



USAID | DELIVER PROJECT

FROM THE AMERICAN PEOPLE

UGANDA'S MANAFWA DISTRICT: CONTRACEPTIVE LOGISTICS SYSTEM ASSESSMENT AND ACTION PLAN COVERING THE LAST MILE TO ENSURE 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 1.

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

COVERING THE LAST MILE TO ENSURE
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 Manafwa District: Contraceptive Logistics System Assessment and Action Plan: Covering the Last Mile to Ensure 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 and developed an action plan for Manafwa district to cover the last mile and ensure contraceptives availability.

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 the district of Manafwa.

Cover photo: Manafwa district team works on the assessment at the Metropole Hotel in Kampala, Uganda, in October 2008.

USAID | DELIVER PROJECT

John Snow, Inc.
Plot 65 Katalima Road
Naguru
Kampala, Uganda
Phone: (256) 414-253-246
Fax: (256) 414-253-245
E-mail: askdeliver@jsi.com
Internet: deliver.jsi.com

CONTENTS

- Acronyms..... v
- Acknowledgments vii
- Executive Summary ix
- Background..... 1
 - Context..... 3
 - Objectives..... 3
 - Methodology:..... 4
- Contraceptives Logistics System Assessment..... 7
 - I. Organization and Staffing..... 7
 - II. Logistics Management Information System (LMIS)..... 8
 - III. Obtaining Supply and Procurement..... 9
 - IV. Inventory Control Procedures..... 10
 - V. Warehousing and Storage 11
 - VI. Transportation and Distribution..... 12
 - VII. Organizational Support for Logistics 13
 - VIII. Product Use..... 14
 - IX. Finance and Donor Coordination..... 15
- Contraceptive Logistics System Assessment Conclusion 17
- Action Plan 19
- References..... 25
- Appendices**
- Appendix A: List of People Interviewed..... 27
- Appendix B: List of Facilities Visited 29
- Appendix C: List of Participants in the LSAT and Action Plan Development Workshop 31
- Figures**
- Figure 1. LSAT Scores by Component xii
- Figure 2. Logistics Cycle..... 5
- Tables**
- Table 1. Manafwa District Scores ix
- Table 2. District Situational Analysis,..... 1
- Table 3. Health Infrastructure Distribution within District..... 2
- Table 4. Health Status Indicators 2

Table 5. Key PEAP Indicators	3
Table 6. Action Plan for the District.....	19
Table 7. Interviewees.....	27
Table 8. Facilities Visited.....	29
Table 9. Participant List.....	31

ACRONYMS

AHSPR	Annual Health Sector Performance Report
BCC	behavior change communication
CAO	Chief Administrative Officer
CME	Continuing Medical Education
CYP	couple years protection
DHO	District Health Officer
FP	family planning
GoU	Government of Uganda
HC	health center
HDP	Health Development Partners
HMIS	Health Management Information System
HSD	Health Sub-District
HSSP	Health Sector Strategic Plan
IST	in-service training strategy
JMS	Joint Medical Stores
LC	local council
MDGs	Millennium Development Goals
MOH	Ministry of Health
MTCs	Medicines and Therapeutics Committees
NGO	non-government organization
NMS	National Medical Stores
PEAP	Poverty Eradication Action Plan
PHC	primary health care
QA	quality assurance
SDP	service delivery point
STI	sexually transmitted infection
UNFPA	United Nations Population Fund
USAID	U.S. Agency for International Development
WHO	World Health Organization

ACKNOWLEDGMENTS

We wish to express our sincere appreciation to all the people that contributed to the planning, completion and success of this assessment. In particular, we would like to extend our gratitude to the District Health Team of Manafwa district especially the District Health Officer, Dr. Gideon Wamasebo, Wamakale Fred, Dr. Kigundu Jonsen, Lusolera Helen, Namataka Joy and Mbohi Charles who were able to provide guidance, advice and input through out the assessment exercise. Special thanks also go to the district team that attended the workshop; their contribution to the final action plan was invaluable. Lastly, we would like to thank the USAID | DELIVER PROJECT team who worked tirelessly to ensure that this exercise was successfully completed. Special thanks go to Dr. Kenneth Ofuso-Barko and Youssof Ouedraogo for their technical support during preparation and assessment of the contraceptives logistics system.

EXECUTIVE SUMMARY

Uganda’s health sector strategic plan II (HSSP II) focuses on strengthening the integrated support systems in the health sector. Continuous availability of essential medicines and health supplies, a proxy indicator for efficient service delivery, is one of the indicators that must be monitored at all levels of the health system. This forms the basis for the logistics assessment.

This logistics systems assessment for contraceptives was instituted by the Ministry of Health (MOH) to verify if contraceptives are available in lower health facilities. Conditions that affect commodity availability were extensively examined, including:

- Organization and staffing
- Logistics management information system
- Obtaining supply and procurement
- Inventory control procedures
- Warehousing and storage
- Transportation and distribution
- Organizational support for logistics:
- Product use

The team also sought to verify if MOH guidelines for accessing free contraceptives by NGOs were available at all levels in the system and if all NGOs had access to free contraceptives.

A comprehensive system-level assessment of the performance of the contraceptives commodity supply system was carried out by use of the Logistics Systems Assessment Tool (LSAT). The tool follows the logistics cycle and includes questions on all components of the cycle. Questionnaires were served to all personnel at health facility level and district who were involved in the management of contraceptives in the district. A general assessment was also carried out through interviews of personnel in charge of commodities management and facility in-charges. Facilities were selected with consideration to ownership (Public, Government, and NGO) and level of care (HCII, III and IV).

Table I. Manafwa District Scores

LSAT SECTION	Score (%)
I. Organization and Staffing	10.8
II. Logistics Management Information System (LMIS)	67.7
III. Obtaining Supplies/Procurement	n/a
IV. Inventory Control Procedures	59.4
V. Warehousing and Storage	64.3
VI. Transport and Distribution	20.0
VII. Organizational Support for Logistics System	91.3
VIII. Product Use	87.5
IX.. Finance/Donor Coordination/RHCS Planning	85.7

Organization and staffing was found to be a major bottleneck in the efficient management of the contraceptives logistics system in the district, achieving a score of 10.8%. Logistics management is an added responsibility of the in-charges and other staff who are busy with other roles. Low motivation for these tasks may also be due to lack of allowances to cover this additional burden. Routine logistics activities are therefore not given adequate attention.

A structure for effective management of logistics information is in place with clear guidelines for staff responsible for logistics management. Good coordination was noted with captured logistics information being used to monitor and improve on performance in medicines supply in the district. Essential data elements are not adequately captured at facilities due to lack of skills, low motivation and heavy workloads. Although facilities confirm they are performing physical counts, related information was not noted on the stock cards.

Procurement guidelines are being followed for primary health care (PHC) supplies and pre-qualified suppliers are able to deliver on time. However, the National Medical Stores (NMS) experienced noteworthy delivery delays of 3-4 months for essential drugs, an integrated grouping that includes contraceptives. The district has unsuccessfully followed up on this issue; most units do not make the effort any more. Although NMS issued a district delivery schedule, they have not adhered to set delivery dates, resulting in facility stockouts. It was noted that pipeline monitoring is not being done; some units have been overstocked while others stocked out of specific commodities. A system for registering complaints is in place but it was noted that most units were not following minimum units of issue on HMIS 018 when filling quantity to order; thus., they always end up with too little or too much of an item. For example, a unit that requires 2, 000 vials of Depo-Provera might fill in 2,000 instead of 20 since Depo-Provera is packed in packs of 100 vials.

Facilities are able to determine their needs and order accordingly through the pull system. There is a clear guideline for maintenance of appropriate stock levels at all levels, although this is not followed adequately due to delays in delivery and poor record keeping of logistics data. The principle of first-to-expire, first-out (FEFO) is being followed with damaged/expired supplies removed from inventory. Most units are not able to recognize loses/adjustments in the system because this data was not being captured and some units did not have updated stock cards with a column for noting loses/adjustments. There are no guidelines for units to access emergency supplies wither from NMS or other facilities/districts that may be overstocked.

The district is responsible for distribution of supplies to health subdistrict (HSD). The HSD is responsible for distribution to lower health facilities. All supplies are delivered at the same time and there is no set delivery schedule within the district. Supplies take 3-4 days to be delivered to lower units upon delivery from NMS. There is no budget line for transport and distribution of essential drugs under PHC. This function is integrated into other activities like support supervision and out reaches which sometimes leads to delay in availing supplies at facility level. DHO relies on HSD transport which is also used as an ambulance for referrals. This has greatly affected support supervision and distribution at the district level.

Good communication within the district with monthly district meetings to review orders, identify units with particular weaknesses then provide support and establish a follow-up mechanism. A process is in place to identify gaps and improve on knowledge and skills of personnel carrying out logistics management. Fridays are set aside for skills development through knowledge-sharing by personnel who have gone through training and technocrats drawn from various fields and external assistance from donors and MOH. Job aids are in place but there is no job descriptions for managing logistics in facilities. Supervision is carried out at least once a month by the district and

quarterly by the Area Team-MOH and the Regional Pharmacist. Due to poor staffing at the district level, the district has not been able to supervise all facilities.

Family planning services are present at all health units, where treatment guidelines are available. Commodity use monitoring is performed by UNFPA, MOH & NDA. Marie Stopes has held awareness campaigns at central level; however, inadequate awareness campaigning is in place at the district level. Long-term methods are not available because providers are not trained in their management and they do not order for them.

Most women access family planning services without spousal consent due to negative perception of the service by men; hence, a preference for injections and long term methods is noted. Low uptake of Ngabo condoms is attributed to quality concerns; an adverse method reaction discourages other mothers from using these products. Political statements against family planning also discourages uptake. Village health teams that could have been helpful in building awareness are not functional.

Donors are coordinating well in the district, with various partners supplementing activities like training, provision of outreaches for family planning methods, especially in instances where there is lack of training. Gaps remain in financing key components such as PHC funds for support supervision and transport in the district. Another concern is low motivation of health facility staffers who are carrying out the logistics management activities in addition to their primary roles.

Conclusion:

The Logistics Systems Assessment clearly shows us that the district's contraceptives logistics system features excellent organizational support for logistic systems. Training has been provided for key personnel in the district and required tools are in place for them to carry out their activities in logistics management. However, there is a need for further support in training additional personnel who manage supplies, such as nursing assistants who have not been trained as yet.

Finance/donor coordination/RHCS planning is adequately addressed in an available budget line for contraceptive storage and distribution. However, poor funding for waste management and support supervision was noted at all levels. Various partners are complementing service delivery in the district, most notably including: USAID | DELIVER PROJECT, Marie Stopes, and UNFPA. There is a need for the MOH to advocate with donors and government for increased funding to lower levels for supportive supervision, waste management and supply distribution within the district.

Rigorous awareness campaigns are needed to address the challenge of negative perception of contraceptives among the men and politicians within the district. District health teams may be functionalized and used in awareness campaigns. The Ministry of Health will address low utilization of Ngabo condoms, which were perceived to be poor quality.

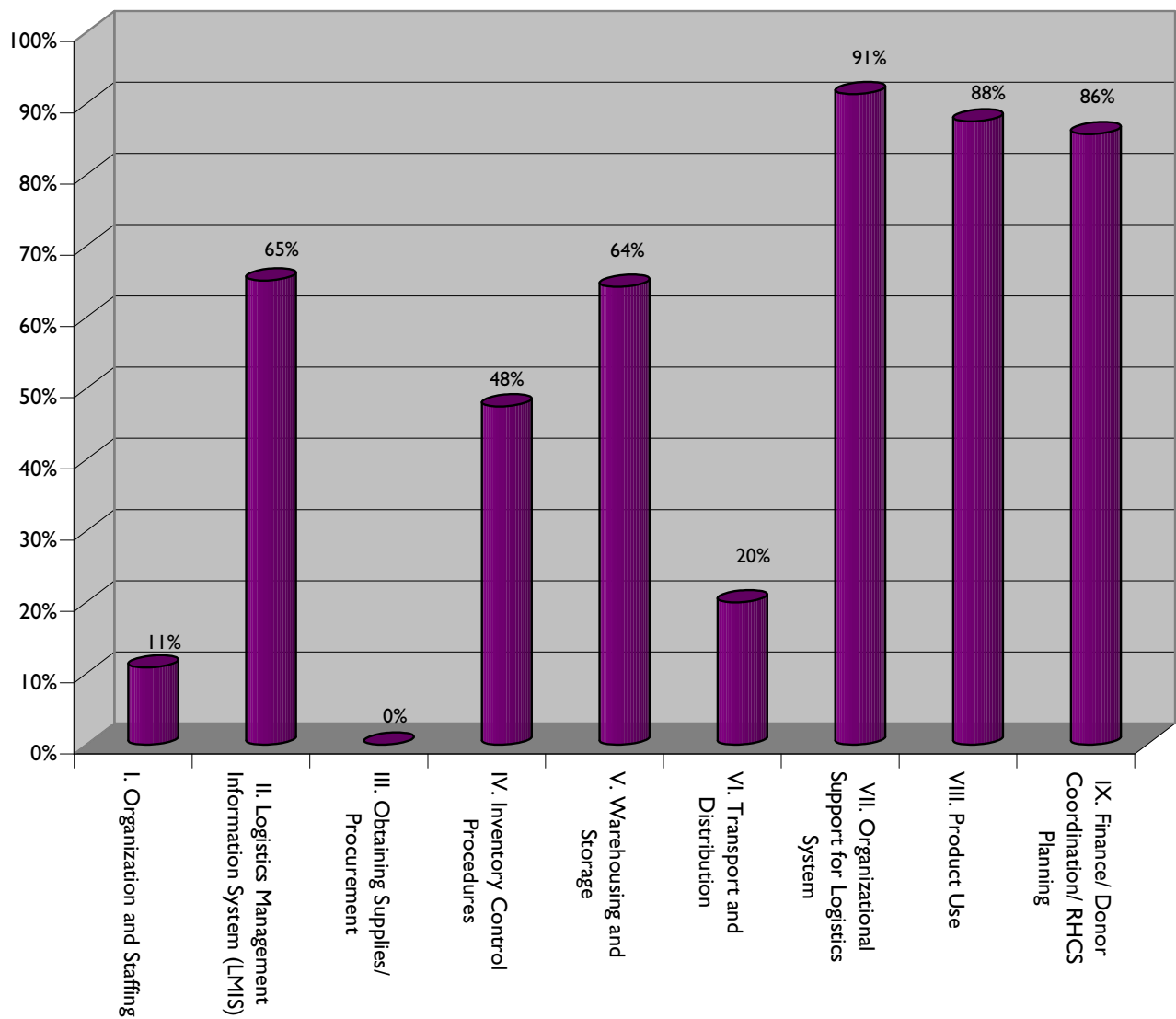
Through increased supportive supervision at all levels, the district should ensure adherence to proper inventory control procedures and warehousing and storage standards. Skills and knowledge gaps at all levels should be identified and addressed through training.

One noteworthy challenge is the lack of a budget line for transport and distribution. Contraceptive distribution is integrated with that of other products; sometimes contraceptives receive insufficient attention. District health office (DHO) transport to lower facilities to carry out supportive supervision is not available. There is a need for a budget line covering transport/distribution (vehicle maintenance, fuel) by the central government and also availing of transport for the DHO.

The weakest link in the contraceptives logistics system is persistent difficulties in obtaining supplies under the credit line. Orders are made on time but deliveries take up to 4 months to be delivered to the district. Quantities ordered are not received and the district receives no communications about the status of their orders. Delivery schedules are not followed by NMS, making it very difficult for facilities to plan. There is a lack of guidelines on how to access emergency supplies in case of stockouts. There is a need for establishing communication protocols at all levels of the system.

Lastly, a review of the Essential Medicines and Health supplies logistics system, including contraceptives, is long overdue. The MOH, in conjunction with the USAID | DELIVER PROJECT and other partners, should carry out a review of the whole supply system so as to identify gaps and develop action plans.

Figure I. LSAT Scores by Component



BACKGROUND

District Profile:

Formerly part of Mbale district, Manafwa district was formed through an Act of Parliament in July 2005 which went into effect in September 2005. It initially included an area that broke off in 2006 to form Bududa district. The Manafwa district is now comprised of two health subdistricts (HSD), termed Bubulo East HSD and Bubulo West HSD.

Manafwa district has fourteen subcounties, including Bumbo, Bumwoni, Buwabwala, Bupoto, Namabya, Tsekululu, Magale and Bubutu in Bubulo East HSD and Buwagogo, Bugobero, Butiru, Sibanga, Bukusu and Kaato in Bubulo West HSD. It has two town councils – Manafwa Town Council and Lwakhakha Town Council – plus 44 parishes and 1300 villages.

Manafwa has a total population of 317,500 of which 164,700 are females. The table below shows the disaggregated population by sub county and age category (e.g. infants under fives, women of child bearing age, pregnant mothers in the district per subcounty).

Table 2. District Situational Analysis^{1,2}

HSD	Total Pop.	Female	Male	Infants	Preg. Mothers	Under fives	Child bearing age
<i>Bubulo West</i>	135,779	69,542	66,243	5,834	6,785	27,831	27,424
<i>Bubulo East</i>	173,024	89,002	84,022	7,436	8,647	35,465	34,948
<i>Total</i>	308,803	158,544	150,265	13,270	15,555	63,296	62,372

Health Facilities

The district is served by twenty-two (22) health units distributed with a geographical bias along main district feeder roads leaving the more remote areas underserved. The health centre four is at Magale which is an NGO facility for Bubulo East and Bugobero HC.IV for Bubulo West Health Sub Districts respectively. The district has no hospital. The distribution of the other units by level and ownership is as shown in the table that follows.

¹ Source: The 2002 Population and Housing Census – Mbale district

² Note: Disaggregated population seem to be less than actual population because of lack of update sub-county data

Table 3. Health Infrastructure Distribution within District

Level of health facility	Bubulo East		Bubulo West	
	Govt	NGO	Govt	NGO
<i>Hospital</i>	0	0	0	0
<i>HC IV</i>	0	1	1	0
<i>HC III</i>	7	0	4	1
<i>HC II</i>	2	3	1	2
<i>Total</i>	9	4	6	3

Human Resource for Health

The total number of established posts in the district is 386 with 161 posts filled for both the district and lower health facility level. The district has only 2 doctors, including the District Health Officer. The position of Assistant District Health Officer is not filled, thus creating a gap in efficient delivery of family planning services.

Health Status Indicators

As a newly-formed district in its second year, it has been difficult to establish specific district population health indicators.

Table 4. Health Status Indicators

Indicator	District	National
<i>Population Density</i>	263/sq KM	
<i>Fertility Rate</i>	7.2	8
<i>Av. House hold size</i>	8 people	
<i>Growth rate</i>	2.5%	3.2%
<i>IMR</i>	46/1,000	130/1,000
<i>MMR</i>	186/100,000	435/100,000
<i>TFR</i>	6%	5.4%
<i><5 mortality rate</i>	134/1000	137/1000

Table 5. Key PEAP Indicators

Indicator	District	National	Comment
<i>OPD utilization</i>	80%	90%	Low access
<i>DPT3/HepB+Hib</i>	119%	90%	High coverage because of good mobilization. Migration across border
<i>% deliveries in Health Units</i>	21%	35%	Low mobilization Few midwives
<i>Proportion of approved posts filled</i>	42%	75%	Delays in recruitment process by DSC.
<i>District average HIV sero prevalence rates as captured from ANC surveillance</i>	2.6 %	6%	From PMTCT implementing sites in the district.

It is important to note that the district has special diseases, conditions and problems that are of particular interest. These include:

- Special cultural factors and beliefs on topics such as circumcision
- High immigration and migration of people since it is a border district.
- Cross-border business with accompanying prostitution, complicating efforts to address HIV/AIDS and other infectious diseases
- High rates of child pregnancy, abortion and maternal anemia

CONTEXT

The Ministry of Health aims to expand access to reproductive health services at lower facility levels and to improve the management of health commodities including contraceptives. Regular assessment of the supply system is one of the ways in which gaps can be identified and mechanisms put in place for improvement. This therefore forms the basis for this assessment

OBJECTIVES

- LSAT
 - Diagnose areas that need improvement.
 - Monitor the system's performance.
 - Raise stakeholders collective awareness about system performance.
 - Gather informants' (logistics) knowledge, and use results of the analysis for work planning.
- Action plan

METHODOLOGY:

The methodology used in this assessment included selection of districts to be visited, teams, facilities, data collection and mechanism for feed back and action planning by the various teams.

Selection of districts:

The survey was carried out in selected districts including Manafwa. This is due to the need to concentrate efforts and develop a comprehensive study despite time and resource limitations.

Selection of Facilities:

A general assessment of health service delivery of Manafwa district was carried out with the District Health Officer. Accessibility and provision of reproductive health services were used as criteria for creating the list of health facilities to be visited. Since it is a mountainous district in a rainy season at the time of survey, some facilities were not easily accessible, particularly at the HCII level. A total of five health facilities were visited, plus the district stores that forms part of the supply chain.

Facility Assessment/data collection:

The team was provided with the HMIS focal person to act as a guide and facilities were notified of the visit. facility in-charges were provided with the letters of introduction from the Ministry of Health explaining the purpose of the survey.

The team had general discussion on service delivery at the facility and key personnel involved in logistics management were identified for interviews. The LSAT tool was explained to personnel to be interviewed and interviewing were done by the team leader.

The stores were visited by the team and the person managing the stores was interviewed to assess health facility (HF) storage conditions. The family planning units were also visited and the midwife in-charge was interviewed to capture information on logistics information management in the units.

A feedback meeting was held with the in-charge to provide feedback on identified strengths, weaknesses and action points agreed upon on how to improve.

LSAT Assessment workshop:

A comprehensive report for the district was prepared by the team and strengths, weaknesses of each of the components in the logistics cycle were identified. Action points/recommendations were developed and shared with representatives from the district in a two-day workshop. District representatives included the DHO, in-charge of the two HSDs, reproductive focal person in the district, district Store keeper and the in-charge of an NGO health facility. An action plan on how to improve the contraceptives logistics system was developed and approved by the team.

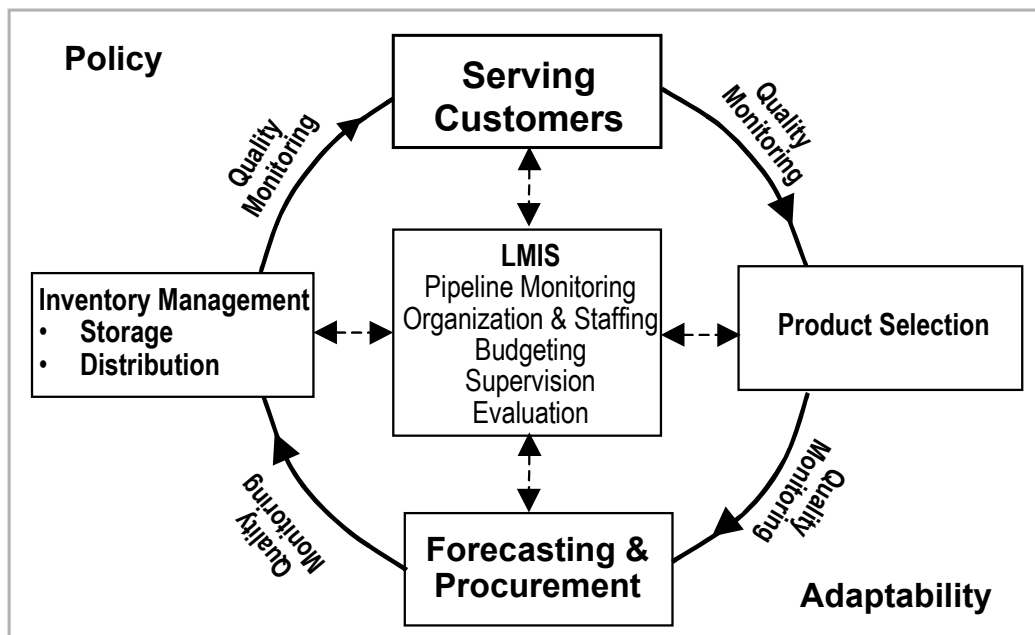
LSAT and action plan development workshop:

All teams from all districts were merged according to the components in the logistics cycle so that the groups could identify cross-cutting issues in each group and come up with an overall Action plan for the six districts. The Action plan that was developed and approved is representative of the countrywide logistics system for contraceptives and will be used by the Ministry of Health to improve system performance and program planning at the central level.

LOGISTICS SYTEM EVALUATION

The Logistics System Assessment Tool (LSAT) enabled the teams to carry out a comprehensive system-level assessment of the performance of the logistics system for essential medicines and health supplies including contraceptives. The tool follows the logistics cycle (see figure 1) and includes questions on all components of the cycle. It is important to note that in this assessment; only the LSAT was used to provide an overall assessment of the program's ability to ensure the continuous availability of health commodities at service delivery points (SDPs) although it can also be used with the Logistics Indicators Assessment Tool (LIAT).

Figure 2. Logistics Cycle



Product selection, forecasting and procurement was not extensively covered during this assessment because they are central level activities.

FIELD VISIT

The survey was carried out mostly in health facilities in Bubulo West HSD, since most roads in Bubulo East were inaccessible due to heavy rains. As detailed in the Appendix, a total of five health units were visited including the district stores.

LSAT AND ACTION PLAN DEVELOPMENT WORKSHOP

The action plan development workshop was organized to come up with an action plan for the district and also a combined action plan for all the districts covered in the assessment. Cross-cutting issues in all the districts (strength, weakness & recommendations) were identified for each of the components. This was a two and a half day workshop that was attended by six representatives from the district of Manafwa and the central level assessment team.

CONTRACEPTIVES LOGISTICS SYSTEM ASSESSMENT

A comprehensive assessment for each of the components of the logistics cycle was performed through use of the LSAT. Findings are as outlined below:

I. ORGANIZATION AND STAFFING

Good coordination of logistics functions were noted at all levels where required tools for logistics management were provided on time and all facilities were able to prepare their reports/orders and submit them on time. Communication is done through joint work plans, formal writing, district, HSD and facility meetings and by telephone. It is also important to note that guidelines for logistics management at the facility were available and being used (Facility job aid book).

It was noted that the facilities do not have a logistics management unit. Logistics activities are being carried out by individuals who are sometimes not trained in logistics management. The medicines and therapeutics committees (MTCs) who are tasked with the role of monitoring and coordinating drug supply activities in the district have been formed but are not functional at all levels apart from the district level.

There is lack of guidelines/tool for logistics supervision in the district. Most supervision visits did not involve proper checking of logistics activities leading to poor maintenance of stock cards, storage conditions etc.

Logistics management at the facility is an added responsibility of the in-charges and other staff who are busy with other roles. Routine logistical activities are therefore not given adequate attention. Poor motivation noted among staffers who carry the extra role of logistics management due to lack of allowances.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ MTCs (in-charge of unit, in-charge stores, LC1 and a parish representative) whose role is to carry out supplies monitoring, supervision and coordination of procurement of medicines are available at facility level but not functional ▪ Guidelines for logistics management in place and is being used. ▪ Good coordination of logistical functions at all levels 	<ul style="list-style-type: none"> ▪ A lot of logistics management done at the HSD without an established logistics officer ▪ Lack of functional MTCs at HSD/District all levels ▪ Lack of guidelines/tool for logistics supervision
RECOMMENDATIONS	
<ul style="list-style-type: none"> ▪ Establish a Logistics Assistant position at the HSD to foster better Logistics Management at this level, since most logistics activities occur at this level of the system ▪ Creation and their fictionalization of MTCs at all levels. ▪ Development and distribution integrated logistics support supervision guidelines/tools for to all stake holders.(District, HSD, HF) 	

II. LOGISTICS MANAGEMENT INFORMATION SYSTEM (LMIS)

The pull system is being used for the essential medicines and health supplies logistics system. The LMIS in use is able to capture all essential data items except losses/adjustments. It is therefore difficult to establish losses or adjustments due to donations in the system.

Although stockkeeping records are kept, most are not updated regularly, making it difficult to determine minimum and maximum stock levels at the facility. Poor recordkeeping also makes it difficult to establish periods of stockouts.

LMIS reports at the district/central level are not able to provide information on units that are stocked out, overstocked or understocked. As a result, some facilities within the district are overstocked with particular items while others are out of stock.

Reports are submitted regularly to the district with a rate of 95% from district to central level and 85% form facility to district. Late reporting at facility level is attributed to heavy workload due to under-staffing and lack of transport.

Systems records are not being reconciled against physical inventory. No evidence of physical count was noted at any facilities visited.

External assistance in medicines logistics management is provided by the Ministry of Health Area team (Eastern) and the Regional Pharmacist and the DADI from Mbale.

Logistical data is being used in program planning, forecasting, identification of gaps for support supervision & accountability.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ LMIS captures essential data items but not losses/adjustments ▪ Good information flow from facility to central level with timely reporting at all levels ▪ Information system is used to monitor performance at all levels (consumption, reorder quantity, drug use & stockouts) 	<ul style="list-style-type: none"> ▪ Physical count not frequently carried out ▪ LMIS is not automated at all levels ▪ Essential data is not adequately captured at facility level due to poor motivation, heavy workload and inadequate knowledge and lack of skills among some staff.
RECOMMENDATIONS	
<ul style="list-style-type: none"> ▪ Enforce proper inventory control standards (physical count, updating of stock cards etc) ▪ Support supervision should ensure proper inventory control standards (physical count, updating of stock cards etc) ▪ LMIS tools should be automated for accurate management of logistics information ▪ Training for staff who lack skills in contraceptives logistics management 	

III. OBTAINING SUPPLY AND PROCUREMENT

Contraceptives have been integrated into the essential medicines and health supplies system (credit line). Ordering and supply is performed every two months. Users and staff responsible for procurement jointly identify needs. The District Procurement Unit is responsible for procurement of supplies under PHC funding and health facilities are responsible for ordering for ED under the Credit line. In-charges are making orders as individuals due to lack of functioning MTCs.

It was noted that local suppliers were able to deliver supplies on time and in the right quantity. Supplies from NMS take 3-4 months from date of order to delivery. Some delays are attributed to delays between the HSD/district/NMS.

A clear guideline for quality assurance of supplies is in place, covering product specification to receiving of supplies. The procedure for registering complaints on product quality is also in place and being used by the district.

Coordination is done through the NMS distribution schedule and default ordering is done by district for any facilities that fail to order on time. Districts follow up by physically going to NMS or by telephone in case of delays.

There is poor monitoring of pipeline information, most especially at the facility level. Buffer stock has been used up on all units and stock levels are maintained below minimum stock levels, leading to constant stockouts within the units.

Poor information flow was noted between stakeholders (e.g NMS and the district for available funds, delivery dates and available supplies). Delay in release of PHC funds is also noted as a major obstacle to obtaining supplies in the district.

All facilities and even the district did not have the MOH guidelines on how to access free contraceptives from NMS. Most NGO facilities are accessing supplies from procurement from private pharmacists. This means that clients are charged a fee for accessing family planning services in NMG facilities. This has had a negative effect on the number of clients attending family planning in these units.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ Written guidelines for quality assurance in place ▪ Procedures for registering complaints on product quality in place ▪ District procurement unit in place and set procurement guidelines being followed 	<ul style="list-style-type: none"> ▪ Poor information flow between stakeholders and district (account balances, delivery dates, availability of supplies) ▪ Pipeline status not regularly monitored ▪ In-charges monopolize logistics management at the facility (orders are made by an individual and may not get done when he/she is away from the facility)
RECOMMENDATIONS	
<ul style="list-style-type: none"> ▪ Strengthen pipeline monitoring ▪ Build capacity at Health facility for logistics management (train other staff, create an enabling environment) ▪ Strengthen information flow among stakeholders 	

IV. INVENTORY CONTROL PROCEDURES

Standard inventory control procedures were in place in facilities visited, although they were not always fully implemented. Poor recordkeeping has resulted in poor estimation of minimum and maximum stock levels.

Most units had stocked out of long-term methods and were operating below minimum stock levels for short-term methods with no procedure for accessing emergency supplies by the facilities either from NMS or between facilities and even between districts.

Contraceptives are full-supply commodities but have not been maintained as such due to delayed resupply from NMS and poor reorder quantity estimation leading to over-stocking/stockouts.

There are no guidelines for redistribution of overstocked products, although it is being done haphazardly at the HSD level and not at the facility level. For example, one unit was stocked out of Microgynon and yet the product was overstocked at another unit within the same HSD.

There is a policy of storing and issuing stock according to first-to-expire, first-out (FEFO) inventory control procedures at all levels and expired /damaged items were removed from inventory. Expired drugs are sent to HSD for onward transportation to the district store. It was noted that there is no mechanism for destruction in the district, leading to expired drugs accumulating at the district store. IUDs, Implants and Depo-provera are the item that stock out most frequently. Depo-provera stocks out due to high demand from clients who prefer this method, which enables family planning to be practiced in secrecy at home. Providers do not order for IUDs and implants because they do not know how to use them.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ Pull system being used implies that facilities have full control of ordering what they need ▪ Clear guidelines for minimum/maximum stock levels available at all levels ▪ Policy of storing and issuing stock according to first-to-expire, first-out (FEFO) inventory control procedures in place at all levels? 	<ul style="list-style-type: none"> ▪ Most units operate below minimum stock levels for long term methods and Depo-provera, sometimes over-stocked (above maximum stock levels) for short-term methods. ▪ Data on losses/adjustments is not being captured. It is not possible to establish the amount of losses/adjustments of medicines in the district because ▪ No guidelines on how to access emergency supplies in case of stock outs through re distribution within the district or ordering from NMS.
RECOMMENDATIONS	
<ul style="list-style-type: none"> ▪ Calculation of minimum and maximum stock levels should be enforced through support supervision by HSD and district ▪ MOH/ stakeholders to develop and distribute guidelines on how to access emergency supplies. Guidelines should include redistribution between facilities , districts and access at central level ▪ Enforce collection and prompt communication of losses and adjustments at all levels to relevant intervention points. 	

V. WAREHOUSING AND STORAGE

Written guidelines for storage and handling of all products were available in the Facility Job Aid book but these were not displayed in storage areas. Injection safety project is providing guidelines on management of medical waste and waste bins for disposal.

Physical counts are done annually during board of survey meetings and also bi-monthly when facility is preparing to order, although physical count records were not recorded in stock cards. Stores at

district and HSD level are congested with expired supplies retrieved from health facilities. Bulky donated supplies like condoms and injectables are kept on the floor due to inadequate storage space at all levels. Facilities have built concrete shelves for storage. Cupboards are also being used.

The district does not have plans for meeting challenges in provision of storage space at facility level, nor is there a budget line for this activity. Inadequate monitoring and documentation of quality of products at SDPs was also noted, including stock holding levels, shelf life, packaging etc.

A system is in place for registering complaints with NMS and other stakeholders. Manafwa does not have an Assistant Drug Inspector to monitor rational drug use (storage) in the district. The DADI of Mbale has been carrying out monitoring on a part-time basis which is not adequate.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ Written guidelines in place at all levels of the system for storage and handling of all products (e.g., manuals) ▪ Quality assurance carried out with a clear system for registering complaints on product quality in place ▪ Periodic physical count of stock is carried out at all levels 	<ul style="list-style-type: none"> ▪ Inadequate storage space especially at HSD and facility level. Poor organization in facilities due to poor shelving, lack of pallets. ▪ Congestion at HSD/district stores due to inadequate disposal of waste/expired products ▪ Inadequate monitoring and documentation of quality of products at service delivery points
RECOMMENDATIONS	
<ul style="list-style-type: none"> ▪ District should identify a central collection point for waste to decongest the stores at HSD/SDP ▪ Strengthen monitoring and documentation of quality of products at service delivery points ▪ MOH/ partners should consider construction of storage facilities at HSD and HCIII. 	

VI. TRANSPORTATION AND DISTRIBUTION

Manafwa relies on two HSD vehicles for transportation and distribution but these vehicles are also used for referrals, support supervision and outreach. The district health office does not have a vehicle. It is the responsibility of the DHO to deliver supplies to HSD when NMS makes deliveries. The HSD then ensures delivery to the lower units however this depends on availability of fuel and ongoing activities within the HSD/district. Facilities are expected to organize transport to pick their supplies in case HSD is not able to deliver to the facility.

Fuel for the two vehicles is covered by the HSD PHC fuel allocation which has been insufficient in size and, in most cases, not released on time. Some outsourcing and use of personal vehicles for supply distribution is done between HSD and facilities.

Timely delivery of orders from lower units to HSD and then to the district was noted, although there was a registered delay in the movement of orders from the district to NMS. The district has never failed to distribute supplies to HSD and lower facilities despite these noted challenges.

It is recommended that MOH/partners consider providing a vehicle to the district for distribution and support supervision and monitoring and coordination of logistical activities. PHC fund allocation for fuel to HSDs should also be increased to take care of added roles of transport/distribution for effective service delivery.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ Timely delivery of orders within the various levels in the district. ▪ District has never failed to distribute supplies despite lack of funds for transport and distribution of supplies. 	<ul style="list-style-type: none"> ▪ DHO does not have a vehicle to carry out support supervision and deliver supplies to HSDs ▪ No budget line for fuel for transport/distribution of supplies in the district. ▪ Delay of orders reaching NMS
RECOMMENDATIONS	
<ul style="list-style-type: none"> ▪ MOH/partners should consider providing a vehicle at the district for distribution and support supervision and monitoring and coordination of logistics activities in the district ▪ PHC fund allocation for fuel to HSDs to be increased to take care of added roles of transport/distribution/ coordination and support supervision for effective service delivery ▪ Automate the ordering system for essential medicines and contraceptives 	

VII. ORGANIZATIONAL SUPPORT FOR LOGISTICS

A stores position has been filled at the district but not at lower facility level. Logistics management in facilities is done by in-charges with support from nursing assistants. The district, HSD and facility health team meet monthly to discuss the logistics performance. On-the-job training is done at all levels for staffers who are not trained. The district has set aside Fridays for skills development through sharing of knowledge from personnel who have gone through training and technocrats drawn from various fields and external assistance form donors and MOH is sought in case of identified training needs. At the district and HSD level, staffers are assigned supervisory roles which are noted in their annual workplans; however, effective supportive supervision is not done due to lack of dedicated vehicles for this activity and poor staffing.

Good communication was noted between personnel involved in logistics management at the district. Guidelines/tools are in place for supportive supervision and it is being carried out to include logistics activities. Staff development is planned in the district with key personnel trained in logistics management for contraceptives and essential medicines. However, there were no written job description for staffers who are responsible for medicines logistics management and transport is lacking for the district health team who would carry adequate support supervision.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ Good communication noted between personnel involved in logistics management at the district. ▪ Guidelines/tools in place for support supervision and is being carried out to include logistics activities. ▪ Staff development registered in the district with key personnel trained in logistics management for contraceptives and essential medicines. 	<ul style="list-style-type: none"> ▪ No written job description for staff who are responsible for medicines logistics management. ▪ No transport for the district health team to carry adequate support supervision ▪ Poor coordination of support supervision activities including follow up mechanisms at all levels due to low staffing and inadequate funding/late release.
RECOMMENDATIONS	
<ul style="list-style-type: none"> ▪ Establish positions for staff who are responsible for logistics management at the district (DADI for district, Supplies Assistants at HSD/facility level) ▪ Districts should fill all established positions at management level. ▪ Increased funding and timely release to facilitate managers to carry out the added logistics activities effectively. 	

VIII. PRODUCT USE

In Manafwa district, all health units provide family planning services and commodities managed by majority of facilities include short term family planning methods such as Depo-provera, Lofeminal, condoms. Long-term methods of family planning service are provided by organizations such as Marie Stopes who visit centers once a month. There is high desire for long-term family planning methods in the district but most providers are not trained in managing these products. The midwives who were trained by CARE in 2000 cannot provide the service because MOH guidelines specify that these services can only be provided by a medical doctor.

Standard treatment guidelines exist for conditions that are treated with commodities in supply chain. Universal safety precautions are available and distributed to SDPs. It was noted that uptake of family planning services has been greatly affected by inadequate awareness campaigns in the community. The perceived poor quality of Ngabo condoms has led to low demand for this product, resulting in district overstocking. The absence of preferred methods has led to low client turn-up at facilities.

NGOs do not have access to free contraceptives due to lack of guidelines on how to access them from NMS. Only Depo-provera is being provided. This product is procured by funds from user fees; thus, clients are charged a fee in order to access this method, leading to low client turn-up for family planning services at the NGO facilities.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ Standard treatment guideline exist for conditions that are treated with commodities in supply chain ▪ Universal safety precaution are available and distributed to SDP ▪ Monitoring done by NDA, Regional pharmacist, UNFPA ▪ Manafwa provides family planning services to all its health units, including faith-based NGO (Catholics) 	<ul style="list-style-type: none"> ▪ Inadequate availability of preferred methods (IUDs, implants, Depo-provera) have led to reduced client turn-up for family planning ▪ Inadequate behavior change communication campaign in district leaves awareness low ▪ Barriers (political, cultural, religious) have greatly affected family planning service uptake ▪ Perceived quality of some products has affected uptake (Ngabo condoms)
RECOMMENDATIONS	
<ul style="list-style-type: none"> ▪ Increase availability of preferred methods (IUDs, Implants, Depo-provera) to improve client turn--up for family planning services and acceptability rates. ▪ Develop and implement integrated awareness campaign programs by all stakeholders ▪ MOH/partners and districts to develop programs to address quality related issues raised 	

IX. FINANCE AND DONOR COORDINATION

There was marked commitment to improving quality of service delivery by all stakeholders. Donors/ partners were actively participating in filling gaps identified in the district in areas of training, provision of long term methods and the monitoring and evaluation of family planning services. Budgets for storage/distribution, staff development are provided at the central level.

Activities in the district including transport/distribution and support supervision are greatly affected by delayed release of PHC funds. Available funding for fuel and vehicle maintenance is insufficient to cover all planned activities in the district/HSD.

Staffers who carry out the added role of logistics managers in the district are not motivated, hence, unable to efficiently carry out these duties.

STRENGTHS

- Central level has budget line for products, warehousing/storage, LMIS and transportation
- Adequate logistic staff development done by programs-USAID | DELIVER PROJECT/ MOH, WHO, UNICEF
- Commitment to improving quality of family planning services by stakeholders (staff, political and district administration, community, donors)

WEAKNESSES

- No monetary motivation for staffers who do added work of logistics management at the lower units.
- No budget for waste management in the MOH and district.
- PHC funds not received on time and inadequate, most especially the allocation for vehicle maintenance at HSDs.
-
-

RECOMMENDATIONS

- Budget support made at district/HSDs & SDPs to motivate staffers who do the added work of logistics management at the lower units
- MOH/partners to identify funding for waste management
- Ministry of Finance through MOH to increase and improve timely disbursement of PHC funds.

CONTRACEPTIVE LOGISTICS SYSTEM ASSESSMENT CONCLUSION

The logistics system for contraceptives is integrated into the essential medicines and health supplies distribution system with an average functionality. From the results of the LSAT it was noted that there is a strong organizational support for logistics systems, product use and finance and donor coordination within the district of Manafwa.

Organization and staffing to support the contraceptives logistics system was found to be lacking in Manafwa district. There is no established position for stores assistants at the facility level with this function being done by staffers with other duties and responsibilities. There is no job description for logistical management at all levels. Supportive supervision not adequate because the district does not have a vehicle and there is no guideline/tool for support supervision in logistics management.

Although there is a logistics management information system in place, most facilities are not keeping records adequately leading to inaccurate/poor data capture in some instances. This is mainly as result of lack of sufficient support supervision and lack of tools for proper logistics information management (e.g. standard stock cards). The LMIS is completely non-automated, making it very tedious and time consuming to capture and analyze data at the facility level. Automation would also improve communication between levels (e.g. order form submission to district and then to NMS).

The process for obtaining supplies/procurement in the district is quite poor with a delivery lead time of 3-4 months from date of order by the facility. Logistical activities are poorly coordinated between the district and NMS, leading to lack of information on status of supplies. Pipeline monitoring is not adequately addressed, leading to stockouts in some units and over-stocking in others and stock available at the central level. Health units do not have a procurement unit to carry out coordination and ordering of supplies. Since these tasks are assigned to the in-charge as an individual, these activities may not be done if the individual is not at the facility.

Inventory control procedures and guidelines are in place. Key stores management staffers have been trained. However, standard inventory control procedures are not fully followed, with most stores operating below minimum stock levels. There is no procedure for accessing emergency supplies from the central level in case of stockouts. The principle of FEFO is followed in storage and distribution and it was noted that most stores had adequate storage conditions (good ventilation, concrete shelves and protection of commodities from direct sunlight). Available storage space is not adequate, especially at HSD and the district level where space is taken up by expired stocks. Also, the district does not have a waste management system in place.

In order to have a fully-functional logistics system for contraceptives and essential drugs, there is a need to focus on areas where gaps have been identified, especially obtaining supplies/ procurement, transport/ distribution and organization and staffing. Follow-up on identified activities and recommendations should be done bi-annually to ensure effective implementation by all stakeholders.

ACTION PLAN

The group action plan was developed for each of the components in the logistics cycle. Strength and challenges were assessed and recommendations developed for improvement of identified gaps. Activities were then developed for each of the recommendations. Developed activities were categorized into short, medium and long term. Timelines were from the month of October 2008. Implementation therefore is to start immediately for those activities that are to be carried out independent of other parties.

Table 6. Action Plan for the District

Logistics components Objectives	Recommendations	Activities	Indicators Objectively verifiable	Timeline	Responsible	Assumptions/ remarks
<i>Organizational context and staffing</i>	Position of Logistics Assistant be created and filled at HSD to foster better Logistics Management at this level.	Recommendation for establishment of position for logistics assistant at HSD level be presented to stakeholders	Established position in the structure	6 months	Deliver/MOH/DHO/CAO	Ministry of health gives professional guidance and Ministry of Public Service approves
	Creation and the operationalisation of Medicines & Therapeutic Committees (MTCs) at all levels.	Review and establish a functional MTC structure at all levels	MTCs established and functional at all levels	6 months	Deliver/MOH DHO/CAO	
	Development and distribution and ensure utilization of an integrated logistics support supervision guideline/tools to all stakeholders.(District, HSD, HF)	Review, print and distribute guidelines for support supervision	Reviewed guideline in place at all levels	6 months	Deliver/MOH/District	

LMIS	Proper inventory control standards (physical count, updating of stock cards etc) be enforced	Continuously Monitor inventory control standards	Standards maintained	On going	In-charges of facilities and HSDs	
	LMIS tools should be automated for accurate management of logistics information	Procure computers and distribute to HSD and district level. Logistics management software to be installed in all computers	Functional automated logistics management system.	12 months	Deliver/Resource Centre	
	Build capacity for contraceptive logistics information management	Conduct training for staff who lack skills in contraceptives logistics management at all levels	Proportion of trained personnel in contraceptives logistics management	3 months	MOH/District/ Partners/HSDs	
Obtaining supply/ Procurement:	Strengthen pipeline monitoring	Develop and disseminate communication protocols	Communication protocols in place at all levels	12 months	MOH/Partners/ NMS/JMS/ Districts	
	Operational flexibility in distribution of medicines	Develop and implement a system for collection of full supply commodities	Timely availability	3 months		
Inventory control procedures	Calculation of minimum and maximum stock levels should be enforced through support	Procure and disseminate required tools (job aids, calculators, stock cards)	Minimum/maximum stock levels in place	3 months	MOH/Deliver/ Patners	Revised stock cards are in place
		Strengthen supervision at all levels		On-going	HSD and district	

	MOH/ stake holders to develop and distribute guidelines on how to access emergency supplies. Guidelines should include redistribution between facilities , districts and access at the central level	Develop& distribute guidelines on how to access emergency supplies	Guidelines developed	8 months	Deliver/ MOH/ partners	
	Enforce collection and prompt communication of losses and adjustments at all levels to relevant intervention points.	Avail facilities with revised stock cards that reflect losses and adjustments column	Revised stock cards in place	2 months	Deliver/MOH/ District	
<i>Warehousing and storage</i>	District should identify a central collection point for waste so as to decongest the stores at HSD/SDP stores.	Identify a central collection point for waste.	Central waste collection point in place	6 months	DHO/HSD CAO/MOH	
	MOH/Partners should consider construction of storage facilities at HSD and HCIII.	Develop and present proposal with storage structural plans and costs to stakeholders for funding	Approved designs with identified funding in place	24 months	MOH/Deliver/ Partners	
	Strengthen monitoring and documentation of quality of products at service delivery points	Document and communicate product quality issues to stakeholders	Record of product quality issues in place with evidence of communication.	3months	DHO/HSD/Facility	
<i>Transport and distribution</i>	MOH/Partners to provide a vehicle at the district for distribution and support supervision and monitoring and coordination of logistics activities in the district.	Procure and distribute vehicles to all districts	Vehicles in place	12months	Deliver/MOH/ Partners	

	PHC fund allocation for fuel to HSDs to be increased to take care of added roles of transport/distribution/coordination and support supervision for effective service delivery.	Lobby for Increased Funding to HSDs	Revised HSD budget	12months	MOH/MOPFED	
Product use	Increase availability of preferred methods (IUDs, Implants, Depo provera) so as to improve on client turn up for Family planning services and acceptability rates.	Facilities to order for preferred methods	Preferred methods available in health units	4 months	DHO/HSD/SDP	
		Train providers in management of long term family planning methods (IUDs, implants)	% of trained providers	6 Months	MOH/Deliver/ UNFPA	At policy level, only doctors are supposed to insert Implants. This issue should be addressed to enable other cadres carry out this role.
	Develop and implement integrated awareness campaign programs by all stakeholders	Recruit and train Village Health Teams to raise awareness	Proportion of village health teams recruited	12 Months	MOH/Partners/ District	Availability of funds
Conduct media campaigns		No. of media campaigns conducted	On-going	District/MOH/ Partners	Availability of funds	
Financing/ Donor coordination /RHCS	Budget support be made at district/ HSDs & SDPs to motivate staffs who do added work of logistics management at the lower units.	Lobby Partners and Government to increase funds	Increased funding for PHC	12 Months	MOH/Partners	

Planning	MOH/Partners to identify funding for waste management.	Lobby for funding for waste management	Waste management funding identified	12months	MOH/Partners/ Deliver/ Legislators	
	Ministry of Finance through MOH to increase and improve on timely disbursement of PHC funds.	MOH to lobby Finance for increased budget for health and timely disbursements	Increased budget allocation with monthly releases of funds (Release paper available)	12 months	MOH	

REFERENCES

1. Annual Health Sector Performance Report Financial Year 2006/2007, October 2007
2. USAID | DELIVER PROJECT, Task Order 1. 2007. *Implementing Multiple Health Commodities Logistics Management Information Systems*. Arlington, Va.: USAID | DELIVER PROJECT, Task Order 1.
3. Uganda Health Facility Survey 2006: Performance of HIV/Aids and Family Planning Commodity Logistics System, Ministry of Health, July 2006.
4. Manafwa district profile 2008, DHO

APPENDIX A - LIST OF PEOPLE INTERVIEWED

Table 7. Interviewees

No	Name	Qualification/Title	Facility/Institution	Contacts
1	Dr. Wamasebu Gideon	DHO Manafwa	District Health Office	0772 642431
2	Charles Mbohi	Stores Assistant	District Stores	0774 662215
3	Wamakale Fred	Clinical officer	Bugobero HC IV	0782 911272
4	Tongoi Charles	Nursing Assistant	Stores Bugobero HC IV	0773 818762
5	Walimbwa Herbert	Clinical Officer	Butiru HCIII-MOH	0772 837004
6	Wilson Kutosi	Clinical Officer	Bubulo HCIII-MOH	0772 527719
7	Wepukhulu Loyce	Nursing Assistant	Buchabusi HCIII-MOH	0782 585156
8	Nakami Lukia	Senior Clinical Officer	Butiru Christo HCIII-NGO	0772 850851
9	Namataka Loyce	Enrolled Midwife	Bubulo Walanga-NGO	0782 818755

APPENDIX B - LIST OF FACILITIES VISITED

Table 8. Facilities Visited

Health Facility Name	Level	Ownership	Name of HSD		
			s/county	Parish	
<i>Bubulo West</i>					
1. Bugobero	IV		GOVT	Bugobero	Bunefule
2. Butiru	III		GOVT	Butiru	Bunabwana
3. Bubulo	III		GOVT	Bubulo	Bubulo
4. Bukhabusi	III		GOVT	Kaato	Bukimanayi
5. Butiru Chrisco	III	NGO		Butiru	Bumagambo
6. Bubulo Walanga	II	NGO		Bubulo	BuBulo

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

Table 9. Participant List

N	Name	Qualification/Title	Facility/Institution	Contacts
1	Jeniffer A. Luande	Short Term Consultant	USAID/DELIVER Project	0772316740
2	James Segawa	Short Term Consultant	USAID/DELIVER Project	0751037728
3	Dr. Wamasebu Gideon	DHO Manafwa	District Health Office	0772 642431
4	Charles Mbohi	Stores Assistant	District Stores	0774 662215
5	Wamakale Fred	Clinical officer	Bugobero HC IV	0782 911272
6	Namataka Loyce	Enrolled Midwife	Bubulo Walanga-NGO	0782 818755
7	Dr. Kigundu Jonsen	Medical Officer	Bubulo West HSD	
8	Lusolera Hellen	Senior Nursing Officer	Bugobero HC IV	

For more information, please visit deliver.jsi.com.

USAID | DELIVER PROJECT

John Snow, Inc.

Plot 65 Katalima Road Naguru

Kampala, Uganda

Phone: (256) 414-253-246

Fax: (256) 414-253-245

Email: askdeliver@jsi.com

Internet: deliver.jsi.com