

# Uganda Logistics Systems for Public Health Commodities: An Assessment Report

May 1 – 21, 2000

## Final Report

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Delivery of Improved Services for Health Project II



## FPLM

The Family Planning Logistics Management (FPLM) project is funded by the Office of Population of the Bureau of Global Programs of the U.S. Agency for International Development (USAID). The agency's Contraceptive and Logistics Management Division increases the awareness, acceptability, and use of family planning methods, and expands and strengthens the managerial and technical skills of family planning and health personnel.

Implemented by John Snow, Inc. (contract no. CCP-C-00-95-00028-04), the FPLM project works to ensure the continuous supply of high quality health and family planning products in developing countries. FPLM also provides technical management and analysis of two USAID databases, the contraceptive procurement and shipping database (NEWVERN), and the Population, Health, and Nutrition Projects Database (PPD).

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### Recommended Citation

Raja, Sangeeta, Steve Wilbur and Bonita Blackburn Uganda Logistics System for Public Health Commodities: An Assessment Report. 2000. Published for the U.S. Agency for International Development (USAID) by the FPLM project. Arlington, Va.



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# Acknowledgements

The Family Planning Logistics Management project (FPLM) of John Snow, Inc. wishes to acknowledge the contributions of the following organizations who provided time, staff and data to assist in completing the assessment:

<b>ORGANIZATIONS</b>		
<ul style="list-style-type: none"> <li>• ACP</li> <li>• CARE</li> <li>• CMS</li> <li>• DANIDA</li> <li>• DFID</li> <li>• DISH II</li> <li>• FPAU</li> <li>• Iganga District</li> <li>• HSSP</li> </ul>	<ul style="list-style-type: none"> <li>• JMS</li> <li>• Kamuli District</li> <li>• Mbale District</li> <li>• MOF</li> <li>• MOH - Health Services</li> <li>• MOH - Reproductive Health</li> <li>• MOH - Resource Planning</li> <li>• MSI</li> <li>• NDA</li> <li>• NMS</li> </ul>	<ul style="list-style-type: none"> <li>• Pallisa District</li> <li>• Population Secretariat</li> <li>• RTC</li> <li>• STIP</li> <li>• Survey Department</li> <li>• UNEPI</li> <li>• UNFPA</li> <li>• USAID</li> <li>• World Bank</li> </ul>

A special thank you goes to the U.S. Agency for International Development (USAID)/Uganda, the Ministry of Health and the Delivery of Improved Services for Health (DISH) II project, who provided valuable input and support in completing the assessment.

We are particularly grateful to the U.S. Agency for International Development (USAID)/REDSO Mission for funding the assessment.

Finally, we would like to thank everyone we have met during the assessment and who are too numerous to mention. All of them have given their time and information freely, and their dedication to providing the best possible service to the people of Uganda has guided and encouraged the suggestions in this report.

As always, the recommendations in this document are those of the consultants, but are based on the collective experiences of the FPLM project and on the wisdom and ideas of those working on a day to day basis within Uganda. We hope (trust) that these recommendations will be helpful in improving logistics system and are prepared to work with all parties to implement the suggested improvements.



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# Acronyms

ACP	AIDS Control Programme
CBD	Community Based Distribution
CMS	Commercial Marketing Strategies
CYP	Couple Year Protection
DANIDA	Danish International Development Assistance
DDHS	District Director for Health Services
DHMT	District Health Management Team
DHV	District Health Visitor
DfID	Department for International Development
DISH	Delivery of Improved Services for Health
FPAU	Family Planning Association of Uganda
GoU	Government of Uganda
HMIS	Health Management Information System
HSSP	Health Sector Strategic Plan
IPPF	International Planned Parenthood Federation
JMS	Joint Medical Stores
KfW	Kreditanstalt für Wiederaufbau
KPI	Kampala Pharmaceutical Industries Ltd.
MOF	Ministry of Finance
MOH	Ministry of Health
MSI	Marie Stopes International
NDA	National Drug Authority
NMS	National Medical Stores
RLI	Regional Logistics Initiative
STIP	Sexually Transmitted Infections Project
SWAP	Sector Wide Approach
UDHS	Uganda Demographic and Health Survey
Ugsh	Ugandan Shillings
UEDSP	Uganda Essential Drugs Support Programme
UNEPI	Ugandan National Expanded Programme for Immunization
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organization





# Executive Summary

The logistics systems for all health commodities present a tangled picture, with overlapping systems and information, as well as public sector and private sector players. This report focuses on family planning commodities logistics, while recording other systems and identifying their existing and potential relationships with contraceptive provision systems. There are national level issues to be addressed, and district and other health facility levels issues that require improvement. This report uses the components of the logistics cycle to track systems and make recommendations based on national and district level needs.

These findings and recommendations were presented and discussed during a stakeholders meeting with a large number of key players in Uganda at the conclusion of the consultancy. They are presented here in bullet form as a brief summary of information presented in more detail in the rest of the report. The recommendations are presented in more detail at the end of the report, organized by agency for easier tracking.

## Key findings

### National Level

#### General

- Public health commodities reach the customer through several separate logistics systems. These include MOH, CMS, MSI, JMS, FPAU, UNEPI and the private sector.
- Some aspects of the logistics system in the MOH are integrated while others are managed separately. Systematic integration of the supply chains could result in cost and time-savings and improve product availability and efficiency at the service delivery level.

#### Product Selection

- Essential drugs are selected from the essential drug list and the standard treatment guidelines.
- The donors and the RH unit select a wide range of short and long term contraceptive methods based on family planning policy guidelines.

#### Procurement

- Importation regulation according to the NDA statute resolved.

#### Forecasting

- Capacity of the RH unit extended and manpower not sufficient.
- Many data sources available for projection – but none are complete.
- Consumption not known at the national level.
- New changes proposed in the new HMIS forms will make forecasting even more difficult.
- Donor coordination meetings taking place – need to extend its role to include review of all logistics issues.

#### Warehousing

- NMS has the capability to manage the distribution and warehousing to pharmaceuticals.
- 100% match of the physical count with the computerized inventory at NMS.

- 10% handling fee at the NMS contorts the delivery system – resulting in delay in delivering district supplies from 3 weeks to 3 months.
- Inventory control computerized and managed at the NMS.
- Responsible programme in MOH notified 6 months prior to the expiration of any product.

### **Transportation**

- Drugs being delivered to all 45 districts every quarter based on a set schedule.
- Deliveries occur within 1 week of the scheduled date.

### **LMIS**

- Service statistics reported by the districts to the central level.
- Data used to revise the kits
- HMIS database managed at the central level. Data includes aggregated service statistic reported by the districts.

## **District and Health Facility Level**

### **Procurement**

- Small amounts of drugs bought from local suppliers using user-charge fees.
- Perceive quality of drugs to be better and more reliable from the NMS.

### **Forecasting**

- No forecasting currently done at the district level.

### **Warehousing/Storage**

- No basic shelving in most of the stores in the districts visited – difficult for the storekeeper to organize and distribute products.
- Storekeepers not trained in basic storekeeping procedures.

### **Inventory control**

- Contraceptive stock cards not kept up to date.
- Lack of inventory control and management.
- Lack of ordering skills to base orders on max and min.
- Lack of skill to calculate months of stock available.
- Too many progesterone-only pills in the facilities visited. Large stock of VFT at all levels.
- Stocks not ordered until total stockout.
- When the stocks are ordered, various methodologies are used to determine the order quantity, (consumption, service statistics, guess work).
- Most facilities visited had at least 2 – 3 contraceptives that were stocked out at the time of the visit.
- Procedure manual not available.

### **Transportation**

- Essential drugs and vaccines delivered to the clinics.
- Local initiative by staff from both the clinic and the district level manage to arrange the transport to deliver/collect the supplies.

## **LMIS**

- Essential data (stock on hand, dispensed/issued, adjustments/losses) collected at different places by different people, but not synthesized and not used for decision-making.
- Reports sent to HQ incomplete or delayed (3-6 months).
- Districts have initiated report tracking. This has improved the reporting timeliness.

## **Use**

- Reported increase in the use of Depo Provera
- Low consumption of PoP, IUD, and VFTs.
- User fees for family planning services applied differently at each health facility.

## **Human Capacity**

- Most of the staff do not have training in logistics.
- Roles and responsibilities of each staff involved in the management of the logistics system not clarified or documented.

# **Recommendations**

## **National Level**

- A. The Reproductive Health Division with external technical assistance should do CPT commodity forecasting in July 2000 for the year 2001 and beyond. It should use all possible data sources including demographic projections, DISH district survey data, 200 site dispensed to user data and HMIS data to produce short and long term projections.
- B. Contraceptive Security – provision of adequate supplies – needs to be closely tracked, especially as donors shift to sector wide approach programs. Continuity of supplies must be insured during this transition period and adequate contraceptive supplies included in the SWAP budgeting. Reproductive Health Division and donors, supported by logistics technical assistance, must be responsible for the inclusion of supplies planning. At the present time, with ordered supplies included, there is at least a 2-year supply for most contraceptive products. Now is the time to plan for beyond two years, using 2001 CPT projections.
- C. The Contraceptive Coordinating Committee should have a formal meeting every 4 months, coordinated by the RH Division. The meeting would review stock-on-hand data, shipment coordination, issued and dispensed to user data, problems that arise, information and product status that need to be shared. This meeting should include all donors and potential donors, all social marketing distributors, all providers of family planning services, the NDA, National Medical stores and MOH sections such as Reproductive Health, Planning unit resource centre and ACP.
- D. Donor procurement should involve the National Drug Authority in procurement planning, especially with new commodities, new manufacturers or even new labeling, to avoid clearance delays and possible exclusion of products.
- E. All contraceptive commodity importers must ensure that not only is the product registered with the NDA, but that packaging and labeling must meet NDA specifications. Any changes in packaging or labeling requires notification to the NDA.

- F. USAID/Washington should note in the Newvern system that any changes in product, manufacturers or packaging must be notified to the NDA.
- G. USAID/ Washington should consider adding the Date of Manufacture to each condom primary packet, at the time of the next worldwide production contract. This would comply with WHO specification guidelines and conform to other condom labeling.
- H. FPLM and USAID/Washington should send to NDA all agreed upon documentation and FPLM should provide a USAID-supplied products documentation and sample folder.
- I. USAID/Washington should review shipping and payment instructions with Panalpina and with Kampala Pharmaceutical Industries.
- J. Technical assistance in logistics planning and advocacy should be provided to the Reproductive Health Division from specialized external expertise and with on-going local logistics support, primarily from the DISH II project. This combination would strengthen the capacity of the RH to coordinate forecasting, procurement and district level improvement.
- K. If for any reason, USAID procured condoms are requested for Uganda for the public sector, the RH Division must obtain in advance a waiver from the NDA for the importation of these condoms.
- L. The ten percent handling fee on the value of commodities due the NMS for handling, storing and shipping supplies to the district level is such an obstacle to a smooth and efficient ordering process that it should be made a guaranteed payment and taken out of the ordering approval process. Options to do this range from 1) RH securing guaranteed funding 2) donors prepay this 10% when commodities are received by the NMS, 3) a guaranteed amount be authorized by line item in the sector-wide planning budgets or 4) a guaranteed amount be included in the health sector debt-relief budgets.
- M. If provided with a clear delivery order from the MOH and payment for services, the NMS has the facilities, transportation and human resources to deliver contraceptive and other medical supplies to the District level in a timely and efficient manner.
- N. Dispensed to user data from a previously conducted 200 site survey should be entered and analyzed. This work could be coordinated by the DISH II project and be used in calculating the 2001 CPT report.
- O. FPLM to provide technical assistance for contraceptive procurement in procedures, specifications and quality control.
- P. USAID/Uganda should consider sending RH Division and other key officials for Arlington logistics training ASAP to build a cadre of trained officials.
- Q. FPLM should encourage and arrange Uganda participation in RLI regional logistics activities.

## **District and Health Unit Level**

- A. Expired stock and damaged materials should be collected and removed from health facilities and district level storage areas.
- B. Basic storage job aides should be developed, disseminated and personnel trained.
- C. Procedures manual need to be developed for district and other level inventory control and stock ordering. The process should include the following:
  - design workshop to achieve agreement on procedures and forms,
  - development of training manuals and on-the job training aids,
  - testing of training in DISH and other project areas,
  - inclusion of logistics training in other training packages,
  - training of both policy decision makers and operational cadre,
  - emphasis on issued to user data for decision making.
- D. Use resources of DISH Project and other projects to advocate for, test and support implementation of inventory and ordering capacity building.
- E. Use Supply Chain Manager computer system for inventory control and ordering in DISH projects as a pilot for eventual nationwide use.
- F. Define role of sub-district health center in logistics activities. The consultant's initial recommendation would be to avoid stock storage at this level.
- G. Include drug, vaccine, contraceptive and other medical supply ordering in any district level guidelines, tools and training.
- H. Consider integration of contraceptive and other commodities with quarterly distribution of essential drug kits to reduce costs and improve delivery.
- I. Design and institute a system to re-distribute commodities in oversupply.
- J. Look for funds to install basic shelving in the district stores.
- K. Train storekeepers in basic storekeeping management, including documented storehouse procedures.



## Situation

Uganda, a land-locked country in East Africa, has achieved marked economic growth for the last five years due to sound macro economic policies, liberalization and privatization of the economy. However, household incomes have remained low, resulting in poor health indicators (*MoH/HSSP, 1999*).

The population of Uganda is estimated at 21 million with a total fertility rate (TFR) of 6.9. Compared to regional neighbors, Uganda suffers from a heavy burden of disease. 75% of life-years lost to premature death are due to ten preventable diseases. 20.4% of these deaths are a result of perinatal and maternal related condition (*MOH/HSSP, 1999*). Use of family planning is low in the country, with only 7.8% of the married women using modern contraception, while 91.6% of the women reported knowing about contraception (*UDHS, 1995*). In addition, Uganda also has the highest adolescent pregnancy rates in sub-Saharan Africa (*DISH Evaluation Survey, 1997*).

Continued availability of contraceptives is essential to contraceptive use. In the last two years, repeated stockouts of contraceptives were registered at national, district and facility level. Monitoring of the Couple Year Protection (CYP) provided by the public sector institutions has shown a marked decrease during 1999, when condoms went out of stock all over the country for more than six months and the injectable contraceptive showed similar trend at the end of the year.

Several logistics factors have been identified as the cause of countrywide stockouts. These include:

- delays in-country procurement clearances due to tighter implementation of the importation rules by the National Drug Authority (NDA);
- outstanding debt owned to National Medical Stores (NMS);
- donor dependent supply system which resulted in changes in product availability,
- restrictions on procurement and financial cuts faced by donors;
- decentralization of health services resulting in lack of information available at the central level to plan for nationwide procurement.

United States Agency for International Development (USAID)-Uganda and the Ministry of Health (MOH) recognized that availability of contraceptives was not only essential for achieving program objectives, but also crucial for saving women's lives from unwanted pregnancies. To ensure adequate and timely supplies of contraceptives, the Mission and the MOH requested John Snow Inc./Family Planning Logistics Management (FPLM/JSI) to conduct an assessment of the reproductive health logistics system and provide operational recommendations.

## Objectives:

The main objectives of the assessment were:

1. To assess the status and function of the logistics-based activities of key partners at all levels of the Uganda supply chain for reproductive health supplies.
2. To identify main causes of recurrent stockouts of contraceptive supplies and identify areas that need to be strengthened or streamlined in order to improve the flow of the products through the system.

For the complete scope of work and other objectives of the consultancy covered (see appendix 1).

## Methodology

The assessment was conducted as a joint collaboration between the Ministry of Health (MOH), USAID/W, USAID-Uganda, Delivery of Improved Services Health (DISH) II and JSI/FPLM. USAID/REDSO and USAID/Africa Bureau through the Regional Logistics Initiative provided the financial support.

The assessment was based on a systems approach, using the logistics cycle as framework (see appendix 2) to ensure a complete and systematic review of all logistics-based activities, at all levels of the supply chain, from central level to the health facility. All public health product flows currently existing to get the commodities to the customer were assessed.

The team used key informant interviews and review of the records at each level of the system to gather the data. A final interview and observation schedule appears in (see appendix 3). Cross-checking of the data reported by the different levels was done with the level above or below and with as many people as possible.

The first week, the team interviewed stakeholders in Kampala. In the second week, a team of USAID-Uganda staff, Ms. Betty Nabirumbi, DISH Logistics Officer, Mr. Muyingo Sowedu, two FPLM staff, Mr. Steve Wilbur, Country Team Leader and Ms. Sangeeta Raja, Logistics Advisor visited four districts in the eastern part of Uganda. The team, in consultation with USAID, MOH and DISH, choose a purposive sample to visit. The eastern part of the country was chosen because it was possible to cover more districts supported by a range of donors, was logistically feasible in the time available to conduct the assessment and represented similar conditions to other districts.

Reproductive health staff at the national MOH level were not able to join the team during the field visit due to a heavy workload. However, Dr. Florence, Ebanyat, Assistant Commissioner, RH Division provided a letter of introduction that the team could give to the DDHS of each of the district. One of the members of the district health team (DHT) accompanied the team when visiting the health facility within that district.



**Table 1: Sites visited to assess the supply chain at the district and health facility level.**

<b>District</b>	<b>Site visited</b>	<b>Donor Supporting the District</b>
Kamuli	Kamuli District Office Level III Clinic	USAID
Pallisa	Pallisa District Health Office Buseeta Clinic	DfID/ UNFPA
Mbale	Mbale District Health Office Budadiri Sub-District Clinic Buwalasi Clinic UNFPA Regional RH Program Coordinator	DfID
Iganga	Iganga District Health Office Muyuge Health Center	UNFPA
Kampala	Kiswa Health Centre	UNFPA, USAID

Quantitative indicators such as stockout rates, percentage stocked according plan, wastage rates were not collected as part of this assessment since the DISH Project will be conducting a quantitative survey to assess the drug supply situation at the health facility level in June and July 2000. FPLM consultants provided written suggestions to their survey.

This report by the consultants describes, in depth, the structure of the system, mode of operation, relationship between the different divisions and levels and provides recommendations for improving the logistics system.

## **Background**

### **Ministry of Health Organization and Structure**

Uganda administratively is organized into 45 districts, which is further divided into counties, sub-counties, parishes, and villages. At each level, there is a local council, made up of politically elected and administrative staff in charge of the area. In order to bring quality health services closer to the community. Health Sub-districts are being created to cover a county. Any hospital, (GOV or NGO) or a health centre within the county will be upgraded to Health Centre IV, will be the referral unit for the HSD. The HSD will provide technical support and supervise all health units within county. It will also be responsible for community outreach services.

At the central level, the Ministry of Health has several technical units including the RH Division that provides guidance and policy support to the 45 districts.

## **Sector Wide Approach**

To reduce the mortality and morbidity from the major causes of ill health, the MoH, other key ministries and its development partners have developed a Health Sector Strategic Plan (HSSP). The health sector reforms include decentralization to the 45 districts and sub-district level, outlining a basic minimum package of health services to be delivered to the Ugandan population through the districts and formulating policies, standards and guidelines for the delivery of health services.

In support to the sector wide approach, some donors, mainly, Department for International Development (DfID), Swedish International Development Agency (SIDA), Irish Aid and the World Bank are preparing to support a common basket funding.

A major concern for family planning activities is the donor funds earmarked for purchase of family planning commodities will now be placed in the basket funding, with uncertain results for commodity purchasing. This must be tracked closely by the RH Division and the donors to ensure that sufficient products will be available under the new approach.

The sector wide approach will start from July 1, 2000. As of this date, PHC conditional grants are being allocated to the districts to implement the priority programs they have developed under the MOH guidelines. However, there are also district based donor funded activities that provide extra support to certain areas. The SWAP approach is designed to permit more equitable distribution of resources, but both systems will co-exist for some time.

In view of the high maternal and child mortality rates, reduction of fertility through family planning has been identified one of the objectives of the HSSP. However, there still a poor of understanding at the national and sub-national level of the impact of population growth on development and health. Many of the stakeholders interviewed felt that family planning received a low priority by the key decision-makers.

## **Health Supply Chain Systems**

Ugandans can access health commodities through various channels. These include buying from private vendors of all types, MOH health facilities, social marketing programs and NGO operated facilities.

Health supplies are brought into the countries by donors, church organizations, government of Uganda and private companies. They usually arrive through two ports of entry, Mombassa for sea freight and Entebbe for airfreight. Most suppliers use freight forwarders to assist in the clearance of customs.

Prior to being allowed in the country, the supplies are inspected by the National Drug Authority (NDA) and given a seal of approval for entry. Depending on the circumstance and the quantity, the NDA can take one day to a month to inspect a consignment. The commodities are then stored in the various warehouses before they are distributed through the different channels.

Lead times to get supplies into the country are dependent on the supplier’s procurement systems, but can range from 2 months to 3 years. Unlike some countries, there is no procurement unit within the MOH supply chain to coordinate the planning and procurement of supplies.

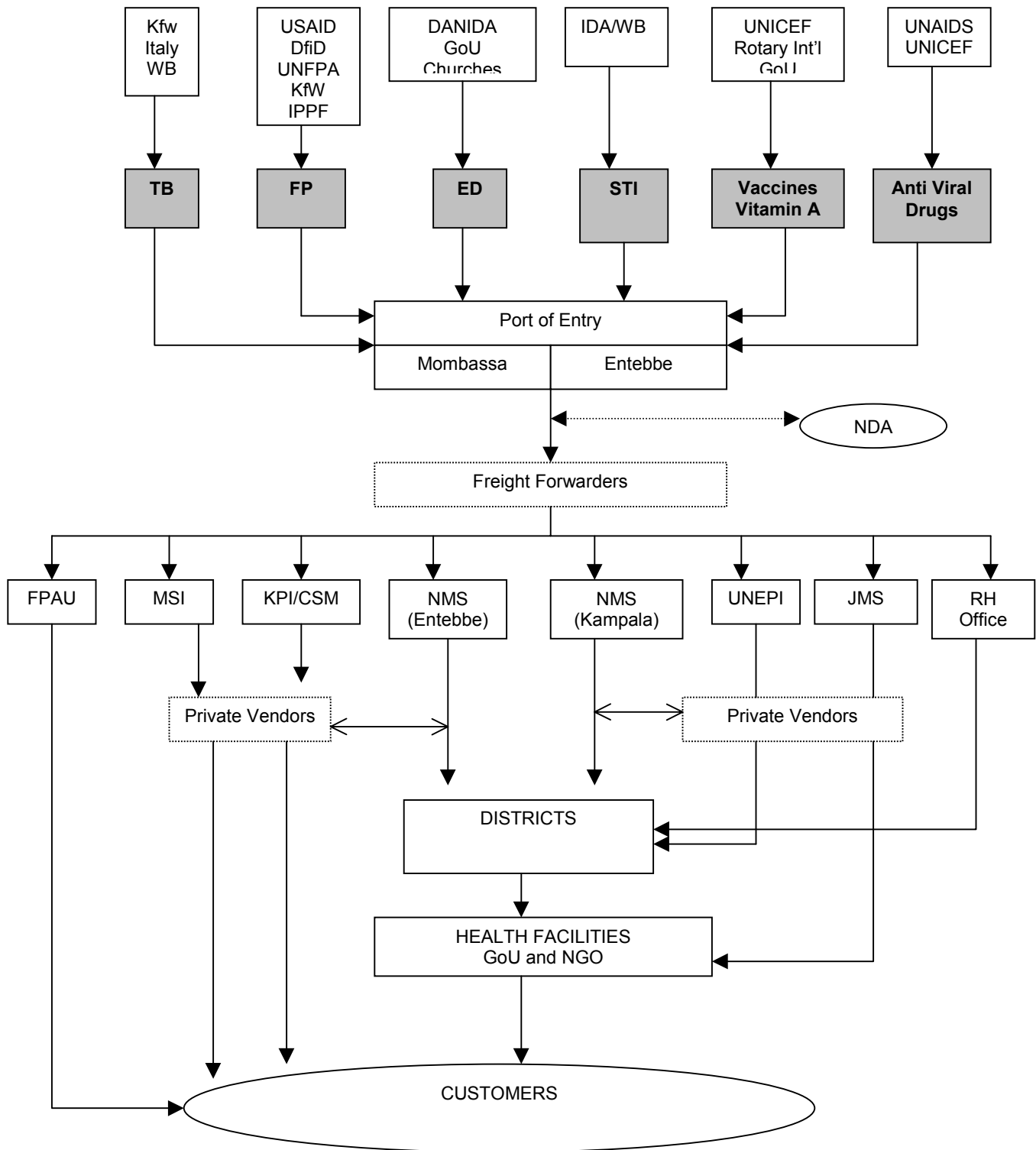
It has been shown in the private sector logistics that aligning the strategies of the various suppliers within the supply chain has decreased the total cost, increases customer fulfillment rates and increases the overall profitability of all the suppliers in the supply chain. In the case of the Uganda, the strategies of all the suppliers (e.g. donors, NMS, districts, clinics) involved in the public sector supply system, are not harmonized. This makes it difficult to create a smooth logistics system that can result in a win-win situation for all the stakeholders.

There is therefore need for all the stakeholders in the supply chain to develop a harmonized strategy that would ensure a win-win situation for all. Different individual objectives sometimes work against common goals. The public health supply chain would benefit if all stakeholders reviewed their objectives together and developed a harmonized strategy with shared performance indicators. These indicators could include monitoring of total delivered cost, customer satisfaction index etc.

**Table 2: Impact on Supply Chain when Strategies are not harmonized**

<b>Supply chain stakeholders</b>	<b>Strategies/Issues impacting supply decisions</b>	<b>Result to supply chain</b>
Donors	<ul style="list-style-type: none"> <li>• Purchase the best product at the lowest cost</li> <li>• Funding available only through a certain period</li> <li>• Restrictions on procurement</li> </ul>	<ul style="list-style-type: none"> <li>• Bulk purchases, mean large shipments which clog storage space</li> <li>• Long-term planning not possible</li> <li>• Overlapping products</li> </ul>
NMS	<ul style="list-style-type: none"> <li>• Provide services at a low cost (break even)</li> </ul>	<ul style="list-style-type: none"> <li>• Pressure to Increase charges</li> <li>• Decapitalization</li> <li>• Reduce service</li> <li>• Delay orders</li> </ul>
District	<ul style="list-style-type: none"> <li>• Ensure supplies are there when customers needs them</li> </ul>	<ul style="list-style-type: none"> <li>• Local purchasing</li> <li>• Increased transportation costs – seek ways to get supplies released from NMS</li> </ul>
Health Facility	<ul style="list-style-type: none"> <li>• Ensure supplies are there when the customer needs them</li> </ul>	<ul style="list-style-type: none"> <li>• Local purchasing</li> <li>• Referring customers to other supply chain (social marketing)</li> </ul>

**Figure 1: Supply chain for Public Health Commodities**



# Logistics Systems for the Management of Public Health Supplies

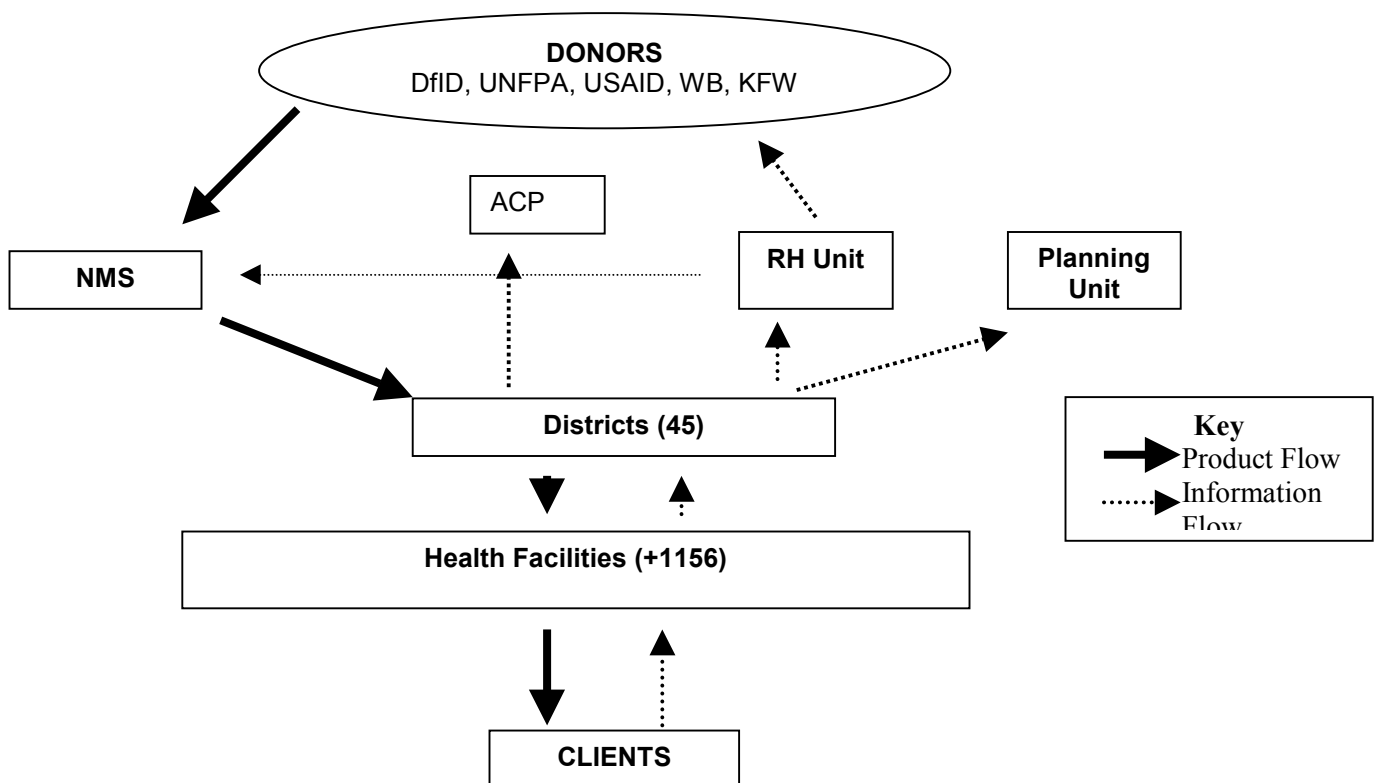
## Essential drugs

Managed as a push system. The government of Uganda and DANIDA purchase essential drug kits from the international market. In addition, the government purchases other required drugs both locally and internationally in bulk. Once in country, the NMS packs them into kits and labels them for each clinic. The amount per kit is determined periodically using morbidity and demographic data. The kits are distributed quarterly to the districts, which in turn ensures that they are directly delivered to the clinics as soon as they are received. Patient load and stockout data is reported on a monthly basis to the central level. The NMS uses this data to review the order quantities for each of the kits and make adjustments accordingly. The current max is set at 5 months and min at 2 months for both the districts and the clinics.

## Contraceptives

Managed as a pull system. The health facilities order contraceptives monthly from the district health office based on the last months' consumption. The districts order their supplies every quarter from the NMS. Due to management issues discussed in detail in the report, this system is currently not fully operational. The health facilities reports dispensed to user data every month to the district. The district in turn aggregates the data of all the clinics and reports to the planning unit at MOH where the data is entered into a database. Like the essential drugs, the current max is set at 5 month and min at 2 months both at the district and clinics. The national level max is at 12 and the min at 9 months.

Figure 2: The contraceptive logistics system



## **Uganda National Expanded Project on Immunization (UNEPI)**

Logistically, UNEPI maintains a separate vertical procurement, storage and distribution system from the national level, down to delivery at the SDP. Vaccine distribution requires maintenance of a continuous cold-chain, which drives this extensive logistics system. The vaccines Tetanus Toxoid are BCG, DPT, Polio, Measles and Tetanus. UNEPI also distributes Vitamin A capsules, which were originally distributed as part of the National Immunization Day (NIDS.)

UNEPI maintains a well-equipped warehouse for vaccine storage on the grounds of the National Medical Stores, but it operates independently. It has a fleet of three ten-ton trucks, which carry only UNEPI supplies. There are four large refrigerated storage units, with temperature controls and back-up generators, plus other storage space at the warehouses.

Forecasting is essentially done on a demographic basis, with targets to reach 80% of the children in Uganda in the year 2000. Procurement is done through UNICEF, and supplies arrive regularly on a quarterly basis. Because this has been an on-going coordination for many years, lead-time is very short, documentation is routine and there are no problems with NDA or customs clearance. Procurements are air freighted in, cleared from the airport to the UNEPI that day and put directly into cold storage.

There is monthly delivery to each District, according to a delivery schedule. UNEPI does not deliver to four districts for security reasons, so supplies are delivered to nearby districts and the affected districts must pick up their commodities. All districts are in radio contact with the central warehouse. Each district has a cold chain manager, who is the focal point for tracking commodities. Propane cylinders for refrigerated units are delivered on a 2-bin, replacement system and refrigerated units for repair are transported back by UNEPI trucks.

From the districts to the SDPs, supplies are both delivered and picked up. Most districts have a motorcycle with a cold box for regular delivery to the health facilities. One-month supply is supposed to be kept at the HU level. The district makes distribution decisions, theoretically based on user data. Wastage is locally recorded and locally disposed.

Vaccine coverage has declined in recent years, but this is not related to logistic issues.

The consultant discussed with the UNEPI staff the question of logistics integration. With their facilities within the NMS compound, separate trucks going to the same District Centers and parallel staffing, this is an obvious question. There was recognition of the pressure to integrate systems and a sense that this will eventually happen, but an understanding that this would be some time in the medium to far future. With the special requirements for cold-chain maintenance, strong donor financial support and the uncertainties of other logistics systems, it is not likely that this vertical system will be dismantled anytime soon.

### **Integration Possibilities**

As mentioned above, there are several parallel logistics systems operating. These include Essential Drug Kits; STI kits and drugs TB/Leprosy drugs, family planning commodities and vaccines.

The key to this possible integration is the Essential Drug kit delivery system, which distributes these kits every three months on a regular schedule. Since the ED kit system is unlikely to be

changed anytime soon, other delivery systems can piggyback on this system. With STI drug procurement moving from separate project status to inclusion in the Sector Wide Approach system, procurement and a coordinated delivery will likely be absorbed into the NMS system. TB and Leprosy drugs are now delivered by NMS to TB regional centers, which then distribute them to district centers. This system does not need to be maintained separately and can certainly be integrated at the NMS, with delivery directly to the districts.

The original objective for family planning commodities was that they be distributed with the essential drug kits. With shortages requiring the districts to scramble for supplies, MOH inability to pay for the NMS 10% distribution fees to the NMS throwing distribution off schedule and inefficient ordering from the District level, this possible system has fallen apart. If the 10% handling fee issue can be resolved, it will be possible to organize district ordering to fit with a three monthly delivery schedule for essential drug kits. Since the farthest point for delivery to the Districts is only 9 hours, emergency delivery off schedule is also practical. Individual donors will still do procurement, but storage once received in country, and delivery from the Center to the Districts, can be accomplished by the NMS system.

Vaccines is not likely be integrated anytime soon due to special handling requirements.

Tanzania has demonstrated an effective integration of essential drugs, vaccines and contraceptives. The Medical Stores Department does some procurement, receives all supplies and delivers them to the district centers. They maintain the cold chain for vaccines to the district level. This system seems to be working effectively. Family planning supplies were the last to be integrated. FPLM assisted in this integration, a process that took almost two years.

The MSD in Tanzania is sufficiently efficient that socially marketed contraceptives are stored by them and distributed to provincial (Regional) warehouses, where social marketing staff collects them for distribution to wholesale and retail outlets. MSD are paid for this service.

Further down the delivery chain, more supplies and systems are effectively integrated. Storage areas are shared, the staff controlling distribution is the same, and facilities at the SDP level are often one cupboard containing all medicines and supplies.

## Product Selection

Essential drugs are selected from the Uganda essential drug list and those recommended in the standard treatment guidelines. The program only purchases generic over brand in order to get a better price for the drugs.

As outlined in the RH policy, a wide range of contraceptives, both long and short-term methods are currently available through the public and private sector. The method mix includes injectables, oral contraceptives, and barrier methods.

There seems to be a dramatic increase in the use of Depo Provera and a decrease in the use of IUD and VFTs. Majority of the condoms in the system are for the prevention of STI and HIV. The STI project and AIDS Control Programme (ACP) logistically manage the condoms.

Contraceptives are usually selected through a joint process between the RH unit and donor. However, it has been difficult for the RH unit to keep the balance of ensuring a wide range of supplies of the same type of brands partly because of the donor restrictions of what products they can supply. As a result, the system has many brands. UNFPA has flexibility to procure various types of brands of contraceptives, while USAID is limited to purchase only American-manufactured brands.

In many of the cases, the brands are of the same active chemical composition. This can be positive in that women can substitute brand of the same active chemical composition in case the brand of choice is not available. On the negative side, brands of the same chemical composition do not increase women's choice, can create confusion for the clients and are very difficult to manage logistically.

The team found that Family Planning Association of Uganda (FPAU) had the most number of brands in their system, followed by the MOH.

The result of a wide range of contraceptive brands in the system has been a result of donor dependency to provide the contraceptives and inability to secure long term donor commitment for the provision of contraceptives.



**Table 3: Methods, brands available at the MOH, social marketing program and FPAU**

Method Mix	Contraceptive Brand	Supplier	Recipient	Code
Condom	No Logo	USAID	FPAU	
	Protector	USAID	CMS	
	Protector	CMS	FPAU	
	Engabu	IDA/WB	MOH	
	LifeGuard	KfW	MSI	
	LifeGuard	MSI	FPAU	
Progesterone Injectables	Depo Provera	DfiD	MOH	d''1
		USAID	CSM, FPAU	d''1
Implants	Norplant	USAID	MOH	h''1
IUD	Copper T 380	USAID DfiD	MOH, FPAU MOH	
Combined Pills	Lo Femenal	USAID	MOH	h4
	Lo Femenal	MOH	FPAU	h4
	Duofem (Pillplan)	USAID	CSM	h4
	Duofem (Pillplan)	CSM	FPAU	h4
	Microgynon	UNFPA	MOH	h4
	Microgynon	MOH	FPAU	h4
	Eugynon		MOH	h3
	Neogynon	IPPF	FPAU	h1
Progesterone-only Pills	Ovrette	USAID	MOH	h''1
	Ovrette	MOH	FPAU	h''1
	Microval	UNFPA	MOH	h''2
	Microval	MOH	FPAU	h''2
VFT	Conceptrol Foaming Tablet	USAID	MOH	
	Conceptrol Foaming Tablet	MOH	FPAU	
	Delfoam	IPPF	FPAU	
	Cotexmax Jelly	IPPF	FPAU	
	Neo-Sampooon	UNFPA	MOH	
Barrier	Diaphragm	IPPF	FPAU	

Note: IPPF stopped providing Noristerat as it was not registered in the country.

Note: The code is taken from the Directory of Hormonal Contraceptives, 1996. Each brand of contraceptives is given a code, which indicates its composition or formula. For example a women using microgynon could equally use Lo-Femenal, since both products have the same amount of active estrogen and progesterone.

## **Procurement**

Essential drug kits are procured by DANIDA and provided to the government of Uganda. In addition, the government also purchases some drugs through international tender procurement. As there is no procurement unit within the Ministry of Health, the procurement is managed by the NMS. Tendering systems are in place. Under the sector-wide approach there are several scenarios being discussed for the management of procurement. These include establishing a procurement unit, placing a procurement officer under each technical unit and or keeping the status quo.

UNICEF and government of Uganda purchase vaccines. These vaccines are procured through the UNIPAC catalogue.

The donors procure contraceptives. Since each donor has a different procurement cycle, projected forecasts are needed at different times of the year. Forecasts for the coming year are usually done between July – December. The specific donor does procurement, shipping and clearing, with delivery to the NMS or social marketing systems directly.

## **Forecasting**

Projections for essential drugs are done using morbidity and demographic data. Vaccines are projected using demographic data and contraceptives are projected using demographic data, issues data from the national level and surveys that are available at the time. USAID/Uganda has provided technical assistance through a consultant to determine the forecasts.

Due to lack of data, it is very difficult to know the current stock in the country at the different levels or consumption rates. This makes accurate forecasting difficult.

**Table 4 : Contraceptive Stock Situation based at the NMS as of May 16, 2000**

**MAX:** 12 MoS

**MIN:** 9 MoS

<b>Months of Stock Available at the National Level</b>			
<b>Contraceptives</b>	Based on 1999 CPT Data	Based on Spectrum Data	Based on NMS Issues Data
	<b>MOS</b>	<b>MOS</b>	<b>MOS</b>
<b>Condom</b>	<b>43</b>	<b>55</b>	
FP			
HIV/STI			
<b>Pill</b>		<b>9</b>	
Lo-Femenal	<b>17</b>		<b>17</b>
Microgynon	<b>59</b>		<b>378</b>
Microval	<b>20</b>		<b>12</b>
Ovrette	<b>35</b>		<b>29</b>
<b>Implants</b>			
Norplant	<b>33</b>	<b>83</b>	
<b>Injectable</b>			
Depo Provera	<b>16</b>	<b>13</b>	<b>224</b>
<b>VFT</b>		<b>11</b>	
Conceptrol	<b>25</b>		<b>24</b>
<b>IUD</b>	<b>6</b>	<b>5</b>	

**Table 5: Consumption Projections by Different Sources**

<b>Contraceptives</b>	<b>CPT Projections for 1999</b>			<b>Based on Spectrum Data</b>
	<b>MOH</b>	<b>SM</b>	<b>Total</b>	
<b>Condom</b>	25,000,000	20,400,000	<b>45,400,000</b>	<b>19,651,045</b>
FP	2,000,000			5,489,662
HIV/STI	23,000,000			14,161,383
<b>Pill</b>			<b>1,625,000</b>	<b>3,291,618</b>
Lo-Femenal	325,000	830,000		
Microgynon	325,000			
Microval	25,000			
Ovrette	120,000			
<b>Implants</b>	6,000		<b>6,000</b>	<b>2,398</b>
Norplant				
<b>Injectable</b>	700,000	175,000	<b>875,000</b>	<b>836,276</b>
Depo Provera				
<b>VFT</b>	200,000	220,000	<b>440,000</b>	<b>436,624</b>
Conceptrol				
<b>IUD</b>	8,000		<b>8,000</b>	<b>9,306</b>

SM = Social Marketing  
 MOH = Ministry of Health

## **Donor Coordination**

A series of donor meetings are held to seek donor commitment for the purchase of the projected quantities for contraceptives for the upcoming years. This process is one of the strengths of the system. It ensures that donors at least meet once a year and provide commitment to the purchase of contraceptives and meeting the contraceptive requirement gap. The main donors that support the procurement of contraceptives are USAID, DfID, KfW and UNFPA. USAID and KfW mainly provide contraceptives to the social-marketing programs, while UNFPA and DfID provide to the MOH.

There is close collaboration among the donors and the RH unit, which has allowed them to make adjustments in product supply as quickly as possible. In the last year, UNFPA had a cut in funding and was not able to meet its procurement obligations of pills. DfID managed to bring emergency shipments, which averted a national stockout.

## **Drug Regulation and Importation**

The National Drug Authority (NDA) was established in 1993 by the act of parliament. The main mandate of the organization is to ensure that drugs brought into the country are of a good quality.

The NDA has regulatory authority over all drugs and medical supplies in Uganda, including all contraceptive products. Their approval is necessary for the importation of all contraceptive products. They follow World Health Organization (WHO) guidelines for contraceptive specifications. All imported products must be registered with the NDA. In addition, all packaging and labeling must be registered with them. When manufacturing or packing changes are made, these changes must be registered.

NDA also has the authority to conduct quality control tests on all products. This is done both in Uganda and externally, depending on need.

In early to mid-1999, several batches of condoms to be imported failed initial quality control testing. Extensive quality re-testing, and destruction of some condom batches, contributed to a serious stockout of condoms in the later half of 1999.

In addition, NDA undertook extensive review of all labeling and packaging for all importers of condoms – the STI Project, CSM and MSI. Detailed compliance with WHO specification guidelines was required for all parties and some packaging and labeling changes were needed.

These packaging, labeling and quality control issues raised by the NDA seem to have been sorted out for all parties importing condoms at the moment. This of course must be tracked closely by the Stakeholders group, since any delay in importation or acceptability of condom requirements for Uganda will effect all parties and total supplies throughout the country.

In a similar manner, the NDA has closely monitored importation of all other contraceptive products. Again, all issues seem to have been worked out, but this must be closely monitored.

As part of the program to address and rectify any questions on contraceptive quality and labeling from US sources, USAID/Uganda asked Ms. Bonita Blackburn, USAID Contraceptive Procurement Specialist to accompany the FPLM logistics assessment team. The specialist met with the National Drug Authority to answer any questions about US products

## Product Review with NDA

On May 3, 2000, the team accompanied by Florence Ebanyat, Assistant Commissioner for Reproductive Health, MOH, met with Dr. John Lule, Acting Executive Secretary, Francis Otim, Drug Assessment and Registration and Gabriel Kaddu, Senior Inspector of Drugs at the National Drug Authority (NDA). A review of the status of the registration of USAID contraceptives was the topic of our meeting.

The team gave an overview of their objectives followed by a brief description of the provision of USAID contraceptive to the family planning and HIV/AIDS prevention activities in Uganda.

The team reviewed with the NDA each USAID contraceptive product that is imported into Uganda beginning with the 52mm non-colored Blue/Gold condoms (52NG).

**52NG condoms:** USAID condoms meet all the WHO standards and all the WHO specifications with the exception of the labeling. The WHO standards are developed by the International Organization for Standardization (ISO) and are designed to establish a minimum level of quality for products (e.g. condoms) that are imported and sold, within a particular country or region. The WHO specifications are a buyer's requirement and simply sets package integrity requirements for condoms because they have to withstand tropical or other conditions of storage and distribution. The WHO specification requires that all condom foil sachets be labeled with both the manufacture/expiry dates and the lot numbers. USAID condoms only have the expiry date and the lot numbers on the foil sachets. USAID does not have the manufacture date on their condoms. It is not part of the design factor in our contract.

USAID ships condoms to 60 countries worldwide. In 1999, USAID shipped approximately 94,500,000 pieces. In order to do meet this volume, USAID has to award large, multi-year contracts. These multi-year contracts allow manufacturers to schedule continuous production and pass substantial savings along to the Government. In 1998, USAID negotiated a contract with a U.S. manufacturer, London International Group (LIG), for a period of three years. This contract outlined the USAID specifications required from the manufacturer in order to provide the condoms. This contract specifies that the individually packaged condoms (foil sachets) are to be marked with the manufacturer's logo and/or name, production location, "Made in USA", the date of expiry and the manufacturer's lot number. Bonita continued to explain that no other country that receives USAID condoms requires both the manufacture and expiry dates on the foil sachet.

The NDA pointed out that it is their responsibility to the people of Uganda to ensure good quality condoms. Their concerns centered on clients receiving expired product. The team pointed out to the NDA that the USAID condom is a good quality product and that is what they wanted for disease prevention activities. There can be exceptions to the labeling but no exception to the performance or manufacturing requirements of the condom. USAID condoms meet both ISO and ASTM standards. In addition, USAID condoms are tested by an independent laboratory, Family Health International (FHI), and USAID can provide quality assurance documents for each shipment by lot number. In addition to testing, USAID asks FHI to retain samples of each lot for future testing if there is a quality assurance problem within country.

The Commercial Markets Strategies Project (CMS) in conjunction with PSI and Kampala Pharmaceutical Industries (KPI), overpacks and distributes USAID 52NG condoms as "Protector" condoms. These condoms are sold for a small cost recovery fee in private sector clinics

countrywide. The local overpacking done by KPI includes all the information required by the NDA for the importation and distribution of the USAID condoms. In addition, USAID's inner cartons of 100 condoms also includes all the information (manufacturer/expiry dates, lot numbers, manufacturer's address, etc) that is required by NDA.

After much discussion, the NDA was willing to agree to the importation of USAID condoms for the CSM program since the local packaging did include all the information required by the NDA in accordance with the WHO guidelines.

Since the USAID condoms for the public sector program (52mm non-colored, no-logo condoms) will not be overpacked with the required NDA labeling, any request by the MOH for USAID-supplied condoms will require a waiver from the NDA for this specific product.

It is important at this time to point out two significant questions asked by the NDA:

- (1) Does the U.S. domestic market use the same manufacturer for condoms? The team explains that LIG does manufacture condoms for sale in the U.S. domestic market. In addition, we explained that LIG is a worldwide manufacturer of condoms and that their Durex brand of condom is a gold star condom, known worldwide.
- (2) What is the relationship of CMS with USAID? We explained that CMS is a centrally-funded project that is funded by USAID to increase contraceptive supply through private sector partners and commercial strategies. CMS also covers underserved, rural and urban areas and populations and works to improve governments' ability to rationalize resources and collaborate with the commercial sector. We pointed out that USAID determines the specifications for the condoms used in the CMS social marketing program.

**Duofem** - The NDA issue with the low-dose oral contraceptive pill, Dufoem, was that it was registered as Lo-Femenal not Duofem. Although Lo-Femenal and Duofem are the same chemical formulation, NDA requires separate registrations. The distinction in the names of these products identifies them either as public sector product or a CMS product. Lo-Femenal is the public sector product while Duofem is the CMS product. Bonita agreed to provide the NDA with a Certificate of Free Sale and a registration dossier for Duofem.

Again, NDA was willing to accept this product based on the fact that it would be overpacked as PilPlan and that it would meet all the WHO specifications.

At this time, we agreed that either USAID or CMS would notify NDA immediately if any changes in product or packaging occurred in the future.

**Depo-Provera:** No problems. Registration approved and on file. Product can be imported.

**Norplant:** Same as Depo. Registration approved and on file.

**Summary:** All parties agreed that the importation of USAID contraceptives for the CMS and MOH public sector programs is acceptable to the NDA, with the exception of no-logo condoms for public sector distribution, which would require a specific waiver.

# Distribution

The table below identifies the various organizations involved in the distribution activities in the various programs

Program	Distribution Activities		
	Procurement	Warehousing	Transportation
Public Sector	NMS/Donors	NMS/district stores	NMS/Recipient
CMS	USAID	KPI	Agents
MSI	KfW	KPI	Agents
JMS	JMS	JMS	Recipient
FPAU		FPAU Stores	Recipient

## Warehousing

### National Medical Stores

#### History, role and responsibilities

The National Medical Stores was created by an Act of Parliament in 1993 and replaced the Central Medical Stores. The purpose was established as the procurement, storage and distribution of drugs, contraceptive products and medical supplies. It is a parastatal organization designed to serve both commercial and public sector service components.

There is extensive documentation, which describes the history, accomplishments and problems of the NMS, which were reviewed and are referenced in the annex of this document. Here we will document those facets that are most pertinent to family planning logistics at the present time.

The NMS presently carries 750 products, through computerized inventory. They have a 9 billion Ugsh turnover per year. (about 6 million US dollars). They provide limited credit for drugs to the district level. They distribute Essential Drug kits, both STI drug Kits and STI individual drugs, TB and leprosy drugs to regional TB centers, and they distribute family planning commodities. They do not distribute or are not involved in the UNEPI vaccine distribution program, though that program is physically within the NMS compound in Entebbe.

NMS has no role in the procurement of contraceptive products. The purchasing, NDA approval and customs clearance of these donor-supplied products is handled exclusively by each donor and RH Division.

The NMS role is to receive the supplies, warehouse and store the products safely and to ship the products to the district level, when told to do so by the MOH. It is very important to understand that the NMS has a very limited role. They are essentially a storage and delivery company, with no role in ordering contraceptives, approving district level orders or making stock requirement decisions. They receive the products once cleared, store them and delivery them when told where and when.

## Facilities

The NMS has a large compound in Entebbe. There are four major warehouses, with racked storage areas and 2 forklifts capable of moving inventory from any spot. The facilities are well designed and are well maintained. There is separate storage space for inflammable items, corrosives, narcotics, and refrigerated items. Receiving and shipping bays are clearly demarcated and there are kit packing areas if needed. Temperature is reasonably well maintained. While improvements are possible, the facilities are very good and are well maintained.

There are four trucks available, with four detachable wagons to increase carrying space. There are 5 truck routes set up for delivery. FPLM through the Regional Logistics Initiative has worked with NMS to implement a computerized transport management system (TMS) to improve the space utilization and scheduling of these existing trucks. The trucks are aging, but sufficient.

NMS has just build a new warehouse, which will effectively contain only an expected shipment of STI Project supplies. Condoms will take up a majority of the space.

It is the consultants' opinion that NMS has the physical facilities, the vehicles and the trained people to effectively provide storage and delivery service to its district level clients if all proper documentation were completed in a timely manner. This however is often not the case and circumstances beyond NMS control often preclude efficient delivery of the product to the field.

For Family Planning products, these circumstances beyond NMS control include:

- inefficient procurement leading to product stockouts
- incorrect clearance and registration leading to clearance delays
- delayed ordering from the district level
- delayed processing of instructions to ship from the RH unit of the MOH
- non-payment of the required 10% handling costs or non receipt of the certification that MOH funds are available for this payment

From field visits, the NMS is perceived as providing a good service on schedule for essential drug kit delivery to the district level. When asked if they would use the NMS service if they had other options, the general response was that they would, since the quality of the drugs was perceived to be high, with lowered risk of being cheated.

With major stockouts in FP products in 1999, and few other options, this question was not asked of contraceptive products supplied by the NMS.

It was also noted that NMS has recently established a Kampala branch of the NMS for local sales and supply within the Kampala area. The existence of a price comparison center has seemed to help stabilize drug prices in the capital area.

## Management Issues

There are several management and organizational issues that jeopardize the on-going work of the National Medical Stores. As noted, these are fully documented elsewhere, but are briefly mentioned here because of the potential impact on NMS services in the medium and long-term.



One is that there has been no Manager for the NMS for several years. The present management team is in an acting capacity, which limits the ability to make key long-term decisions and does not allow for guidance and necessary planning.

There currently is, and has been for some time, the idea that the NMS would be privatized. This has resulted in current employees operating without employment contracts, and uncertainty resulting in low employee moral.

The NMS is regularly effected by scandals in drug procurement. Two officials were arrested during this consultancy visit. This of course effects public perception of the role and value of the NMS.

In addition to drug procurement losses, the NMS is also in debt, rumored to be in the 4 million-dollar range. Substantial sums are owed by other branches of the government, and are difficult to collect. This is partially the result of the dual nature of the NMS, which is to be an efficient business, but also to provide drugs and service to the people of Uganda. This debt leads to an increasing decapitalization of operating funds.

It is not yet clear how these issues will be resolved. Privatization is being promoted, and has been decided philosophically but with 51% of the company to remain in Government hands and a substantial debt, this may not happen soon. Discussions are on going, but the NMS is in Class II (second priority) for privatization efforts by the government commission.

## Ordering

### Ordering and Delivery processes from the National Medical Stores

The process depends on which type of product is being distributed.

Essential Drug kits, are distributed based on a push system with a pre-calculated number of drug kits labeled for a specific health unit. These are distributed every three months on a set schedule and are sent to the district health center for re-distribution, as a closed kit. The 10% handling fee is paid by the Danida Project, which is then reimbursed from government funds for this counterpart commitment.

STI kits, the situation is a bit more confusing. Most STI drugs are contained in a kit form, and the number of kits is pre-set. Ordering is not on a set schedule and kits are sent out usually on a different schedule from the essential drug kits. The 10% handling fee is supposed to be paid now by the STI Project, but payment has not been made at all. The drug kits however are being distributed without this fee payment because of the critical nature of the need for these supplies in the field.

In addition to drug kits, some drugs are ordered, collected and sent as individual pieces. The ordering is done theoretically based on client use at the district level, but this is not quite clear. These drugs are distributed at the same time as the STI drug kits.

TB and leprosy drugs are distributed on a push system. The TB officer at the district level orders the supplies. Supplies are shipped by the NMS after proper technical approvals. These drugs are then shipped to regional TB centers, and then the district level collects them. While this uses NMS trucks, it is another separate logistics system.

In the field visit, to the districts, Pallisa and Mbale complained that the regional center for the eastern region is in Kumi. This has added additional cost in terms of transportation and time for the district to collect their supplies from the regional centers.

Contraceptive products are based on pull system. The ordering is supposedly done by the calculation of issues to users, but in practice it seems to be a variety of methods using issue data, consumption figures, replacement plus 30%, etc. This will be addressed in more detail in a section on district level training needs. Most of the health facilities pick up supplies after they have stocked out completely.

Once the order is completed from the district level, it is sent to the RH unit at the MOH. They review and approve it and send it to the NMS. NMS confirms that order can be supplied and calculates the 10% distribution fee and send to MOH to process an LPO. The LPO is returned before delivery is made by NMS. In normal circumstances, this process would run smoothly if the RH unit received funding allocation from the Ministry of Finance (MoF) to cover these charges. This year, the government did not achieve the expected revenues. As a result, the MoF has asked each of the ministries to cut their planned activities in order to be within the reduced allocated budget.

The RH Division has requested the 10% storage and distribution funds but has not received any allocation from the Finance Department through the MOH for the last two years. Since the NMS is also trying to maintain a viable business by charging for their delivery services, they require payment of this 10% handling fee. With the RH Unit having no approved funds to pay NMS for this handling fee, this leads to periodic crisis. In the last year, the NMS stopped shipment of contraceptive products to the field due to non-payment. To get partial payment made, the RH Unit has had to seek approval from the Permanent Secretary to re-allocate funds for the Ministry of Health to release.

Now, a guarantee that funds will be paid by the MOH is often required before commodities will be shipped to the districts. This approval for the handling charge on contraceptives is often delayed because funds are not readily available.

The NMS can then ship the contraceptive order to the district either with the regularly scheduled essential drug kit shipment or can ship as soon as possible with other shipments going to the appropriate district.

The other alternative is for the district to go directly to Entebbe to collect contraceptive products. In a real local-level effort to speed up the process, some districts will come into Kampala and Entebbe to speed up the contraceptive procurement. Usually this is done in connection with some other capital city visit, but it demonstrates a genuine effort to provide needed services to the local clients.

In this process, the districts must go first to the RH for order approval, then try to get the financial clearance for the 10% handling charge. It is not often possible to do these things on one visit. Then they must return to pick up the goods at the NMS warehouse in Entebbe

The RH unit has pursued several options to solve the problem of delay in product collection due to the 10% handling fee requirement. This includes looking at the option of renting a warehouse of storing RH supplies which was found to be too expensive to storing small amounts of supplies in the offices at the MOH.

With severe stockouts of products last year, we have seen dedication on the part of the district to try and acquire needed contraceptive supplies, often at the expense of other district priorities.

## **Ten Percent Handling Charge**

As a private business handling medical supply distribution, the NMS is supposed to be recovering its handling, processing and distribution costs. It has been decided that a 10% handling charge would be assessed on the total value of the goods stored and delivered. This is to provide for the operational costs of the NMS.

This is certainly a legitimate cost, and in fact is probably insufficient for the real handling costs. NMS estimates that their actual handling costs are 22%. FPLM estimates a 10-15% logistics costs on the total value are needed for commodity delivery to the district level.

For essential drugs, as mentioned above, this 10% is paid by the MOH as counterpart funds for the DANIDA support to the essential drug kits (plus 50% of the actual cost of the drugs). This however is paid immediately by DANIDA to the NMS, and funds are then reimbursed from the government to DANIDA. Drug requirements however have highest priority, and the DANIDA project has some clout to insure that this amount is indeed contributed.

For STI drugs, the agreement was that the STI Project would pay that 10% handling charge. However, this has never been paid to the NMS, with large amounts due. Crown Agents estimated that the NMS is losing significant funds in supporting this program. The drugs however are still being delivered by the NMS.

For contraceptive products, the 10% is paid by some donors and not by some other donors. DFID does pay this amount. UNFPA and USAID had reached agreement with the Government of Uganda that this 10% handling cost due to the NMS would be the government counterpart funds for the contraceptive commodities donated.

This is a logical approach in principal. However, in practice, nonpayment of the 10% is causing extensive delays in product release, occasional non-delivery of products by the NMS and complicating the ordering and delivery system to the point that products are being wasted and stockouts reported at the facility level.

With reduced government revenues, competing priorities and bureaucratic inefficiencies, this money is usually not paid or is in severe arrears. At the moment, NMS has written the RH unit saying that the MOH presently owes 198 million shillings for logistics handling costs for distributed MCH supplies (Approximately \$130,000 US dollars.) and threatening non-delivery of contraceptive products unless the debt is at least partially paid. It was estimated that 75% of this debt is from UNFPA non-contraceptive supplies.

As a business, NMS should certainly expect to be paid for the service they provide. However, the reality is that the contraceptive supplies are delayed or not delivered due to this debt owed by the

MOH to the NMS. For the period Oct - Dec in 1999, the NMS refused to and didn't deliver any contraceptive supplies to the districts.

This even led to the situation where the RH unit didn't put contraceptive supplies into the NMS warehouse for fear that they could not get them released later. So they stored them in RH offices and distributed them directly to districts that had to come to Kampala to collect these supplies.

This is mentioned only to underline the severe contortions to the logistics system that the government inability to pay the 10% handling charge is causing. It requires a "Certification of Availability of Funds" be completed by the MOH to be given to the NMS as part of the product release cycle to the districts. This tells the NMS that the MOH intends to pay.

This piece of paper is carried back and forth between the NMS and the RH unit, and within several offices of the MOH itself. If there is a question that the MOH cannot pay, then higher approval is required.

The handling charge issue adds between 3 weeks and 3 months to the time required to process a district level order.

From a logistics standpoint, the inability of the Government of Uganda to pay this logistics handling cost to the NMS creates a total distortion of the logistics system. It lengthens the lead time to acquire products, it means that district level deliveries miss scheduled transportation and must wait for another cycle and it means that products are not delivered in a timely manner, leading to wastage of the product. In short, it creates an unworkable situation.

There are several options in dealing with this 10% handling fee, from immediate to medium term to long term. For the immediate, it will be important to track the approval or lack thereof for the 272 million Uganda Shilling request for this handling fee made from the RH Unit through the July 2000 to June 2001 MOH budget submission to the Ministry of Finance. The consultants met with the appropriate officials at the MOF, and approval is dependant both on government funds available, plus prioritization by the MOH. The donor organizations can also support this request as part of MOF allocations connected with each donor. This needs to be tracked closely within the next two months.

Even if funds are completely allocated at the 272 million level, there is an existing debt of 198 million, leaving little for the coming year costs. And it is likely with Uganda budget shortfalls, that any allocation would be small.

The medium term is to have the donors cover the 10% handling fee for contraceptive products supplied by them. DFID is already made this provision and is paying the 10% fee. USAID is prepared to consider the possibility. UNFPA is prepared to review the need for this 10% fee and will be conducting an operational review this summer, so the timing for a decision is correct. NMS can track and bill for these costs per individual donor.

For the long term, funds could be included in the SWAP program, or even in the Debt Relief program, so that the allocations are guaranteed, but within government budgets. Since many of these systems are presently evolving, this may take some time and effort to get this allocation included in these other government payment structures.

All parties would even benefit from a 10% reduction in contraceptive purchases by each donor, if that fund could be used for the 10% handling costs. It would save time, wasted product and improve service.

As a perspective, in Tanzania, USAID and UNFPA split 50-50 the total storage and distribution costs for all contraceptive products. This agreement was started in July last year, seems to be working well, and was brokered by FPLM. This 50-50 is certainly more than the 10% handling costs requested here.

If it is not possible for the various donors to pay this charge to the NMS in advance when the product is delivered to their warehouses, then another option might be to have SWAP funds earmarked from the donor basket to cover this 10% handling fee. The end result would be improved public sector services.

The RH unit of the MOH has already endorsed this idea. They see no advantage to having to track down signatories for almost every shipment and would like this obligation to be removed. It would then even be possible to have requests go direct to the NMS and be filled immediately if they fell within already approved limits for each district. Elimination of this handling cost from the RH responsibilities would improve the system enormously. In addition it would free up the RH staff already over-extended to be able to focus to technical issues of reproductive health.

## Inventory Control at the NMS

The NMS has installed a very efficient inventory control and warehousing system, which covers all products. Shipment lots are tracked and stored by random bins, with computerized printouts for picking supplies for shipment.

They can provide inventory tracking by supply source, meaning that donor-donated supplies can be tracked separately. An accounting for the status of donor supplies can be provided within a few minutes.

Using this same system, the NMS can provide up-to-the-day stock status for family planning supplies at the request of the Reproductive Health Unit. This information would be very useful for tracking adjustments needed to supply requests. The consultants would recommend that stock status information at the NMS warehouses would be a subject for review at the proposed stakeholders meetings every four months.

The consultants conducted a physical inventory count of all contraceptive products except condoms in storage at the NMS on May 16, 2000. The NMS staff were particularly helpful in accomplishing this count. We found that the physical count matched the computer generated stock list with 100% accuracy in all items. We wanted to highlight this fact to demonstrate that, at least on this day, NMS inventory control records were up to date and completely accurate.

**Table 6: Results of a Physical Count of Contraceptives as of May 16, 2000**

Contraceptives	Physical Count	Record	Difference
Conceptrol	265,923	265,923	0
LoFemenal	85,600	85,600	0
Microval	41,596	41,596	0
Ovrette	6	6	0
Depo Provera	9000	9000	0

## **Expired Products handling at the NMS level**

There are extensive amounts of expired contraceptive and drug supplies in storage at the NMS. These expired products are carefully separated and stored away from the “active” supplies, but the volume is increasing.

There seems to be no present way to dispose of these expired products. In addition to the usual government regulations concerning expired materials and donor specific disposal requirements, there are extensive environment regulations that combine to effectively prohibit the disposal of these products. There appears to be no incinerator in country, which can handle the volume needed, the high temperature requirements and the pollution control regulations. NMS has made several proposal to construct such an incinerator but to date have not received the funding necessary.

Until a high volume, environmentally correct incinerator can be built, contraceptive and drug supplies will continue to collect at the NMS. At some stage, this problem will need to be addressed.

## **Joint Medical Stores**

The Joint Medical Stores was set up by the Catholic and Protestant church organization of Uganda in 1979. The main purpose of the Joint Medical Stores is to deliver high quality medicines at an affordable price. They currently procure essential drugs, medical supplies and equipment for the 400+ health clinics and hospitals managed by the NGOs. The JMS mainly procures through the international market, clears the supplies and stores them. Due to fewer procurement regulations, JMS is able to have supplies delivered in Uganda ready for distribution within 3 – 4 months. This enables the JMS to hold fewer inventories, decreasing the warehouse space requirements and capital tied in inventory.

In the past, the JMS provided supplies on credit; however, this resulted in a major debt being owed to the stores. As a result, the system operates on a cash and carry system. Credit is only provided to credit-worthy facilities. The stores inventory turnover is over 4.5 million dollars per year and estimates that it serves 30 - 50% of the overall essential drug market of Uganda. Some of the NGO health facilities prefer to receive the supplies in kits, partly because it is easier to manage and are based in remote districts with limited transportation. The JMS facilitates this by working with the NMS to purchase the kits and ensuring that the kits are provided through the NMS distribution system.

At this point, the JMS does not carry contraceptives. However, many of the facilities would like one-stop shopping, whereby they can collect all their supplies from one point. Orders are accepted by email, fax or hand delivery of the order forms and can be filled within 10 minutes to two hours depending on the order quantity.

## **Transportation**

The NMS currently has sufficient vehicles to provide for the delivery of all supplies down to the District level. There are four Ten-ton trucks, with detachable wagons and 3 smaller trucks. This fleet is aging, but still functional.

These vehicles operate on a regular schedule for delivery of Essential drug Kits every three months, and also an as-needed delivery to the District centers. Effectively this means they visit every District Center approximately once a month.

FPLM, through the Regional Logistics Initiative (RLI) has worked closely with the NMS to install a computerized Transport Management System (TMS) which predicts vehicle routes, truck loading, vehicle maintenance and fuel and repair costs. This system has been in operation for several years and seems to be working quite effectively. This is an adaptation of a similar system used in Kenya.

## **Logistics Management Information System**

At the central level, there are various technical units that are responsible for a specific health program. These include the Reproductive Health unit, Child Health Unit, STI/HIV/AIDS unit and so on. Each of these units has reporting requirements and data they need to make national decisions. The Health Management Information System under the planning unit of the MOH has developed a set of forms that can be used for local level management and forms that is used for reporting essential data for decision-making to the central level. Since 1996, the health facilities throughout the country have been using these forms. A HMIS manual that provides information on how to feel the data is available at the district level and can be obtained from the planning unit at the MOH.

In some of the countries where FPLM has worked, the experience has been that the HMIS usually is focused on gathering the epidemiology data and not the management data, especially logistics data. This fortunately is not the case of Uganda. There are a set of logistics forms that allow one to record all the essential data items (stock on hand, losses and adjustments and consumption) in order to manage a logistics system for each level. However, these data are recorded at different places but are not brought together to make logistics decisions such as determining order quantities. The HMIS manual provides instruction on how to fill out the various forms and how to use the data. However, in the field visit, the team found little evidence that the data was being used at the local level for making logistics decisions.

Dispensed-to-user data is reported to the central level of the planning unit where the data is entered into the HMIS database. However, as reported by many key informant interviewers and reviewing the records at each level, the team found that the reports were late, incomplete, or missing. Some of the districts visited have instilled a system of posting on the bulletin board the date the report was received from the facility. The district staff reported that this has helped monitor facilities that have not reported. Reporting compliance has also improved.

## **Forms Used in the System**

Stock Cards are used at all levels of the system for each commodity. At the NMS, they were kept with each product. However, in many cases they were not updated since the computer system also keeps this data. In the districts, stock cards were also kept with the supplies or on the storekeepers' desk, which was usually in the store where the supplies were kept. However, many of the stock cards were not kept up to date. A similar situation was also found at the health

facility level. In most of the clinics visited, the team found that there was usually not a stock card kept for contraceptive supplies. While there is no column for losses and adjustment, most of the storekeepers interviewed were aware that they should record it as a negative balance. None of the records reviewed had a record entered for losses and adjustment.

Requisition and Issue Voucher are used at very level of the system to order supplies. A multiple of three copies per order is used. The first copy stays with the facility ordering the supplies, the other two copies are sent to the supplier. The supplier retains one copy and the third copy is returned to the recipient with the supplies. The in-charge of the facility is usually the authorizing signatory on the order. The form also has a column for current balance. However, in most of the records reviewed, the team found that that column was usually not filled out. If this data were provided, the central level would have the data on stock on hand and would be better able to determine the inventory in the country.

Health Unit Monthly Report are used by the clinics and the districts to report to the level above. The four-page form provides service statistics data. For family planning, the form reports on service statistics and number of contraceptives dispensed to clients by brand. This data if reported could be used to determine the country-wide forecasts. This report was found to be too time-consuming and is currently being redesigned. In the new form, the family planning dispensed to user data is being replaced by reporting by method.

Daily Registers for various services are used at the clinics level. These usually notebooks purchased from the local market. The health workers draw in the various columns that they need. In the case of the contraceptive register, the columns were titled in a different sequence from page to page. This practice can result in increased errors when health workers are aggregating data at the end of the month.

**Table 7 : Logistics Records and Reports**

Level	Recording and Reporting Form	Information	Staff responsible	Facility record kept	Comments
Health Facility	Daily Register	<ul style="list-style-type: none"> <li>Rate of consumption</li> </ul>	Provider	Consulting room	no preprinted registers
	Stock card	<ul style="list-style-type: none"> <li>Stock on hand</li> <li>Quantity received</li> </ul>	In-charge	In-charge office	usually no stock cards for contraceptives
	Requisition & Issue Voucher	<ul style="list-style-type: none"> <li>Stock on Hand</li> <li>Quantity received</li> </ul>	In-charge	In-charge office	stock on hand usually not reported
	<i>Health Unit Monthly Report</i>	<ul style="list-style-type: none"> <li>Rate of Consumption</li> <li># of days stocked out</li> </ul>	In-charge	In-charge office	
District	Stock card	Stock on hand			
	Requisition & Issue Voucher	<ul style="list-style-type: none"> <li>Stock on Hand</li> <li>Quantity received</li> </ul>	DDHS Storekeeper	DDHS office Storeroom	stock on hand usually not reported
	Record of stockouts	<ul style="list-style-type: none"> <li># of days stocked out</li> </ul>	Storekeeper	Storeroom	usually not reported
	<i>Health Unit Monthly Report</i>	<ul style="list-style-type: none"> <li>Rate of consumption of all the clinics aggregated</li> </ul>	DDHS	DDHS office	

In line with the decentralization policies, the objective of the HMIS is to strengthen the districts' ability to use data for decision-making and reduce the amount that is reported to the central level. However, it would be very difficult for the district level to make logistics decisions based on the



current data. This is because not all the essential data items are reported to the district level; and there is no one person responsible to pull all the data together so that it can be used to make logistics decisions. However, assigning and training one or two people to be responsible to compile and manage the logistics data from drugs, vaccines and contraceptives could rectify this situation.

## Impact of MOH Changes to HMIS Forms

In order to reduce work for the health workers, changes are being made to the HMIS forms so that only essential data is collected. For family planning, the new HMIS form suggestions include removal of reporting dispensed-to-user data by brand and replacing it reporting it by method. The consultants believe however, these will not reduce work for the frontline worker, but in fact will increase it. Health workers manage their daily family planning registers by brand dispensed. It would be far easier for the health worker to count each column and transfer the number than to get the health worker to add all the pills and then enter the number by method on the monthly report form. If data is received by brand, it is very easy to compile data by method. However it is impossible to determine the amount dispensed by brand if it is reported by method.

If the dispensed to user data is not reported by brand, this would ensure that the data could not be used for projecting and improving forecasts. In many of the countries FPLM works in, the country projections have dramatically been improved due to dispensed-to-user data available by brand.

The following points are suggestions to the proposed changes that are planned for the HMIS.

### The Family Planning Register

- In order to minimize reporting errors, it is better to have pre-printed registers.
- If funding for pre-printed register cannot be secured, staff should be trained to ensure that the column products are same month to month. Two approaches can be used:
  - alphabetically
  - by the most popular brand.

E.g. insert the name of each FP commodity in the column

Client Information		Amount and type of contraceptive dispensed				Other Services	Reason for Referral
Serial No.	Client No.	Depo	Microgynon	Lofemenal	Ovrette		

### Summary of Family Planning by Month and Health Unit Monthly Report

- If the form is to be sent every month, there is no need to have column for each month.
- On table two: From Operating Theatre Register, on the implant column. No. of new acceptors can be used to determine dispensed to user data.

- On the table amount contraceptive dispensed, the data would be more useful if it was reported by brand. In addition, include a few blank rows in case other brands are added.
- We suggest removing the third table in the new form and replacing it with the following

Contraceptives dispensed	Dispensed
Depo Provera	
Microgynon	
Lofemenal	
etc.	

- Amount dispensed by method can easily be derived from the above reported information.
- The demand for PoP was very low. By reporting it as all pills it is difficult to use the information to determine quantities required for each product.
- The Health units usually noted the amount they gave to CBD workers in the daily register as dispensed and it would create more work if they were to try and separate the data at the end of each month in order to report it. The Health units would have to consider keeping another register that recorded amount dispensed to CBD program.

## Social Marketing for Contraceptive Products

In addition to public sector distribution of free contraceptive products, the Reproductive Health Unit of the MOH encourages the distribution of FP products through private sector firms. This is in keeping with the MOH policy to bring contraceptive products to as broad a segment of the population as possible and make these products as accessible as possible.

These organizations involved in social marketing of FP products conduct extensive marketing and brand promotion, distribution and sales through wholesale and retail outlets and bring a quality product to the consumer. In general, these products are highly subsidized, but with the eventual goal of sustainability.

In Uganda, the two primary organizations in social marketing of FP Products are Commercial Marketing Strategies (CMS) and Marie Stoppes International (MSI). They will be described below.

Market share of socially marketed products has grown steadily, with quite dramatic growth seen in some products. It was frequently reported during field visits that products that people pay for are perceived by the purchasing client to be of higher quality. MOH officials at the field level mentioned that they welcomed the socially marketed FP products, since these products supplemented free supplies at the health units.

## **Commercial Market Strategies (CMS)**

Deloitte & Touche manage the CMS Project, with support from Population Services International (PSI.) CMS took over from the SOMARC Project in early 1998. SOMARC had been marketing FP products since 1993. Contraceptive products are supplied with USAID support, and are imported tax-free.

CMS is promoting and selling the following products; condoms, oral contraceptives, and injectables. They are planning to introduce emergency contraceptives within the year. They also sell impregnated bednets.

Their procurement calculations are based on sales data and expected gains or losses in sales. Their products are imported and cleared by Kampala Pharmaceutical Industries (KPI) who warehouse the products. KPI also overbrands – with permission – the contraceptive products for sale and distribution within Uganda.

Eight sales agents, on commission, with 2 motorcycle re-supply couriers in Kampala to distribute products to various sales outlets. Sales cycles are approximately 2-3 weeks, with products picked up from the KPI warehouses and distributed personally by the sales agents. These agents also collect any expired or damaged products for destruction. The farthest sales point is only 9 hours from Kampala, so quick re-supply is possible.

### **CMS Condoms**

The brand name is Protector. Three protector condoms sell for 100 UgSh (approximately 7 cents for 3.) Sales figures since 1993 are shown in the table below. As can be seen, sales have grown steadily. Condom supplies were interrupted in the second half of 1999, and the product was essentially stocked out from August to December 1999. The reason for this (and other group's condom stockouts) is discussed in the section concerning the National Drug Authority.

In the first quarter of year 2000, condom sales have reached almost 4 million. This may partially be a reaction to the total stockouts of the previous quarter, as commercial outlets re-supply. CMS is projecting total sales of Protector condoms of 7 to 8 million in the year 2000.

These condoms are USAID-supplied condoms, overpackaged with the Protector secondary packaging, containing the three condoms. The secondary packaging contains the necessary information required by the NDA, while the individual primary packet is missing the date of manufacture. It was agreed with the NDA that the information on the secondary packet is sufficient for NDA requirements.

In mid-1999, CMS faced packaging and labeling issues raised by the NDA. These issues resulted in delays of condom shipment clearance and stockouts of the CMS protector brand. These issues are addressed in greater detail in the section on the NDA regulations, but appear to have been resolved during this consultancy visit.

**Table 8 : Sales History of Protector**

Year	Unit Sales
1993	1,812,488
1994	3,846,381
1995	5,980,285
1996	9,812,520
1997	8,962,380
1998	6,417,420
1999	4,076,880

## Oral Contraceptives

The product Duofem, supplied by USAID and produced by Wyeth Industries, is overbranded and sold as PilPlan. There are 21 tablets and 7 ferrous sulfate tablets per package per cycle and 3 cycles per package. One package sells for 250 UgSH (approximately 17 US cents.) They are marketed through pharmacies, clinics and drug shops. PilPlan sales have increased steadily since 1993, but sales decreased slightly from 1998. It is not clear why, but consumers may be switching to injectables.

CMS is the only organization socially marketing oral contraceptives. They “compete” only with other types of pills supplied free from the public sector, including Lofemenal, which is essentially the same product formulation as the Pilplan products. PilPlan has a 53% market share with 47% other pills from the private sector. Sales are projected for 685,000 cycles in the year 2000.

**Table 9: Sales History of PilPlan**

Year	Unit Sales
1993	66,026
1994	220,980
1995	309,743
1996	401,460
1997	517,860
1998	645,780
1999	625,860

## Injectaplan

Injectaplan is a Depo-Provera product, supplied by USAID. Distribution was started in 1996, with dramatic jumps in sales in 1998 and 1999. (See tables below.) Injectaplan is sold for 500 UgSH, approximately 30 US cents, and is effective for a 3-month period. They come complete with an injector, which must be brought to a qualified medical clinician, but this does not seem to be a problem.

Sales were projected for 0% growth in 2000 , with 20,000 units a month expected to be sold. This would mean target of 240,000 units in 2000. The current market share is 29%, with 71% through the public sector.

**Table 10: Sales History of Injectaplan**

Year	1996	1997	1998	1999
Unit Sales	4,140	50,820	138,190	144,000

## **Other Products**

CMS is currently marketing impregnated bednets through commercial outlets throughout the country.

The are expecting to introduce on a pilot basis sales of an emergency contraceptive product within a few months.

## **Summary**

With regard to logistics, CMS is essentially an independent system. They forecast commodities, arrange procurement through USAID, clear and warehouse products through Kampala Pharmaceutical Industries, and distribute the products through the CMS system of sales agents. An extensive marketing promotion supports the sales of these products.

Sales of Depo Provera are increasing dramatically, and can be expected to continue to increase. Sales of oral contraceptives have shown a slight decrease in coming years. Sales of condoms have increased regularly (taking into consideration major stockouts in 1999,) and can be expected to continue to increase.

Because of the large volume of condoms, oral contraceptives and injectables that pass through the CMS (and MSI) social marketing systems, their efforts increase availability and accessibility of contraceptive products at all levels. In any national strategic planning, social marketing must be calculated as part of overall commodity requirements, tracked as method mix and adjustments made in forecasting and commodity procurement.

## **Recommendations:**

1. Commercial Marketing Strategies should continue as part of the larger MOH FP logistics stakeholders group to improve and expand on timely information sharing.
2. The NDA requires not only product registration, but packaging registration. Any changes in packaging details must be registered as well. It will be important to insure all packaging registrations are kept current to eliminate possibility of supply interruption because of packaging or labeling issues.
3. USAID should inform CMS and NDA of any changes in product specifications or in packaging and labeling information. This should be noted on the USAID NEWVERN procurement tracking system notes.
4. USAID and CMS should crosscheck door-to-door payments made to Panalpina (the USAID delivery agent) with clearance and final delivery costs paid to KPI.

## Marie Stopes International - MSI Uganda

MSI- Uganda provides an extensive range of family planning services and counseling. Recently they have become an active player in the social marketing of male and female condoms.

MSI started marketing male condoms in January 1997. The primary brand is Lifeguard, though a smaller number of studded condoms are marketed under the Pleasure brand. Condom sales are recorded in the table below.

**Table 11: Sales History of LifeGuard Condoms**

Year	1997	1998	1999	2000
Unit Sales	7,024,080	12,209,280	12,000,000 (estimate)	15,000,000 (target)

The Lifeguard condoms are produced by the LIG group/India and supported by KfW. The condoms are sold in a packet of 3, for 100 Ugsh, the same as the CMS product. They are overpackaged at the point of manufacture. The Lifeguard brand is supported by extensive marketing and promotion campaigns.

Forecasting is done based on monthly sales, and sales figures are available for each outlet. Sales projections for the year 2000 are targeted at 15 million condoms, a 25% increase. Sales figures might be slightly skewed since CMS condoms were not available for the later half of 1999, so sales should be tracked to be sure this 25% increase is not an over-projection. MSI tries to keep a 6-month stock-on-hand. Their supplies are kept at KPI warehouse and they do their own customs clearance.

As with all other importers of condoms, MSI faced quality and clearance issues with the National Drug Authority in 1999. This resulted in destruction of some condom supplies, stockouts and slightly reduced sales in 1999 from 1998. These issues seem to have been resolved.

MSI has also been experimenting with the social marketing of female condoms. This started in May 1997. Sales have slowly increased, with monthly sales averaging 200-800 a month, with total sales as of Jan 1999 of 8,250 units. With low monthly sales and a total of 1.2 million condoms brought into the country in 1997, there is an oversupply of female condoms at current consumption rates and will probably expire.

As in other countries, the social marketing of female condoms is being done on a pilot basis. It requires more extensive client and provider information and training than other products.

### Summary

MSI maintains an independent logistics system for their male and female condoms. Forecasting, clearance, warehousing, distribution and sales are done through their own separate systems.

However, their work impacts greatly on condom availability and accessibility. Between CMS and MSI, 1999 sales were almost 15 million condoms, at a time of major condom stockouts for both groups. With projected year 2000 sales for both groups, this is approximately 50% of the total estimated condom use in Uganda.

## Recommendations

MSI should be a part of an expanded stakeholders group so there is a up-to-date information exchange about product availability, method mix and use in the country.

Use of female condoms should be tracked closely. It is likely that large quantities will expire in 2002, if consumption rates do not increase.

## **Private Sector Contraceptive Products**

Beta Health Care markets the Durex brand condom, with 1999 sales of 120,000. Their cost per condom is 833 UgSH (approximately 55 US cents each.) Since socially marketed condoms cost 33 UgSH each, this is designed for a specialized, upscale market. MacNoughton sells a Rough Rider condom for the same price, with 1999 sales of 233,000. The market share for upscale condoms is insignificant and should not effect public sector or socially marketed condom projections.

No information is available for true private sector sales of oral contraceptives, but this market is not being targeted by the public sector or by and socially-marketed product.

## **Family Planning Association of Uganda**

The FPAU is the oldest family planning group in Uganda, having been operating for 48 years. They have 28 branches in 23 districts, but will likely be consolidating with six regional centers and a greater emphasis on community-based services. They provide both long-term and short tem Family Planning choices, MCH ante and post-natal care, counseling and treatment for STI, post abortion care and both prevention counseling and treatment for HIV/AIDS patients.

They provide a wide range of contraceptive products with an extensive method mix. They receive many of their supplies through the IPPF, but can also acquire or purchase supplies locally. For imported supplies, they do their own forecasting, procurement, clearing, warehousing and shipment. They have a lorry for supply delivery, and use a private commercial company for emergency shipments when necessary. Distribution to their clinics and outlets is by pull basis, with distribution quarterly. They operate on a manual stock tracking system, and are interested in a computerized system.

The consultants identified a large number of IUDS in FPAU possession, which would not have been used and would expire in early 2001. Since the Ministry of Health was completely stocked out of IUDS, and other programs such as MSI needed these immediately, a mutually beneficial transfer of usable IUDS was arranged by the Reproductive Health Unit and started immediately. This demonstrates the real value of an expanded stakeholders group, which could share information and products across systems on a regular basis.

## Recommendations

This section will group recommendations by the key responsible agency in order to help track decisions and actions taken by each group. Some recommendations are duplicated since they will apply to several agencies, in identical or similar ways. This also fulfills the requirement in the consultant's SOW to organize recommendations by individual implementing groups.

### The Reproductive Health Unit of the Ministry of Health

- A. Contraceptive Security – provision of adequate supplies – needs to be closely tracked, especially as donors shift to Sector Wide Allocation programs. Continuity of supplies must be ensured during this transition period and adequate contraceptive supplies included in the SWAP budgeting. The Reproductive Health Unit, supported by donors and logistics technical assistance, must be responsible for the inclusion of supplies planning. At the present time, with ordered supplies included, there is at least a 2-year supply for most contraceptive products. Now is the time to plan for beyond two years, using 2001 CPT projections. Projections can be updated also with DHS data due in February 2001 and the Population Consensus in 2002.
- B. As allocations are made in the SWAP budgets, the RH Unit must work closely with the donor agencies to be certain sufficient funding is included for contraceptive commodity procurement and for their distribution. Since this is a new and evolving system, this process must be tracked closely to monitor procurement funding levels. It would seem that the Population Secretariat would be a useful ally in this process.
- C. UNFPA funding will not be known until January 2001 at the earliest, so their possible support must be calculated in then, if applicable.
- D. The Reproductive Health Unit with external technical assistance should do CPT commodity forecasting in July 2000 for the year 2001 and beyond. It should use all possible data sources including demographic projections, DISH District survey data, 200 site dispensed to user data and HMIS monthly form to produce projections.
- E. We believe USAID will be able to support a two-week consultancy the end of July to have technical assistance from FPLM to help conduct this extensive review and develop detailed contraceptive need projections. FPLM technical assistance is also available at any time for long-distance consulting or technical review on CPT forecasting or forecasting changes.
- F. The Contraceptive Coordinating Committee should have a formal meeting every 4 months, coordinated by the RH Unit. This would review stock-on-hand data, shipment coordination, issues data, problems that arise, and information and product status that need to be shared. This meeting should include all donors and potential donors, all social marketing distributors,



all providers of family planning services, the National Medical Stores and MOH sections such as Reproductive Health, ACP, HMIS and the NDA.

- G. Regular meetings would focus attention on stock status and future needs, identify problem areas as they arise and permit information and even product exchange between stakeholders to mutual advantage.
- H. The Reproductive Health Unit should coordinate this meeting, but the DISH project has generously offered to provide secretariat and other support to help coordinate this important meeting. Having this meeting three times a year seems to be an effective timeframe in other countries within the region.
- I. Technical Assistance in Logistics planning and advocacy should be provided to the Reproductive Health Unit from specialized external expertise and with on-going local logistics support, primarily from the DISH project. This combination would strengthen the capacity of the RH to coordinate forecasting, procurement and district level improvement. The DISH II Project will provide technical assistance and funds to the district in improving district level inventory control/ordering procedures and storage in the 12 DISH supported districts.
- J. External technical assistance under the direction of the RH Unit would be very productive to help verify CPT forecasting, assist in the development of procurement guidelines, coordinate improved District level inventory control and ordering procedures, improve storage procedures, assist in the integration of logistics systems and bring in regional experience. If this were able to be provided, the RH Unit could request specialized experience from within the region or internationally. There is excellent regional expertise available from Nairobi, which would be accessible on short notice.
- K. The DISH project offers both advocacy and policy support and follow-up on the national level and hands-on knowledge of logistics activities at the District and Health Unit level within their 12 focus Districts. They will be conducting a detailed logistics survey in mid-2000 and this knowledge will be useful for the RH Unit in planning District level systems and approaches.
- L. Specific project activities, including DISH, CARE, UNFPA and others, can be used to promote RH Unit objectives is supporting logistics systems at the District level.
- M. The ten percent handling fee on the value of commodities, due to the NMS for handling, storing and shipping supplies to the District level, is such an obstacle to a smooth and efficient ordering process that it should be made a guaranteed payment and taken out of the ordering approval process.

Options to do this range from

- 1) RH securing guaranteed funding;
  - 2) donors prepay this 10% when commodities are received by the NMS,
  - 3) a guaranteed amount be authorized by line item in the Sector-wide planning budgets or
  - 4) a guaranteed amount be included in the Health Sector Debt-relief budgets.
- district level ordering will not improve perceptively until this 10% handling fee issue is resolved.

- N. Immediately, the RH Unit should track their request for 272 Million Uganda Shillings for commodity clearance which has been submitted to the Ministry of Finance. If this should not be allocated, or if it is allocated in a significantly smaller amount, this information should be shared with relevant donors to explore what other options might be possible.
- O. The RH Unit should request from the NMS a detailed breakdown of the past unpaid and anticipated 10% handling costs for contraceptive delivery so that the donor agency could make provisions for this payment if possible.
- P. RH and donors need to ensure dispensed to user data is maintained in the new HMIS forms.
- Q. The HMIS forms are being revised at the moment. Logistics planning information is in danger of being lost. Recommendations for the revised forms are attached in an appendix, but the RH Unit and the donor organizations should track this development.
- R. All contraceptive commodity importers must ensure that not only is the product registered with the NDA, but that packaging and labeling must meet NDA specifications. Any changes in packaging or labeling requires notification to the NDA.
- S. if for any reason, USAID procured condoms are requested for the public sector in Uganda, the RH unit must obtain in advance a waiver from the NDA for the importation of these condoms.
- T. If provided with a clear delivery order from the MOH and payment for services, the NMS has the facilities, transportation and human resources to deliver contraceptive and other medical supplies to the District level in a timely and efficient manner.
- U. Dispensed to user data from a previously conducted 200 site survey should be entered and analyzed. This work could be coordinated by the DISH project and be used in calculating the 2001 CPT report.
- V. RH unit should use Pipeline software to assist in the procurement planning. This can be installed by FPLM with training provided. Back-up technical assistance is always available for the use of this system. Several individuals should be trained in Pipeline use.
- W. Pipeline tracking of stock status would be a useful component of regular stakeholders meetings.
- X. The RH Unit can request technical assistance for contraceptive procurement in procedures, specifications and quality control.
- Y. RH and other key officials would benefit from the three-week Arlington logistics training course. It would be important to develop a cadre of trained officials who could mutually support the development of an improved logistics system. Two officials should be sent to the next available training course.

## **I. RH and MOH Activities at the District and Health Unit Level**

- A. Expired Stock and damaged materials should be collected and removed from health unit and District level storage areas. With prior notification to the Districts to collect expired products to the District level; a truck could be sent to each district to collect expired contraceptive (and drug) products. An authorized official from the MOH should be involved to receive, report and sign for these products.
- B. The NMS has developed a proposal for the removal of these expired products to the national level.
- C. Storage facilities need to be upgraded especially at the district level. The MOH should encourage Districts and District-specific projects to provide minimal resources such as shelving and paint to improve storage areas. One day's worth of time to organize stocks and train storekeepers in simple procedures would help substantially.
- D. With the construction and re-furbishment of sub-district centers, simple plans for a functional storage area could be developed. For example, built-in concrete shelves seen at some centers were inexpensive and very effective. A minimum space requirement should be developed.
- E. Basic storage job aides should be developed, disseminated and trained. This can be done with FPLM and DISH assistance.
- F. Procedures manual need to be developed for District and other level inventory control and stock ordering. The Process should include the following:
  - design workshop to achieve agreement on procedures and forms
  - development of training manuals and on-the job training aids
  - testing of training in DISH and other project areas
  - inclusion of logistics training in other training packages
  - training of both policy decision makers and operational cadre
  - emphasis on dispensed to user data for decision making
- G. This work should be coordinated with the drug project supported by DANIDA and forms. Systems and approaches should be developed in common.
- H. Contraceptive and other commodities need to be synchronized to the quarterly distribution cycle of Essential Drug kits, once procedural obstacles are eliminated and staff trained to manage inventory and ordering.
- I. Define role of sub-District health center in logistics activities. The consultant's initial recommendation would be to avoid stock storage at this level.
- J. Design and institute a system to re-distribute commodities in oversupply

## USAID and Other Donor Organizations

- A. Contraceptive Security – provision of adequate supplies – needs to be closely tracked, especially as donors shift to Sector Wide Allocation programs. Continuity of supplies must be ensured during this transition period and adequate contraceptive supplies included in the SWAP budgeting. The Reproductive Health Unit, supported by donors and logistics technical assistance, must be responsible for the inclusion of supplies planning. At the present time, with ordered supplies included, there is at least a 2-year supply for most contraceptive products. Now is the time to plan for beyond two years, using 2001 CPT projections.
- B. As allocations are made in the SWAP budgets, the RH Unit must work closely with the donor agencies to be certain sufficient funding is included for contraceptive commodity procurement and for their distribution. Since this is a new and evolving system, this process must be tracked closely to monitor procurement funding levels. It would seem that the Population Secretariat would be a useful ally in this process.
- C. Donor Procurement should involve the National Drug Authority in procurement planning, especially with new commodities, new manufacturers or even new labeling, to avoid clearance delays and possible exclusion of products. This should be done at the time of commodity procurement, not when supplies have arrived in country.
- D. USAID should consider providing support for specialized external technical assistance on a regular basis
- E. USAID should encourage and support DISH participation in logistics advocacy and policy discussions and decisions at a national level. This would be a useful and effective use of different aspects of USAID technical assistance.
- F. USAID/Washington should note in the Newvern system (worldwide commodity procurement tracking system) that any changes in product, manufacturers or packaging must be notified to the NDA. And to USAID/Uganda.
- G. USAID/ Washington should consider adding the Date of Manufacture to each condom primary packet, at the time of the next worldwide production contract. This would comply with WHO specification guidelines and conform to other condom labeling.
- H. FPLM and USAID/Washington should send to NDA all agreed upon documentation and FPLM should provide USAID-supplied products documentation and sample folder.
- I. USAID/Washington should review shipping and payment instructions with Panalpina and with Kampala Pharmaceutical Industries.
- J. Donor Organizations and FPLM should encourage Uganda participation in RLI regional logistics activities.

## **DISH Project**

- A. Use resources of DISH Project and other projects to advocate for, test and support implementation of inventory and ordering capacity building at the District level.
- B. Use Supply Chain Manager computer system for inventory control and ordering in DISH Projects. Encourage expansion of logistics lessons learned in DISH focus districts to other project-assisted Districts.
- C. Provide a small fund for re-furbishment and improvement to District level storage areas and provide training to storekeepers in simple storage improvements.
- D. Support the RH Unit in encouraging and coordinating a stakeholders meeting for logistics every four months at the national level.

## **Other Stakeholders**

- A. Actively Participate in a national-level logistics stakeholders meeting every four months.
- B. Notify and receive approval from the National Drug Authority for product packaging and any changes in product packaging.
- C. There are a large number of female condoms in Uganda. With current levels of consumption, there is more than a hundred years of supply. Even allowing for greatly improved consumption rates; it might be advisable to consider “marketing” supplies that will not be used to other countries.

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# Appendix 1: Scope of Work

## ASSESSMENT OF THE CONTRACEPTIVE LOGISTICS SYSTEM IN UGANDA FAMILY PLANNING LOGISTICS MANAGEMENT PROJECT

### Background

USAID/Uganda supports reproductive, maternal and child health programs in Uganda through various strategies. These include increasing service utilization and behavior change by increasing availability, improving quality, knowledge and perceptions and enhancing sustainability. In addition, USAID supplies substantial contraceptive commodities for the entire country.

Availability of contraceptive supplies is an essential element in the delivery of quality, integrated reproductive health services. Contraceptives in Uganda are procured through a limited number of donors (USAID, UNFPA and DfID in particular) and provided to the Central Ministry of Health (Reproductive Health Division) for their distribution to the District Health Offices and other institutions responsible for service provision. Distribution from central to peripheral level involves an intermediate storage step with the National Medical Store (NMS), a para-statal institution responsible for drug purchase, storage and distribution at national level.

Over the last two years, repeated stock outs of contraceptive supplies have been registered at national, district and facility levels. Several logistics issues that may possibly hamper the programs' success in ensuring that the products such as contraceptives are available for distribution were identified, including:

- Delays in-country procurement clearance resulting in a shortage of condoms and potentially an expiration of expensive STI drugs and reagents due to outstanding handling fees owned to the NMS.
- Current limitations of donor coordination approaches, as shown by the unexpected termination of Norplant supply by the UK.
- The same distribution system is currently handling the all the free and cost-recovery products. There is problem in ensuring that the products that are provided for free are used for the intended purpose and not sold. It is difficult to achieve this, as the same products are also available in the cost-recovery program.
- Decentralization of health services has resulted in lack of information at the central level to plan for procurement. In addition, it is also unclear whether there are sub-standard products that have filtered in the system, due to lack of trained staff at the lower levels in procurement procedures.
- Poor quality of drugs/contraceptive storage and needs assessment at district and facility levels.

Monitoring of CYP provided by the public sector institutions has shown a marked decrease during 1999, when condoms went out of stock all over the country for more than six months and injectable contraceptives showed a similar trend at the end of the year. While a shift towards the

private sector as the preferred source of contraceptive – at household level - may be taking place currently and account for part of this trend, the MOH Reproductive Health office, USAID Mission and the DISH Project are worried that potential stock outs of contraceptive and other supplies may prevent the achievement of the objectives of increased availability and quality of reproductive health services. Within this context, they would like to request the Family Planning Logistics Management Project to conduct, in coordination with MOH, DISH, CMS and other partners, a systematic assessment of the contraceptive procurement system in Uganda.

### **Goal of the Assessment**

To conduct a qualitative and quantitative assessment in order to formulate recommendations to improve the efficiency of the logistics system based on the data gathered on the current status of the contraceptive logistics system. The assessment will include the complete in-country supply chain, i.e. all tiers of the system and will review all functions of logistics; procurement, distribution, transportation, warehousing, inventory control and LMIS.

While the assessment will focus on the contraceptive logistics system, where feasible, the team will also collect data on logistical aspects of essential drugs, vaccines, vitamin A, iron supplements, STD drugs, TB drugs, drugs for opportunistic infections related to AIDS and other public health commodities.

Specifically, the assessment will provide an understanding of the comprehensive issues with the current contraceptives logistics system in Uganda and provide a set of specific recommendations to facilitate an adequate and timely supply of contraceptives over the coming five years.

### **Objectives of the assessment**

1. To assess the status and function of the logistics-based activities of key partners at all levels of Uganda supply chain for reproductive health supplies and critically review the current structure of the various supply chains currently operating in Uganda, with particular attention brought to the following issues/problems:
  - past procurement patterns, intentions of current donors and availability of funding over the coming five years;
  - Ministry of Health intentions/plans with regards to contraceptive procurement with national/district funds and proposed move towards a “pull” drug procurement system;
  - relationships between the various institutions (MOH, NDA, NMS, JMS, CMS, districts and others) involved in storage and distribution of donor-procured contraceptive supplies, in particular with regards to:
    - legal requirements for importation/packaging of pharmaceutical products, in particular contraceptive supplies
    - responsibilities of central MOH and districts vis-à-vis storage and handling fees
    - definition of procedures for procurement of contraceptives from the district level (that is, which institution is responsible for supplying the districts and facilities?)
  - adequacy of the current contraceptive needs assessment process at national and district levels
  - the perception and position of the National Drug Authority about social marketing and community-based distribution programs, and the problems faced

- by these subsidized programs in the procurement, clearance and distribution of contraceptives with respect to the requirements of the NDA
  - existing contraceptive logistics and management practices and networks of CMS, Marie Stoppes and FPAU with respect to the established MOH drug logistics and management system
  - adequacy of existing human resource at the MOH for performing its core functions related to drug/contraceptives logistics and management.
2. To gather and review logistics indicators for all levels of the MOH system for contraceptives
  3. To identify the main causes of recurrent stock outs of contraceptive supplies, identify areas that need to be strengthened or streamlined in order to improve the flow of the product through the systems and suggest operational solutions to ensure the timely and sufficient provision of these supplies through the coming five years.
  4. To estimate, from a review of the previous Contraceptive Procurement Tables and from the findings of the assessment, the needs for contraceptive supplies over the next years, both at national level and in the 12 DISH and 3 CARE districts (based on a 1% projected annual increase in CPR at national level and 1.5% in the DISH-supported districts).
  5. In addition, the assessment team should help the DISH Project identify those issues/problems/ constraints related to contraceptive procurement that are equally relevant to the overall drug procurement system in Uganda; and provide advice, based on its experience in this area, on the feasibility of extending the current computerized commodity tracking system to a wider range of products (in particular, IMCI-related drugs, Vitamin A, Iron, vaccines and other selected public health commodities).

### **Planned Output of the Assessment**

1. A report on the status of the current funding, procurement, clearance, storage, distribution, sales and LMIS for contraceptive supply in Uganda and existing failures or constraints.
2. An estimate of the quantities of contraceptive supplies (per method) needed over the next five years for the country, and for the DISH and CARE-supported districts.
3. A set of operational recommendations aimed at facilitating an adequate and timely supply of contraceptives over the coming five years; these recommendations should be specifically directed to:
  - the USAID Mission
  - the Ministry of Health and other government or parastatal institutions involved
  - the DISH Project
  - the CMS Project

### **Timing and duration**

It is agreed that the study shall begin on May 1 for a duration of three weeks.

### **Assessment Team**

Two FPLM staff will work in collaboration with the MOH, DISH-II project and other donor partners to conduct the assessment. Prior to the arrival of the FPLM staff, DISH-II will assist in

gathering some preliminary data, help with setting up a schedule for the team, identify the sample size and participating on the team itself.

The team will also work closely with Bonita Blackburn/USAID/W to coordinate the resolution to the procurement issues and their potential impact to the contraceptive logistics system.

### **Methodology/Strategic framework of the Assessment**

The assessment will gather qualitative data through key informant interviews and quantitative indicators to assess the overall status of the logistics system. The logistics cycle will be used as a framework. Data will be collected on the entire in-country supply chain from the central level, all the way to the clinic where the product is dispensed to the client.

In addition to the standard assessment, the team will use the *Logistics Performance Matrix*<sup>1</sup> used by many private sector companies to assess the performance of each of the components of the logistics system and of the overall status of the supply chain performance. Performance indicators will be gathered where possible on *Quality*, *Productivity* and *Response Time* on each of the activities of the logistics system. This data will inform managers, operators, and designers on their current performance in each of the logistics activity and enable them to set targets to improve the logistics system. If the data can be gathered, it can be used to at least set up an internal benchmarking program among the different regions or districts.

**Note:** the DISH Project plans to conduct in May and June 2000 a district-level assessment of the drug logistics systems which should complement the proposed assessment, as well as the Drugs for Management of Childhood Illnesses (DMCI) study undertaken by the Rational Pharmaceutical Management (RPM) Project. Accordingly, the FPLM team may focus its efforts on national and central level logistics and management issues.

### **Focal Persons**

Dr. Vincent David of DISH-II and Ms Annie Gaboggaza-Musoke of USAID will be the focal person to oversee the implementation of this assessment. Before and during the assessment, the DISH Project staff will also identify and make appointments with relevant persons and institutions; review the trends of past funding of contraceptive supply in the country; compile existing literature on drug procurement studies in Uganda and brief FPLM team upon arrival.

### **Addendum for Bonita Blackburn, USAID/W**

It is our understanding the Ms Bonita Blackburn from USAID/W will join the FPLM team. We would like to take the golden opportunity to increase common understanding and expectation among USAID/W, USAID/Uganda and selected USAID implementing partners including CMS and DISH about CPTs and critical issues with NDA regarding procurement, clearance and distribution of drugs and contraceptives. Accordingly, we would appreciate that Ms Blackburn:

- 1) review and discuss CPTs and related problems and recommend revisions USAID and CMS
- 2) review and revise roles and responsibilities for development and monitoring of CPTs with USAID and CMS

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<sup>1</sup> Frazelle Edward, *Logistics Performance, Cost and Value measures*. 1999. Penton Media Inc.

- 3) Familiarize her with NDA procedures and pitfalls,
- 4) Present USAID procurement to NDA and the MOH with CMS
- 5) review shipping documents and procedures with USAID, KPI and CMS).

### **Proposed Institutions to be contacted/visited**

#### **Government institutions**

##### *Ministry of Health*

*Headquarters of the Ministry of Health:* responsible for policy formulation, implementation and supervision. This will include clinical services, Pharmaceutical division. Reproductive Health project, Logistics section, etc.

*NMS – National medical stores:* A parastatal drug procurement and distribution corporation, involved in the handling, storage and distribution of drugs and contraceptives mainly for the public sector.

*Ministry of Local Government – Decentralization secretariat:* Oversees district health services under the decentralization scheme.

Uganda Local Authorities Association

*NDA – National Drug Authority:* The national drug regulatory agency. Formulates drug policies, regulates drug imports, drug use, issues national drug use guidelines and sets standards.

Uganda Peoples Defense Forces

Service delivery centers including Hospitals (including Mulago, Regional District referral, District, NGO, HC IV, HC III, HC II)

#### **Donors**

*DANIDA:* Funds health related programs like Health sector support program (HSSP) and essential drugs support program (EDSP)

*UNFPA* Funds the Reproductive Health (RH) project that carries on Reproductive health services in about 26 districts. Funds substantially the supply of contraceptives in the country

*EDSP* Funded by DANIDA. Funds rural drugs/drug kits

*DfID* Funds procurement of contraceptives. Supports collection of data needed for contraceptive projections

*USAID*

#### **Projects/NGOs**

*HSSP:* Supports the training of medical assistants & equipping paramedicals, supports implementation of HMIS and supports the quality assurance unit

*STIP* – Sexually Transmitted Infections Project: Funded by among others the World Bank. It operates countrywide. It is involved in the prevention of sexually transmitted diseases, care for the people with AIDS and the other related diseases.

*DHSP* – District Health Services Program: Funded by World Bank, KfW, SIDA, and GoU. Supports capacity building in district primary health care services.

*JMS* - Joint Medical Stores: Christian founded drug procurement NGO involved in drug storage and rational drug use promotion.

*CMS* – Commercial Market Strategies: involved in social marketing of condoms, oral and injectable contraceptives, STI treatment kits.

*MSI* - Marie Stoppes International: CNS competitor, also involved in social marketing of contraceptives

### **Others**

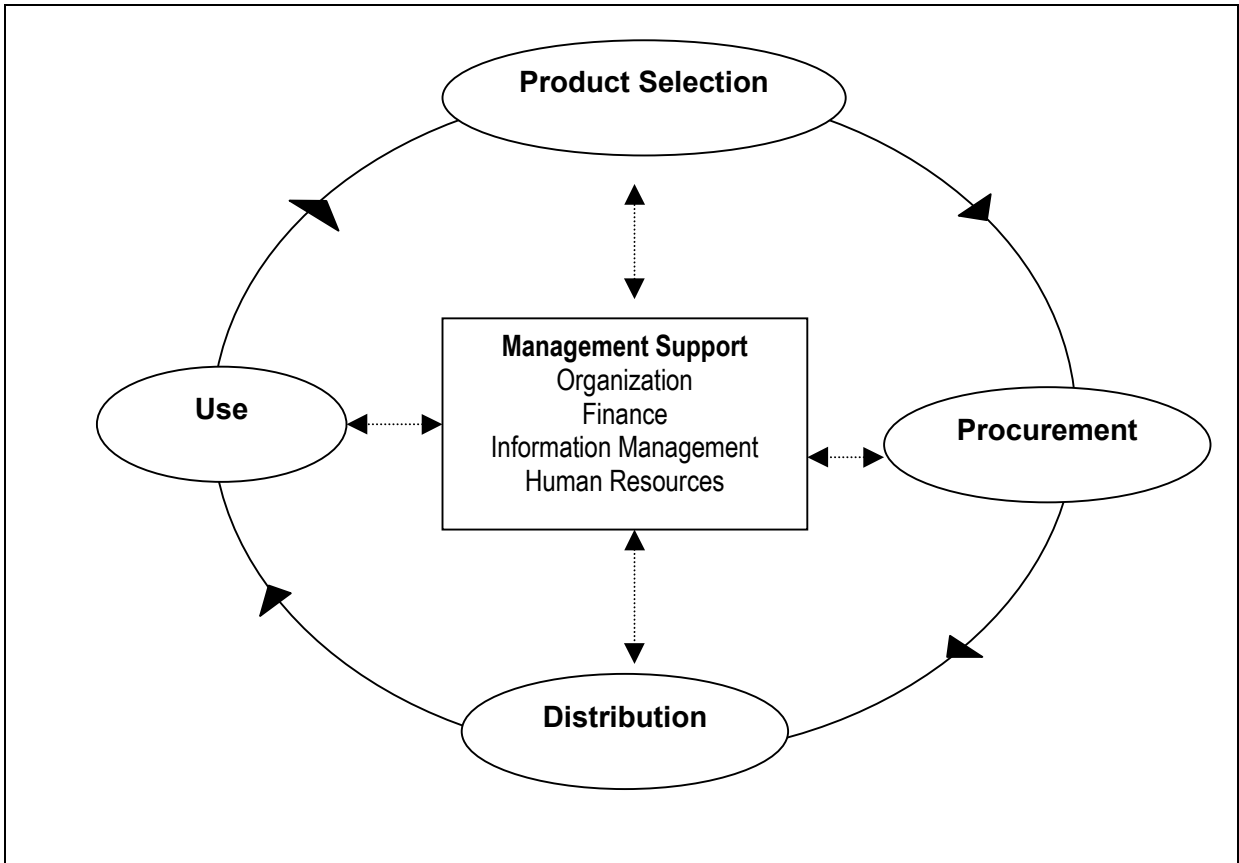
Districts- Involved in drug logistics and management

*KPI* – Kampala pharmaceuticals industries: Manufacture of drugs, packaging of commodities e.g. protector condoms for CMS.

Association of Drug Importers

*WHO* - Involved in various fields: PHC, disease control, malaria and tropical diseases, women and children health, health information, nutrition, environmental health, non-communicable diseases. Very influential on MOH policy development and standard setting

## Appendix 2: The Logistics Cycle



## Appendix 3: Schedule for FLM/USAID Assessment Team

May 2 – 19<sup>th</sup>, 2000

### Tuesday, May 2

- 8:30am **USAID Kampala briefing**  
Angela Lord, Rebecca Rohr, Annie Kaboggoza-Musaki, Betty Nabirumbi
- 10:30am **Reproductive Health Unit**  
Dr. Florence Ebanyat, Dr. E.F. Katumba, Dr. Bazirake (UNFPA)
- 1:30pm **DISH II Project**  
Dr. Vincent David, Eldad Sebagenzi, Dr. Stembile Matutu, Charles Katende
- 3:15pm **Kiswu Clinic, Kampala**  
Daisy Okuma
- 4:00pm **STI Project**  
Dr. Peter Nsubugu

### Wednesday, May 3

- 8:30am **DISH II Project**  
Dr. Souleymane Barry, Dr. Vincent David, Eldad Sebagenzi
- 11:00am **Commercial Marketing Strategies (CMS)**  
Elizabeth Gardner
- 1:30pm **National Drug Authority**  
Dr. John Lule, Francis Otim, Gabriel Kaadu
- 4:00pm **DFID**  
Ros Cooper

### Thursday, May 5

- 8:30am **USAID**  
Angela Lord, Rebecca Rohr, Betty Nabirumbi
- 9:30am **UNFPA**  
Fabian Byomuhangi
- 11:30 **CMS**  
Dr. Peter Crowley, Elizabeth Gardner, Rebecca Rohr
- 2:00pm **HSSP/DANIDA Project**  
Sjoerd Postma

### Friday, May 5

- 9:00am **National Medical Stores, Entebbe**  
Patrick Kisitu, Saul Kidde, David Kubagenda
- 3:30pm **Marie Stopes Intl.**  
Judith Butagira
- 4:30pm **DISH II Project**  
David Vincent
- 6:00pm **Regional Quality of Care Center – Makerere U.**  
Shelia Magero, Tom Kakaire

### Monday, May 8

- 9:00am **USAID**  
John Cutler
- 10:30am **DISH II**  
Muyingo Sowedi



- 1:30pm **Joint Medical Stores**  
Wim Mensink
- 3:30pm **Uganda Midwives Association**  
Charlotte, Gideon Nzoka
- 4:30pm **Family Planning Association of Uganda**  
Dr. Paul Kabwa

Tuesday, May 9

- 9:00am **DMS, Ministry of Health**  
Professor Omaswa, Dr. Ebanyat
- 11:00pm **Depart for field**
- 3:00pm **Kamuli District Office**  
DHV, Nurse, Storekeeper
- 4:30pm **Level Four Clinic**  
Kamuli Nurse, Storekeeper

Wednesday, May 10

- 9:00am **Pallisa District Office**  
DHO, Nurse, storekeeper
- 11:30am **Buseta Clinic – Level III**  
Doctor, nurse, storekeeper
- 3:30pm **Mbale District Office**  
DMO, nurse, storekeeper
- 4:30pm **UNFPA Regional Office**  
Regional coordinator

Thursday, May 11

- 9:00am **Budadiri Clinic Level III**  
Doctor, nurse, storekeeper
- 11:30am **Buwalasi Clinic Level IV**  
DDHS, nurse, storekeeper
- 1:30pm **Iganga District Office**  
Nurse, storekeeper, records
- 3:00pm **Muyunge Health Center –III**  
Doctor, nurse, storekeeper

Friday, May 12

- 9:30am **DISH II Project**  
Souleymane Barry, Musingo Sowedi
- 11:00pm **USAID**  
Betty Nabirumbi, Annie Kaboggoza-Musaki
- 2:00pm **USAID**  
Dawn Liberi, Patrick Fleuret, Angela Lord

Monday, May 15

- 9:00am **World Bank**  
Peter Okwero
- 10:30am **CARE**  
Louis Alexander, Dr. T. Makwate

Tuesday, May 16

- 9:00am **NMS- Inventory Count**  
Saul Kidde, David Kubagenda
- 1:30pm **UNEPI**  
Isingoma Patrick, Winifred Tabaaro, Zura Asander, Kurasi Beim
- 2:30pm **Geographic Mapping Survey Department**

Wednesday, May 17

- 9:00am **Ministry of Finance**  
Magona Ishmael, Steve Rice, Annie Kaboggoza-Musaki, Betty Nabirumbi
- 11:00pm **USAID**  
Patrick Fleuret, Angela Lord, Anne Kaboggoza-Musaki, Betty Nabirumbi, John  
Cutler
- 6:00pm **Regional Center**  
Joel Okullu

Thursday, May 18

- 10:00am **Population Secretariat**  
Dr Jotham Musinguzi, Nahabwe Paddy, Rhobbinah Ssempebwa  
Charles Zirarema,
- 11:30am **CMS**  
Peter Crowley, Elizabeth Gardner, Sarah Margiotta, Angela Lord, Annie  
Kaboggoza-Musaki.
- 10:00am **Reproductive Health**  
Dr. Katumba
- 2:00pm **Stakeholders Meeting**  
Dr. Mbowye, Dr. Katumba, Karl Kulesa, Dr. Bazirake, Ros Cooper, James  
Thornberry, Annie Kaboggoza-Musaki, Betty Nabirumbi, John Cutler, Dr.  
Souleymane Barry, Muyingo Sowedi, Dr. Vincent David, Chris Forshaw, Dr.  
Joel Okullo, Wim Mensink, Elizabeth Gardener, Sarah Margiotta, Steve Wilbur,  
Sangeeta Raja

Friday, May 18

- 9:00am **Reproductive Health Unit**  
Dr. Katumba
- 11:00am **USAID**  
Angela Lord, Annie K., Betty N.
- 11:30am **DFID**  
Ros Cooper
- 12:00pm **DISH II Project**  
Souleymane Barry, Muyingo Sowedi

## Appendix 4: People Contacted

Uganda country code: 256

Kampala: 41

Entebbe:

<b>Ministry of Health</b> <b>P.O. Box 7272, Kampala, Uganda</b> <b>Tel: 256-41-231563/9</b> <b>Fax: 256-41-340881</b>			
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Project Manager (STIP)	Dr. Peter Nsubuga	<a href="mailto:pco@infocom.co.ug">pco@infocom.co.ug</a>	Tel: 340884 Fax: 340877
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National Programme Officer, Head Family Health Dept.	Rhobbinah Ssebowa Ssempebwa	<a href="mailto:popsec@imul.com">popsec@imul.com</a>	
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Annie			
Project Management Assistant	Betty Nabirumbi	<a href="mailto:bnabirumbi@usaid.gov">bnabirumbi@usaid.gov</a>	
Senior Health Advisor	Dr. John Cutler	<a href="mailto:cutler@imul.com">cutler@imul.com</a>	Mob: 075 721101

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