The United Republic of Tanzania

MINISTRY OF HEALTH


John Snow, Inc.
Contract No. HRN-C-00-00-00010-00
TANZANIA: Country Strategic and Evaluation Plan

1.0 Executive Summary

Two important initiatives shaping interventions in the health sector in Tanzania currently are the integration of health service delivery and support systems, and the decentralization of management, planning, budgeting and implementation of these interventions. Any proposed intervention strategy for the public health sector must be consistent with the goals of these and other reform initiatives identified by the government of Tanzania. Specifically, the strategy for development and implementation of an integrated logistics system for essential health commodities described in this document directly supports Strategy 5: Central Support Systems under Tanzania’s Health Sector Reform Programme of Work for July 1999 – June 2002 with the ultimate goal of strengthening and facilitating the provision of health services to be more responsive to the needs of the people.

Key components of Strategy 5: that are addressed in this document include:

- support to the indent and capitalization programs;
- strengthening of the Medical Stores Department;
- development of a logistics MIS to support planning and decision-making in health commodity management, specifically quantification and forecasting of commodity requirements;
- capacity building and strengthening of PSU to fulfill mandate for management of essential health commodities under the Pharmaceutical Sector Master Plan;
- capacity building and support to regional, district and health facility staff to improve management of essential health commodities using consumption data and an established inventory control system
- coordination of current central and district level transport systems to improve distribution of essential health commodities

The strategy proposed in the CSEP will cover the period from October 2001 to September 2004. Thus, an intermediate term strategy had to be distinguished from the long term goals and objectives of the MOH for logistics system implementation. The document presents the long term goals and objectives, as well as the intermediate term strategy and objectives that can realistically be achieved for the duration of the CSEP. The long term goal and objectives are as follows:

Goal

Ensure availability of essential health commodities at all levels of the public sector health care delivery system through an integrated supply chain
Objectives

- Improve essential health commodity management at all levels of the public sector health care delivery system by designing and implementing a fully operational logistics system and logistics MIS that can manage increased categories and volumes of commodities

- Build individual and organizational capacity and capabilities for logistics system management and use of logistics MIS data at all levels of the Tanzanian public health sector

Given that integration of all health commodities into a functioning Logistics System is an ambitious goal, MOH and JSI/DELIVER propose to take an incremental approach to the implementation process, and integrate categories of commodities step by step, in the most logical and feasible manner possible. Integration will begin with incorporation of selected HIV/AIDS commodities into existing systems as the first phase. The intermediate term objectives that relate specifically to the HIV/AIDS commodity related interventions are as follows:

Intermediate Term Objectives

- Enhance the logistics system procedures and MIS to manage the flow of all essential drugs and integrate STI drug management into the indent and kit systems

- Improve availability of HIV test kits and supplies by designing and implementing a logistics system and MIS for HIV test kits and supplies to be integrated under the Diagnostic Services & Laboratory Section of the Directorate for Hospital Services

- Increase management efficiency and availability of condoms for STI/HIV prevention by streamlining distribution of condoms for STI/HIV prevention through the existing system for family planning condoms and facilitating distribution through non-clinical sites.

The interventions outlined in the document will consist of designing and implementing a logistics system and LMIS that builds on strengths of existing systems but re-engineers processes and procedures wherever the need arises. Developing a functional logistics MIS and enhancing users’ ability to apply information from the LMIS to improve other logistics functions including quantification/forecasting, budgeting, inventory control, storage and distribution through interventions aimed at building human capacity will form the crux of the strategy. A key criteria of the intervention is to enable full participation by the MOH throughout the design and implementation process. The design of interventions should also ensure that management capacity and capabilities in health commodity logistics are transferred to host country organizations and individuals.

Specifically, the strategy aims to ensure that the Pharmaceuticals and Supplies Unit (PSU) develops the skills, capacities and capabilities for leadership and coordination of logistics activities for all essential health commodities in the public health sector. Furthermore, the interventions aim to create a supportive environment for development of an integrated logistics system while ensuring that stakeholders at all levels develop the skills and capacities required to implement and maintain the logistics system.

The proposed MOH and JSI/DELIVER interventions will begin with a process mapping exercise intended to identify and fully document the strengths and weaknesses of the logistics systems designated for re-engineering during phase one of the strategy. The exercise will enable full participation of key MOH stakeholders in assessing the strengths and weaknesses of the existing systems and in re-engineering the system to ensure achievement of the stated goal and objectives.
The desired outcomes and monitoring indicators will be outlined in detail after the process mapping exercise has been conducted.

The proposed interventions, as detailed in the attached workplan in Annex 1, will begin with the process mapping exercise in January 2002 and will be at the stage of rollout and ongoing system improvement by October 2004. To complete the activities in the timeframe indicated, the strategy requires:

• The presence of a dedicated logistics officer within PSU with sufficient time and authority to assume the leadership and coordination role for integrated health commodity logistics;
• A JSI/DELIVER resident logistics advisor in Tanzania for the duration of the system design, rollout and strengthening period; and
• Periodic short-term technical assistance visits from JSI/DELIVER Washington for specialized activities defined in the workplan.

Variations in these requirements will not hinder accomplishment of the strategy, but will undoubtedly delay the design and implementation period, and thus limit any expected outcomes.

The proposed MOH and JSI/DELIVER strategy is both supportive of USAID/Tanzania’s role in the U.S.-Japan Common Agenda as well as of achievement of intermediate results under the mission’s Strategic Objective 1 (SO1). As part of the U.S.-Japan Common Agenda, the government of Japan, through JICA/Tanzania is committing to the purchase of HIV test kits and supplies for blood safety, sentinel surveillance and voluntary counseling and testing, STI drugs and supplies for syndromic management, and RPR kits for universal screening of syphilis in pregnant women. The U.S. government, through USAID/Tanzania’s funding of JSI/DELIVER, is providing the technical assistance to the MOH to design and implement a system to deliver the commodities to health facilities and customer end points. In addition, the MOH and JSI/DELIVER strategy is directly supportive of USAID/Tanzania’s Intermediate Result 2 (IR2), which is aimed at increasing provision of quality services. One of the objectives is to achieve results for IR2 by providing health system support in the areas of supervision, HMIS/surveillance, MSD/logistics, financing, personnel and incentives. The proposed strategy incorporates support of all these elements, and wherever possible, will include the same indicators as those selected by USAID/Tanzania.
2.0 Current Situation in Tanzania

2.1 Civil Service and Health Sector Reform in Tanzania

Tanzania’s public health system has been subject to substantial changes resulting from implementation of civil sector reforms since 1991 and health sector reforms since 1996. Civil Service Reforms were initially aimed at restructuring and reducing the role of the central government, and increasing the role of local governments, and are now focusing on capacity building and improving the quality of public services. One consequence has been a devolution in decision making and management to district councils, which are overseen and supported by regional councils. The central MOH is responsible for developing policy guidelines and setting standards to ensure quality of health services. The regions assist district councils in interpreting and implementing the guidelines. Similarly, health staff qualification requirements at regions and districts are determined by the MOH, but district councils select, coordinate and budget for training and supervision of health staff performance at local levels.

In addition to supporting the goals of civil service reform, health sector reforms aim to improve responsiveness of the health sector to the needs of the people, improve quality of services and increase equity in accessibility and utilization of health services. Results of these reforms specifically pertaining to logistics include integrated distribution and storage of most health commodities from the central to district levels, implementation of a national, integrated Health MIS, and separation of distribution and supervision functions at the district level. In line with the spirit of decentralization, commodity management of essential drugs at health facilities is in the process of being transformed from a “push” to a “pull” system through the piloting of the indent system in five districts. Similarly, at district and regional hospitals, a pull system is being implemented along with a “cash and carry” system to recover 50% of drug costs, which are managed through a Drug Revolving Fund (DRF) at the hospitals.

Linking in with HSR are activities aimed at implementing Tanzania’s National Drug Policy. Enhanced performance of the pharmaceutical sector is one specific goal of the policy and achievements to date include:

- Transformation of the former central medical stores into Medical Stores Department (MSD), an independent organization with financial and managerial autonomy from the MOH. MSD is responsible for procurement, storage and distribution of all essential health commodities in the public sector.

- Establishment of the Pharmaceuticals and Supplies Unit (PSU) as the central drug management unit in the MOH. PSU was envisaged to oversee and manage a wide variety of activities including increasing pharmaceutical manpower in the health sector, ensuring rational drug use, improving commodity management (including collection and use of logistics data to forecast requirements) and enhancing quality assurance. PSU also has a key role of advising ministerial functions in pharmaceuticals and coordinating between the MOH, MSD and other pharmaceutical partners in the public sector.

PSU has not reached the stage where it has the capacity to perform as envisaged. One challenge has been insufficient manpower of pharmacists throughout the health sector, affecting PSU’s ability to increase the number of its staff. Another challenge is the lack of an information system to track the use and stock levels of health commodities in the public sector. Without this information, the PSU is
unable to make informed decisions on commodity supply and management. Furthermore, as PSU oversees implementation of the capitalization system for drug management at hospitals and the indent system for drug management at primary health care facilities, it is crucial that PSU should be able to access data to facilitate decision making on forecasting, procurement and supply of essential health commodities in the public sector.

**2.2 Structure of Tanzania Health Care Delivery system**

PSU is responsible for coordinating and overseeing effective management and use of health commodities to all primary and secondary health care facilities in mainland Tanzania. Health services on the mainland of Tanzania are provided through:

- Tertiary care facilities: 17 regional and 5 referral hospitals
- Secondary care facilities: 114 district hospitals
- Primary care facilities: >300 health centers and <4000 dispensaries

**2.3 Commodity Security Policy Issues**

The demand by policy makers in the MOH for an integrated logistics system as a means of ensuring product availability of all essential health commodities at health facilities is increasing as HSR initiatives emphasize the need for provision of quality health services.

Several MOH programs and donors are already beginning to explore various strategies to increase commodity availability. Left to implement such strategies alone, each of the programs would likely select different types of commodity management systems, thus posing a significant challenge to integrated management of health commodities in the public sector at a later point in time.

Since integration has been a focus of the health sector for several years now, guidelines and structures that are supportive of an integrated logistics system already exist. The following are examples of some structures that could provide a foundation for a strategy to build and implement an integrated logistics system for health commodity management:

- **High visibility and demand for logistics at the policy level.** The recognition by key policy and decision makers within the MOH and key donor partner organizations of the need to develop an effective, integrated logistics management system for health commodities is increasing and is an enabling factor for committing human, financial and organizational resources and time for logistics interventions.

- **A regular mechanism to coordinate MOH and donor budgeting and planning activities.** The annual stakeholders consultative meetings provide an effective mechanism for coordinated stakeholder budgeting, financing and planning for availability of health commodities in the public sector.

- **Integration of commodities into National Essential Drugs List (NEDL).** For the first time, the revised NEDL will include all contraceptive commodities used in the country and all essential diagnostic agents required for each level. Thus, all essential health commodities consumed, stored and distributed throughout the public sector will have been added to the NEDL.
• **Integrated national supervision guidelines.** Similarly, the national supervision guidelines that are used at all levels of the health care delivery system have recently been revised to include a checklist of logistics management tasks for all commodities. This will promote integrated supervision of logistics functions for all commodities rather than for individual vertical programs.

However, there are several organizational and policy issues that must be addressed before implementation of an integrated logistics system. Unless advocacy and policy initiatives address and resolve these issues, they are likely to pose a challenge to logistics system implementation. Some pertinent examples include:

• **PSU’s decision making authority is not conducive to achievement of its mandate.** PSU, the unit tasked with leadership for logistics system implementation does not have the level of authority equivalent to a Directorate, but is tasked with overseeing commodity and logistics related interventions across several different Directorates.

• **Some reform goals may impede logistics best practices without advocacy and planning.** The goals of some of the civil service and health sector reforms might pose a challenge to achievement of effectiveness and efficiencies in logistics. For example, decentralized procurement could lead to higher drug prices and reduced drug quality. Integration of all health management information systems could lead to the loss of logistics data for decision making.

• **Human Resource capacity is currently insufficient for implementing and maintaining a fully functional integrated logistics system.** In general, the health care delivery system is characterized by shortages of staffing at most levels, outdated or non existent job descriptions for lower level staff, and no processes to match health provider skills to required tasks. PSU in particular requires a substantial increase in staff to achieve its existing mandate and add oversight of integrated logistics functions to that mandate.

### 2.4 Product Availability/Commodity Security Situation

The product availability/commodity security situation varies for the different categories of commodities in Tanzania. Given that much of DELIVER’s past work was related to contraceptives and much of the current and future work is going to be dealing with selected HIV/AIDS commodities, summaries of product availability and commodity security for only those categories are provided below.

#### 2.4.1 Essential Drugs and HIV/AIDS commodities

The assessment of product availability and security was conducted for the four categories of commodities listed below. Although other commodities are important to the strategy, including TB drugs and vaccines, the assessment was limited to the categories of commodities that will receive the major thrust of attention under the proposed strategy.

- Essential Drugs distributed under the indent and kit systems.
- STI Drugs for syndromic management
- HIV Test Kits for blood safety, VCT and clinical diagnosis
- Condoms for STI/HIV prevention.
A synopsis of product availability for the four categories of commodities follows:

- **Product availability of essential drugs under the kit system has been recognized as being problematic for several years now.** Since the kit contents are designed to meet drug needs for the whole country, and there are significant variations in morbidity between different geographic regions, a chronic problem is that regions are continuously stocked out of certain products and overstocked in others. Not only is the supply for the high moving essential drugs insufficient to meet demand, overstocks result in high levels of wastage and expiries or require use of scarce transportation resources for redistribution to avoid wastage. Recognizing the problem, the MOH and DANIDA are transforming the pre-packed kit system into an “indent” or ordering system, where health facilities determine their own drug needs and place quarterly orders with MSD. Product availability assessments at health facilities visited in the pilot indent region in May 2000 indicated significant improvements in essential drugs availability and higher satisfaction by service providers related to the drug supply. Since the pilot only covered one of 20 regions, it is difficult to estimate how those results would translate to the entire country.

- Currently, the STI program using the syndromic management approach only exists in 12 of the 20 regions in the country. Trained service providers exist in these regions and commodities were provided by support from the EU in the past. STI drug availability in these 12 regions has been inconsistent, partly related to the lack of continuous financing for the commodities, and partly due to the lack of a functioning logistics system to manage their supply. The Situational Assessment conducted in May 2000 found over 50% of sites in the participating regions stocked out of the indicator STI drug. In the 8 regions where the STI program has not trained providers or supplied drugs, health facilities treat STI clients with drugs from the EDP kit.

- Availability of HIV test kits for any of the purposes is said to be extremely problematic, and may contribute significantly to the inability of the MOH to provide wide scale VCT services at district hospitals. JSI/DELIVER has not had an opportunity to visit public sector field sites where HIV testing is conducted so results are based on central level interviews and documents rather than survey data. As is the case with STI drugs, the problems with availability are a combined result of inconsistent financing and the lack of a functioning supply chain to manage the test kits.

- UNFPA is the primary supplier for all condoms distributed through the public sector in the country, regardless of use. However, once condoms arrive in the country, they are arbitrarily divided up, with 2/3 assigned to STI/HIV prevention and the remaining 1/3 for family planning. Availability of family planning condoms is easier to track since there is a logistics system for these commodities; condoms for STI/HIV prevention go to health facilities through a separate, parallel distribution system that has no record keeping, thus availability is difficult to assess. Data from the Situational Assessment indicated stockout levels between 10-30% at health facilities. Condoms for STI/HIV prevention and family planning are provided through PSI and its condom social marketing program outside of the public health sector.

The commodity security situation for the four categories of commodities is as follows:

- Programs currently responsible for these categories of commodities (PSU and NACP) are not able to estimate current and future requirements for these commodities. Forecasts are based on
outdated, inaccurate or no data and do not take into account quantities needed to ensure full supplies of the products. In addition, forecasts are short term and limited to one or two years at a time.

- Funding for essential drugs comes primarily from the MOH budget and is supplemented by donor funds. For HIV test kits, STI drugs and condoms, a complicated, multiple donor environment of short term financial commitments exists which leads to fragmented piecemeal funding for commodities. This situation jeopardizes product availability and precludes building long term forecasting capacity among host country program managers. A new initiative in 2002-03 is to include HIV/AIDS commodity requirements in the annual budget planning document.

- Medical Stores Department (MSD) has established procurement mechanisms in place for all essential health commodities in the country, including these commodities. Although past procurements have been characterized by delays, MSD is improving its capacity in this area. MSD’s ability to initiate procedures is highly dependent on disbursement of funds for procurement by the MOF.

- MSD is also the primary storage and distribution arm of the MOH for the four categories of commodities and has a well established distribution system that reaches districts. From districts to SDPs, another efficiently managed and well functioning distribution system – managed by the Central Transport Unit (CTU) and transport officers at each district – exists to transport these products to health facilities. Transportation for all commodities has not been integrated into these systems. Although essential drugs pass through this system, exceptions include HIV test kits, condoms for STI/HIV and STI drugs, which are sent from MSD to regions and then go in vertical program vehicles to districts and to SDPs. This parallel system is generally not as efficient as the one for other health commodities (MSD-CTU).

### 2.4.2 Contraceptives

- The family planning program is able to obtain data from the contraceptive LMIS and has the skills and capacity to estimate current and future requirements for contraceptives, and routinely conducts 3 year forecast estimates. However, although data from the LMIS used to be relatively accurate, timely and useful for forecasting future requirements, a combination of factors related to reforms and human resource capacity have resulted in the gradual decline in quality and timeliness of LMIS data, thus compromising the accuracy and usefulness of forecasting.

- Funding for contraceptives in the past has come primarily from USAID, UNFPA, KfW and DfID. In 2001-02, a new initiative of using pooled basket funding to purchase a full supply of Depo-Provera is being undertaken and will be monitored for replication for other contraceptives and health products. Currently sufficient funds for purchasing the other contraceptives have been committed by USAID and UNFPA.

- Medical Stores Department (MSD) has established procurement mechanisms in place for all essential health commodities in the country, including contraceptives. Given that in the past, procurements were conducted by donor agents, MSD’s first round of Depo-Provera procurement will be conducted in conjunction with technical assistance from Crown Agents and the procedures for procurement using basket funding will be clearly documented.

- MSD is also the primary storage and distribution arm of the MOH for contraceptives, which are distributed in the same manner as essential drugs described above (the MSD-CTU system).
2.5 Supply Chain Infrastructure

Under FPLM, the majority of logistics technical assistance was provided to the Reproductive and Child Health Section (RCHS) to implement and maintain the contraceptive logistics system and LMIS. As a result of changes in the MOH structure, MOH and donor priorities related to integration and decentralization initiatives, and the devastating health effects of HIV/AIDS on the country, the focus of DELIVER’s technical assistance efforts have shifted to PSU. The MOH and USAID’s request is to focus on HIV/AIDS commodities in the short term, and to work towards developing an integrated logistics system for essential health commodities in the long run.

A brief overview of key elements of the logistics systems is provided:

• **MSD currently houses most key logistics functions and will implement its MIS in March 2002.** MSD’s mandate includes responsibility for procurement, storage and distribution of MOH commodities. All health commodities are stored at its central warehouse and distributed to regions or districts via its seven zonal warehouses. To enhance commodity management and its ability to provide quality service to customers, MSD has already planned to implement an automated MIS in March 2002. MSD also has the mandate to procure all commodities that are funded through the MOH and pooled basket funding mechanisms. This includes essential drugs, some STI drugs and HIV test kits, Depo-Provera and expendable medical supplies.

• **Existing programs with logistics MIS and systems in place.** While currently there are no LMIS for essential drugs, STI drugs, HIV test kits, condoms for STI/HIV prevention, LMIS do exist with varying degrees of effectiveness for TB/Leprosy drugs, vaccines and contraceptives. Development of an integrated commodity management system will have the benefit of building on the strengths of existing systems rather than requiring the establishment of an entirely new system. Furthermore, because of the existing systems, logistics skills already exist at each level and can be re-organized and enhanced.

• **Well functioning transport management system.** At districts, a well functioning “transport matrix” exists for allocating resources for distribution and supervision of health facilities. Currently, essential drugs, contraceptives and vaccines are distributed using this system. The system has the capacity to include distribution of other health commodities, for example HIV/AIDS commodities.

• **Inventory control systems do not exist for most commodities.** There are no established minimum, maximum and emergency order stock levels for essential drugs, STI drugs, HIV test kits and condoms for STI/HIV prevention. In most cases for these commodities, products are either rationed by the higher level due to shortages in supply, or are ordered by the health facility using budget ceilings to determine quantities to order.

The following organogram depicts the funding partners for each category of commodities, and the flow of commodities once they enter the country.
2.6 Organizational Support for Logistics

The organizational support for logistics interventions may be the hardest to influence because of the complexity of relationships amongst the stakeholders. While high level organizational support for logistics exists at the central level of the MOH, that same support does not necessarily extend to all 114 districts, which will be primarily responsible for implementing the proposed interventions for logistics system improvement.

One of the primary goals of the civil service reform program is to reduce the staff burden on the government by reducing the overall number of staff whose salaries are paid by the Ministry of Finance and also by devolving human resource functions and responsibilities for local staff to regional and district administrations. Thus all employees at the Ministry of Health (in Dar-es-Salaam) are central level government employees, while all health staff at regions and districts are employed by the regional and district administrations.

One immediate consequence is that health staff in various technical areas at district levels are accountable primarily to the District Medical Officer rather than the technical supervisor from the level above (i.e., the District Pharmacist is accountable to the District Medical Officer rather than the Regional Pharmacist). Another consequence that is likely to become more important as decentralization takes firmer root in Tanzania is that district decision makers might not accord logistics the same priority as central level MOH counterparts.

Given that staff shortages are perceived to be chronic throughout the health system, one challenge to implementing any logistics intervention is ensuring that there are sufficient human resources and organizational support at local levels. Other important issues to consider are:

- Ensuring that logistics responsibilities are recognized as important, included in job descriptions and tasked to staff that have the necessary skills (or that staff are trained to handle these responsibilities)
- Ensuring that supervision for logistics occurs consistently and by appropriate staff. Supervision occurs every month from districts to SDPs and is conducted by rotating district health management team members, most of whom do not have technical skills in logistics.

2.7 Commodity Financing

The MOH proposal for Grant Aid from the Government of Japan submitted in 2001 includes a request for selected HIV/AIDS commodities. These supplies include HIV test kits for blood safety, sentinel surveillance and VCT, and all necessary consumable supplies; STI drugs and supplies for syndromic management; and RPR test kits for universal screening of syphilis in pregnant women. Condoms for STI/HIV prevention are included in the quantities supplied by UNFPA, who have committed to ensuring a full supply of all condom needs in Tanzania until 2003.
3.0 Intervention Strategies

The strategy proposed in the CSEP will cover the period from October 2001 to September 2004. Thus, an intermediate term strategy had to be distinguished from the long term goals and objectives of the MOH for logistics system implementation. The document presents the long term goals and objectives, as well as the intermediate term strategy and objectives that can realistically be achieved for the duration of the CSEP.

To capitalize on the demand for commodity management systems across programs and to take advantage of current structures and guidelines that allow integrated management of commodities, the proposed MOH, USAID and JSI/DELIVER strategy includes the design of an integrated Logistics System – including a LMIS – that will be implemented in phases and coordinated primarily by PSU. Thus, the overall goal and objectives are as follows:

**Goal**

Ensure availability of essential health commodities at all levels of the public sector health care delivery system through an integrated supply chain

**Objectives**

- Improve essential health commodity management at all levels of the public sector health care delivery system by designing and implementing a fully operational logistics system and MIS that can manage increased categories and volumes of commodities

- Build organizational and individual capacity and capabilities for logistics system management and use of logistics MIS data at all levels of the Tanzanian public health sector

Throughout the process of implementation, for both the short and longer term interventions, the partners will select and apply interventions based on the following guiding principles:

1. Take a phased approach to integration
2. Build on the strengths and procedures of existing systems
3. Develop a system that is user friendly for health facility staff
4. Include participation of all key stakeholders, particularly RHMTs and DHMTs as implementers of the interventions
5. Contribute to and be consistent with the goals of ongoing government and health sector reform initiatives.

In keeping with the guiding principles, and given that integration of all health commodities into a functioning Logistics System is an ambitious goal, MOH and JSI/DELIVER propose to take an incremental approach to the implementation process, and to integrate categories of commodities step by step, in the most logical and feasible manner possible. Integration will begin with incorporation of selected HIV/AIDS commodities into existing systems as the first phase. The intermediate term objectives that relate specifically to the HIV/AIDS commodity related interventions are as follows:
Intermediate Term Objectives

- Enhance the logistics system procedures and MIS to manage the flow of all essential drugs and integrating STI drug management into the indent and kit systems
- Improve availability of HIV test kits and supplies by designing and implementing a logistics system and MIS for HIV test kits and supplies to be integrated under the Diagnostic Services & Laboratory Section of the Directorate for Hospital Services
- Increase management efficiency and availability of condoms for STI/HIV prevention by streamlining distribution of condoms for STI/HIV prevention through the existing system for family planning condoms and facilitating distribution through non-clinical sites

To achieve the intermediate term objectives in a manner that allows for long term implementation of a fully operational, integrated logistics system for all essential health commodities, a thorough understanding of the design, standard operating procedures, processes and forms for each of the systems involved in phase one of implementation must be achieved. In other words, in order to operationalize the proposed strategy and interventions, the key stakeholders involved in system design and implementation must have a thorough understanding of what the strengths and weaknesses are of each of the logistics systems involved and come to a consensus about steps to re-engineer each of the systems to achieve the desired outcomes. Thus, the MOH/PSU and JSI/DELIVER team propose to begin by conducting a process mapping exercise of the logistics systems for: essential drugs (both kit and indent); diagnostic and laboratory services; and contraceptives.

Process Mapping

Process mapping involves the identification and documentation of each action step and decision required to move commodities through the system. The greater the number of steps, the more complex the system, and the more likely that the process will breakdown and increase the cycle time for commodity movement. Process mapping allows identification of how work actually occurs (rather than how people think it works), enables identification of breakdown points and differentiation between productive and non-productive work. Ultimately, process mapping enables identification of solutions aimed at increasing efficiency and reducing complexity and thus improving the chances that commodities will flow to customers on a timely and sustained basis.

In the Tanzania context, process mapping is a mechanism for ensuring that PSU and JSI/DELIVER are able to meet the objectives as well as adhere to the guiding principles defined above. Process mapping will ensure that all key stakeholders in logistics system design and implementation:

- Participate in determining the strengths and weaknesses of the logistics systems for essential drugs, diagnostic and laboratory services, and contraceptives, and
- Jointly come to a consensus about the actions, resources and timeframe required for the design of the integrated logistics system.

Thus the integrated logistics system will be designed with full stakeholder participation, will build on strengths of existing systems, and will build capacity and capabilities within the MOH in design and implementation of the system. This is a crucial point to emphasize. Process mapping will ensure that key implementers of the logistics system – the RHMTs, DHMTs and health facilities – will participate in understanding the problems and identifying the solutions, thus increasing the likelihood that the proposed changes will be implemented and sustained.
The proposed interventions described in the following pages are subject to change and will depend on the outcome of the process mapping exercise and stakeholder design workshop for the integrated logistics system. It is likely that the process mapping will not change the interventions radically, but rather enable more specific and appropriate interventions to be targeted and applied.

### 3.1 Proposed Interventions

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<tr>
<th>Problem Statement: Quantification/Forecasting, Budgeting and Procurement</th>
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<tbody>
<tr>
<td>1. Quantification/forecasting is budget-driven rather than need based.</td>
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<td>2. Commodity quantification/forecasting cannot be based on actual need because logistics data from health facilities is not being collected, aggregated and used.</td>
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<td>3. Gap between true commodity needs and budget allocation cannot be quantified.</td>
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<td>4. Commodity procurement and supply is not linked to actual needs.</td>
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<td>5. Delays in disbursement creates delay in procurement of commodities.</td>
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<th>Objectives</th>
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<tr>
<td>• Use Logistics MIS as a tool for accurate forecasting of requirements and rational budget allocation for selected HIV/AIDS commodity procurement.</td>
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<tr>
<td>• Secure adequate funding for HIV/AIDS commodities, contraceptives and vaccines.</td>
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<tr>
<td>• Ensure timely procurement of Depo-Provera, HIV test kits and STI drugs to guarantee availability and continuity of these supplies.</td>
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<th>Proposed Interventions</th>
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<tr>
<td>1. Include technical requirements for HIV/AIDS commodities, contraceptives and vaccines in annual MTEF documents.</td>
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<td>2. Liaise with donors to provide needed quantities of selected HIV/AIDS commodities to avert imminent shortages.</td>
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<td>3. Clarify, streamline and communicate commodity procurement procedures, including strengthening procurement monitoring.</td>
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<td>4. Conduct annual quantification of selected HIV/AIDS commodities using logistics data.</td>
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<td>5. Design and implement an LMIS to provide data for quantification/forecasting and budget allocations (details found in LMIS section).</td>
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<th>Assumptions</th>
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<td>• PSU will coordinate compilation of quantification and forecasting for HIV/AIDS commodities, essential drugs and medical supplies through routine and regular meetings.</td>
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<td>• Budget allocation will be based on commodity forecasts.</td>
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<td>• Budget preparation for commodities will be conducted jointly between MOH and development partners.</td>
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**Problem Statement: Logistics Management Information System**

1. The difference between a Health MIS and a Logistics MIS is not clearly understood (purpose and types of data collected).
2. Logistics data are not being collected at Health Facilities with the exception of a few vertical programs.
3. Where logistics data are available, they are not used for decision-making for commodity supply and management with the exception of the National Tuberculosis and Leprosy Program.

**Objectives**

- Design and implement an integrated logistics system and LMIS with stakeholder participation.
- Logistics data is collected and used for supply and management of HIV/AIDS commodities, essential drugs and medical supplies.

**Proposed Interventions**

1. Conduct a process map of each commodity management system to analyze current forms, procedures, responsible parties and timelines for budgeting, financing, procurement, ordering, inventory control, distribution, storage and managing information.
2. Design and obtain consensus on the integrated logistics system and LMIS based on results of process mapping and consensus among key stakeholders.
3. Pilot test, refine and rollout the integrated logistics system and LMIS, including reporting, ordering and feedback systems.
4. Enhance MSD’s MIS to collect and aggregate logistics data from health facilities, provide feedback reports for decision making, and to support an integrated LMIS.
5. Support MSD in design and implementation of LMIS.
6. Explore computerization and possible linkage of LMIS with health MIS at district levels.
7. Monitor and support implementation of LMIS reporting, ordering and feedback system for management of selected HIV/AIDS commodities.
8. Draft logistics manual to document logistics system design, standard operating procedures, and job aids for logistics tasks.

**Assumptions**

- MSD will house and manage the Logistics MIS for all health commodities.
- The MIS currently under development at MSD will be enhanced to collect and aggregate logistics data on all health commodities from Health Facilities and produce reports for key stakeholders.
- Personnel with responsibility to manage Logistics MIS are at all levels of the health system.

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1 The MOH and JSI/DELIVER teams produced a preliminary draft of one possible design for an integrated LMIS. This has been included as Annex 3.
### Problem Statement: Inventory Management (Inventory Control, Storage and Distribution)

1. Lack of inventory control system at all levels (with exception of NTLP and RCHS).
2. Logistics data not used for ordering and stock management at health facilities.
3. Consumption and commodity stock levels cannot be determined at any level.
4. Overstocking, shortages and stockouts of commodities exist at all levels of the health system.
5. Excessive product loss due to expiry and poor storage practices.
6. Inadequate storage space and conditions at lower levels of the system.
7. Personnel responsible for commodities lack skills in inventory management and storage.

### Objectives

- Improve inventory control of HIV/AIDS commodities, essential drugs and medical supplies.
- Coordinate efficient use of transportation resources at all levels.
- Streamline commodity distribution from MSD to districts and from districts to health facilities.
- Improve storage conditions and practices for HIV/AIDS commodities, essential drugs and medical supplies to promote product quality at all levels.

### Proposed Interventions

1. Implement an inventory control system that uses logistics data to maintain desired stock levels, accurately calculate order quantities, and monitor product expiration dates.
2. Mobilize local government resources and community participation to improve storage conditions at health facilities.
4. Improve health provider skills in inventory management to enhance availability for all health commodities.
5. Support maintenance of CTU transportation MIS and commodity distribution schedule according to established regional and district transport matrices.
6. Integrate distribution of selected commodities from MSD to districts and from districts to health facilities.
7. Strengthen distribution of condoms for STI/HIV prevention from districts to non-clinical sites.

### Assumptions

- MSD reforms in inventory control and management of storage facilities are accomplished.
- CTU will continue to supervise and support regional and district transport matrices and maintain transportation MIS.
- Mechanism for replacement of vehicles is operational.
Problem Statement: Human Resource Capacity

1. Shortage of staffing at most levels of the health care delivery system.
2. Outdated or non existent job descriptions for health facility staff.
4. Health provider skills not matched to required tasks.
5. Supervision of logistics functions is infrequent or inadequately covered.

Objectives

- Enhance PSU’s ability to fulfill mandate for overseeing integrated logistics management of all essential health commodities.
- Availability of skilled staff at all levels capable of using the Logistics MIS to improve supply and management of HIV/AIDS commodities, essential drugs and medical supplies.

Proposed Interventions

1. Sensitize councils on the need for capacity building in logistics management.
2. Ensure implementation of logistics component of national supervision guidelines.
3. Advocate for development of job descriptions that include logistics management responsibilities at all levels.
4. Advocate for competency-based logistics training into in-service and pre-service curricula for clinical health staff.
5. Clarify PSU’s role in liaising with other program managers to oversee logistics and commodity related interventions for all essential health products.
6. Adapt and incorporate logistics management responsibilities and qualification requirements into existing job lists for PSU staff.
7. Establish routine quarterly meetings between PSU, MSD, MOH Program Managers, donors and other partners to communicate and coordinate planned logistics activities; develop and disseminate local logistics capacity; use data from LMIS for decision making; and to address logistics problems.
8. Train key stakeholders and implementers at central, regional, district and health facilities in use of logistics data and LMIS reporting and ordering system for logistics management of HIV/AIDS commodities, essential drugs and medical supplies.

Assumptions

- Local government will implement MOH guidelines on manning levels (staffing requirements).
- Sensitization of local councils will result in implementation of capacity building in logistics management.
3.2 Roles and Responsibilities of Key Stakeholders

The strategy and interventions proposed in this CSEP were developed in conjunction with key stakeholders from the central level of the MOH. Implementation of the strategy hinges on participation from virtually all players in the health sector in Tanzania at all levels of the system. A key outcome of the process mapping and stakeholder design workshop will involve identification and consensus by all stakeholders about their roles and responsibilities in implementing an integrated logistics system. The following section identifies many of the stakeholders and illustrates potential roles they will play in ensuring implementation of the system. These roles and responsibilities will be agreed upon following the stakeholder design workshop for the integrated logistics system and will be documented in the final draft of the CSEP.

Pharmaceuticals and Supplies Unit

- PSU has the mandate for leadership for all commodity-related interventions and coordination between key stakeholders, including MSD, Program Managers, donors, MOH Directorates and Ministry of Finance. The following are examples of activities PSU will undertake in this role:
  - Receive and review annual forecasts, consumption and stock balances of program related commodities from Program Managers
  - Provide feedback on issues relating to commodity management
  - Inform appropriate entities (MSD, DPP, MoF, donors and others) on any changes in product selection and use (NEDL, STGs), which would affect forecasting, budgeting, financing and procurement of commodities
  - Advocate, promote and ensure inclusion of all health commodities in annual MTEF budgeting process and document.

- PSU, as manager for essential drugs and STI drugs through Indent, Kit and Capitalization Systems, will also have commodity specific responsibilities including:
  - Receive, review and analyze aggregated reports pertaining to essential drug distribution to primary health care facilities (through indent and kit systems) and district and regional hospitals (through capitalization system), and provide timely commodity supply and management decisions to MSD
  - Identify logistics problems on a timely basis
  - Use logistics MIS reports for preparing and updating forecasts on commodity requirements for their program
  - Notify MSD of planned changes in product selection and use of commodities.

JSI/DELIVER

JSI/DELIVER’s primary role is to support PSU with technical assistance, mentoring, skills transfer and capacity building throughout the period of system design and implementation. A key goal will be to work with PSU to monitor and support design and implementation of the logistics system and completion of activities in the workplan on a timely basis, with involvement of all key stakeholders at central, regional and district levels. Given the increasing focus on decentralization in Tanzania, it is crucial that the implementing level – RHMTs and DHMTs – be included in the entire process, and it is likely that some of JSI/DELIVER’s interventions and assistance will be targeted at the implementation level as well as the decision making and coordinating level.
JSI/DELIVER’s ability to complete activities identified in the workplan as scheduled is highly dependent on several factors:

- Sustained commitment and active involvement on the part of stakeholders in country, particularly dedicated human resources from PSU.
- The extent of JSI/DELIVER presence in Tanzania. Many of the interventions related to logistics policy and advocacy as well as ongoing mentoring, communication and transfer of skills and logistics management capacity to MOH counterparts can best be achieved through the continuous presence of a resident logistics advisor (RLA). In the absence of a RLA, attention will be given to these issues, but not on a sustained and targeted basis. In addition, in the absence of a RLA, workplan activities would be subject to potential delays, and the timeframe for achievement of desired results prolonged. Completion of workplan activities would be much more dependent on PSU’s ability to allocate time and human resources to support implementation and follow-up of the interventions.
- The continuation of an environment supportive of logistics system improvements.

Medical Stores Department

MSD’s major responsibilities will likely be to:

- Maintain and expand ongoing storage and distribution activities for all commodities
- ZMS collect, aggregate and send Logistics MIS reports to Program Managers, DMOs, RMOs and MSD central
- ZMS use data from Logistics MIS reports for resupply to districts and health facilities
- Provide financial status reports to districts, health facilities and program managers
- Obtain commodity requirements from PSU for timely procurement planning.

National Program Managers

The following table illustrates the commodities for which each program and program manager is responsible. Below that are some responsibilities that program managers are likely to undertake:

<table>
<thead>
<tr>
<th>National Program</th>
<th>Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceuticals and Supplies Unit (PSU)</td>
<td>Essential drugs for kits, indent and capitalization</td>
</tr>
<tr>
<td>National TB &amp; Leprosy Program (NTLP)</td>
<td>Anti-TB and Leprosy drugs and supplies</td>
</tr>
<tr>
<td>Expanded Program on Immunization (EPI)</td>
<td>Vaccines</td>
</tr>
<tr>
<td>Reproductive and Child Health Section (RCHS)</td>
<td>Contraceptives, condoms for Family Planning and STI/HIV Prevention</td>
</tr>
<tr>
<td>National Malaria Control Program (NMCP)</td>
<td>Anti-malaria drugs (integrated into Kits/Indent)</td>
</tr>
<tr>
<td>National AIDS Control Program (NACP)</td>
<td>Antiretrovirals, STI drugs and HIV/AIDS supplies</td>
</tr>
</tbody>
</table>

- Receive, review and analyze aggregated reports pertaining to program commodities and provide timely commodity supply and management decisions to MSD
- Quarterly reporting to PSU on consumption and stock status of program related commodities
- Identify logistics problems on a timely basis
- Use Logistics MIS reports for preparing and updating forecasts on commodity requirements for their program
- Notify PSU of planned changes in product selection and use of commodities.
Central Transportation Unit

It is envisaged that CTU will:
- Be responsible for maintaining transportation management information system to monitor functioning of district transport matrices
- Coordinate with PSU and working with RHMTs and DHMTs on integrating distribution of HIV/AIDS commodities into district distribution and supervision schedules
- Communicate with PSU and RHMTs and DHMTs on problems related to transportation resources for distribution and supervision between district and health facility levels.

Regional and District Council Health Management Teams

As the main implementing partners, the RHMTs and DHMTs will:
- Be responsible for implementing interventions and maintenance of systems
- Collect, review and complete logistics MIS forms from health facilities and send to ZMS for data entry and aggregation
- Coordinate with PSU and Program Managers to incorporate logistics training in district plans.

Other Stakeholders

- Ministry of Finance
- Donors
- Health Sector Reform partners
- Local Government partners
- Health facility staff
- NGOs

3.3 Relationship to USAID Mission Objectives and Activities

The request for JSI/DELIVER to develop a strategy for implementing a logistics system for HIV/AIDS commodities resulted from a U.S.-Japan Common Agenda team visit, where HIV/AIDS was identified as an area of joint collaboration. The government of Japan through JICA/Tanzania is providing selected HIV/AIDS commodities, while USAID/Tanzania, is providing technical assistance through DELIVER to build a logistics system to manage the HIV/AIDS commodities. The MOH requested that the development of a logistics system for HIV/AIDS commodities be a first step towards implementing an integrated logistics system to handle all essential health commodities in the public sector in Tanzania. Thus JSI/DELIVER’s work is directly supportive of USAID’s role in the U.S.-Japan Common Agenda.

In addition, the proposed strategy outlined in this CSEP is also supportive and consistent with USAID/Tanzania’s Strategic Objective 1 (SO1), which is the “Increased use of FP/MCH & HIV/AIDS preventive measures.” The three primary Intermediate Results (IR) under SO1, include:
- IR1: Policy and Legal Environment Improved
- IR2: Availability of Quality of Services Increased
- IR3: Demand for Specific Quality Services Increased

Since the proposed logistics system intervention cuts across all aspects of the health sector, including the policy and legal environment, systems development and service delivery, it will contribute to all
IR’s within SO1. However, much of the contribution and focus will be under IR2. The mission objective under IR2 is to provide overall health system support in order to achieve the following results:

- IR 2.1 Provision of information & services increased
- IR 2.2 Practitioners skills & knowledge increased
- IR 2.3 Program Management Improved

### 4.0 Expected Outcomes and Desired Results

This section onwards will be completed after the process mapping and re-engineering activities have been conducted. Once desired outcomes have been agreed upon by key stakeholders, the indicators to monitor achievement of progress and desired results will be developed. The most effective method to monitor progress towards meeting objectives and evaluating successful implementation of the strategy is by collecting baseline data through a facility based survey at the beginning of the interventions. The indicators can then be measured through routine LMIS data collection once the information system is operational or through sentinel surveillance. Other existing data can be used to supplement this information, including:

- Data from the process mapping exercise;
- Qualitative data from the Logistics System Assessment Tools for the selected HIV/AIDS commodities; and
- Quantitative data from the Situational Assessment of Logistics Systems at districts and SDPs conducted in May 2000

Furthermore, wherever possible, indicators selected for the MOH and JSI/DELIVER interventions will include those under USAID’s intermediate results above.
Annex 1:

The United Republic of Tanzania
MINISTRY OF HEALTH

Three Year Workplan for JSI/DELIVER Technical Assistance
in Developing an Integrated Logistics System for Essential
Health Commodities

October 2001 – September 2004
Annex 2:

List of References
John Snow, Inc/FPLM and DELIVER documents:

Developing a Logistics System for Essential Health Commodities and Supplies in Tanzania: DRAFT STRATEGIC PLAN. October 2001


Tanzania HIV/AIDS documents:


Project Proposal for the Government of Japan, Grant Aid for Infectious Diseases in Tanzania. The United Republic of Tanzania, Ministry of Health. May 2001

“Situation Analysis to Determine the Requirements for Setting Up a Program for Improving Care and Drug Access for People Living with HIV/AIDS in Tanzania”. Situation Analysis Team. June 2001


Tanzania Commission for AIDS. A Consultative Meeting between TACAIDS, Civil Society, the Public Sector and Development Partners. “Priority Areas in the HIV/AIDS Control”. October 2-3, 2001

MOH Budgeting and Planning Documents:

Staffing Levels for Health Facilities and Health Training Institutions. Prepared by Ministry of Health, Civil Service Department. April 1999


Government of Tanzania Subsidiary Legislation on Local Government:

- Local Government Service (Staff Code of Conduct) Regulations, 2000
- Local Government District Authorities (Councillors Code of Conduct) Regulations, 2000
- Local Government Financial (Block Grants) Regulation, 2000
- Local Government (District Authorities) (Suspension of Council and Committee Meetings) Order, 2000

Tanzania National Drug Policy Documents:


Tanzania Pharmaceutical and Regulatory Documents:


The United Republic of Tanzania, Ministry of Health, “Guidelines on Donations of Drugs and Medical Equipment to the Health Sector for Tanzania Mainland,” 1995.


Sources and Prices of Selected Drugs and Diagnostics for People Living with HIV/AIDS. Joint UNICEF-UNAIDS Secretariat-WHO/HTP-MSF Project. May 2001
Annex 3:

Diagram of Proposed Design for Integrated Logistics System
MOH
- Directorates
- Medical Tender Board

PSU provides logistics information to stakeholders involved in decision making for commodity management.

MSD enters and aggregates data for all SDPs and sends reports to districts, regions, program managers and MSD central.

District reviews and completes LMIS forms and verifies orders for all SDPs. District gives MSD one copy and keeps one copy of all SDP LMIS reports.

PSU convenes quarterly meetings with MSD and program managers to update forecasts, address commodity management issues.

Program Managers, Regions conduct supervision/provide logistics feedback using status reports.

Exchange of logistics information for planning and decision making.