Work for the PPM Strategic Plan

| Focus | Details | Timeline |
|---|--|--|
| Brainstorming | <p>The initial discussion between SIAPS and PPM was based on the request by PPM for SIAPS to support the development of standard operating procedures (SOPs). The need to update PPM's SOPs was identified as part of an assessment to determine areas that need to be addressed to improve PPM efficiency and compliance to best practice and standards.</p> <p>Discussions and a visit to PPM headquarters made it clear that PPM has bigger governance, capacity, and process challenges than an SOP revision alone could address. Therefore, SIAPS advised PPM to explore the possibility of performing a detailed evaluation of PPM's position on the country's overall public health supply system.</p> | Less than one week |
| Consultation with key stakeholders | <p>With the aim of understanding clients' perceptions and obtaining buy-in from key partners, SIAPS organized a half-day stakeholders' workshop to collect feedback on PPM's services and performance. Key stakeholders included donors (USAID, European Union, Global Fund, charitable organizations); technical partners (Plan, Program for Appropriate Technology in Health, Population Services International); development partners (United Nations Development Programme, United Nations Children's Fund); and other departments within the government (department of pharmacy, directorate of health services, ministry of finance and planning). The workshop confirmed the need for a holistic approach to supporting PPM and identified the following areas to be addressed:</p> <ul style="list-style-type: none"> • Lack of coordination with programs (e.g., malaria; maternal, newborn, and child health; HIV and AIDS) in terms of | Two to three days, including preparing for and conducting the workshop |

| Focus | Details | Timeline |
|-------|--|----------|
| | <ul style="list-style-type: none"> commodities distribution • Incidences of PPM being non-responsive to programs • Outdated SOPs • Limited capacity of PPM staff to perform their duties and meet their responsibilities • Gaps in the overall PPM strategic guidance to strengthen supply chain performance and client satisfaction (ensuring product availability) • Poor warehouse conditions • Limited storage, infrastructure, and asset management capabilities • A lack of understanding on PPM costing parameters to donated commodities (e.g., malaria and HIV commodities) and the need to improve PPM's financial capacity and performance • The need to strengthen PPM's logistics management information system (LMIS) to improve the availability of supply chain data, its human resources capacity to handle supply chain duties, and its financial system and business performance • The need to improve PPM's capacity to ensure good-quality products | |

Discussions with PPM staff and stakeholders led to the conclusion that an in-depth analysis of the PPM situation was necessary to inform priority areas for strengthening PPM's supply chain performance. At this stage, there was consensus that PPM would need a strategic plan to address the identified challenges.

Situational Analysis

Once clear agreement to develop a strategic plan for PPM was reached, the next step was to determine PPM's current situation based on its performance (financial, operational, and service level); its mission and vision; and its expectations of staff and stakeholders. The information gathered while developing the scope of the strategic planning process helped to refine the areas of focus and clarify the types of information needed. Three key areas of focus were identified:

1. Supply chain performance, including supply chain data, data definitions, and sources
2. Management and coordination of stakeholders, including:
 - Identifying key stakeholders
 - Conducting a stakeholder analysis by adapting the partnerships for health reform approach¹⁴
 - Holding stakeholder consultations/forums
3. Financial and asset management analysis

¹⁴ <http://www.who.int/management/partnerships/overall/GuidelinesConductingStakeholderAnalysis.pdf>

Table 3. Situational Analysis Process

| Focus | Details | Timeline |
|--------------------------|---|---------------------|
| Assessment of PPM | <p>This was done by SIAPS with support from PPM. The process included:</p> <ul style="list-style-type: none">• Reviewing various reports, including assessments, audit reports, guidelines, previous SOPs, and external documents• Collecting inventory, procurement, financial, storage, transportation, and information system data and reports and various tools used by PPM• Physically observing PPM facilities, including the PPM central warehouse, compounding unit, other storage facilities in Bamako, points of service and regional warehouse, regional health directorate, and community health center <p>SIAPS analyzed the data and information using various tools, models, and projections. In addition, supply chain modelling and validation of specific information and data were performed. Examples of these analyses include:</p> <ul style="list-style-type: none">• Supply chain environment<ul style="list-style-type: none">○ Stakeholders analysis○ Strengths/weaknesses/opportunities/threats analysis○ The country's pharmaceuticals market situation• Supply chain operations<ul style="list-style-type: none">○ Inventory analysis, including levels, number of items, ABC analysis, weight volume analysis, product flow, turnover, lead times, service level, expiration dates, and stock modeling○ Storage and space analysis, including options for the new warehouses and improvements needed○ Transportation and vehicles○ Quantification and procurement processes and management○ Management information systems, including tools, processes, and functions• Financial and asset analysis<ul style="list-style-type: none">○ Cash flow○ Financial ratios○ Profit analysis○ Spending analysis○ Asset management system | One to three months |

The preliminary findings of the situational analysis were communicated to PPM. Through a series of discussions and validations, PPM and SIAPS agreed to focus on strengthening PPM by strategizing on how to improve PPM based on the information gathered.

Prioritizing and Developing Strategic Objectives

Key interventions were prioritized based on the findings of the situational analysis. This followed a two-steps approach: an internal workshop with SIAPS and PPM followed by a second workshop that also included key stakeholders.

Participants at the first workshop discussed the findings, possible causes, and potential ways of addressing the challenges given PPM's capacity, finances, policies, and regulations and the overall supply chain environment in Mali. The findings were categorized based on possible intervention areas, such as operational or financial or areas addressing the surrounding environment. SIAPS applied various scenarios and options to identify the best way of framing the strategic plan that could be acceptable to all stakeholders, particularly PPM. During this internal workshop, the findings were clustered as follows:

- Supply chain operations aimed at addressing
 - Supply chain performance based on selected KPIs
 - Service-level improvements
 - Efficient operations
- PPM business position/analysis, including financial projections, asset management, financing strategies, and overall business growth
- The implications of the supply chain environment, including policy, governance, accountability, good client-business relationships, and stakeholder management

In consultation with PPM and key stakeholders, seven strategic objectives were identified as priorities in addressing the current PPM challenges:

1. Improve commodity availability at PPM by strengthening product selection, quantification, and procurement
2. Improve health facilities' access to pharmaceuticals
3. Improve storage capacity and conditions
4. Strengthen PPM's LMIS to improve the availability of supply chain data
5. Strengthen PPM's human resources capacity to handle supply chain duties
6. Improve PPM's capacity to ensure good-quality products
7. Strengthen PPM's financial system and business performance

Table 4 summarizes the challenges identified in the situational analysis and the proposed responses to improve PPM.

Table 4. Summary of the Identified Challenges and Proposed Interventions

| Key Areas | Findings/Challenges | Proposed Interventions |
|-------------------------|---|--|
| Supply chain operations | Product selection: A review of PPM inventory lists showed that the lists have not been reviewed and updated recently, making it difficult to have effective and efficient plans for inventory management. In addition, there is no product category that conforms to standards. | Improve commodity availability at PPM by strengthening: <ul style="list-style-type: none"> • Product selection, catalog development, and periodic review and updating of the product list • Quantification systems in collaboration with other key stakeholders • Procurement systems, including tender processing, vendor prequalification, and framework contracts • Coordination with the Ministry of Finance |
| | The review found out that PPM was not actively involved in the quantification of program commodities but was involved in procurement. This gap needs to be addressed so that PPM can be an integral part of the quantification system. | |
| | A review of PPM's procurement process showed a robust system that can be improved by managing contracts, improving vendors' delivery schedules, and introducing framework contracts. In addition, procurement could be improved if regional warehouses were more involved in procurement planning. | |
| | An inventory analysis showed that PPM has a high inventory volume at the central level (approximately 80%). There were high variations in inventory levels for critical commodities, increasing the risk of expirations and stock-outs. In addition, the stock holding cost was high. The ABC analysis showed that even category A items were at risk of stock-outs. Further analysis showed that critical information, such as products and package dimensions, data on deliveries and receipts, location of different products in the warehouses, stock audit reports, and inventory control protocols, was missing; this information is very useful when planning. | Improve health facilities' access to pharmaceuticals by: <ul style="list-style-type: none"> • Improving inventory management to ensure that commodities are available where they are needed • Improving PPM's distribution and transport management to ensure that commodities reach their intended destinations • Establishing a PPM client service charter to enhance customer/client focus • Improving the capacity of regional warehouses to increase sales and service • Establishing a special unit/department to focus on priority programs, such malaria, family planning, and HIV/AIDS |
| | An analysis of the distribution system showed that the current demand-driven distribution procedure was adequately scheduled and managed; however, if PPM service levels were to increase based on overall improvement of the PPM supply chain, the existing routes, fleet, and transport coordination would be insufficient. | |
| | The information management system was seen as a critical area that requires significant attention. Although internal transactions were being performed in accordance with SOPs, logistics data were not readily available; the quality of the data was not validated; and there was a need to upgrade the entire management information system, starting with data sets definition, data analysis and use for decisions, and tools for managing information. In addition, limited available data has deterred management from making critical decisions. | Strengthen PPM's LMIS to improve the availability of supply chain data by: <ul style="list-style-type: none"> • Establishing a logistics management unit that will be responsible for managing the LMIS • Procuring a new warehouse management system that will track and capture all |

| Key Areas | Findings/Challenges | Proposed Interventions |
|---------------------------------|--|---|
| | Storage practice was another area in need of improvement. The existing storage facilities did not meet the minimum requirements (most were extensions of the original warehouses built more than 50 years ago). In addition, store arrangements, documentation, and quality and safety measures did not meet the standards. | warehouse transactions and necessary performance monitoring indicators Improve storage capacity and conditions by: <ul style="list-style-type: none"> Constructing a new, state of the art central warehouse in Bamako capable of handling up to 5,000 pallets at a time Developing a comprehensive warehouse maintenance program for all PPM warehouses Improving storage practices and regional warehouse management capacity |
| Finance and assets | <p>PPM warehouse networks and other key elements (e.g., size, building conditions) were not adequately documented as per materials management regulations.</p> <p>A cash flow analysis showed that PPM depends almost solely (92%) on sales of procured commodities. Further analysis showed that PPM's income dropped by 12% and profit dropped by 31% from 2010 to 2012, although overhead costs remained constant. These results could be explained by internal conflict, and the trend is expected to reverse as the country stabilizes.</p> <p>Price and charge analyses showed a gap in PPM's costing structure, and the factors used to determine service fees for donated products or set new prices were not documented.</p> <p>Further analysis showed that PPM's debt collection from clients takes a long time, and this jeopardizes PPM's ability to efficiently manage its working capital.</p> <p>A stock turnover analysis showed that PPM is tying up significant capital by having slow stock turnover, with an average turnover of 16 months.</p> | <p>Strengthen PPM's financial system and business performance by:</p> <ul style="list-style-type: none"> Improving financial efficiency and compliance Boosting PPM's working capital |
| Supply chain environment | <p>The analysis showed that PPM commands approximately half of the Mali's overall potential pharmaceutical business.</p> <p>Health expenditures in Mali have been increasing linearly for 15 years, and PPM needs to position itself to grow and fulfil its potential.</p> <p>An order fulfilment analysis showed that PPM service levels ranged from 42% to 57%. This indicates that although PPM commands approximately 50% of the business volume, the service level could be improved.</p> <p>A stakeholder analysis showed that PPM interacts with a wide range of stakeholders, including vendors, development partners, donors,</p> | PPM's supply environment can be improved by addressing supply chain operations gaps, making financial and asset management improvements, and addressing human resources capacity and the quality assurance of PPM products (i.e., the seven proposed strategic objectives for PPM to improve its supply chain environment). |

| Key Areas | Findings/Challenges | Proposed Interventions |
|----------------------|---|--|
| | <p>competitors, MOHs, transportation, finance and planning, and environmental. In addition, there were several other key departments within the MOH, and a big challenge for PPM is to manage and coordinate all stakeholders while executing day-to-day operations.</p> <hr/> <p>An analysis identified PPM's strengths, weaknesses, opportunities, and threats.</p> | |
| Cross-cutting | <p>A situational analysis determined that PPM staff at all levels need capacity building in areas of service, including leadership, management, and day-to-day warehouse operations.</p> | <ul style="list-style-type: none">• Strengthen PPM human resources capacity to handle supply chain duties• Improve PPM's capacity to ensure good-quality products |

Development of Implementation Plan and Budget

A detailed plan to meet the strategic objectives and the overall goal was developed by a small group of SIAPS and PPM staff with support from a consultant. Table 5 outlines the key steps of the process.

Table 5. Implementation Plan and Budget Development

| Focus | Details | Timeline |
|---------------------------|---|---|
| Activity plan development | Based on the seven strategic objectives, a detailed activity plan was developed jointly by SIAPS, PPM, and an external consultant who focused on finance and business management. | |
| | The process involved consultations on the activities, timelines, and required technical resources. In addition, selected stakeholders helped to explore the feasibility of the proposed activities. | Approximately two months |
| Budget development | The budget development process followed the normal budgeting process. PPM, SIAPS and key stakeholders were consulted throughout the process. | |
| Consensus and approval | Once the detailed activity plan and budget were developed, PPM's five-year strategic plan was disseminated to key stakeholders under the leadership of the MOH to review and build consensus that the strategic plan would meet the needs of both PPM and stakeholders. | A one-day consensus workshop involving all key stakeholders |
| | Upon review and consensus, the strategic plan was approved by the MOH. | |

IMPLEMENTATION AND MONITORING

Successful strategic plan implementation depends on the availability of financial and technical resources. The PPM strategic plan development and approval process showed that if the process included consultations with all stakeholders, there is a better chance that partners will commit to funding the plan's implementation.

A detailed implementation plan of activities to respond to strategic priorities is needed to create an accurate budget. In the case of PPM, activities relevant to each strategic objective were developed and priced based on the budgetary assumptions that were relevant during the strategic plan development period.

Several factors should be considered when developing and implementing a strategic plan.

Financing and Resources Mobilization

Planning for financing the strategic plan should start during the development phase by engaging stakeholders and particularly the donor community. This engagement is critical to ensuring that the plan fits into national priorities and responds to donor interests as well as those of other development partners. This activity needs people with planning, advocacy, and budgeting ability and expertise as well as commodity management and supply chain experts. During the development of PPM's strategic plan, an all-inclusive and consultative approach was used to ensure that key stakeholders and the donor community were fully engaged into the process.

Strategies to solicit funding and consensus building to obtain funds must be owned by the CMS and the government. Stakeholder involvement, targeted meetings and presentations, and the inclusion of strategic plan activities within MOH activities plan helps ensure that sufficient implementation funds are allocated.

Organizational Structure to Implement the Strategic Plan

When implementing a strategic plan, the core tasks should be assigned to CMS leadership with technical and financial support from internal and external technical partners and funders, respectively. In the case of PPM, a task force was created to support PPM in implementing its strategic plan.

Monitoring Implementation

A clear implementation plan should be developed and approved as part of the management tools that CMS leadership and key stakeholders will use to monitor the progress and outcomes of the strategic plan's implementation.

LESSONS LEARNED AND RECOMMENDATIONS

During the course of developing and implementing the PPM strategic plan and conducting a literature review, several lessons were learned:

- CMS strategic plan development is an important activity for aligning organizational and overall system priorities.
- Advocating for and encouraging stakeholders to assess the supply chain system as a whole can generate interest beyond the initial impetus for action and help meet the demand for additional technical, financial, and material resources.
- Supply chain interventions can be leveraged as entry points that lead to opportunities in other areas (e.g., contributing to improving rational medicine use and strengthening regulatory affairs).
- There is limited information on developing a CMS strategic plan or lessons learned from that process. Theoretical principles and processes for developing a strategic plan are similar; however, there are unique features of the CMS environment that need to be considered when developing a CMS strategic plan. The peculiarities of a public-sector CMS cannot be ignored.
 - Based on Mali's experience, the strategic planning process can be done (or replicated) in any other country or public health system provided that the supply chain environment, stakeholders, and country context are well understood. An in-depth analysis of the environment is critical for success.
 - The process needs commitment and readiness from the organization and stakeholder consensus.
 - Leadership and ownership are critical to successful strategic plan development