



**USAID** | **DELIVER PROJECT**  
FROM THE AMERICAN PEOPLE

# UGANDA'S SEMBABULE DISTRICT: CONTRACEPTIVE LOGISTICS SYSTEM ASSESSMENT AND ACTION PLAN

COVERING THE LAST MILE TO ENSURE  
CONTRACEPTIVE AVAILABILITY



**NOVEMBER 2008**

This publication was produced for review by the U.S. Agency for International Development. It was prepared by the USAID | DELIVER PROJECT, Task Order I.



# **UGANDA'S SEMBABULE DISTRICT: CONTRACEPTIVE LOGISTICS SYTEM ASSESSMENT AND ACTION PLAN**

COVERING THE LAST MILE TO ENSURE CONTRACEPTIVE  
AVAILABILITY

## **USAID | DELIVER PROJECT, Task Order 1**

The USAID | DELIVER PROJECT, Task Order 1, is funded by the U.S. Agency for International Development under contract no. GPO-I-01-06-00007-00, beginning September 29, 2006. Task Order 1 is implemented by John Snow, Inc., in collaboration with PATH, Crown Agents Consultancy, Inc., Abt Associates, Fuel Logistics Group (Pty) Ltd., UPS Supply Chain Solutions, The Manoff Group, and 3i Infotech. The project improves essential health commodity supply chains by strengthening logistics management information systems, streamlining distribution systems, identifying financial resources for procurement and supply chain operation, and enhancing forecasting and procurement planning. The project also encourages policymakers and donors to support logistics as a critical factor in the overall success of their health care mandates.

### **Recommended Citation**

USAID | DELIVER PROJECT, Task Order 1. 2008. *Uganda's Sembabule District: Contraceptives Logistics System Assessment and Action Plan: Covering the Last Mile to Ensure Contraceptive Availability*. Kampala, Uganda: USAID | DELIVER PROJECT, Task Order 1.

### **Abstract**

In September and October 2008, the Ministry of Health (MOH), with technical assistance from the USAID | DELIVER PROJECT, Task Order 1, conducted an assessment of the performance of the logistics management and supply chain systems for selected family planning commodities in six districts, including Sembabule, and developed an action plan. Findings for Sembabule are presented in this report.

The survey's overall objective was to assess how the logistics systems managed selected family planning commodities at public health institutions. This report presents the findings of the assessment as well as the short and long-term action plan to improve the contraceptive logistics systems and cover the last mile to ensure product availability in Sembabule district.

Cover photo: Kayuki Joseph, Enrolled Nurse; Sembagare Chris, District Assistant Drug Inspector (DADI); and Juliet Nkiganda, Short Term Consultant, meet at Mitete Health Center II.

## **USAID | DELIVER PROJECT**

John Snow, Inc.  
Plot 2 C, Nakasero Hill Road  
Nakasero  
Kampala, Uganda  
Phone: (256) 414-253-246  
Fax: (256) 414-253-245  
E-mail: [askdeliver@jsi.com](mailto:askdeliver@jsi.com)  
Internet: [deliver.jsi.com](http://deliver.jsi.com)

# CONTENTS

- Acronyms..... v
- Acknowledgments ..... vii
- Executive Summary ..... ix
- Background..... 1
- Contraceptive Logistics System Assessment ..... 7
  - I. Organization and Staffing..... 7
  - II. Logistics Management Information System ..... 8
  - III. Obtaining Supply and Procurement..... 9
  - IV. Inventory Control Procedures..... 10
  - V. Warehousing and Storage ..... 10
  - VI. Transportation and Distribution..... 13
  - VII. Organizational Support for Logistics ..... 14
  - VIII. Product Use..... 15
  - IX. Finance and Coordination..... 15
- Contraceptive Logistics System Assessment Conclusion ..... 17
- References ..... 19
- Appendices**
- Appendix A: List of People Interviewed..... 21
- Appendix B: List of Facilities Visited with GPS Coordinates ..... 23
- Appendix C: List of Participants in the LSAT and Action Plan Development Workshop ..... 25
- Appendix D: District Statistics ..... 27
- Figures**
- Figure 1. Map of Sembabule District Showing Health Units per Sub-County..... 1
- Figure 2. The Topography of Sembabule ..... 2
- Figure 3. The Economic Base of Sembabule..... 2
- Figure 4. The CAO Mr. Mukose Jonathan Hosea..... 5
- Figure 5. The Team at the LSAT Meeting..... 6
- Figure 6. Kayunga HC II Store I ..... 12
- Figure 7. Mateete HC III Store I ..... 13
- Figure 8. CBDs at Lwebitakuli HC III..... 18
- Tables**
- Table 1. LSAT Scores by Component ..... ix
- Table 2. Distribution of Health Facilities..... 3
- Table 3. Interviewees ..... 21
- Table 4. Facility List..... 23

Table 5. Participant List.....25

# ACRONYMS

CAO	Chief Administrative Officer
CBD	Community Based Distributors
CORPs	Community Owned Resource Persons
DADI	District Assistant Drug Inspector
DHO	District Health Officer
DHT	District Health Team
DSC	District Services Commission
FEFO	first-to-expire, first-out
FP	family planning
HC II	Health Center II
HC III	Health Center III
HC IV	Health Center IV
MOH	Ministry of Health
NGO	non-governmental organization
SDP	Service delivery point
LIAT	Logistics Indicator Assessment Tool
LSAT	Logistics System Assessment Tool
USAID	U.S. Agency for International Development
SPSS	Statistical Package for Social Sciences





# ACKNOWLEDGMENTS

The USAID | DELIVER PROJECT would like to thank the following persons for their support to the study: Mr. Mukose Jonathan Hosea, Acting Chief Administrative Officer for devoting time for the briefing and debriefing, and for the insightful discussion on the impact of the District Services commission and the lack of financial institutions on program implementation; and Dr. Matovu Charles, District Health Officer and Mr. Chris Sembagare, District Assistant Drug Inspector for their introduction to the district and their guidance during the study. We would also like to extend our sincere thanks to all the staff of the health facilities that participated in the study, and to the staff who took time off to travel to Kampala to participate in the LSAT meeting.



# EXECUTIVE SUMMARY

Sembabule District has a population of 214,031 (2002 census of population.) with approximately 48,227 women in the reproductive age group. The district has two Sub-Health Districts, Mawowgola and Lwemiyaga. There are a total of 25 health facilities in the district, 10 of which are operated by non-governmental organizations (NGOs), and the remaining 15 operated by the Ministry of Health. There is only one physician for the entire population. Two of the government health facilities have no staff and services to that catchment population are through outreach services. There are 214 primary school in the district, of which 189 are operated by government and 25 by the private sector. The infrastructure is still under development. There are no tarmac roads in the district, and electricity and water supply is still limited.

A combination of the Logistics System Assessment Tool (LSAT) and the Logistics Indicator Assessment Tool (LIAT) was applied in order to assess the performance of the family planning logistics system both nationally and sub-nationally in Uganda. The LIAT, while normally used as a quantitative tool, was modified in order to complement the LSAT and provide a qualitative assessment of stock availability and management in seven health facilities pertaining to one of the two Health Sub-Districts. Six members from health facilities in the district were invited to participate in a meeting in which the components of LSAT were discussed and conclusions were drawn along with the findings from the modified LIAT.

The following table illustrates the component specific scores of the LSAT.

**Table I. LSAT Scores by Component**

LSAT COMPONENTS	SCORING (%)
I. Organization and Staffing	95.6%
II. Logistics Management Information System (LMIS)	61.5%
III. Obtaining Supplies/Procurement	n/a
IV. Inventory Control Procedures	47.5%
V. Warehousing and Storage	96.4%
VI. Transport and Distribution	53.3%
VII. Organizational Support for Logistics System	75.8%
VIII. Product Use	100%
IX. Finance/Donor Coordination/RHCS Planning	71.4%
<b>TOTAL</b>	

As the above table demonstrates the district scored high (greater than 90%) on three logistics system components, despite having a number of limitations. These components are organization and

staffing, warehousing and storage, and product use. In other areas scores ranged between 47% and 75%, with inventory control and transportation yielding the lowest scores.

The management structure of the District comprises a District Health Team (DHT) and District Health Management Team, whose job is to oversee all health operations in the District and administration of a structured reporting system, including guidelines for managing the LMIS. The LSAT discussion and modified LIAT revealed that while a strong organizational structure is in place, overall logistics functions are being negatively affected due to financial constraints and a shortage of qualified personnel. For example, only one out of seven logistics positions is currently filled, and the absence of a District Services Commission (DSC) for the past two years has hindered the recruitment of health staffs in the district. Furthermore, infrastructure deficiencies, such as lack of financial institutes, bad road structures, and inadequate housing, all contribute to the challenge of recruiting and keeping logistics personnel at the district. To address these problems, it is recommended that a DSC be established, and that increased resources be made available to help fill vacant positions and train staff.

With respect to the practices involved in obtaining supplies and procurement, there are assigned staff responsible for planning and ordering products. The coordination of these activities is done through regular scheduled meetings, however the resupply plan does not take key logistics elements into account and ordered quantities are not always received on time. It is recommended that staff receive further training on what logistics information is needed and how it is used to calculate orders. Furthermore, to ensure that staff are adequately putting their training into practice, it is recommended that the district increase its support supervision activities at health facilities.

Once family planning commodities arrive at the health facilities, the District has done a good job of managing certain aspects of inventory control, including first-to-expire, first-out (FEFO) practices, requirements that all facilities use stock cards for inventory control, and available written guidelines on the minimum-maximum system. These policies are not without their challenges, however, since FEFO practices were not consistently observed in all health centers and since most of the facilities visited during the survey had stock cards that had not been updated. Also, there currently are no written guidelines on emergency ordering. With regards to resupply, quantities are determined using a formula at all levels of the program. On the day of visit to the different facilities surveyed, Depo Provera was completely in stock; however stockouts of Lofemenal, Micorgynon, and Ovrette were observed. Recommendations to improve inventory control procedures are to use quantification guidelines to avoid stockouts and over stock, and to minimize the need for emergency orders. While the district institutes these quantification practices, written guidelines on emergency ordering still need to be in place.

One of the District's strongest areas in its logistics system is warehousing and storage. The district has guidelines for storage and handling of products and there are also guidelines for disposal of sharps and biohazardous materials. Products are mostly arranged in the storage areas as per these guidelines. At all the facilities, the products were protected from direct sunlight as well as from water and humidity and all products were stored at the appropriate temperature. The main challenges the District faces in this area are that there is less than adequate storage space and a lack of adequate fire safety equipment. It is recommended, therefore, that the District conduct a de-junking exercise to improve functional storage space and that it install fire safety equipment.

Transportation and distribution of commodities remains a challenge in the Sembabule District. There are documented distribution schedules, but most of the time supplies from the central level are not delivered on time. There is a budget line for vehicles, fuel, and spare parts, but it is limited

and many vehicles are non-functioning due to a lack of proper maintenance, which in turn undermines the distribution schedule. Recommendations to improve transportation and distribution are that the District make more strategic use of its resources and integrate health with other sectors. This should allow management to build an effective transportation system for commodities.

With regards to organizational support for logistics, there is regular communications between different levels of the health system and a system for supervision of logistics activities is in place. Data collected during the visit indicates that the mean duration between supervision visits is 51 days, or roughly once every 2 months. This system may be sufficient in the future, provided that other means of communication are reliable and that facilities have access to written guidelines and procedures for logistics functions. Currently, however, there are no written procedures and guidelines to help staff carry out their logistics responsibilities. Unfilled positions further complicate the problem and put undue strain on existing staff. Furthermore, late release of funding to support logistics activities is also a problem. Recommendations to improve organizational support for logistics include establishment of a DSC, development of guidelines on staff responsibilities, and timely release of funds.

Currently, Lofememnal, Depo-Provera, Microgynon, Ovrette, IUDs, Implanon, Jadelle, Norplan, and Condoms are all managed at the appropriate level facility in the district. Behavior change communication campaigns are carried on in the district by NGOs. However, access to the programme tends to be negatively affected by cultural perceptions. Sensitizing the community on the use of family planning (FP) is recommended.

Finally, with respect to financing and donor coordination, the programme's budget line includes provision for the products, warehousing, LMIS and transportation. To increase the effectiveness of the FP program and its logistics system, it is recommended that the District advocate for an increase in the budget line for FP.

In conclusion, the District Services Commission should be instituted as a matter of urgency, and an attempt should be made to attract financial institutions to the district. A combination of these two measures will increase staffing at the facilities and restore time spent on financial transactions to logistics functions and support supervision. In the future, greater scrutiny should be employed in the selection of the appropriate staff for logistics training. Support supervision should also be intensified so as to ensure that staffers apply their knowledge in logistics to inventory control and ordering based on logistics information.

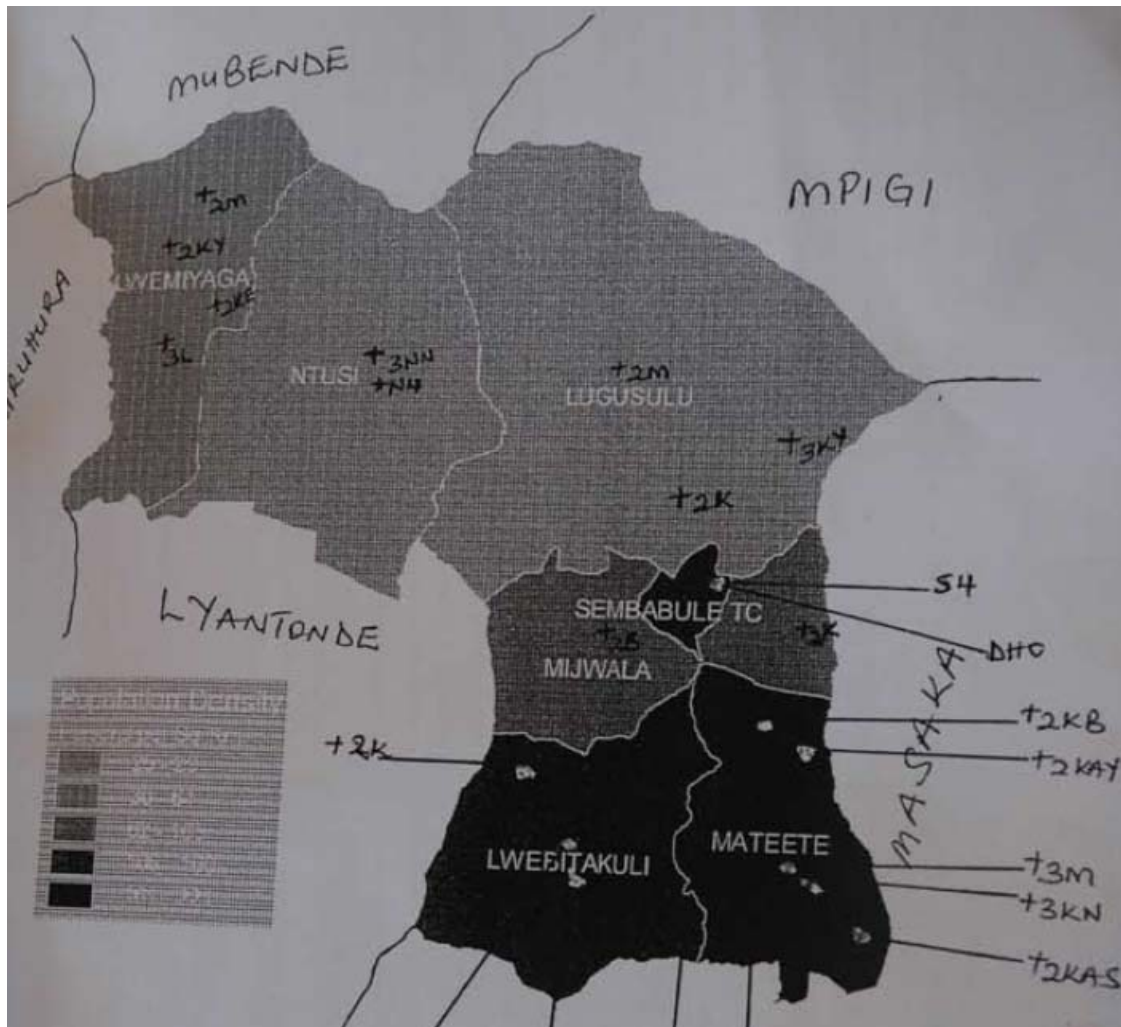


# BACKGROUND

## CONTEXT

Sembabule is one of 81 districts in Uganda, calved out of the Masaka district in 1997. The district is bordered on the east and south by Masaka District, on the north by Mpigi, Kiriwura and Rakai on the south-west and Mubende and Kaborarole on the north-west. The river Katonga separated Sembabule District from Mubende. The district covers an area of 2,500 Square Kilometers.

Figure 1. Map of Sembabule District Showing Health Units per Sub-County



**Figure 2. The Topography of Sembabule**



## **PEOPLE**

The District has a population of 214,031 (2002 census of population), with around 23 percent of whom are women of reproductive age (48,227), and another 20 percent in the under-five age group. The people belong to the Baganda (predominantly agrarian) and the Balaalo (predominantly pastoral) ethnicities.

**Figure 3. The Economic Base of Sembabule**





## ADMINISTRATION AND EDUCATION

Administratively the district is divided into two counties (Mawowgola and Lwemiyaga) with six sub-counties and a Town Council. There are a total of 35 parishes and 390 villages. The economic base of the two counties is different, with Mawowgola being more agrarian and Lwemiyaga being more pastoral. There are 214 primary schools in the district, of which 189 are operated by the government and 25 are private. Of the 189 primary schools, there are 35 Grade I, 37 Grade II, 60 Grade III, and 57 Grade IV. School enrollment stands at 84,322, of which there are 42,233 males and 42,089 females. Reproductive health is taught in grades P5 through P7 as per the Uganda primary school curriculum.

## HEALTH

There are two Health Sub-Districts (Mawowgola and Lwemiyaga) with 15 health facilities in total. Most of the facilities are public and there is one hospital in Mawowgola. The distribution of health facilities is as indicated in the table below.

**Table 2. Distribution of Health Facilities**

Health Facility	Lwemiyaga		Mawogola		Sub-total
	Private	Public	Private	Public	
Hospital	0	0	1	0	1
Health Center IV	0	1	0	1	2
Health Center III	1	1	2	3	7
Health Center II	0	5	0	10	15

## OBJECTIVES

The objectives of the overall assessment were as follows:

1. Assess the performance of the Reproductive Health Logistics System and the availability of the reproductive health commodities at the health facilities in the Sembabule District.
2. Make recommendations towards improving Reproductive Health Commodity availability based on the gaps identified through this assessment.
3. Assess informants' logistics knowledge, and use results of the analysis for work planning.

## METHODS

The survey was a cross-sectional qualitative study to assess different components of the logistics system relating to contraceptives. The contraceptives that were taken into consideration were: microgynon, ovrette, lo-femenal, intra-uterine devices (IUD), implants, condoms, and Depo Provera. A combination of the Logistics Indicator Assessment Tool (LIAT) and the Logistics System Assessment Tool (LSAT) was employed in this study. Details of how the two tools were modified are as follows:

## **LIAT**

The LIAT was modified into a semi-structured questionnaire and made country specific. Although the LIAT is a quantitative tool, the modified LIAT in this survey was applied mainly as a qualitative guide to assess specific logistics indicators.

### **Sampling:**

A multi-stage sampling technique was used in the selection of the facilities for the modified LIAT. The stages were as follows:

1. Six Districts were selected out of the 81 districts. These are the districts in which the USAID | DELIVER PROJECT will be working during the period October –September 2008/2009. The criteria for selecting the districts to include in the study were geographical diversity and the presence of other projects with a reproductive health component, to encourage collaboration between the projects.
2. Districts are sub-divided into Health Sub-Districts (HSD). A Sub-District was selected as a cluster and facilities were selected within that cluster. This allowed the team to follow the supply chain within the cluster. Lwemuyaga HSD has eight health facilities of which one is private. Of the seven public facilities, two had no staff and therefore were not operational. Mawogola HSD has 16 health facilities of which two are private. The remaining 14 facilities were all operational, and therefore this HSD was selected as the cluster.
3. None of the private facilities were eligible for inclusion because they are operated by the Catholic Church and do not offer family planning services. Within the cluster, the natural stratification of facilities into Health Center IV (HC IV), Health Center III (HC III), and Health Center II (HC II) were used and facilities selected within each facility category. A total of seven Service Delivery Points were selected—one HC IV (1 out of 1), three HC IIIs (3 out of 3), and three HC IIs (3 out of 10).

### **Data Analysis:**

The data was entered using the Statistical Package for the Social Sciences (SPSS) Data Entry Module, cleaned and analyzed using SPSS analysis software. A report was written based on the findings from the survey in conjunction with the LSAT assessment which is presented here.

## **LSAT**

In Kampala, a two-day LSAT workshop was organized where representatives from the district were invited to determine the strengths and weaknesses faced by the district logistics system and to develop recommendations to address the problems. An action plan was then formulated based on the findings from the LSAT to improve the system and enhance contraceptive availability.

## **FIELD VISIT**

The group met with the District Assistant Drug Inspector (DADI) to discuss which of the facilities to visit and the protocol to follow during the introduction into the new district. At a joint meeting with the DADI and the HC IV senior nursing officer, a decision was made on the HC IIs that were to be visited, based on their ability to offer family planning. The list of the facilities visited included Sembabule HC IV, Kyabi HC III, Mateete HC III, Lwebitakuli HC III, Kayunga HC II, Kabunsi HC II, Nteete HC II, and Mitete HC II. Mawogola Health Sub-District was chosen as the cluster HSD to visit (see Methods above.)

A meeting was held with the CAO at which the CAO briefed the group on the key outstanding areas in health before the field visit. The district has a Technical Planning Committee, a committee made up of health technical persons and the CAO, which points out the critical areas in health and works out an action plan.

A total of seven service delivery points (out of the eight selected) were visited. This included one Health Center IV, three Health Center IIIs, and three Health Center IIs. This was done during the period September 22-24, 2008.

**Figure 4. The CAO Mr. Mukose Jonathan Hosea**



### **LSAT AND ACTION PLAN DEVELOPMENT WORKSHOP**

A Logistics System Assessment Tool (LSAT) workshop was held a week after the field visits in Kampala. This workshop brought together a team of six from the district. Representation included the District Health Officer (DHO) the Reproductive Health Focal Person, the Logistics Focal Person, the In-Charge LWEBITAKULI HC II, the In-Charge KAYUNGA HC II and the DADI.

The team and the two facilitators used the tool to assess the status of the logistics system in Sembabule and arrived at a consensus on the strengths and weakness of the system and developed a number of recommendations under each of the sub headings.

1. Organizing and Staffing
2. Logistics Management Information System
3. Obtaining Supply and Procurement
4. Inventory Control and Procedures
5. Warehousing and Storage
6. Transport and Distribution

7. Organizational Support for Logistics
8. Product Use
9. Finance and Coordination

**Figure 5. The Team at the LSAT Meeting**



# CONTRACEPTIVE LOGISTICS SYSTEM ASSESSMENT

## I. ORGANIZATION AND STAFFING

Staffing at the district level faces challenges, and therefore not all possible conceivable units can have separate identities. There are structures and reporting systems in place. The functions of a Logistics Management Unit (LMU), including using Logistics Management Information System (LMIS) for ordering required quantities of supplies, inventory management and support supervision are performed by the District Health Team (DHT). However, staffing is constrained by a number of factors.

There are written guidelines for managing the LMIS such as inventory management, storage and distribution. Logistics positions, though established, have not been filled to a large extent. There are seven key logistics positions of which only one is currently filled.

There is a District Services Commission (DSC) in place for over two years, yet the positions required to fill this body have remained empty since its inception. There are no financial institutions in the district, so staff spent on the average 20 hours a month to travel to the adjoining district to undertake financial transactions. Adequate housing is limited so some key personnel live outside the district and commute daily. These staff spent on the average 60 hours a week to commute, precious time that is lost for support supervision

The delayed release of funds has its impact on the availability of medical supplies. While Family Planning Commodities are in full supply, the required funds to transport the commodities from the district to the facilities are dependent on availability of funds to purchase fuel.

Culture and religion and the interplay between these two have their effects on Family Planning. The Muslim faith does not like FP and the Catholic faith officially does not endorse it.

There is a cultural belief that “all eggs must come out as babies” and as far as FP interferes with this process, it has its effects on someone’s life. The pill is commonly believed to kills eggs and reduce libido, while vasectomy is believed to eliminate a man’s ability to engage in sexual intercourse.

Donor support for Family Planning is viewed in general with suspicion.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"><li>• DHT (District Health Team) and DHMT (District Health Management Team) in place</li><li>• Fully plays the roles of LMIS, procurement and inventory management, supervision</li><li>• Existence of written guidelines</li><li>• Full time logistics focal person in place</li><li>• Logistics focal person has equal decision making authority</li></ul>	<ul style="list-style-type: none"><li>• Only one out of seven logistics positions is filled.</li><li>• Lack of District Services Commission</li><li>• Lack of guidelines on procurement</li></ul>

- The district has got established logistics positions; there are one district logistics focal person, and a record assistant for each of the HC IIIs and HC IVs.
- One-year strategic plan in place

## RECOMMENDATIONS

- Advocate for the establishment of the District Services Commission
- Fill the existing vacant positions
- Train new staffs and update existing staffs in logistics management
- Adapt/Update existing guidelines
- Sensitization of community on the benefits of FP

## II. LOGISTICS MANAGEMENT INFORMATION SYSTEM

There is a Logistics Management Information System in place in Sembabule. Stock keeping records and requisition issues records are in place, yet inventory balances are not always updated at the lower facilities. This is attributed to the limited number of staff and a shortage of time for staff to update logistics records. Evidence suggests that most of the staff have had adequate training but are unable to make time to complete the records. Furthermore, reporting to higher levels occurs but not always on time. It is estimated that 80% of reports reach the central level on time to be used for decision making. To compound the challenges of coordination and communication, the information system is not fully automated.

Information system reports are used to make decisions affecting transport and delivery, inventory management, how much resupply to order, and scheduling of supervisory visits. The average duration of time since the last supervisory visit was 51 days, with a minimum of 31 days and a maximum of 70 days (see annex).

Finally, logistics data are neither used for continuous monitoring of stock balances nor for calculating quantities for resupply at each level of the system.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>• There is a Logistics Management Information System</li> <li>• Essential data is collected on the LMIS cards</li> <li>• All levels of system show quantity dispensed and quantities received</li> <li>• Reports are provided to higher levels at scheduled intervals</li> <li>• LMIS is used for scheduling</li> </ul>	<ul style="list-style-type: none"> <li>• Reported information does not include Stock on Hand and losses and adjustments.</li> <li>• Facilities are not tracking their losses and adjustments on their stock control card</li> <li>• Some facilities are still using the former standard stock cards which lacked some information on them.</li> <li>• Records are not reconciled against physical inventory at each level</li> </ul>

supervisory visits

- LMIS is not automated.
- Logistics data is not used for continuous monitoring of stock status, and for calculating quantities for resupply.

### RECOMMENDATIONS

- Provide health centers with updated standard stock cards
- Train new staff in logistics management, while orienting the old ones.
- Re-emphasize the role of logistics data in the logistics management system so that staff starts filling it with interest but not as an obligation.
- Use the available computers to automate the logistics management information system especially in the HC IIIs and the HC IVs.
- Make the supervision visits more effective and frequent.

## III. OBTAINING SUPPLY AND PROCUREMENT

The facility in-charges, DADI, and DHO (via the DHT) are responsible for products planning and ordering. The coordination of these activities is done through regular scheduled meetings.

Unfortunately, it does not always take into account inventory levels at the facilities. Not all ordered quantities of supplies are received at all times and on time. During the site visits (22-23 September 2008), orders sent in June that year had still not been received. The HC IV and HC III tend to receive all the quantities they order, but the same cannot be said for the HC IIs.

Asked what action is taken when facilities are about to stock out before the order date, 50% said they inform the DADI, 33% make an emergency order, and 17 % go to pick supplies from the HSD. No facility had made an emergency order the three months preceding the visit. In 57% of facilities it is the Nurse who determines the facilities re-supply quantities of contraceptives; 28% rely on the Clinical Officer; and 14% on the store keeper.

### STRENGTHS

- DHT in charge of ordering supplies

### WEAKNESSES

- Resupply plans do not take into account the key logistics system elements.
- Limited list of suppliers.
- In general products ordered are not obtained at the appropriate time at all the district level, and this also affects the lower levels.
- Quantities ordered are not always the quantities received.

### RECOMMENDATIONS

- Train staff on the logistics elements and their roles in drug management
- Re-emphasize the support supervision to ensure that staffs are practicing the acquired knowledge.

## IV. INVENTORY CONTROL PROCEDURES

Stock cards were in use for inventory control at all facilities for the Family Planning commodities that are offered. However, stock cards had not been updated in most instances, ranging from 50 percent to 100 percent of stock cards on hand.

There is no written provision for the redistribution of over-stocked supplies, although redistribution is done during supervisory visits. On the whole, FEFO is practiced, with half of the HC IIIs and two-thirds of the HC IIs actively maintaining this standard.

Resupply quantities are determined using a formula at all levels of the program. A third of the facilities had stocked out of Lo-femenal and Micorgynon, and 20% had stocked out of Ovrette on the day of the visit. All sites had Depo Provera in stock. No emergency orders had been placed in the previous three months.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"><li>• Facilities receive what they order for, most of the time.</li><li>• All products on the programme are considered to be on full supply.</li><li>• There are written guidelines on determining the maximum and minimum stock levels.</li><li>• The programme has FE-FO involved and its being practiced in the facilities.</li><li>• Expired products are separated from the other products.</li><li>• The use of pull system allows each facility to order for what they need.</li><li>• Physical inventory is done.</li></ul>	<ul style="list-style-type: none"><li>• Although there are written guidelines on max—min levels, they have neither been respected nor reviewed by most facilities.</li><li>• There are no written procedures for writing emergency orders, and these are only placed at the district level.</li><li>• Physical inventory – done once and not recorded on the appropriate LMIS card (recoded in a register)</li></ul>
RECOMMENDATIONS	

- Emphasize the use of quantification guidelines to avoid stock outs and over stocking.
- Help logistics staff appreciate the use of LMIS data in managing logistics
- Put in place written procedures on writing emergency orders.
- Train staff on filling logistics forms and reports accurately.

## V. WAREHOUSING AND STORAGE

The state of warehousing and storage at the facilities visited was assessed on indicators ranging from proper storage distance of items from the floor and walls, through cleanliness to security to the absence of rodents.



At 50% of all the facilities, products that were ready for distribution were arranged so that identification labels and expiry dates were visible. Specifically this standard was maintained at the HC IV, half of the HC IIIs, and two-thirds of the HC IIs. Again these same proportions applied to FEFO.

Cartons and products were all in good condition with the exception of one HC III. All facilities separated damaged and/or expired products from usable products except at one HC III

At all facilities products were protected from direct sunlight as well as from water and humidity and all products were stored at the appropriate temperature. All roofs were maintained in good condition and therefore avoided sunlight and water penetration

Sixty-six percent of the facility stores were visually free from harmful insects and rodents. Only 50% of the store rooms were kept in a clean condition and again only 50% had sufficient space for existing products and reasonable expansion for receipt of expected products.

Fire safety equipment was only available at the HC IV, but its state of functionality was suspect, which effectively means that none of the facilities had any or functional fire safety equipment.

In on-third of the facilities products were not stored separately from insecticides and chemicals. Two-thirds of the facility stores had products stacked at least 30 cm away from the walls and other stacks. One facility had products stacked more than 2.5 meters high

The district has guidelines for storage and handling of products and there are also guidelines for disposal of sharps and bio-hazardous materials. Physical inventory is conducted at least once a year at all levels. Damaged and expired products are supposed to be collected and sent to the central level for destruction, but this has not happened in the past five years.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>• The district has guidelines for storage and handling of products and there are also guidelines for disposal of sharps and bio-hazardous materials.</li> <li>• Physical inventory is conducted at least once a year at all levels.</li> <li>• Products are protected from direct sunlight as well as from water and humidity and all products were stored at the appropriate temperature.</li> <li>• At majority of the facilities, products that were ready for distribution were arranged so that identification labels and expiry dates were visible</li> <li>• FEFO was observed in the majority of facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Damaged and expired products have not been collected for destruction at the central level in the past five years</li> <li>• Functional Fire safety equipment was lacking at all facilities</li> <li>• Less than adequate functional storage space. Some store lack adequate shelves/cupboards</li> </ul>
<b>RECOMMENDATIONS</b>	

- Facility stores should be de-junked with immediate effect to create space for proper storage of products.
  - Functional storage space needs to be improved at some facilities (install shelves and provide cupboards.)
  - Fire safety equipment, not matter how modest (bucket with sand) should be installed at all facilities
  - Emphasize maintenance of a clean secure storage area.
- 

**Figure 6. Kayunga HC II Store I**



**Figure 7. Mateete HC III Store I**



## **VI. TRANSPORTATION AND DISTRIBUTION**

There is a budget line for vehicles, fuel and spare parts, but it is so limited, that the health has to rely on the Chief Administrative Officer at times to obtain fuel to distribute supplies. The funds available for the maintenance of vehicles are so limited that approximately half of the vehicle fleet is grounded waiting to be repaired.

There are documented distribution schedules, but most of the time supplies from the central level are not delivered on time. When they are delivered, the districts redistribute supplies to all facilities within one week. There is a coordinated and efficient use of vehicles available to the district.

### **STRENGTHS**

- A budget line exists for transport and distribution.
- Written procedures specifying the type and schedule of distribution to be used between each level and are followed most of time.
- The available vehicles are used effectively for routine and emergency deliveries.

### **WEAKNESSES**

- The funds for transport and distribution are limited.
- There is an insufficient number of vehicles and fuel to meet the desired product distribution schedule, and only a few are in running order.

## RECOMMENDATIONS

- Use of the limited available resources effectively.
- Integrate health into the other sectors in the district.

## VII. ORGANIZATIONAL SUPPORT FOR LOGISTICS

There is good communication between the central level and the district and between the district and SDPs. This happens on a monthly basis.

There is a system for supervision of logistics activities. Supervision of the SDPs is scheduled to take place on a quarterly basis. Data collected during our visit indicate that the mean duration between supervision visits is 51 days. This supervisory visit schedule of approximately once every two months may be sufficient in the future, provided that other means of communication are reliable and that facilities have access to written guidelines and procedures for logistics functions. Currently, however, there are no written procedures and guidelines (e.g., manuals, job aids, standards) to help staff carry out their logistics responsibilities.

However, by and large, logistics staff do have the tools and resources they need to do their jobs at all levels.

### STRENGTHS

- Regular communication between levels
- Presence of a logistics system that covers logistics activities.
- There is a provision for continuous capacity building.
- Staffs have written job descriptions including logistics responsibilities.
- Supervisions are done as scheduled most of the time.
- There are guidelines and tools used during supervisions.
- All areas of logistics management are covered during supervision.
- Training on logistics management has been given to key staff at all levels.

### WEAKNESSES

- Lacking written guidelines for staff on their logistics responsibilities.
- Lack of adequate tools and resources to carry out logistics activities
- Late release of limited available funds.
- Not all established logistics positions are filled; only one out of seven is filled.

## RECOMMENDATIONS

- Advocate for the District Service Commission to be staffed and for the empty logistics staff positions to be filled.
- Provide written guidelines for staff on their logistics responsibilities.
- Provide adequate tools and resources to carry out logistics activities
- Advocate for increase and earlier release of funds to support logistics operations in the District.

## VIII. PRODUCT USE

The following products, Lo-femenal, Depo-Provera, Microgynon, Ovrette, IUD, Implanon, Jadelle, Norplan and Condoms are all managed at the appropriate level facility in the district. The implants and IUDs at HC IV and HC III while the oral and injectable contraceptives are managed at all levels. There are written standard guidelines for the use of these products and distributed to all SDPs. There are posters, flip charts, to aid staff in the implementation of the standard guidelines. This is augmented through support supervision.

Behavior change communication campaigns are carried on in the district by NGO. However, access to the programme tends to be negatively affected by cultural perceptions. Contraceptives are perceived to either cause infertility or lower sexual desire.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"><li>• There are guidelines on initiating a client on FP, and these guidelines are distributed to all delivery points and are followed.</li><li>• There are written procedures for monitoring and supervising prescribing practices, they are distributed to all service delivery points, and they are followed.</li><li>• Commodities are provided only to facilities that have staff trained and equipped to use them.</li><li>• Written guidelines on monitoring and supervision of staff.</li></ul>	<ul style="list-style-type: none"><li>• The programme is affected negatively by some cultural and religious beliefs in the districts.</li><li>• Community has a negative attitude towards the use of ENGABO.</li></ul>
RECOMMENDATIONS	
<ul style="list-style-type: none"><li>• Sensitize the community on the benefits of FP.</li></ul>	

---

## IX. FINANCE AND COORDINATION

The programme's budget line includes provision for the products, warehousing, LMIS and transportation. To increase the effectiveness of the FP program and its logistics system, it is recommended that the District advocate for an increase in the budget line for FP.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"><li>• The budget line caters for all key necessities aimed at ensuring product availability and quality.</li></ul>	<ul style="list-style-type: none"><li>• The budget provision is limited to enable the program achieve its objectives</li></ul>
RECOMMENDATIONS	
<ul style="list-style-type: none"><li>• Increase budgetary provision for FP activities</li></ul>	

---



# CONTRACEPTIVE LOGISTICS SYSTEM ASSESSMENT CONCLUSION

Sembabule is a relatively new district with evolving infrastructure. The major trunk routes in the district are not tarmacked and water and electricity supplies are limited. The health care infrastructure is reasonable but not completely staffed, and the District Service Commission, the body that recruits these vital civil servants, is not operational. This has hindered the recruitment process in the health as well as other sectors. There is also no financial institution in the district, the lack of which has adverse effects on staff time in terms hours spent on financial transaction out of the district.

Staff at the health facilities have been trained in Logistics Management Information System, but the trained staff are not always the persons detailed to manage the health supplies. Only a fraction of the established logistics positions have been filled. LMIS is in place in the district, but the records are not always updated. This is due in part to pressure of time on the limited staff. Reporting to higher level occurs but not always on time. Logistics data are neither used for continuous monitoring of stock balances nor for calculating quantities for resupply at each level of the system. While the district makes a good faith effort to order supplies, they do not always receive what is ordered, and deliveries are delayed. However when supplies are received, the districts delivers them to the facilities within a week.

Inventory control procedures are in place and FEFO is practiced. All sites had Depo Provera in stock, yet a third of the facilities had stocked out of Lofemenal and Micorgynon, and 20% had stocked out of Ovrette on the day of the visit. Warehousing and storage was adequate, although some of the lower level facilities could benefit from the installation of shelves. Firefighting equipment was lacking at all facilities and these should be provided. Lofemenal, Depo-Provera, Microgynon, Ovrette, IUD, Implanon, Jadelle, Norplan and Condoms are all managed at the appropriate level facility in the district.

The District Services Commission should be instituted as a matter of urgency and efforts should be made to attract financial institutions to the district. A combination of these two measures will increase staffing at the facilities and restore time spent on financial transactions to logistics functions and support supervision. In the future, greater scrutiny should be employed in the selection of the appropriate staff for logistics training. Support supervision should be intensified so as to ensure that staffs apply their knowledge in logistics to inventory control and orders are based on logistics information.

Figure 8. CBDs at Lwebitakuli HC III





# REFERENCES

Sembabule District Work Plan 2008/09.

Sembabule Medical Department Work Plan 2007/2008

USAID | DELIVER PROJECT, Task Order 1. 2007. *Implementing Multiple Health Commodities Logistics Management Information Systems*. Arlington, Va.: USAID | DELIVER PROJECT, Task Order 1.



## APPENDIX A - LIST OF PEOPLE INTERVIEWED

**Table 3. Interviewees**

<b>N</b>	<b>Name</b>	<b>Qualification/Title</b>	<b>Facility/Institution</b>	<b>Contacts</b>
1	Negesa Bernadette	Senior Clinical Officer	Lwebitakuli Health Center III	0777 87 90 70
2	Mukiibi Mesach	Registered Comprehensive Nurse	Kyabi Health Center III	0772 87 20 18
3	Kyagaba Norah	Enrolled Midwife	Ntete Health Center II	0752 48 64 45
4	Sengaali Francis	Senior Clinical Officer	Mateete Health Center III	0782 47 47 05
5	Nakawuka Gonzaga	Enrolled Midwife	Kayunga Health Center II	0752 64 70 69
6	Kayuki Joseph	Enrolled Nurse	Mitete Health Center II	0772 95 76 35
7	Nanyunja Justine	Senior Nursing Officer	Sembabule Health Center IV	0751 92 93 34
8	Matovu Charles MD.	District Health Officer	Sembabule Health Center IV	
9	Sembagare Chris	District Assistant Drug Inspector (DADI)	Sembabule Health Center IV	0772 55 39 60
10	Mukose Jonathan Hosea	Ag. Chief Administrative Officer (CAO)	Sembabule District	0772 96 90 29
11	Kanyesigye Nathen Erisa	Psychiatric Nursing Officer	Mental Health Co-coordinator	0772 41 46 34
12	Ssebugwo Wilson	District Health Inspector	District Health Department	0772 83 67 69



## APPENDIX B – LIST OF FACILITIES VISITED WITH GPS COORDINATES

**Table 4. Facility List**

<b>N</b>	<b>Name of Facility</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Altitude</b>
1	Lwebitakuli Health Center III	Lat S 00 15.25	Lon E 310 21.12''	Alt 1318 m
2	Kyabi Health Center III	Lat S 00 00.31''	Lon E 310 2.95''	Alt 1198 m
3	Ntete Health Center II	Lat S 00 15.08''	Lon E 310 24.95''	Lon E 31 24.95
4	Mateete Health Center III	Lat S 00 14.68''	Lon E 310 28.88''	Alt 1253 m
5	Kayunga Health Center II	Lat S 00 11.69''	Lon E 310 30.15''	Alt 1273 m
6	Mitete Health Center II	Lat S 00 14.44''	Lon E 310 33.82''	Alt 1262 m
7	Sembabule Health Center IV	Lat S 00 05.03''	Lon E 310 27.61''	Alt 1277 m



## APPENDIX C – LIST OF PARTICIPANTS IN THE LSAT AND ACTION PLAN DEVELOPMENT WORKSHOP

**Table 5. Participant List**

<b>N</b>	<b>Name</b>	<b>Qualification/Title</b>	<b>Facility/Institution</b>	<b>Contacts</b>
1	NAMALA HARIET KIZITO	REPRODUCTIVE HEALTH FOCAL PERSON	SEMBABULE HC IV	
2	KATONGOLE NOELLA	LOGISTICS FOCAL PERSON	SEMBABULE HC IV	
3	NEGESA BERNADETTE	IN-CHARGE	LWEBITAKULI HC III	
4	NAKAWUKA GONZAGA	IN-CHARGE	KAYUNGA HC II	
5	SEMBAGALE CHRIS	DADI	SEMBABULE HC IV	
6	MATOVU CHARLES	DHO	SEMBABULE HC IV	
7	JULIET NAKIGANDA	CONSULATANT		
8	KENNETH OFOSU-BARKO	COP		





# APPENDIX D – DISTRICT STATISTICS

Districts by Service Delivery Point (SDP)

		District		Total	
		Ssembabule			
		Count	Col %	Count	Col %
Type of SDP	Health Center IV	1	16.7%	1	16.7%
	Health Center III	2	33.3%	2	33.3%
	Health Center II	3	50.0%	3	50.0%
<b>Total</b>		<b>6</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>

Electricity at Facility

		Operational electricity on day of visit?				Total	
		NO		YES			
		Count	Row %	Count	Row %	Count	Row %
Type of SDP	Health Center IV			1	100.0%	1	100.0%
	Health Center III	2	100.0%			2	100.0%
	Health Center II	3	100.0%			3	100.0%
<b>Total</b>		<b>5</b>	<b>83.3%</b>	<b>1</b>	<b>16.7%</b>	<b>6</b>	<b>100.0%</b>

Principal Store's Person

		District		Total	
		Ssembabule			
		Count	Col %	Count	Col %
Who is the principal person responsible for the day to day running of the store?	Nurse	4	57.1%	4	57.1%
	Clinical Officer	2	28.6%	2	28.6%
	Enrolled Midwife	1	14.3%	1	14.3%
<b>Total</b>		<b>7</b>	<b>100.0%</b>	<b>7</b>	<b>100.0%</b>

Principal Store's Person by SDP

		Type of SDP						Total	
		Health Center IV		Health Center III		Health Center II		Count	Col %
		Count	Col %	Count	Col %	Count	Col %		
Who is the principal person responsible for the day to day running of the store?	Nurse	1	100.0%	1	50.0%	2	66.7%	4	66.7%
	Clinical Officer			1	50.0%			1	16.7%
	Enrolled Midwife					1	33.3%	1	16.7%
<b>Total</b>		<b>1</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>3</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Duration since last support supervision	5	31.00	70.00	51.2000	17.9639
Valid N (listwise)	5				

		Type of SDP						Group Total	
		Health Center IV		Health Center III		Health Center II		Count	Col %
		Count	Col %	Count	Col %	Count	Col %		
Lofemenal Managed at this facility?	Yes	1	100.0%	2	100.0%	3	100.0%	6	100.0%
Group Total		1	100.0%	2	100.0%	3	100.0%	6	100.0%
Lofemenal stocked out at this facility today?	Yes	1	100.0%			1	33.3%	2	33.3%
	No			2	100.0%	2	66.7%	4	66.7%
Group Total		1	100.0%	2	100.0%	3	100.0%	6	100.0%
Depo-Provera Managed at this facility?	Yes	1	100.0%	2	100.0%	3	100.0%	6	100.0%
Group Total		1	100.0%	2	100.0%	3	100.0%	6	100.0%
Depo-provera stocked out at this facility today?	No	1	100.0%	2	100.0%	3	100.0%	6	100.0%
Group Total		1	100.0%	2	100.0%	3	100.0%	6	100.0%
Microgynon Managed at this facility?	Yes	1	100.0%	2	100.0%	3	100.0%	6	100.0%
Group Total		1	100.0%	2	100.0%	3	100.0%	6	100.0%
Microgynon stocked out at this facility today?	Yes			1	50.0%	1	33.3%	2	33.3%
	No	1	100.0%	1	50.0%	2	66.7%	4	66.7%
Group Total		1	100.0%	2	100.0%	3	100.0%	6	100.0%
Ovrette Managed at this facility?	Yes			2	100.0%	3	100.0%	5	83.3%
	No	1	100.0%					1	16.7%
Group Total		1	100.0%	2	100.0%	3	100.0%	6	100.0%
Ovrette stocked out at this facility today?	Yes					1	33.3%	1	20.0%
	No			2	100.0%	2	66.7%	4	80.0%
Group Total				2	100.0%	3	100.0%	5	100.0%

		Type of SDP						Group Total	
		Health Center IV		Health Center III		Health Center II			
		Count	Col %	Count	Col %	Count	Col %	Count	Col %
IUDs Managed at this facility?	Yes	1	100.0%	1	50.0%			2	50.0%
	No			1	50.0%	1	100.0%	2	50.0%
Group Total		1	100.0%	2	100.0%	1	100.0%	4	100.0%
IUD stocked out at this facility today?	No			1	100.0%			1	100.0%
Group Total				1	100.0%			1	100.0%
Implanon Managed at this facility?	Yes	1	100.0%	1	50.0%			2	50.0%
	No			1	50.0%	1	100.0%	2	50.0%

		Type of SDP						Group Total	
		Health Center IV		Health Center III		Health Center II			
		Count	Col %	Count	Col %	Count	Col %	Count	Col %
Group Total		1	100.0%	2	100.0%	1	100.0%	4	100.0%
Implanon stocked out at this facility today?	No			1	100.0%			1	100.0%
Group Total				1	100.0%			1	100.0%
Jadelle Managed at this facility?	Yes	1	100.0%	1	50.0%			2	50.0%
	No			1	50.0%	1	100.0%	2	50.0%
Group Total		1	100.0%	2	100.0%	1	100.0%	4	100.0%
Jadelle stocked out at this facility today?	No			1	100.0%			1	100.0%
Group Total				1	100.0%			1	100.0%
Norplant Managed at this facility?	Yes	1	100.0%	1	50.0%	1	100.0%	3	75.0%
	No			1	50.0%			1	25.0%
Group Total		1	100.0%	2	100.0%	1	100.0%	4	100.0%
Norplant stocked out at this facility today?	Yes			1	100.0%			1	100.0%
Group Total				1	100.0%			1	100.0%
Condoms Managed at this facility?	Yes	1	100.0%	1	50.0%	1	50.0%	3	60.0%
	No			1	50.0%	1	50.0%	2	40.0%
Group Total		1	100.0%	2	100.0%	2	100.0%	5	100.0%
Condoms stocked out at this facility today?	No			1	100.0%			1	100.0%
Group Total				1	100.0%			1	100.0%

		Type of SDP						Group Total	
		Health Center IV		Health Center III		Health Center II			
		Count	Col %	Count	Col %	Count	Col %	Count	Col %
Products that are ready for distribution are arranged so that identification labels and expiry dates and/or manufacturing	No	1	100.0%	1	50.0%	1	33.3%	3	50.0%
	Yes			1	50.0%	2	66.7%	3	50.0%
Group Total		1	100.0%	2	100.0%	3	100.0%	6	100.0%
Products are stored and organized in a manner accessible for first-to-expire, first-out (FEFO) counting and general man	No	1	100.0%	1	50.0%	1	33.3%	3	50.0%
	Yes			1	50.0%	2	66.7%	3	50.0%
Group Total		1	100.0%	2	100.0%	3	100.0%	6	100.0%
Cartons and products are in good condition, not crushed due to mishandling. If cartons are openm determine if products ar	No	1	100.0%	1	50.0%			2	33.3%
	Yes			1	50.0%	3	100.0%	4	66.7%
Group Total		1	100.0%	2	100.0%	3	100.0%	6	100.0%
The facility makes it a practice to separate damaged and/or expired products from usable products and removes them from	No			1	50.0%			1	16.7%
	Yes	1	100.0%	1	50.0%	3	100.0%	5	83.3%
Group Total		1	100.0%	2	100.0%	3	100.0%	6	100.0%
Products are protected from direct sunlight	Yes	1	100.0%	2	100.0%	3	100.0%	6	100.0%
Group Total		1	100.0%	2	100.0%	3	100.0%	6	100.0%
Cartons and products are protected from water and humidity	Yes	1	100.0%	2	100.0%	3	100.0%	6	100.0%
Group Total		1	100.0%	2	100.0%	3	100.0%	6	100.0%

		Group Total	
		Count	Col %
Storage area is visually free from harmful insects and rodents. (Check the storage area for traces of bats and /or roden	No	2	33.3%
	Yes	4	66.7%
Group Total		6	100.0%
Storage area is secured witha lock and key, but is accessible during normal working hours; access is limited to authoriz	No	1	16.7%
	Yes	5	83.3%
Group Total		6	100.0%
Products are stored at the appropriate temperature according to product tempereure specifications	Yes	6	100.0%
Group Total		6	100.0%
Roof is maintained in good condition to avoid sunlight and water penetration.	Yes	6	100.0%
Group Total		6	100.0%
Storeroom is maintained in good condition (clean, all trash removed, sturdy shelves, organized boxes)	No	3	50.0%
	Yes	3	50.0%
Group Total		6	100.0%
The current space and organization is sufficient for existing products and reasonable expansion (i.e., receipt of expec	No	3	50.0%
	Yes	3	50.0%
Group Total		6	100.0%

For more information, please visit [deliver.jsi.com](http://deliver.jsi.com).

**USAID | DELIVER PROJECT**

John Snow, Inc.

Plot 2 C, Nakasero Hill Road Nakasero

Kampala, Uganda

Phone: (256) 414-253-246

Fax: (256) 414-253-245

Email: [askdeliver@jsi.com](mailto:askdeliver@jsi.com)

Internet: [deliver.jsi.com](http://deliver.jsi.com)