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West Africa Reproductive Health Commodity Security

*Study Phase 1
Task Report: 5*

Logistics System Capacity in West Africa



DELIVER
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Logistics System Capacity in West Africa

Aoua Diarra



DELIVER

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Qualitative Assessment Using the Questionnaire

For this study, three tools were used to assess the countries' logistics capacity in countries where information was available and where DELIVER has conducted previous assessments. The qualitative information was obtained using a questionnaire and logistics system assessment tool (LSAT), and through comments from experts and advisors with experience working in logistics management in West Africa. The quantitative information was collected using a logistics indicator assessment tool (LIAT).

The first tool is a structured questionnaire that was designed for and administered to delegates from each of the countries attending the Reproductive Health Directors meeting, which was organized by West Africa Health Organisation (WAHO) in Accra on November 11–14, 2003. Although the assessment was planned to assess the entire range of reproductive health commodity security (RHCS), the assessment tool focused mainly on contraceptives. The delegates were expected to know the answers to most of the questions in the assessment tool. However, the point persons would probably need to consult on several questions with their colleagues who have specific technical and programmatic knowledge. To facilitate the process, the questionnaires, with instructions, were distributed to the point persons a month before the November meeting. However, only the country delegates from Senegal and Benin completed the questionnaire before the meeting. Delegates from nine more countries (Burkina Faso, Gambia, Ghana, Liberia, Mali, Niger, Nigeria, Sierra Leone, and Togo) completed the assessment tool during the Accra meeting, which limited the completeness of the response to some of the questions. French responses were translated into English, and all the responses were entered into a Microsoft Excel file to facilitate the analysis. For this study, a descriptive analysis of the questionnaire was then conducted and the findings were reported. See appendix 2 for the responses to the questions.

Three aspects of the 11 countries' logistics capacity were assessed for this review: (1) capacity to forecast reproductive health (RH) commodity requirements, (2) capacity to procure RH commodities, and (3) capacity to distribute RH commodities.

Countries' Capacity to Forecast Reproductive Health Commodity Requirements

For the responses to the questions on the capacity to forecast RH commodity requirements, see table 1 of appendix 2. The summary of table 1 follows:

- *Staff (number, responsibility, and skills):* Almost all countries (except Liberia and Sierra Leone) identified an in-house officer or department/unit responsible for forecasting RH commodity requirements. Six of the 11 countries reported a shortage of trained staff to forecast RH commodity requirements. Two reported that there was no in-house logistics capacity (Liberia and Sierra Leone).
- *Process:* Most countries (5 out of 11) reported that the forecasting for RH commodities was done once a year. Burkina Faso, Niger, and Togo reported more frequent (i.e., six monthly or quarterly) forecasting.
- *Data (source, capacity to collect and use RH commodity logistics data for forecasting):* The source of data used for forecasting commodities was not consistent across the 11 countries assessed. Benin, Gambia, and Niger used distribution data, while Nigeria used demographic data; and Senegal used consumption data. The other three countries (Burkina Faso, Ghana, and Mali) with logistics

management capabilities used a combination of data sources for forecasting, usually consumption and distribution data.

Countries' Capacity to Procure Reproductive Health Commodities

For the responses to the questions about the capacity to procure reproductive health commodities, see table 2 of appendix 2. A summary of the table is as follows:

- *Staff (number, responsibility, and skills):* Most of the countries (7 out of 11 countries) reported lack of staff with appropriate knowledge and training to procure RH commodities. The other four countries (Ghana, Mali, Senegal, and Togo) reported having qualified staff for the purpose. Gambia reported that attrition of trained staff in the health system was a general problem, not just limited to the logistics system. Seven of the 11 countries identified an in-house officer or a department/unit responsible for procuring RH commodities. Niger reported that UNFPA and the Directorate of Reproductive Health did the procurement together.
- *Process (transparency, mechanisms per type of commodities):* About half the countries (5 out of 11 countries) reported having adequate transparency in the procurement process of RH commodities. In general, procurement policy for contraceptives was different from the procurement policy for other essential drugs/commodities.

Countries' Capacity to Distribute Reproductive Health Commodities

Table 3 in appendix 2 reports the responses regarding the capacity to distribute RH commodities. Table 3 is summarized below:

- *Process (Is the logistics system in place? How is it performing?):* Except for Liberia, Niger, and Senegal, all the countries reported having an operating logistics system. However, Sierra Leone reported that their logistics system was poor.
- *Data (type of data available vs. needed, how collected, how reported, capacity to collect and use RH commodity logistics data for distribution):* Five of the 11 countries reported having a routine data collection system on consumption and/or other logistics indicators. The other four countries reported not having routine data collection system for logistics or the data collection system was not functional.
- *Staff (number and responsibility):* Most countries (7 out of 11) reported not having adequately trained staff to manage the logistics system for distributing RH commodities. The other three countries (Ghana, Nigeria, and Togo) reported having adequate and trained staff for the purpose.

Qualitative Assessment through the LSAT

An assessment of logistics systems for the nine countries was conducted using DELIVER’s Logistics System Assessment Tool (LSAT). The assessment covered eight components of the logistics systems, and focused on sexually transmitted infection commodity logistics in five countries (Burkina, Cameroon, Cote d’Ivoire, Niger, and Togo), while contraceptives and other essential drugs were assessed in countries managing an integrated system like Ghana, Nigeria, Cameroon, Sierra Leone, and Mali. The score was a percentage of the maximum, by components, shown in figure 1.

Figure 1. Logistic System Assessment Tool (LSAT score for contraceptives as a percentage of the maximum, by components)

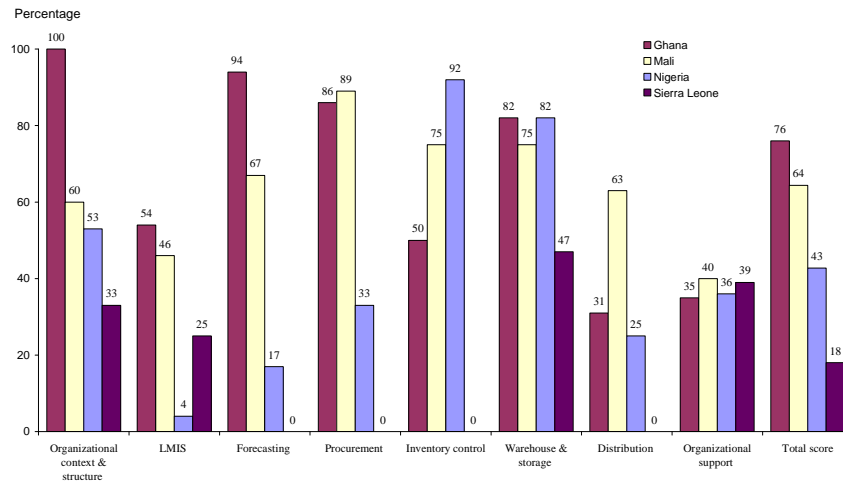
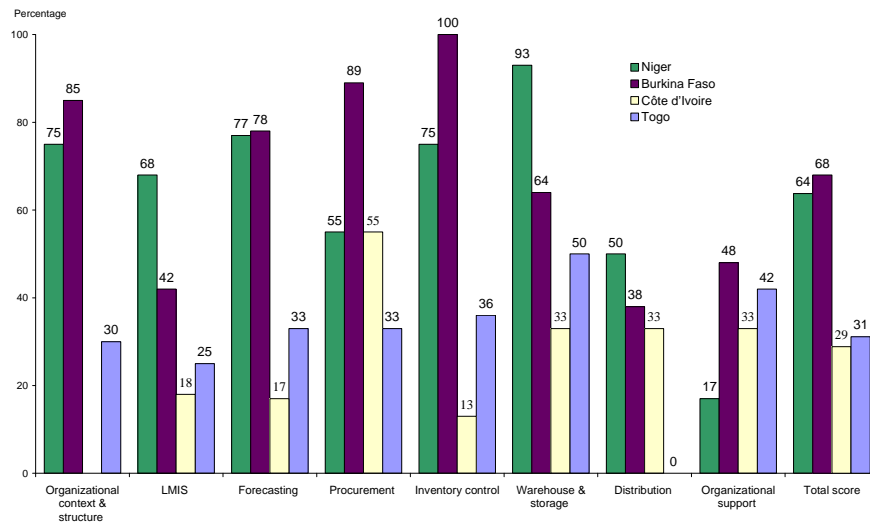


Figure 2. Logistic System Assessment Tool Score for Sexually Transmitted Infection Drugs as a Percentage of the Maximum, by Components



Qualitative Assessment through Lessons Learned during Forecasting Exercises

During the forecasting exercises, a number of issues related to the logistics system were uncovered. For example, in Burkina and Cameroon the following problems influenced the quality of forecasting:

- There is no in-country capacity to do the forecasting and to determine country future needs. Although some staff members are trained, they don't familiarize themselves with the forecasting exercise. Perhaps they are not given enough opportunity to do so. This exercise should be part of their annual workplan.
- There is no effective data collection in the logistics system. Consumption data at the service delivery points (SDPs) are not collected or, if it is collected, it is not sent to higher levels in the system to be used for management decision making.
- There is no accurate reporting of products distributed at various levels of the supply chain or from various distribution systems. The gaps are obvious during the review of the data when preparing for the forecasting exercise.
- There are stockouts at the SDPs and the warehouses due to poor management of products (expiries, damages).
- The central-level staff of Ministries of Health does not always monitor/supervise the management of the logistics system to identify and address problems.
- The central warehouse staff does not understand the reason for setting up a logistics system (six rights of logistics management), which are offering customers the right commodities, in the right quantities, at the right time, in the right place, in the right conditions, at the right cost. They seem to focus only on products sold. As a result, products are often sold to institutions and individuals that are not on priority lists.

Quantitative Assessment Using the LIAT

Another DELIVER assessment tool (the LIAT) was used to conduct a quantitative assessment of logistics indicators in three countries: Ghana, Mali, and Nigeria. The indicators assessed included stockouts at SDPs during the day of visit, stockouts during the past six months, months of stock on hand, and data quality for the three countries mentioned above. Figures 3–13 show the results of the assessments.

In Public SDPs

Figure 3. Stock Status of Public Service Delivery Points

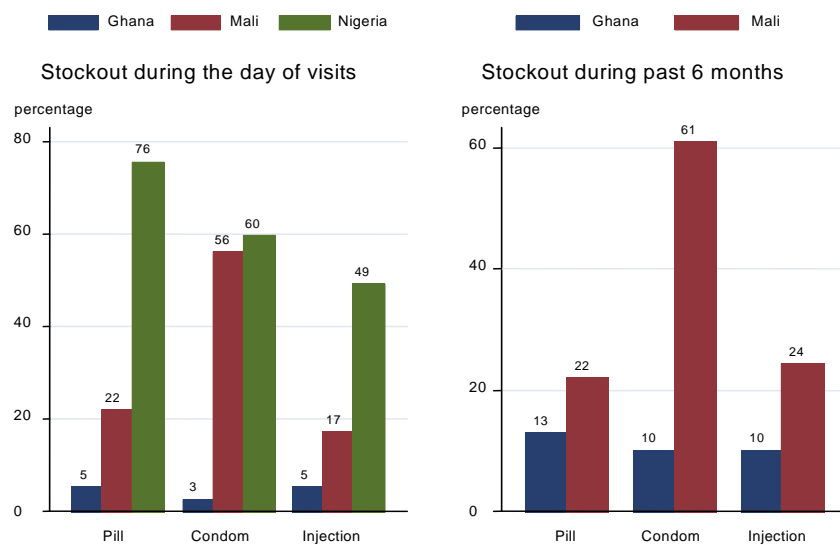


Figure 4. Stock Status of Public Warehouses

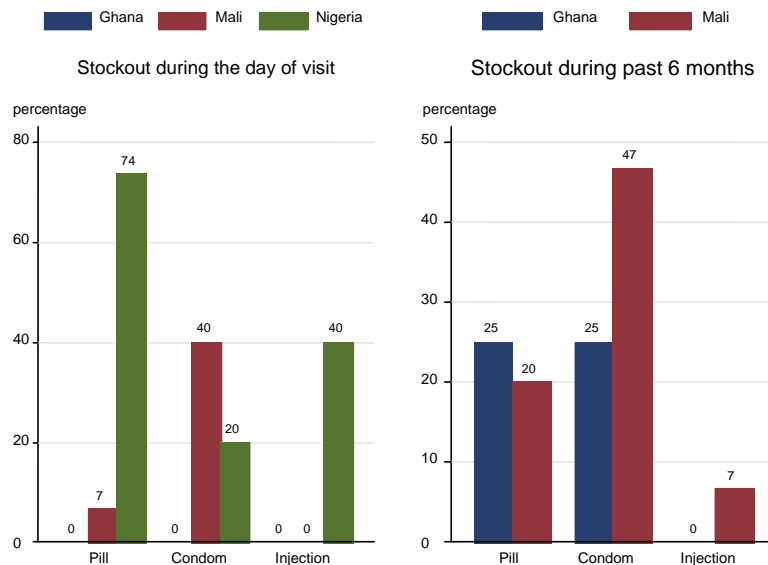


Figure 5. Months of Stock on Hand in Public Service Delivery Points with No Stockout on the Day of Visit

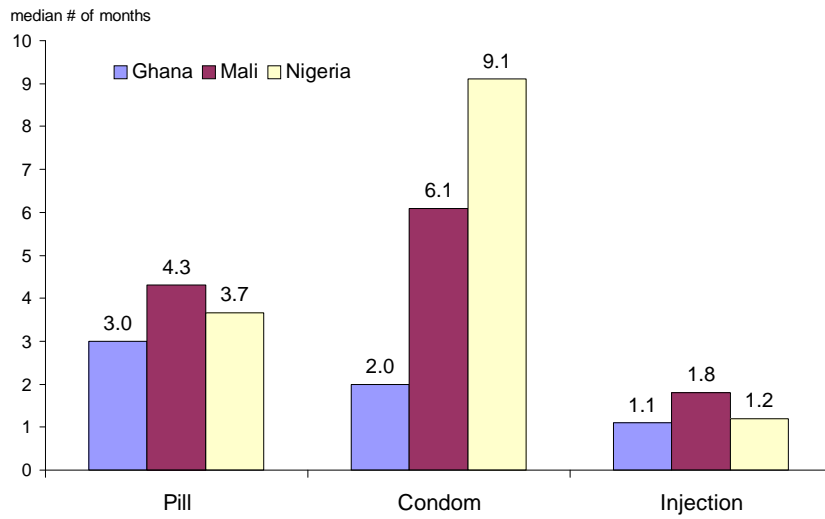


Figure 6. Months of Stock on Hand in Public Warehouses with No Stockout on the Day of Visit

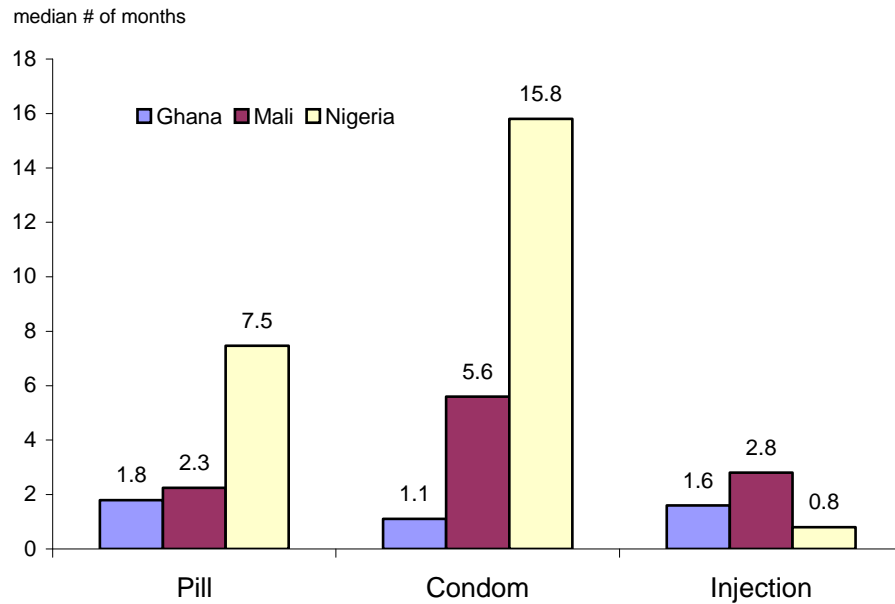


Figure 7. Percentage of Public SDPs Accurately Record Stock Status

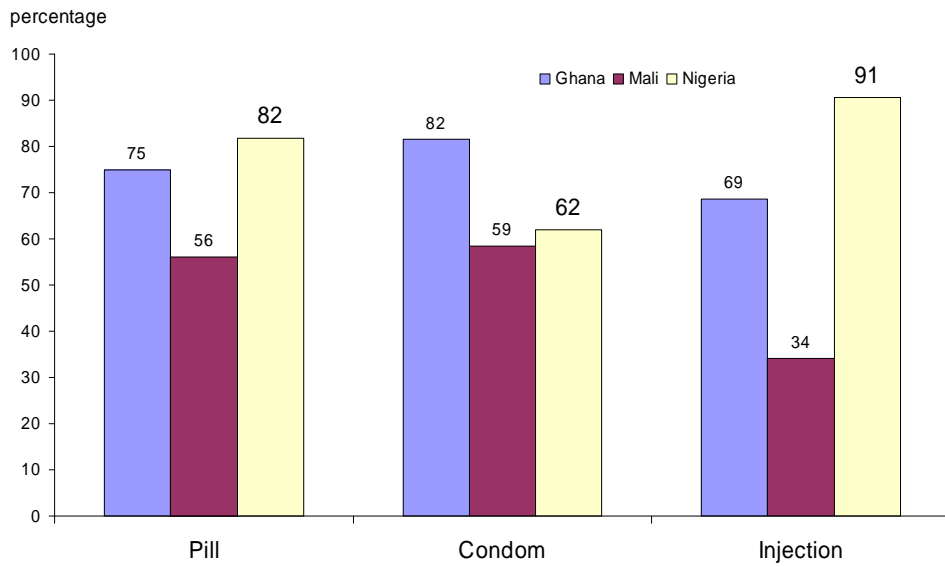
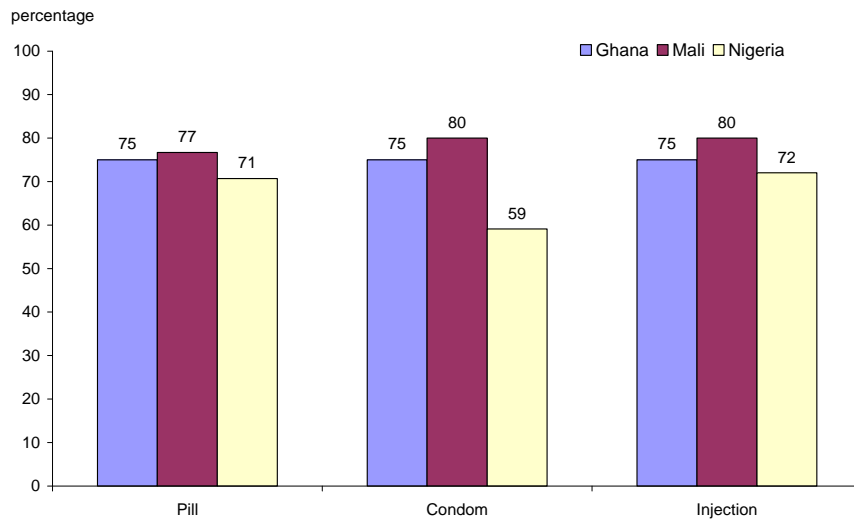


Figure 8. Percentage of Public Warehouses Accurately Record Stock Status



In Mali

Figure 9. Percentage of Facilities with Stockout on the Day of Visit, STI Antibiotics, Mali 2001

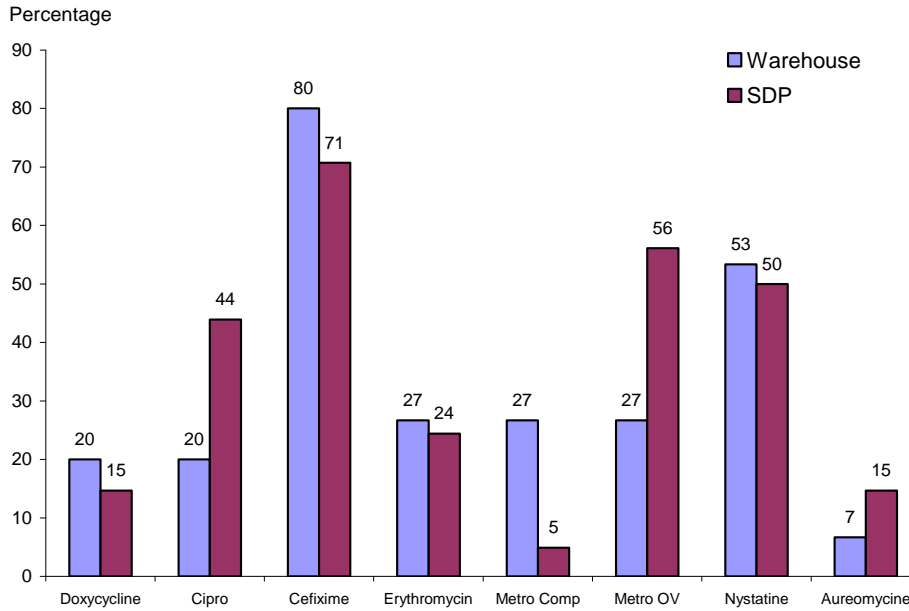
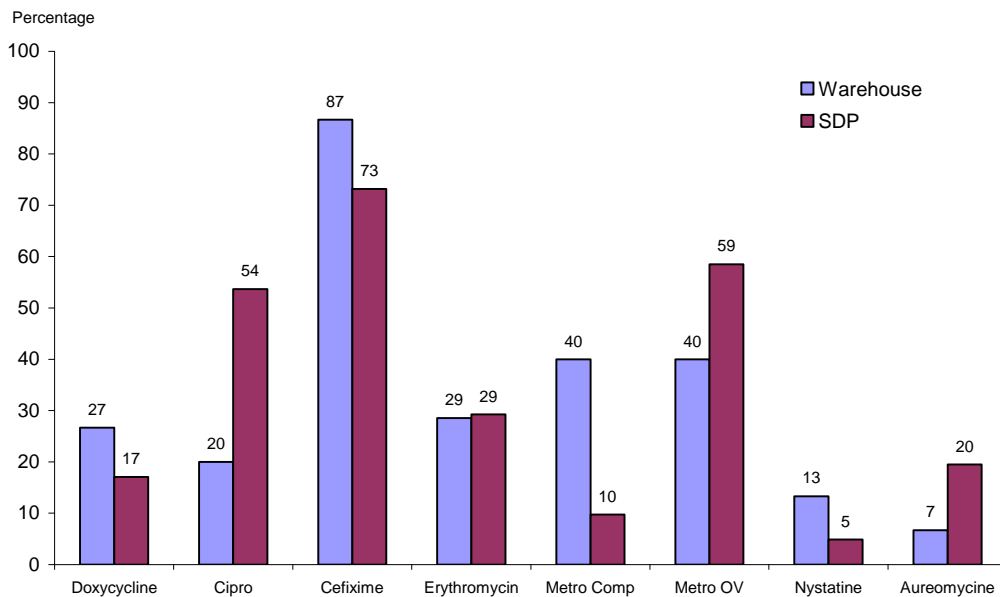
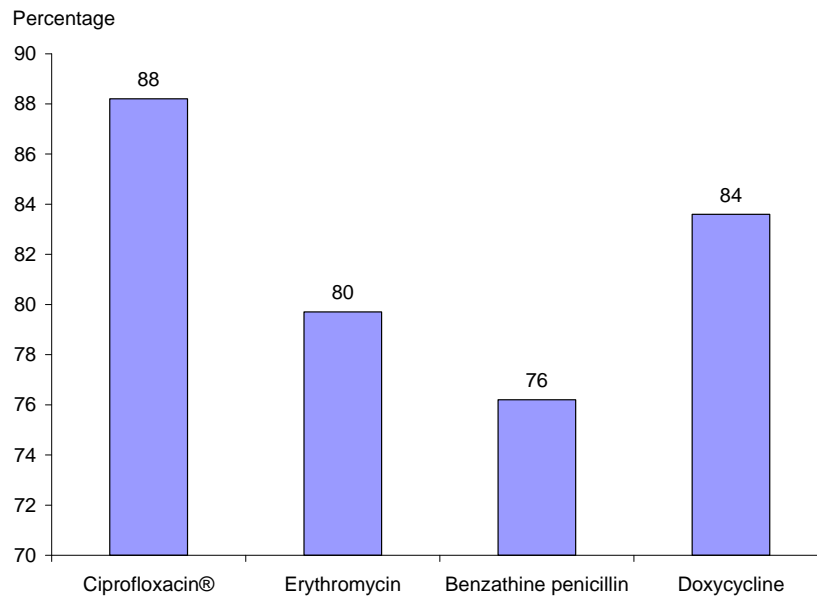


Figure 10. Percentage of Facilities with Stockout during Past 6 Months, Sexually Transmitted Infection Antibiotics, Mali 2001



In Nigeria

Figure 11. Percentage of Private SDPs Reported Stockout for STI Antibiotics on the Day of Visit, Nigeria 2002



In Ghana

Figure 12. Percentage of Facilities with Stockout on Day of Visit, Essential Drugs, Ghana 2003

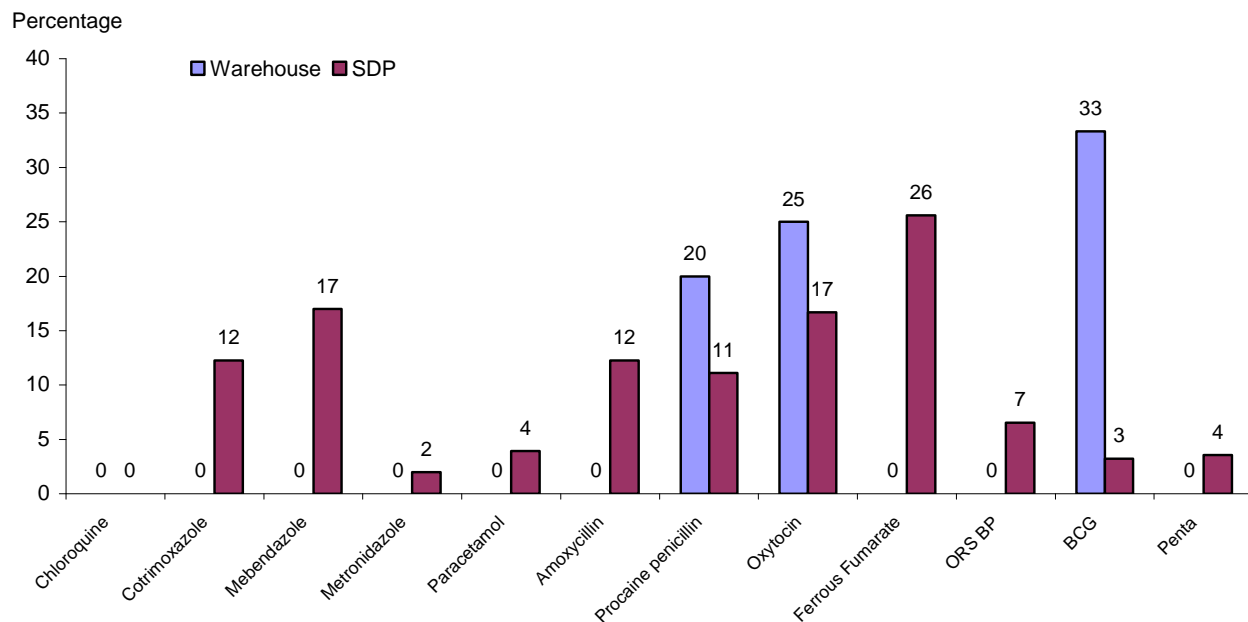
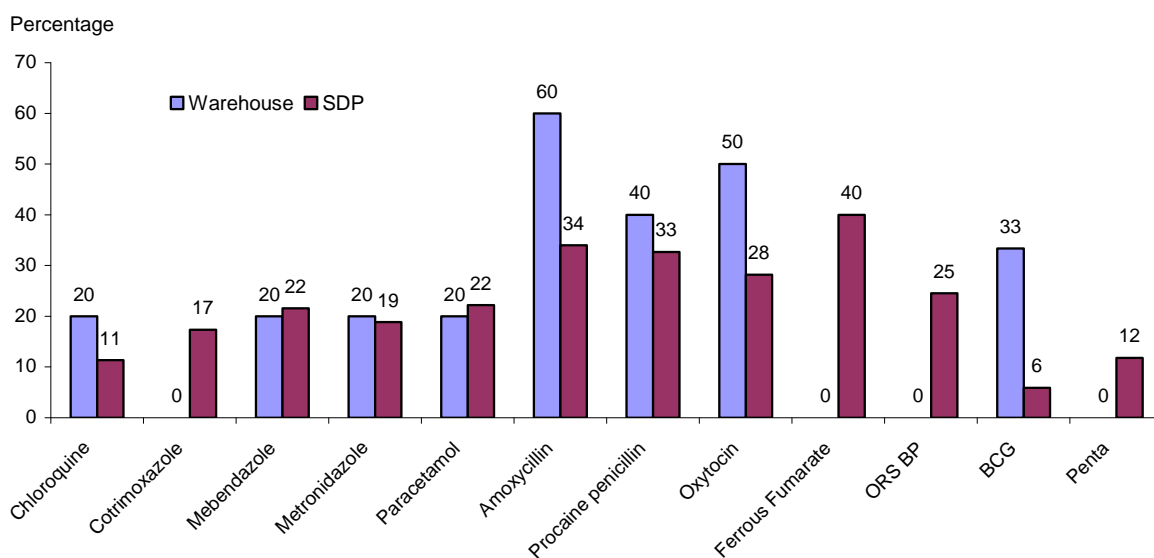


Figure 13. Percentage of Facilities with Stockout During Past 6 Months, Essential Drugs, Ghana 2003



Summary of Reproductive Health Program Managers' Opinion on How a Regional Logistics System Would Work for West Africa

For detailed stakeholders responses, see the Ghana and Burkina Faso country reports.

- Seven of the 11 countries agreed that a regional logistics system for RH commodities would be beneficial for West Africa.
- All seven countries that agreed with the idea of a regional logistics system also opted for regional financing and pooled procurement. Six of these seven countries also agreed to have a regional distribution system. Gambia reported that regional forecasting of contraceptive requirements for the region might also be needed, with regional financing, procuring, and distribution.
- Burkina Faso reported that a regional logistics system would provide more leverage in negotiations with suppliers. Informal inter-country collaborations already exist between Burkina and its neighbors on the regional procurement of contraceptives.
- All eleven countries supported having a regional training center for logistics system management. Burkina Faso highlighted the importance of integrating logistics management modules in the training programs in professional schools.
- The respondent from Senegal perceived that regional logistics system for West Africa was not a good idea because (1) the West African countries were not at the same level in terms of acquisition, storage, and distribution of RH commodities; (2) the weak contraceptive prevalence in the region did not make it a large consumption for contraceptives and, therefore, not a potential market; (3) the level of the development of routine and airborne distribution; and (4) the armed conflicts in the area could also constitute a constraint.

Main Strengths and Weaknesses of the Current Logistics Systems from the Desk Review

Logistics Components	Strengths	Weaknesses
Organizational context and structure	Almost all countries assessed have a unit responsible for all logistics tasks, with an identified in-house officer in charge.	The organizational context of logistics systems is highly dependent on the level of technical support provided to countries. Ghana and Mali, which benefit from an in-country presence of logistics advisors, have better scores than other countries (e.g., Sierra Leone). In most cases, logistics managers do not have written logistics guidelines or a strategy developed to guide logistics systems improvement.
Logistics management information system (LMIS)		The LMIS scores were among the lowest of the assessment in West Africa, ranging from 4 to 54%. Issues were related to data not being collected, lack of reporting between different levels of the system, and information not used for informed decision making.
Forecasting	Forecasting is done at least once a year. The two countries with resident advisors (Ghana and Mali) have better scores.	Many countries have reported shortage of trained staff for forecasting RH commodity requirements. The type of data used for forecasting was not consistent across all countries of the study. Logistics data are used most of the time but while some countries use consumption data (dispensed to users), others use issue data from one level of the system to another or demographic projections.
Procurement	Most countries reported lack of staff with appropriate knowledge and training to procure. Countries benefiting from in-country presence or advisors scored better (Ghana, Mali).	Procurement policy for contraceptives differs from the policy for other essential commodities and is more donor driven. The transparency of the procurement process is, at times, questionable.
Inventory control	This is one of the best-managed logistics components in the countries of the study with scores from 50 to 92%. Most of the countries have established maximum and minimum levels of stocks, stock review periods, and frequency of resupply.	The established levels and procedures are not always followed. As a result, stockouts are frequent, especially at service delivery points.
Warehouse and storage	Almost all countries assessed have written guidelines for storage and disposal of expired products, and policy for inventory management. Storage capacity of warehouses is usually adequate.	Sometimes the stock managers do not apply the existing written guidelines because they have not been distributed at all levels or managers have not been trained. This can cause confusion between poorly arranged products and lack of space.

Logistics Components	Strengths	Weaknesses
	<p>Visual quality control of commodities is routinely conducted.</p>	<p>National Laboratories are not adequately equipped to conduct quality testing for all contraceptives.</p> <p>There is also room for improvement in sharps, hazardous material, and other medical waste disposal.</p>
Distribution capacity	<p>Almost all countries reported having a logistics system in place to manage RH commodities.</p> <p>There are usually sufficient vehicles available for product distribution.</p> <p>The distribution of commodities is usually charged to the funds generated from the cost recovery of commodities.</p>	<p>The distribution systems in place are often poorly managed. The type of distribution system to be used is not always specified. Half the countries studied do not have a routine data collection system for logistics. More than half those countries do not have adequately trained staff to manage the distribution of commodities.</p> <p>Products are not distributed according to a plan or schedule to ensure rational uses of vehicles and drivers.</p> <p>Vehicles are not always well maintained.</p>
Organizational support	<p>In most health systems, health workers meet at least quarterly at different levels of the system.</p> <p>Communications exist among staff via phone, meetings, or radio.</p> <p>There is often a schedule for supervisory visits.</p> <p>Some logistics training has been conducted at central, regional, and district levels.</p>	<p>Supervisory visits are rarely conducted according to schedule, the main reason being the lack of funds for supervision.</p> <p>Supervision is rarely conducted with written guidelines.</p> <p>Most programs do not have job aids or logistics manuals, or job descriptions for logistics staff.</p> <p>Performance improvement activities are usually conducted at central and intermediate levels but not at service delivery points. Rollout training does not always go down to this level due to lack of funding for training.</p>

Logistics Capacity from Country Assessments: Case of Burkina

Structure of Current Logistics System(s)

The Ministry of Health (MOH) logistics system is the main system in the country. Other systems are the International Planned Parenthood Federation (IPPF) affiliate and Population Services International (PSI). The assessment team dealt chiefly with the MOH system that provides commodities to the majority of health services in the country. Even PSI and ABBEF (the IPPF affiliate) receive some of their products from the MOH logistics system. Furthermore, most donors of antiretroviral (ARV) drugs provide these products to the country through the National Pharmacy, which is the procurement agency for the MOH.

The pipeline usually has four levels: central warehouse, regional warehouse, district warehouse, and SDP warehouses:

- At the central level four institutions play pivotal roles in the MOH logistics system:
 - The National Pharmacy, a parastatal organization, was created as countries were getting ready to implement the Bamako Initiative a decade ago. Its mission is to improve the supply of drugs and other essential commodities in the health system. This institution received an initial funding from government and donors to purchase the necessary products. Future procurements were based on funds collected from the cost recovery mechanism that was put in place.
 - The Directorate of Family Health is the MOH's division in charge of implementing the MOH reproductive health policy and programs: family planning, safe motherhood, child survival, and prevention of mother-to-child transmission (PMTCT). *Direction de la Santé de la Famille* (DSF) is involved in the procurement and management of RH products and is especially concerned with RH product logistics management information system.
 - Directorate of Pharmacy, Laboratory and Medicine, which implements the MOH policy for drugs, consumables, and laboratory-related business. It develops and implements action plans in these areas in collaboration with other departments of the MOH, international partners, and the private sector.
 - The coordination committee for HIV/AIDS programs coordinates all activities pertaining to the fight against HIV/AIDS within the MOH and is concerned with HIV/AIDS product availability.
- At the regional level, there are regional warehouses of the National Pharmacy.
- At the district level, there are district warehouses, one per district.
- At the peripheral level, there are service delivery warehouses.

Finance

A distinction should be made between financing of contraceptives, ARVs, and other products because the funding sources are different.

Contraceptives

Until 2003, the bulk of contraceptives funding was provided by donors, including the World Bank UNFPA, and the U.S. Agency for International Development (USAID). The MOH also used the poverty reduction fund (PPTE) to purchase contraceptives. In Burkina, from 1997 to 2004, the World Bank funded contraceptives through its local project, and has also made contributions through its current project, although this project does not deal with family planning. The World Bank's representative in Burkina will assess the possibility to further procure contraceptives for Burkina in the upcoming World Bank project, but this is less certain. There has not been a phaseout plan before the end of the World Bank's former project, under which contraceptives were procured for Burkina.

- UNFPA has procured contraceptives during the period cited above. UNFPA has made provisions for contraceptives in its country plan 2001 to 2006. Although this contribution was intended for UNFPA projects, the products were used for the needs of the entire country. UNFPA has pledged support to the DSF to develop a contraceptive security strategic plan.
- USAID has provided products but did not commit to procuring contraceptives for Burkina in the coming years. Nevertheless, the organization responded positively to Burkina's request for an emergency shipment of contraceptives in March 2004.
- The national budget has also provided contraceptives using the poverty reduction fund (PPTE). There is no line item in the MOH regular budget to purchase contraceptives. All the funds for drugs in the regular budget have been credited to the districts and hospitals to purchase drugs such as anesthetics, narcotics, etc.
- IPPF funds ABBEF requirements for contraceptives. This assistance has, however, decreased over time. The current assistance plan includes purchasing part of ABBEF needs in contraceptives from foreign manufacturers and purchasing the remainder from the National Pharmacy. This means that ABBEF is getting the subsidized products given by donors.
- KfW (the German funding agency for international development) funds condoms for the social marketing organization.
- Households contribute to financing contraceptives through a cost recovery mechanism established in all service delivery sites. Funds from cost recovery are kept in a special bank account with the National Pharmacy.
- Financing for other products is ensured through a cost recovery mechanism. The National Pharmacy uses the recovered funds to procure the needed products.
- The case of ARV: Private organizations, as well as international donors, such as the French Red Cross, provide funding for ARVs, but these funds do not cover the needs of the country.

Forecasting

Forecasting methods differ depending on whether the products are contraceptives, ARVs, or other RH products.

Contraceptives

- Each organization does the forecasting (DSF, ABBEF, PROMACO, and PSI). DSF is responsible for the forecasting exercise for the MOH. Because products for all organizations are managed by CAMEG, representatives for these organizations regroup once a year to coordinate the forecasting, with technical assistance from DELIVER and funding by USAID. The forecasting is reviewed six months later to make the necessary adjustments.
- Consumption data are usually not available to forecast for the MOH. Therefore, distribution data from the central warehouse is used, which makes the results of the forecasting less reliable.
- ABBEF is able to use consumption data for its forecasting. PSI and PROMACO use sales data for their forecasting.
- A number of staff from the MOH and CAMEG have been trained in logistics, including forecasting by Family Planning Logistics Management (FPLM) and DELIVER. However, the trained staff have not been able to take ownership of the exercise and complete it on their own.
- ABBEF is getting technical assistance from IPPF to do the forecasting. For example, to ensure good access of clients to quality products and services, IPPF organized a workshop from April 10–23, 2004, to strengthen ABBEF staff in forecasting and supply chain management.
- One weak point, as mentioned before, is consumption data collection and use. In the current system, consumption data are collected but not channeled to the central level for use in decision making and forecasting.

Other products

CAMEG uses the money collected to purchase the products. Future needs are based on sales of products to clients. A shortcoming is that the money collected may not be sufficient to purchase enough products to meet the need at the SDP level. For products purchased with government fund, DSF estimates the needs and sends its request to the Directorate of Pharmacy, which then procures the commodities. The products are delivered to DSF for distribution to the regional health directorates.

ARVs

These products are donations from international organizations or individuals. The donors collaborate with the service providers to determine the needs for these products. For example, *Médecins Sans Frontières* and the World Bank forecast their needs for nevirapine for the projects they support, and they ask CAMEG to purchase the product. Likewise, UNICEF makes the forecasts and provides Nevirapine for the PMTCT program.

Procurement

Procurement differs according to products and source of funding.

Contraceptives

After the forecast is complete, each source of funding is responsible for procuring the needed products. Shipments are scheduled according to the needs of the programs. Request for USAID-funded products is sent to the WARP mission in Accra where the request is reviewed and approved. The request is then sent to Commodities Securities, and Logistics Division (CSL) in Washington, D.C., where an order is placed and the products are shipped to Burkina according to established schedule.

Requests made to UNFPA are forwarded to the local office where they are reviewed and approved, then sent to UNFPA headquarters to be pooled with requests from other countries and an order is placed. The products are then sent to the respective countries.

Requests made under World Bank funding are processed and procured by UNFPA.

The IPPF affiliate sends a portion of its needs to IPPF for procurement. It is pooled with needs from other countries. The other portion of ABBEF's (IPPF affiliate in Burkino Faso) needs are purchased locally at CAMEG.

For PROMACO, a short list of suppliers is established. A tender is made and published in German newspapers. Tenders are made according to the rule of the funding agency. Selection of suppliers is then made and a contract is signed with selected suppliers. Products are paid for with German currency.

Other products

A procedure for procuring products agreed to by all parties is implemented by CAMEG, which consists of selection of pre-qualified suppliers by a commission made up of all stakeholders, open tendering, request of price quotation from pre-selected suppliers, and selection of suppliers and contracting. This makes the procurement process transparent.

Delivery

There are important differences about delivery times for various organizations and funding sources. Because of time spent in pooling all the requests from countries before doing the procurement, the products from UNFPA and IPPF may be delayed in being delivered to the countries. The products, on arrival, can sometimes be tested for quality before they are made available for sale. All products are stored at the central store in CAMEG and delivered to the regional warehouses. Products like ARVs are given directly to the institutions that requested them.

CAMEG has its own vehicle to distribute the products to its regional warehouses. From regional warehouses to the districts, there is no defined means of transportation; sometimes ambulances are used. From the district warehouses to the SDP warehouses, the products are usually picked up by motorcycle.

Availability of Studied Commodities

As mentioned earlier, the assessment team visited a number of district and health facilities warehouse, as well as the regional warehouse in Bobo-Dioulasso. All products of the study list are available in these facilities. However, the facilities often experience stockouts of variable duration, sometimes lasting from two to three weeks. Nevirapine and condoms were found at only one of the sites visited. The team was later informed that these products are made available in only a sample of facilities in the country.

Some RH products purchased through the poverty reduction funds, such as iron, will be soon distributed free of charge, in contradiction to the policy of cost recovery. The district warehouses no longer procure these products. Because the free distribution system is not well planned, there will be a stockout of these products. It is not known how long the free distribution program will last. See the appendix for a list of tables for product availability.

Differences between Contraceptive and Other Medical Supply Systems

There are differences between contraceptives and other commodities supply system, because contraceptives have, until now, been supplied by donors and are not products in high demand. Management of contraceptives is different because the cost recovered from the sale of these products is kept in a special account that is jointly managed by DSF, CAMEG, and the division of finance and administration of the MOH. Contraceptives and other commodities are channeled through the same logistics system but contraceptives, so far, are managed through the logistics management information system.

Issues That Might Impact Pooled Procurement of Commodities

From the information we have gathered, a number of issues can have an impact on pooled procurement:

- Although the nationals take part in the forecasting exercise, they have not, so far, done the forecasting on their own. They need to take ownership of the exercise and be able to forecast without external assistance.
- Consumption data are collected but is not channeled to the central level, where it could be used for decision making and forecasting
- There are delays in delivering some of the procured products.
- There is no budget line item for contraceptives and other RH products. The poverty reduction funds currently used to buy contraceptives and other RH products is not made available in a timely way. Also, the duration of the funds is not known.
- Some RH products are distributed free of charge, and program managers ignore the duration of the free distribution program.
- It is uncertain if the donors will support the early phase of a pooled procurement mechanism because they have their own agendas and procedures for spending the funds put at the country's disposal. For

example, the basket funding is not yet implemented because the donors have not yet decided to endorse it.

- The Burkina National Pharmacy (CAMEG) does not want to join the pooled procurement mechanism yet because its managers think that other countries are not credible. CAMEG has an established excellent partnership with manufacturers and suppliers; they want to continue to take advantage of this relationship and do not want to jeopardize its credibility in a pooled procurement until other partners have reached an acceptable level of confidence. CAMEG has the opinion that pooled procurement will work best with products that are in low demand, such as contraceptives.

The National Pharmacy's technical leadership welcomes the idea of a feasibility study of pooled procurement, which will give all interested parties the information and recommendations needed to proceed with the pooled mechanism or abandon it.

Logistics Capacity from Country Assessments: Case of Ghana

A 1999 FPLM assessment and more recent DELIVER assessments indicate that Ghana has a relatively well-functioning contraceptive logistics system that has, for the most part, been successful in making a wide range of contraceptive methods available through the MOH distribution system, even in the most inaccessible and rural areas. The private for-profit sector and also the not-for-profit sector as well as the social marketing products, are widely available in the country and are responsible for a fair market share of services.

Logistics system capacity in Ghana reflects many years of sustained effort at improving health commodity availability in the both the public and social marketing sectors. DELIVER will continue to provide technical assistance to the MOH and Ghana Social Marketing Foundation (GSMF). This section presents a summary of the current situation and key strengths and weaknesses of the contraceptive logistics management systems of the two organizations.

Logistics data is collected through order forms and is reported to the national level. This permits the use of logistics data in forecasting contraceptive requirement. While the supply of contraceptive products has been deemed adequate to meet past demand, future shortfalls are predicted if additional funds are not committed to procuring contraceptive supplies.

Despite the strengths and accomplishments noted, several areas of weakness were identified. Storage conditions were deemed inadequate, and there was general agreement that under the current conditions, clients could not be guaranteed a consistent supply of quality contraceptives. Stock level guidelines were applied irregularly, including adherence to maximum stock levels and calculation of average monthly consumption. Increases in the volume of commodities, due to program successes, were overburdening central level commodity managers. The result of these has been stock imbalances throughout the system and an inability to maximize the use of scarce resources. With respect to the information system, too much data are collected on too many forms, leading to duplication of effort and late submission of reports. This situation led, in some cases, to stockouts at the regional level. Finally, while staff had been trained in basic storekeeping skills for contraceptives, such training has not been extended to the management and storage of health commodities, particularly drugs. Staff does not have the capacity to prepare forecasts of contraceptive requirements.

To address the systemic weaknesses in a comprehensive manner, the MOH decided to move forward with the full integration of family planning and health commodities and to do so within the context of a fully reengineered commodity management system. The objective was to create a single streamlined and integrated supply chain that would achieve customer service and MOH objectives.

Since its launch in 1985, the social marketing program (GSMF) has become a significant player in providing contraceptives in Ghana. Sales have quadrupled since 1986, and it is now the largest provider of private sector contraceptives in Ghana. But, several constraints will have an impact on its continued success. A serious impediment to further growth in sales is the adverse price differential between the social marketing and the MOH products. MOH products are sold at much lower prices, and the result is a flow of clients from the private sector to the MOH delivery system. There is a concurrent flow of public

sector supplies to the private sector, as it is cheaper for private sector suppliers to obtain supplies from the MOH instead of through GSMF. This situation has recently been partially relieved by an increase in MOH prices and the introduction of the Champion condoms as a low-cost competitor to MOH products.

Another issue for GSMF is its lack of staff adequately trained in logistics management and in contraceptive forecasting. Finally, GSMF's ability to expand its program is constrained by a lack of sufficient staff and funding to continue to support the NGO program with its own funds. It has been difficult for them to find private sector partners (i.e., workplaces) that are willing to share responsibility in supporting condom distribution.

Can the Conclusions be Generalized for the Rest of ECOWAS?

The conclusions can be generalized to the rest of the ECOWAS countries but the countries should be divided into three groups:

1. countries with in-country presence or a regular technical assistance provision (Ghana, Mali, Nigeria, and Senegal)
2. countries that have benefited from regular technical assistance but are now being phased out (Burkina, Cameroon, Côte d'Ivoire, and Togo)
3. the rest of the countries with little technical assistance (Niger, Sierra Leone, Liberia, Guinea, Guinea-Bissau, The Gambia, and CAB Verde).

Currently, countries with bilateral missions are being funded for logistics and CS activities, and for commodity purchase. Some countries without a USAID mission are still getting commodities from the USAID West Africa Regional Project (WARP), and also with funding from UNFPA, DFID, KfW, and the World Bank.

What Is Being Done to Address the Weaknesses?

- Integrating logistics systems for forecasting, procurement, and distribution.
- Formal training sessions (international courses on supply chain management and in-country training).
- Training on-the job and the use of supervision for training.
- Planning for commodity security strategy.
- Externally assisting countries.

How to Strengthen Capacity (regional training and technical assistance options)

To address all these problems, appropriate staff at all levels should be trained, and through supervision and monitoring, should implement effective transfer of training to the work place. Indicators and performance standards should be set for each logistics system. All countries should have commodities security plans with a provision to strengthen the logistics system. Donors can assist in logistics capacity building with realistic phase-down plans. Governments should take ownership of the plan and commit adequate resources to it. Contracting cooperating agencies like DELIVER and the POLICY Project, can provide technical assistance to strengthen logistics capacity and commodity security in the various countries and at the regional level.