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LOGISTICS AND COMMODITY MANAGEMENT
NIGERIA

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EXECUTIVE SUMMARY

A team of three Centers for Disease Control (CDC) consultants and three consultants representing Family Planning International Assistance (FPIA), the Pathfinder Fund, and the American Public Health Association (APHA) visited eight Nigerian states from December 1-21, 1983. At the request of the Federal Ministry of Health (FMOH) and several State Ministries of Health (SMOH), and in accordance with the scope of work outlined in the AID/Nigerian family planning meeting on November 21, 1983, the team (1) identified and assessed options for shipping, importing, storing, and distributing contraceptives and other family planning related supplies and equipment, and (2) estimated commodity requirements for seven states, the Army, and two ongoing family planning programs for an 18-month period beginning in March 1984. The team also identified the need for state-level planning for the purposes of clarifying program inputs that would be needed, when they would be needed, and which organizations(s) could provide them so that the integration of family planning services into SMOH programs might proceed as smoothly and quickly as possible. In completing its scope of work, the team worked closely with the AID Affairs Officer (AAO) and her staff, both in Lagos and in five of the eight states (See Sections I, III, and IV).

The team recommends that AID ship the following commodities to Nigeria as an immediate initial consignment: 32,700 Lippes C IUDs; 32,700 Lippes D IUDs; 32,400 Copper-TIUDs; 556,800 cycles of Femenol (oral contraceptives); 474,000 condoms; 810 77-mm diaphragms; 810 85-mm diaphragms; 13,100 tubes of contraceptive jelly, and 908 IUD insertion kits (Number 6). FPIA has these commodities in stock and has agreed to ship them at AID's request. The team also recommends that Nigerian officials discuss with another organization such as the United Nations Fund for Population Activities (UNFPA), the possibility of its providing 56,850 doses of an injectable contraceptive as well as 51,645 tubes of contraceptive foaming tablets to support new family planning initiatives in Nigeria (See Section V and Appendix 3 for details).

From among the numerous options explored, the team recommends that Sterling Products (Nigeria), Ltd., be selected as the agency to (1) receive AID's shipment of air-freighted commodities and clear them through customs for the American Embassy on behalf of the FMOH; (2) store commodities in its warehouse until given instructions from FPIA to distribute specific amounts; and (3) to distribute specified shipments to MOHs and other recipients and to confirm receipt of delivery. Sterling Products has agreed to provide these services to AID free of charge for at least an 18-month period. The team has verified that Sterling is capable of and authorized to provide these services. However, we suggest that future consultants explore alternatives to this conduit to institutionalize the importation and distribution of commodities (See Sections V.B. and VI for details).

The team has already discussed with the appropriate AID/W and AAO/Lagos authorities the need to secure required documentation prior to establishing shipping dates: certification that all drugs and supplies to be shipped have been approved for sale in the U.S.; a certificate of analysis of manufacturing for all drugs; certification that all drugs, supplies, and equipment are gifts and are not to be sold in Nigeria; and a certificate of duty-free importation. FPIA has agreed to expedite the air freighting of the 18-month shipment to Nigeria once it has received confirmation that these documents are secured (See Section VI.A. for details).

Warehousing, control, and distribution of commodities within the states will be achieved through existing SMOH mechanisms--a new or parallel system will not be needed. The team was favorably impressed with the organization and controls in most states' central warehouses. However, a few modifications in management procedures and some training will be required at this level. While state-provided transportation is not always available, getting commodities to service delivery points (SDP's) does not appear to be a problem when supplies are available--SDP staff use their own vehicles to collect consignments. The adequacy of organization, recordkeeping, and stock controls at the SDP level is variable. Basic training will be needed in these areas in many of the states (See Section VII for details).

Some of the equipment and supplies required by state programs are needed prior to the training of state family planning trainers to be undertaken by INTRAH. Others can be made available after the training. While FPIA will be shipping IUD insertion kits along with contraceptives, other equipment and supplies will need to be either shipped from the U.S. or procured in Nigeria within six months. The need for these supplies and equipment requires confirmation and a decision about their procurement needs to be made (See Section V.A.2. and Table 3 for details).

Ondo and Lagos states have completed an overall plan for the integration of family planning into their primary health care programs, according to guidelines developed by Nigerian counterparts and the team. Niger state expects to complete a similar plan within a few weeks. These plans are important in establishing (1) who will be responsible for directing family planning activities within each state and with whom the supporting organizations should communicate/coordinate, (2) the sequence of activities that must take place for family planning services to be smoothly and responsibly implemented, and (3) the inputs that will be needed from outside sources and when they will be needed. Once these plans have been established with input from the appropriate supporting organizations, it will be possible for the AAO's office to monitor state progress in a systematic way. The utility of the planning guidelines and approaches used by the first three or four states needs to be assessed and possibly modified by experienced planning consultants, together with state counterparts. Lessons learned from

their experience will facilitate the development of plans in other states (See Section IV for details).

The team has discussed the specific needs for program monitoring and coordination, commodity monitoring and administrative support, and continued liaison functions with the AAO. Together, the roles and responsibilities of the AAO's staff were outlined (see Section IV.C.1.). The team recommends that AID review these suggestions and determine whether additional staff will be required.

A team of CDC consultants will be working in Ondo and Niger states in February and March 1984 to institute commodity management and service statistics systems that are needed (see Sections VII.C and VIII). INTRAH, Pathfinder, and PCS consultants have coordinated their schedules so that they will be working in Ondo and Niger at the same time so that issues related to the inputs of the three organizations can be resolved and/or planned in the field with Nigerian counterparts. INTRAH will proceed to work with Plateau state after the CDC team has completed its technical assistance in Ondo and Niger states.

LIST OF ACRONYMS

AAO	AID Affairs Officer
APHA	American Public Health Association
AVS	Association for Voluntary Sterilization
CCP	Christian Central Pharmacy
CDC	Centers for Disease Control
CEDPA	Center for Development and Population Activities
CHANPHARM	Christian Health Association of Nigeria Central Pharmacy Project
CYP	Couple-Years of Protection
DANAFCO	Danish African Company
FMOH	Federal Ministry of Health
FPIA	Family Planning International Assistance
GCA	Government Coastal Agency
GSA	General Services Administration
HSMB	Health Services Management Board
IE&C	Information, Education and Communication
INTRAH	Program for International Training in Health
JHPIEGO	Johns Hopkins Program for International Education in Gynecology and Obstetrics
ORT	Oral Rehydration Therapy
PCS	Population Communication Services
PPFN	Planned Parenthood Federation of Nigeria
SDP	Service Delivery Point
SMOH	State Ministry of Health
UCH	University College Hospital
UNDP	U.N. Development Program
UNFPA	U.N. Fund for Population Activities

PLACES, DATES AND PURPOSE OF TRAVEL

Nigeria, December 2-21, 1983 -- The Team consisted of six consultants: Dr. Michael E. Dalmat, Mr. Neal Ewen, and Dr. J. Timothy Johnson, Center for Disease Control; Dr. Ayo Ajayi, Senior Program Officer, Africa Regional Office, the Pathfinder Fund; Mr. H. McKinley Coffman, Director, Logistics and Supply Division, Family Planning International Assistance; and Dr. Richard Samuel Johnson, Management Information Systems Consultant, American Public Health Association. The purposes of the trip were to (1) identify and examine options for establishing a reliable and efficient family planning commodity management system to serve the states of Nigeria, (2) recommend the best available commodity management option, and (3) to critique existing service statistics systems and design a family planning information system that will satisfy state and national needs.

The team was in Nigeria from December 2-21, 1983. To accomplish their objectives, they spent time in Lagos, the National capital, in addition to visiting seven other states: Ondo, Ogun, Gongola, Kano, Plateau, Niger, and Anambra. In order to establish a uniform methodology for working in all states, the entire team visited Ondo. Following Ondo, the team split into different groupings to visit the other states. The following is a summary of the team's travel schedule:

<u>Date</u>	<u>State</u>	<u>Team Members</u>
12/2-5	Lagos:	Dalmat, Ewen, T. Johnson, Ajayi, Coffman, and R. Johnson
12/6-7	Ondo:	Dalmat, Ewen, T. Johnson, Ajayi, Coffman, and R. Johnson
12/8-9	Ogun:	Dalmat, T. Johnson, and Ajayi
12/8-21	Lagos:	Ewen ¹
12/8-10	Lagos:	Coffman and R. Johnson
12/10	Lagos:	Dalmat, T. Johnson, Ajayi
12/11-12	Gongola:	Dalmat, T. Johnson, Ajayi, Coffman, R. Johnson ²
12/13-14	Kano:	Dalmat, Coffman ³
12/13	Kano:	T. Johnson, Ajayi, and R. Johnson
12/14-15	Anambra:	R. Johnson ⁴
12/14-16	Niger:	T. Johnson, Ajayi
12/15-17	Plateau:	Dalmat, Coffman ⁵
12/16-21	Lagos:	R. Johnson, T. Johnson, and Ajayi
12/17-21	Lagos:	Dalmat and Coffman

¹Accompanied/assisted by Mr. Bayo Iginla, AAO's Office

²Accompanied by Ms. Keys MacManus, Mrs. Shitta-Bey, AAO's Office

³Accompanied by Ms. MacManus and Mrs. Shitta-Bey

⁴Accompanied by Ms. MacManus, AAO

⁵Accompanied by Mrs. Shitta-Bey

II. BACKGROUND AND SCOPE OF WORK

BACKGROUND AND SCOPE OF WORK

With an estimated mid-1983 population of 84.2 million, Nigeria is by far the most populous African nation and ranks as one of the 10 largest countries in the world.

Crude birth rates currently hover close to the 50 per 1,000 level. This level, combined with an estimated crude death rate of 17 per 1,000 and a consequent natural increase rate of 33 per 1,000, implies a current net population increase of about 2.74 million per year, which is exceeded worldwide only by China, India, Brazil, and Bangladesh. With a bottom-heavy population distribution showing 48 percent of the population aged under 15 years, and as yet little or no evidence of fertility decline from the present total fertility rate of 6.9, and with predominantly pronatal cultural values remaining largely unchanged, massive efforts will be required if the population is to avoid its projected doubling in the next 21 years.

The evolution of Nigeria's concern with the potentially grave adverse implications of these demographic trends for the attainment of national social and economic development goals has been extensively documented elsewhere (See APHA consultants report, June 1983, and accompanying background document). Here we need only note that in 1979 a National Population Commission was established to advise the President on population matters and to assist in population policy formulation and implementation.

Subsequently, Nigeria's Fourth National Development Plan, 1981-85, has called attention to the negative social and economic aspects of current demographic trends and has stated that "since mortality is already on the decline, it is clear that fertility rate will have to move in the same direction in order to bring the overall growth rate of our population down to a level which will not impose excessive burden on the economy in the long run." Family planning services, intended to assist in meeting this objective, are considered to be among the preventive service programs having the "highest priority of implementation" in the Fourth Plan.

In response to Nigerian requests for assistance, the U.S. Embassy and AID have, since 1981, been involved in developing and implementing a strategy for assisting Nigerian population-related efforts. The activities described in the present report represent one chapter in this evolving effort and grow more specifically from a series of activities launched by an AID-sponsored APHA consultant's team in June 1983.

This team recommended a sequentially staged approach, initially involving a small number of states for establishment of "accelerated" programs in "family health/family planning" services, and further recommended a series of steps to ensure the development of adequately trained staff, as well as a logistical system and patient record and data systems.

As a preliminary step to this consultation, trainees from selected "accelerated states" were provided with an intensive study course in the U. S. during October 1983. This training, consisting essentially of a series of workshops, emphasized development of state plans for establishing family planning, oral rehydration therapy (ORT), and immunization programs, and was conducted sequentially by Emory University and CDC, Atlanta, by CEDPA in Washington and by JHPIEGO in Baltimore, with assistance also from PCS and INTRAH. Immediate emphasis was on development of staff training plans by the selected states in anticipation of proposed visits by INTRAH and JHPIEGO teams to those states.

On October 20, 1983, a Nigeria Coordinators Meeting was convened at AID/W to review the present status and future directions for AID assistance in Nigeria. Among concerns expressed were issues of coordination among participating agencies and the question of the rapidity with which the program could be expanded into states beyond those under initial consideration.

On November 21, 1983, another meeting was hosted by the Office of Population and the AID Africa Bureau in preparation for the December consultancy by the CDC/FPIA/Pathfinder team. The following is an abstract of the scope of work outlined for the team and summarized in the minutes of that meeting:

Nature and objective of trip: The December visit will be an exploratory one in which the team will assess: (a) the commodity logistics systems now in place; (b) the extent to which the existing systems could be used for the distribution and tracking of contraceptive commodities; or (c) whether a new distribution system needs to be designed for the above purposes. The team will produce a report which will include an initial plan for importing, distributing, and accounting for contraceptive commodities in Nigeria.

The geographic scope of the visit has to include the five states of Oyo, Ogun, Ondo, Niger, and Plateau. The need for some flexibility was recognized in the understanding that if "it is determined feasible and advisable to visit other state(s) that may represent a unique set of factors, the team is encouraged to do so."

Key issues to be addressed included questions of commodity importation options, distribution and warehousing within Nigeria, corresponding commodity reporting procedures, and the staffing needs for maintaining the system that will be established. The team was encouraged to explore all options and to be as comprehensive and innovative in its explorations and recommendations as the Nigerian circumstances might warrant.

OVERVIEW

The team prepared an incomplete draft version of this report to serve as a basis of discussion between representatives of the different organizations involved in supporting AID-financed family planning activities in Nigeria. In this light, the contents of the draft report were viewed as a "proposal" to be reviewed before, during, and after the January 11, 1984, AID Nigerian Coordination Meeting. The draft report was modified based on discussions during and after that meeting, and this document represents the final report.

State Program Development

After visiting the first two of eight states, it became obvious to the team that the representatives from the Pathfinder Fund, CDC, INTRAH, JHPIEGO, AVS, and FPIA had independently done some planning with different states but that had not developed cohesive plans to integrate these inputs into state-specific activity schedules for incorporating family planning into the basic health services offered by the states. As a result, we found that some essential startup activities had not been planned and that others that had been planned were poorly prepared. The team developed a generic program development plan in the form of a flow chart (See Figure 1) which:

1. served as the basis for reviewing with state officials the status of their preparations for family planning;
2. shows the interdependency between IE&C, training, commodities, service statistics, and key management decisions in the process of implementing family planning services; and
3. provides a logistically sound starting point for state managers to develop an implementation schedule for family planning services.

In Ondo, Niger, Gongola, Kano, and Ogun states, where it was discussed, our state counterparts informed us that the generic plan is useful and easily understood.

We also developed a program planning guide (See Appendix 2) to be used by state officials together with the generic plan in developing their own state family planning program plan (i.e., implementation schedule). The guide poses a series of questions which, if fully addressed by state officials, will yield the following decisions or plans:

1. official state approval of family planning as part of basic health services;
2. who will be responsible for the various aspects of the program;
3. who will be trained, from which facilities within which health zones; when, where, how, and by whom;
4. what needs to be done to ensure that the training site operates as a model clinic prior to training;
5. who needs to be motivated to accept family planning; when and how;
6. what equipment, supplies, and commodities are needed and when in the model training clinic and the health facilities, and how they will be accounted for;
7. what information needs to be collected and when, to evaluate the performance of the program; who will use this information, and how it will be reported.

If the program planning guide is used, we are confident that realistic, integrated plans will be developed for each state. In some states--Ondo Lagos, Gongola, Niger, and Kano--this can be done with minimal input from outside advisors. In others--Plateau, Ogun--technical assistance will be needed.

Once developed, state plans can be used to coordinate the input of supporting organizations. We recommend that the AAO and her staff serve as the hub of communications and coordination between states and supporting organizations.

Summary Status of States

The team found that the seven states visited and the Army are at different stages of implementing family planning services. The following summarizes their status:

- Gongola: committed; not currently providing family planning services; eager to begin state planning; needs to train more nurses before offering family planning services at a model clinic training site.
- Kano: committed; currently providing family planning services from three service delivery points (SDP's); adequate number of trained nurses; eager and ready to move ahead.

- Lagos: committed; currently providing family planning services to a significant number of clients from a few SDP's; sufficient number of well trained nurses; eager and ready to move ahead.
- Niger: committed; currently providing family planning services to a limited number of clients from one SDP; enough trained nurses to begin a program; eager and ready to move ahead.
- Ogun: committed; entered into family planning agreement with the Pathfinder Fund; implementation stalled due to internal conflicts; providing family planning services to a limited number of clients from two SDP's; eager but not ready to move ahead.
- Ondo: committed; currently providing family planning services to a limited number of clients from one SDP; eager and ready to move ahead.
- Plateau: committed; currently providing family planning services to a limited number of clients from 3 SDPs; ready to start services in approximately 23 other SDP's, although the need for refresher nurse training needs to be assessed first; eager to move ahead but needs to develop a feasible state plan and "mend fences" between MOH and Health Services Management Board.
- Army: committed; currently providing family planning to a small number of clients; completed training of 23 nurses at University College Hospital (UCH) Family Planning Training Centre in December 1983; has agreement with the Pathfinder Fund.

Table 1 provides additional information about each of the states and the Army, including:

- o number of UCH or Planned Parenthood Federation of Nigeria (PPFN) trained nurses;
- o estimated number of SDP's that could begin providing family planning services within the first 18 months of receiving assistance;
- o estimated number of active users 18 months from the start of the state programs.

Supporting Organizations

Nigerian family planning activities are not funded through a bilateral program. AID is supporting the Nigerian program through centrally funded programs, similar to the Mexican program. Currently, there are eight organizations with central funding that are providing assistance through the AID Affairs Office (AAO) to the Federal and State Ministries of Health as well as to the private sector.

The types of assistance offered by the eight organizations differ but are complementary and necessary to the successful implementation of family planning at the state and local levels. Thus, an overview of the types of assistance that they can offer is outlined below, based on discussions with the AAO, the present efforts and past activities and experience of those organizations, and the availability of funds.

In consultation with the AAO, the team also has outlined the functions and responsibilities of the AAO's office. This outline is also included.

This section is included to assist the reader in understanding the complexity of the interrelated tasks involved in developing family planning services in Nigeria.

AAO and Staff

Program Monitoring and Coordination:

The AAO and Family Planning/Population Specialist:

- o Identifies changes in state plans during implementation that require a change in the timing or the nature of the input to be offered by support organizations;
- o communicates these change to the appropriate support organizations; and
- o relays any changes in plans back to the state(s).

Commodity Monitoring and Administrative Support:

A Commodity Management Specialist will:

- o monitor the requisition and flow of commodities;
- o assist in implementing acceptable commodity management procedures at the state level;

- o collaborate with AID-supported intermediaries such as CDC and FPIA in conducting an annual spot-check of inventories and inventory report at the state and local levels;
- o maintain an up-to-date inventory of equipment issued to each state; and
- o provide administrative support to the AAO office and teams of advisors from support organizations.

IE&C Assistance:

The AAO has indicated a desire to contract for the services of a long term IE&C consultant for that office. The primary objective of this consultant will be to assist states in developing and implementing short term approaches to gaining rapid increases in the number of family planning acceptors through the model clinic training sites. This function will be vital to the states' efforts to ensure that each family planning trainee provides service (e.g., IUCD insertions/removals, client counseling) to a predetermined number of clients as part of the fulfillment of competency-based training requirements.

Liaison and Establishing New Contacts:

The AAO and the Family Planning/Population Specialist will continue their liaison functions with high level federal and state government and voluntary and international agency officials. After identifying new state and private family planning initiatives, the AAO will confer with AID/W and representatives of support organizations before making new commitments.

CDC

CDC advisors can provide assistance in:

- o the implementation of appropriate commodity management procedures at the state level;
- o conducting physical inventories, inventory control cards, and service statistics once a year for state and local levels on a sample basis in collaboration with FPIA and the AAO's office;
- o the design and implementation of service statistics and reporting forms and procedures at the state level;
- o state program planning efforts, both in the U.S. and Nigeria; and

- o state level program evaluations upon request.

The Pathfinder Fund

The Pathfinder Fund supports:

- o state program planning efforts in the U.S. and Nigeria;
- o local costs associated with the implementation of state service statistics, reporting, and program evaluation efforts in collaboration with CDC; and
- o the procurement and shipping of clinical equipment.

FPIA

- o procures, ships, and arranges for customs clearance and the delivery of commodities to states and local private voluntary organization (PVO) drug distribution centers;
- o ensures that appropriate commodity management procedures are used at the national and/or regional level; and
- o supports local costs associated with the training of state and local level storekeepers;

INTRAH

- o plans, provides for, and assists in inservice training for service providers (nurses and midwives) and backup physicians;
- o assesses the need for and provides refresher training to UCH-Ibadan former family planning trainees as required; and
- o participates in the development of state family planning program plans.

JHPIEGO

- o provides for and participates in the training of preservice training of midwives and nurses and the further development of the UCH Family Planning Unit into a training center;
- o supports the development of inservice training programs for physicians;

- o provides specialized training in reproductive health for physicians, midwives, and nurses; and
- o participates in the development of state family planning program plans.

PCS

- o develops communications strategies and statewide work plans;
- o supports and assists in the development, testing, and dissemination of IE&C printed materials and radio and television programming;
- o provides technical input into the training of motivators, educators, and counselors;
- o evaluates the effectiveness of public education and promotional strategies; and
- o supports and assists in the development of short term approaches to increasing new acceptor rates at training sites.

Columbia University

Columbia University will continue to develop and test approaches to community-based distribution programs in Oyo state.

Roles of the Federal Ministry of Health

Program Evaluation

We recommend that the Office of National Health Planning establish an evaluation unit to be comprised of a program planning and evaluation specialist, a management information systems specialist, and an administrative secretary. This unit will:

- o maintain a file for each state and for the family planning program to track the rate of growth and size of family planning services;
- o collect quarterly state service statistics reports;
- o provide feedback to each state on a quarterly basis about new acceptors and active users by method, trends in service statistics, compliance with reporting requirements, and couple-years of protection;

- o provide technical assistance in collaboration with CDC or other advisors to states in conducting special studies such as record reviews to determine client characteristics by method, method changes, and program continuation rates, assessments of the effectiveness of IE&C strategies, and provider and/or client surveys.

Liaison Functions

Federal Ministry of Health assistance will be needed in obtaining National Council of Health formal authorization of the family health program, duty-free clearance certificates, and other formal approvals as needed.

COMMODITY SHIPMENTS

Eighteen-Month Requirements

Contraceptives:

Contraceptive requirements for an 18-month period were calculated for seven states (Lagos, Niger, Ogun, Ondo, Pleateau, Gongola, and Kano), the Army and University College Hospital (UCH), Ibadan.

In addition, a general reserve was calculated to serve the seven states, the Army, UCH, and other states or programs that may make requests of the AAO. These estimates are found in Table 2. The methodology used in making these calculations is presented in Appendix 3. A more detailed description of the buildup of contraceptive requirements for the 18-month period, broken down into three 6-month periods, is found in Appendix 4.

The United Nations Development Program (UNDP) is shipping contraceptives to Ondo, Niger, Rivers, Borno, and Sokoto states. The types and quantities to be air-freighted in April 1984 are listed in Appendix 5. The commodities to be sent to Ondo will be used to support UNFPA-supported projects in that state. The contraceptives sent to the other four states will be distributed statewide through existing service delivery points. Our team has not proposed targeting Rivers, Borno, or Sokoto states as a part of the first shipment to be sent by FPIA in February or March 1984. Therefore, the only statewide overlap between the UNDP and AID shipments of contraceptives would occur in Niger state. We recommend that AID and its Nigerian counterparts explore two issues with UNDP:

- o The possibility of UNDP's to supplying injectables and possibly foaming tablets, leaving the supply of other contraceptive methods to AID.
- o Since AID will be providing Femenol for Niger state, it may be desirable for the UNDP-provided Eugynon, targeted for that same state, to be used elsewhere. This could avoid potential complaints from clients who may begin with one brand name and resist or refuse to switch to a different brand name, even though the compound is chemically the same.

Family Planning-Related Equipment and Supplies

A list of family planning-related equipment and supplies was developed by the team. Based on the expected numbers of service

delivery points that will be providing family planning services in the next 18 months, quantities of equipment and supplies were estimated (Table 3). As indicated in this table, 14 of the 21 items listed are essential for the training of service providers and, therefore, should be available at the training sites.

The critical item to ship to Nigerian states, which is available through FPIA and the Pathfinder Fund, is a supply of IUD kits. While an adequate number of kits is available to equip "model clinics" that will serve as training sites, and the SDPs of trainees during the first 18 months, AID/W and AAO/Lagos need to decide whether or not AID is prepared to furnish all subsequent SDPs with IUD kits.

There are four items which were available locally in Nigeria for purchase at the time of our visit and are needed to start family planning services: flashlights and batteries, oral thermometers, kerosene stoves, and kerosene and metal pots (for boiling instruments). If these items are to be purchased in Nigeria, program grants may be needed by the states. At this time, it is uncertain how these items will be procured/supplied.

Seven other items are also needed at the time of training and the implementation of clinical services: sterile gloves, gauze, cotton, antiseptics, iodine, Clinistix or an equivalent, and Albustix or an equivalent. We believe that some of these items are not available for purchase in Nigeria at present. At such time that commercial sources can make these items available, hard currency will need to be authorized for their purchase (M-form). At the time of our visit, M-forms were almost impossible to obtain. AID/W needs to investigate whether these items are available on the General Services Administration (GSA) schedule and decide if and how they will be procured/shipped. If AID decides to furnish these items, we recommend that they be purchased in the U.S. and shipped to Nigeria to ensure that they are available on time. This will probably be the most economical option. The team hopes that AID will supply these items initially and that the states will see to their future procurement.

Shipping

There are three alternative approaches that can be used to ship commodities to Nigeria: importation through a third country, sea freight, or air freight.

Importation Through a Third Country

Importation of goods via a third country is an undesirable option. Goods theoretically could enter Nigeria from Benin, Niger, or Cameroon, but the problems of clearing twice through customs and

surface transport further add to cost and potential damage or pilferage. Various sources indicated that importation problems would only be exacerbated by adding borders through which goods must pass. Finally, given the volatile nature of inter-African diplomatic relations, any arrangements using a third country could be disrupted by breaks in diplomatic relations. (At the time of this consultancy, relations were somewhat strained between Nigeria and Cameroon.)

Sea versus Air Freight

Discussions with representatives from several private firms indicated that air shipment is preferable to surface shipment. It is faster, requiring from 3 days to 2 weeks for clearance while clearance for surface shipments may take several months once the goods have arrived in port. Pilferage and damage are reported to be considerably lower for air shipments. One FMOH physician in Kano state indicated a loss rate of about 5 percent for commodities sent via the Kano airport compared with losses of up to 40 percent reported for surface shipments through Lagos. The loss rate is also higher for small, marketable products. Our investigation of the commercial availability of contraceptives in Lagos indicates that these products are for sale. Surface shipment of contraceptive supplies would probably be subject to extensive losses because of the length of time goods remain in customs. The shorter delay at airports reduces potential loss. Although the cost of air freight can be as much as four times that of sea freight, reduced loss and timeliness largely compensates for the difference. Uninterrupted availability of contraceptives to clients is also enhanced, a factor particularly important for maintaining continuation rates at a cost-effective level, and avoiding brief stock outages that can lead to unintended pregnancies. After the program has been in operation and as the required quantities of supplies increase, some shipments might be made by surface to evaluate the reliability of this procedure. For the immediate future, air shipments are recommended.

V. CLEARING CUSTOMS

CLEARING CUSTOMS

Importation Requirements

A number of administrative procedures are necessary before contraceptive supplies can be imported into Nigeria. The AID Affairs Office in Lagos has agreed to obtain a certificate of duty-free importation from the FMOH. Dr. Sulaiman, Director, National Health Planning, FMOH, committed himself to securing this certificate. Based on our conversations with Dr. Sulaiman, the chief pharmacist, and others, getting this certificate should take between two days and two weeks. FPIA also informed AID/S&T/POP/CPSD that they (AID) would have to secure (1) a certificate of analysis of manufacturing for all drugs, (2) certification that all drugs, supplies, and equipment are approved for sale in the U.S., and (3) certification that all drugs, supplies, and equipment are gifts and are not to be sold in Nigeria. AID's agent in Nigeria will need to acknowledge receipt of the certificate of duty-free importation before FPIA establishes shipping dates. The three other certifications must accompany the bill of lading.

Options for Clearing Customs

A major consideration for the family planning program planned by AID is the conduit which will be used for clearing contraceptives and related supplies and distributing them within Nigeria. Clearing goods through customs can be a slow, complicated, and expensive procedure, and the distribution of supplies, once they have been imported, is fraught with the potential for loss, damage and pilferage. Loss of supplies can also occur while goods are awaiting clearance at the three international airports (Lagos, Kano, and Port Harcourt) or harbors. Because of the many problems that exist, the team explored several options and met with a number of persons and agencies. A brief summary of our findings appears below.

Federal Ministry of Health

The FMOH does not have its own personnel specializing in customs clearance. This service is provided by the Government Coastal Agency (GCA), another unit of the Nigerian government. Reportedly, several months may elapse before shipments are released from customs. The FMOH does not have reliable transportation, since many of their vehicles are out-of-service. In several states, staff at the MOH level indicate communications with the FMOH were uncertain, thus creating further delays in those instances when the FMOH sent supplies to the states. These problems are so serious that states claimed that they prefer to handle their own customs clearance procedure, provide their own transportation, and bypass the FMOH altogether. At the present time, UNICEF is providing some material

to state governments through the FMOH. UNICEF staff indicated that this was possible only because they handled the customs and distribution procedures themselves. Dr. Emofor, the FMOH Senior Pharmacist, indicated he would be willing to help the AID program if requested. However, he stated that there have been problems with states picking up shipments on a timely basis and that the FMOH does not have adequate equipment to assure its ability to make deliveries.

State Ministries of Health

Although states indicated that they are able to clear their own goods, it was difficult to determine how quickly this can be done. We found that direct state MOH involvement in clearing customs was very limited--most of their procurements are from domestic sources. Even if they receive timely notification of arrivals of shipments and the necessary documents, transportation at the state level is not assured because vehicles are often not available. Alternatively, they have used commercial transportation, which reportedly increases losses. In addition, when states clear customs, they often end up making more than one trip due to unexpected delays or complications with clearance procedures. The present economic situation makes it impossible to predict when vehicle repairs will be made or whether funds would be available to arrange for commercial transport. Only storage at the state level seems assured, at least in those states that the team visited.

Private Clearing and Forwarding Agents

The team visited five agencies which can provide this service.

1. Femope and Richard Jackson and Co. are two small firms employing approximately 20 persons each. Femope has a small warehouse which is full at present, and Richard Jackson and Co. has no warehouse at all. Currently, it relies on contracting with local transport companies to ship goods directly to their final destination. Femope specializes in importing and selling medical supplies and serves as the clearing agent for the JHPIEGO program in Ibadan. Richard Jackson and Co. is considered satisfactory by the Nigerian office of UNDP. Richard Jackson provided cost estimates to the team for handling contraceptive shipments. Femope sent a written response without specific prices.
2. Panalpina is a very large agency which submitted an estimate before the team left Nigeria. It has adequate warehousing space and a large staff. Panalpina potentially could handle the program's needs but has a mixed reputation with respect to timely clearance of commodities and losses. One source suggested that

Panalpina works best with surface shipments which involve large bulk items such as rice, cement, or fertilizer. At the time this report was written, Panalpina was in the process of obtaining clearance for a vehicle supplied by FPIA. This process will provide another test of its abilities. Distribution to the states could be provided by (1) Panalpina vehicles, (2) commercial transport, or (3) state vehicles, depending upon prevailing conditions.

3. Major and Co. is a large trading company which imports drugs for a number of firms, including Wyeth. Major and Co. contracts with Panalpina for clearing customs, and they own a fleet of delivery vehicles, including heavy-duty trailer trucks. Major and Co. also employs manufacturer's representatives (detail men) for its drug line. It has five warehouses in cities outside Lagos and serves several cities in all 19 states in Nigeria.

The managing director indicated that Major and Co. would probably not be able to serve as an importing and distribution agency for AID-supplied contraceptives because it would conflict with Major's agreement with Wyeth, also a manufacturer of contraceptive products.

4. Morison Son and Jones is a large trading firm with the staff, storage, and distribution facilities to handle the AID contraceptive program. At the time the consultant team left Nigeria, a bid from this firm had not been received.
5. Several attempts were unsuccessfully made to contact the Danish-African Company (DANAFCO).

Manufacturing Companies

Sterling Products (Nigeria), Ltd., is not involved in the manufacture or promotion of any contraceptive products in Nigeria. They offered to work with the AID program (See Section VI-C. for details).

Health Care Products of Nigeria plans to market Ortho contraceptive products. The managing director indicated that working with AID was not a major problem and that he would prefer to discuss specifics further before submitting a proposal.

UNICEF

UNICEF currently provides medical supplies to Nigeria through the FMOH. Its two clearing agents described the many steps needed to clear goods through customs and the subsequent need to monitor

the distribution through the FMOH. These agents emphasized the need for obtaining all documents and informational telegrams in advance of each shipment. Air shipments can generally be cleared faster than surface shipments, and damage and pilferage has proven to be less. They also felt that it is more cost-effective to use one's own properly trained personnel. In the past, UNICEF used a clearing agency but was dissatisfied due to lengthy delays, losses, and storage charges.

State Liaison Offices

The team visited four state liaison offices to discuss the possibility of obtaining their assistance in clearing and forwarding contraceptive supplies. In two of the liaison offices the persons we spoke to could not give us any information, and in the other two offices, after repeated attempts, we were unable to speak with the appropriate officials.

Discussion of Recommended Option

After evaluating the options available for clearing supplies through customs and distributing them to each state, the team recommends the use of Sterling Products (Nigeria), Ltd. This company has offered and has the ability to clear, store, and distribute supplies at no cost to the program. They have vehicles which make regular deliveries to all 19 states, and experience minimum damage and pilferage.

Our final discussion with Mr. William Price, General Manager of Sterling Products (Nigeria), Ltd., produced the following understanding:

The shipper will provide:

1. Items to be shipped.
2. Transportation costs from U.S. to port of entry in Nigeria
3. Duty-free and approved drug certificates.
4. Documentation, i.e., Airway bill, packing list, list of delivery points, release and delivery schedule through FPIA.
5. Special communication channels via U.S. Embassy, c/o Ms. Keys MacManus, AID Logistics Specialist.

Sterling Products will provide:

1. Clearing of shipment from port of entry.

2. In-country transportation.
3. Storage in Sterling warehouse or Sterling-controlled depots.
4. Documentation of proof of delivery.
5. Reports of stocks in Nigerian state storehouses as available (six months minimum-exceptional findings to be reported immediately).

FPIA has received confirmation of the Sterling Products (Nigeria), Ltd., offer from its parent company, Sterling Drug Company (an American pharmaceutical manufacturer). Sterling has a record of providing assistance as a part of its Corporate Benevolence Program (i.e., donations of products or personnel time to assist in programs such as refugee resettlement). The team is confident that Sterling can meet the needs of the program. This recommendation is reinforced by the uncertainties associated with the other available options as discussed above.

VI. STATE COMMODITY MMANAGEMENT

STATE COMMODITY MANAGEMENT

Central Warehousing

At the level of the 19 individual states, commodity procurement, storage, and distribution are the responsibility of the SMOH and its operational counterpart, the State Health Services Management Board. The individual most directly concerned with state level pharmaceutical supply and distribution is the chief pharmacist.

Each state has a central pharmaceutical warehousing facility (generally several buildings) located in or near the state capital. This centralized location will be the principal initial destination within each state for family planning program commodities and ancillary equipment after these items have cleared customs formalities at the national port of entry if, as anticipated, the state distribution system is used for supplying local service delivery points.

Distribution

Procedures

Once supplies have been cleared through customs and distributed to the principal destination in each state (generally the destination is the pharmaceutical warehouse in each state capital), further distribution and accounting become the responsibility of the MOH.

If the order is part of an annual purchase for the entire state, the MOH allocates quantities to each health unit, taking into account original request, past use, and total availability. A "reserve" quantity is also retained in the central warehouse. This type of "push" allocation is based on previous annual consumption and is subject to the availability of supplies and fiscal constraints.

Supplies may also be requisitioned by hospitals, dispensaries, and other health units as they are needed. The requisition form is prepared and approved within the health unit and forwarded to the MOH warehouse or to regional or "zonal" warehouses where these exist. (Orders may also be sent to a hospital or other facility where supplies are known to be available.) This component of the distribution system operates on a "pull" basis.

Transportation

Distribution of supplies within each state is theoretically done using state-owned vehicles. Since these are often out-of-service,

staff in hospitals, dispensaries, etc., often use their own vehicles for transport.

Record Keeping and Controls

At the health facility level, copies of requisitions are maintained, and an entry is also made in a ledger listing each produce in the facility storeroom or warehouse. Tally cards (sometimes called "bin cards") are used to maintain balances. These cards are sometimes located on shelves with each product and sometimes maintained in a single location. Periodic inventory reports do not appear to be used. The MOH relies instead on inspectors who are said to make periodic visits to all peripheral facilities. A team in Gongola state actually saw such inspectors (auditors) during a visit to one facility.

There are a number of control procedures and cross-checks used by warehouse staff when they fill a requisition. The chief pharmacist first checks to make sure the requisition has a valid signature. When he countersigns, the requisition is forwarded for filling. One entry is made in the general ledger and one on tally cards. These are normally kept in separate locations. Orders are then packed and quantities rechecked against approved amounts. The consignee must sign a receipt when supplies are finally issued.

Summary of Findings in States

We present a summary of our observations and findings in Table 4 for seven states and the Army with respect to:

- o Turnaround time from notification that a consignment has arrived until it has been delivered to the state central store.
- o Pilferage of items from the consignment prior to taking possession. "Low" generally means under 10 percent.
- o Quality of inventory control means (a) that general ledger entries and tally cards are kept up-to-date for items, (b) that the physical inventory corresponds to what is recorded on the tally sheets and/or ledger, and (c) that amounts dispensed to service delivery points noted on the returned requisition form correspond with the draw-down recorded on the tally sheets.
- o Distribution within the state from the central store to the service delivery point.

We used the same standardized checklist in reviewing the management of commodities in the seven states. We have kept these on file at CDC in the event that more detailed information is needed.

Procurement and Accounting for Equipment

In each state the selected training centers will need to be adequately equipped and supplied with commodities before the training of trainees begins. In order to equip the "model clinics" that will serve as training sites in time for the scheduled training sessions, direct cash grants may need to be made to each state for local equipment purchase and installation of selected items. To ensure that such cash grants are used for the intended purposes and not deposited in the government treasury, each state has been asked to obtain a formal letter of authorization from the State's Ministry of Finance enabling the program director to be fully responsible and accountable for all such funds on behalf of the state. The program director will thereby be accountable to the granting agency for the purchase and installation of such equipment and for the submission of program and financial reports. The program account will be audited.

Since the availability of the required equipment in Nigeria is uncertain, efforts should be made to expedite the procurement of these items from the GSA schedule. In the event that this cannot be done, grants to states may need to be extended for another 6 months in order to ensure the availability of appropriate equipment in the health facilities of trainees upon completion of their training.

During the training programs, service delivery personnel will be trained in the proper care and maintenance of the equipment. Each item will be clearly marked with the name of the health facility in which it is to be used, and spot checks will be made by a representative of the granting agency within six months of the installation of the equipment to verify that it is being used appropriately. In each facility, the most senior family planning nurse will be accountable for all the equipment. The commodities management specialist within the office of the AAO will maintain an up-to-date inventory of equipment per state and facility.

Training in Commodity Management

We generally found that a satisfactory system for managing commodities was in place at the state level and that records appear to be maintained satisfactorily. Refresher training will be needed at this level in the use of requisitions and in maintaining inventory records of contraceptive supplies and equipment. Periodic inventory reports to the central state store are not currently filed and will have to be designed and instituted during the training. Once the reports are being submitted, they should be photocopied and forwarded to the AAO's office for monitoring purposes.

More extensive training will be required at the service delivery point (SDP) in all aspects of commodity management. As requested, CDC will help in training state commodity management staff to train

those responsible for logistics at the SDP level. The cost-effectiveness of alternative approaches to this training will be explored during the next follow-up visit.

MANAGEMENT INFORMATION SYSTEMS

Overview

Complexity of Nigerian Program

Information will be needed for planning, coordination, monitoring, and evaluation, and replanning purposes by state and Federal Ministries of Health, the FMOH, AAO, and supporting organizations' staff. The challenge at hand is complex since (1) there is no bilateral agreement now, nor will there be one in the foreseeable future; (2) each state is by and large autonomous and provides service for between 2 and 12 million people; and (3) the FMOH is not in a position to control what happens within a state, either in the public or private sector. In short, working with each state is like working with an individual country.

What further complicates matters is that between six to ten different centrally-funded supporting organizations will be providing assistance to each of the states involved (See sections IV.C and D for specifics). A graphic representation of what is likely to be entailed is found in Figure 2. We anticipate that the task of coordination will be shared by the AAO's office together with state coordinators, and that the supporting organizations themselves will have to coordinate their own inputs carefully (See section IV.A. for further discussion).

Uses and Sources of Information

States will need information for (1) managing the integration of family planning services into the primary health care activities of existing SDP's, including number of SDP's providing family planning, program continuation, method preferences, etc., and (2) maintaining accountability for the use of contraceptives, other supplies, and equipment. A more detailed outline of the information that will be needed by the states (and other entities), the sources of information, and who will be responsible for obtaining the information is presented in Table 5.

Supporting organizations will need information in order to (1) assess whether program support offered to specific states is effective in producing the anticipated results--cost--effectively and timely; (2) learn from the experience with each state so that the work in future states can be more efficient and effective, and (3) determine what else is needed to enable states to manage their programs on their own (See Table 5 for more details).

The information needed by the AAO and her staff will be used to (1) monitor whether state programs are being implemented according to plan in terms of the availability and use of family planning

services and meeting target dates; (2) determine what outside inputs will be needed; (3) coordinate the timing of inputs so that good use is made of them; (4) monitor state and private sector accountability for contraceptives, other supplies, and equipment, and (5) communicate the lessons learned in one state to others (See Table 5).

The FMOH, while not responsible for the actual implementation of services, is still responsible for the development, communication, and evaluation of national policies. In this light, it will need information in order to (1) determine whether program (contraceptive) prevalence targets are being met, (2) identify new state and private sector activities that might increase contraceptive prevalence and improve reproductive health, and (3) evaluate the interaction between family planning services and other primary health care services and whether there are ways to improve the quality, accessibility, availability, use, and effectiveness of these services (See Table 5). In addition to analyzing state reports, the FMOH will probably find it necessary to conduct or assist in special evaluations or studies. Such studies are not the subject of this report.

As described above, there are many entities, each of which will need several years of information for an array of purposes. Most information required can be made available if three information systems are operational: (1) a service statistics systems, (2) a commodity statistics system, and (3) a program management (information) system. Each of these systems is briefly described below--these descriptions are first approximations of the information systems that our team believes will be needed. Based on future collaboration with Nigerian counterparts, these systems will need to be defined in detail, tested, and implemented.

Service Statistics System

At the level of the service delivery point (SDP), we recommend the use of six elements as the basis for a basic service statistics system:

- o Index Card File--When a new client comes to the clinic, the names of the new client and the spouse are recorded on an index card along with the client card number. These cards are kept on file in alphabetical order. If a client returns to the SDP without an appointment card, the client's card can still be retrieved after looking up the client's index card that is filed alphabetically to retrieve the client's number. In this way, a new client card is less likely to be erroneously filled out for an active user with no appointment (i.e., identification) card. Index card files--or the equivalent--were not being used in the clinics we visited.

- o Daily Activity Register--Basic information is recorded on this form for all clients, new and active, attending the SDP on a given date: patient name, new versus active status of client, and type (brand and quantity, if appropriate) of method received during the current visit.

The daily activity register will serve as the basis of tabulating (a) new acceptors and (b) commodities dispensed for the reporting period. The commodity data can then be used to establish minimum-maximum stock levels and couple--years of protection by method. All clinics that we visited are using a daily activity register. We recommend that the one most commonly used, PPFN's, be simplified. We have drafted a simplified version, and the February-March 1984 CDC team will review and revise it as necessary with the appropriate state and PPFN officials during their trip.

- o Client Record (Patient record, client card)--We have reviewed the PPFN client record which is the most commonly used in the states we visited. We recommend taking out some information which is not used, not uniformly collected, or not very useful; adding a few items to the form; and changing the size and format of the client record to some extent. We have already outlined these changes. The February-March team will review and revise, as necessary, the client record with Nigerian counterparts. In addition to serving as the basis for the medical management of clients, the client card can be abstracted during periodic record reviews to ascertain (a) client characteristics by method, (b) method changes, and (c) adherence to quality of care standards.

- o Appointment Card--At the end of a client's visit, the service provider customarily establishes a date for the client's next visit. This date is recorded both on an appointment card and in the client's record. The client then brings the appointment card back to the clinic at the time of the next visit. Since the client's record number is recorded on the appointment card, the card helps to facilitate retrieving the patient's client record from the files. Appointment cards are used in all the clinics we visited. No changes in these are needed.

- o Tickler File--Once the client has completed the visit, the provider files the client record by date of the next appointment. In this way, defaulters can easily be identified and followed up, if desired. If properly maintained, the tickler file can be used to determine the number of active users at any given point in time. The client records of defaulters who do not return to the SDP after a specified period of time can be removed from the

tickler file and placed in an "inactive user" file. This system is not currently used in Nigeria. The February-March team will review its pros and cons with counterparts

- o Quarterly Report--The service provider in charge at the SDP will be responsible for tabulating the number of new acceptors and quantities of commodities dispensed. This can be done every day with a weekly or monthly cumulative total, or can be done once a month. We recommend that SDP providers not be required to file monthly reports. Instead, we propose the use of quarterly (three-month) reports. Either SDP providers or zonal supervisors can be asked to fill in these reports. These details will be worked out by the February-March CDC consultants with our Nigeria counterparts.

We propose that state zonal supervisors compile a quarterly zonal report to submit to the state coordinator. State coordinators should, in turn, compile state quarterly reports and submit them to the FMOH. Finally, we anticipate that the FMOH will want to prepare a national summary from the state's service statistics twice a year.

Figure 3 presents a summary of the use of elements of the service statistics system and the flow of information.

Commodity Statistics

In addition to the inventory control system that will be maintained by Sterling Products (Nigeria), Ltd., at the central level and state confirmation of the receipt of consignments, there are four basic elements of the proposed commodity statistics system.

1. Requisition Forms--All states are using a fairly standard requisition form to (a) initiate a request for commodities, (b) serve as the basis for reviewing the merits of the request, (c) authorize the issue of commodities, and (d) acknowledge the receipt of commodities. We propose that one small, yet important modification of this form be made and that is to enter the commodities dispensed during the period prior to a requisition. In this way the state chief pharmacist can adjust the commodities issued in order to reestablish or alter the minimum-maximum stock levels of the SDP to safeguard against stock outages. This modification will be reviewed by the February-March CDC consultants with our Nigerian counterparts.
2. Tally Card (Inventory control or bin card)--We found all clinics and state warehouses are using tally cards to maintain a running balance on inventory. In some stores,

we found both a ledger book and tally cards were being used. The only difference between the two inventory control systems is that the tally cards stay on the shelf with the inventory whereas the ledger book is maintained at the desk of the dispensing clerk. The February-March team will explore with our counterparts whether both systems need to be maintained. If not, we would recommend keeping the tally cards.

3. Daily Activity Register--As already described, we recommend modifying the daily activity register so that it can be used for reporting the quantities of each commodity dispensed.
4. Quarterly Commodity Reports--No commodity reports are currently submitted from SDPs to the state central stores. We recommend that a quarterly commodity report be submitted, summarizing the following information for each commodity during the three-month period: (a) beginning balance, (b) receipts, (c) dispensed, and (d) closing balance.

Based on SDP reports, the zonal supervisor can compile a zonal quarterly commodity report. These will be compiled by the state chief pharmacist or staff and used to project future needs. In this way, the states should be able to submit timely and appropriate requisitions thereby keeping the "pipeline" full. The state commodity reports can be used at both the state and national levels to estimate couple-years of protection (CYP) by method. CYP estimates can be used as a crosscheck to validate service statistics figures on new acceptors and active users. The details of quarterly reports will be worked out by the CDC February-March team and their Nigerian counterparts.

Figure 4 summarizes the flow of commodities and commodity statistics at all levels.

Program Management Information System

The team suggests that for each program (state, military, or private), a plan be developed. These plans should specify outcome variables in terms of contraceptive prevalence, adolescent pregnancy rates, or other appropriate measures of the accomplishment of program objectives. In addition, the process for achieving these objectives needs to be planned and documented. These process plans should specify (a) what will be done, (b) when, (c) where, (d) for whom, (e) by whom, and (f) which activities are interdependent. There are a number of planning tools that can be used: The Logical Framework, GANTT (bar) charts, PERT charts, flow charts, and/or others. Independent of the planning method used, all plans should

identify milestone accomplishments so that (a) progress can be monitored, and (b) changes in plan can be related to future activities, and the inputs from states and outside sources can be rescheduled. Monitoring should be the joint responsibility of the state or program coordinators and the AAO's staff. Based on these plans, the AAO can identify specific milestones or key accomplishments for which she wants to receive a report (actual versus planned). Monitoring does not require the constant presence of AAO staff if a reporting system is established. A file should be kept on each program.

The inputs of supporting organizations made into state programs can be referred to as projects. For example, INTRAH's in-training support offered to Ondo state would constitute one project. Each intermediary should develop a project plan for its activities in each state. These plans should establish outcome measures, e.g., the number of nurses to complete the training program and demonstrate that they are able to perform specified functions by a given time. The process should also be planned in terms of a schedule of activities and resource requirements, including consultant time. The development of project plans will enable the AAO's office to monitor progress through reports and/or site visits and communicate the need to change plans on a timely basis. A file should be kept on each project.

We recommend that all files be kept manually, at least initially. Once the program management information system is in place and operating satisfactorily, the AAO may want to computerize the files.

PRIVATE ORGANIZATIONS

Planned Parenthood Federation of Nigeria

As in most countries, government policies and programs to promote family planning have been preceded by private organizations. In Nigeria the most notable provider of family planning information and services has been the Planned Parenthood Federation of Nigeria (PPFN), founded in 1959. Currently, the PPFN operates in 15 of the 19 states. In these 15 states, it maintains 33 branches of "reporting units," which reportedly provide services through 128 sites. Two of these sites are owned by PPFN and all others are operated out of state-owned hospitals or other medical facilities. Services are provided after-hours by state-employed physicians and nurses, who are generally paid a modest honorarium or "sessional fee." Patients are charged 1 naira per month of contraceptive supplies (Naira 1=U.S.\$1.35).

The total number of reported new acceptors declined from about 34,000 in 1980 to 27,000 in 1982. For the same period the figure for all users declined from 97,000 in 1980 to 57,000 in 1982. During that three-year period, users of pills declined from 62 to 51 percent of all users, while IUD clients increased from 19 to 28 percent. Depo-Provera use also grew to reach a substantial 15 percent of all users in 1982.

All contraceptive supplies for state-PPFN facilities pass through Lagos, where PPFN handles import procedures and central storage. Transportation for distribution to the individual states is usually provided by state staff.

United Nations Fund for Population Activities

The United Nation Fund for Population Activities (UNFPA) has primary health care projects underway in five areas of Nigeria. It operates statewide projects in Sokoto and Niger states and Pilot Projects at single Sites in Rivers, Ondo, and Borno states. Immunization of children and family planning services for women are UNFPA's primary activities. It provides IUDs, oral contraceptives, condoms, and injectables. In the past the UNFPA has worked through the FMOH, but in 1984 plans to be involved more directly with the states. It will provide all supplies directly to each state, relying on either UNDP or UNICEF to clear customs, store, and distribute supplies. The FMOH will focus on program monitoring. The UNFPA has not yet developed standard report forms and has only collected such service information as individual states wish to submit.

Original plans called for the FMOH to pilot-test a program manual in 1984, but this will probably not be done since the FMOH

has no funds to print copies of the manual and pay for the expenses involved in evaluating it.

The AID program should remain in close contact with the local UNFPA office, particularly for activities in Niger State, where UNFPA already has a program in operation. Since UNFPA has not yet developed a standard reporting format, the AID program should provide it with copies of the report forms proposed for the AID program for its consideration. AID/Washington should make contact at an appropriate UNFPA level to discuss possible UNFPA provision of injectable contraceptives to those programs supplied by AID with other contraceptives. UNFPA is currently supplying Noristerat (a Schering product) to the five states in which it has projects.

Mission-Associated Agencies Distribution Systems

There are several Christian mission-associated organizations serving as pharmaceutical and equipment distribution agencies to medical missions with rural health outposts. Of these, the most significant--from the standpoint of its potential to provide widespread family planning commodity distribution--is the Christian Central Pharmacy (CCP), with its headquarters in Jos, Plateau state. This nonprofit organization currently serves about 350 locations in a three-state area.

Also located in Plateau state is the Christian Health Association of Nigeria Central Pharmacy Project (CHANPHARM) whose General Manager indicated probable willingness to add three commodities (pills, IUDs and either condoms or form) to the list of items it supplies to about 140 mission institutions in Nigeria. While the mission distribution systems were not seen by the team as a viable base for national distribution, they were perceived as valuable potential parallel systems, whose activity in the family planning area deserves encouragement. Both agencies gave considerable evidence of interest in such arrangements.

Product Promotions, Nigeria, Ltd

Product Promotions (Nigeria), Limited, is an advertising agency which would be interested in any information/education campaigns initiated as part of the contraceptive program. J.O. Lamptey, the director, said that he has nationwide coverage and that someone from his office visits every state at least once every six weeks. Lamptey is one of several persons who mentioned the substantial need for information/education/promotional programs for disseminating facts about contraception.

DHL Courier Service

DHL Courier Service provides rapid delivery of documents worldwide. In the USA it has offices and drop-boxes in the Baltimore-Washington area (and in other cities as well). UNDP and Richard Jackson have made use of DHL's courier service and are quite satisfied. DHL also offers a small parcel (less than 30Kg) service which could be useful to the program.

IX. POLICY CONCERNS

POLICY CONCERNS

Government Authorization

According to at least two permanent secretaries of state ministries of health, with whom we met, some states may be reluctant to enter any type of international agreements without prior FMOH concurrence. It was suggested that a formal statement should be circulated by the FMOH to every MOH and HSMB supporting and authorizing the introduction of family planning as an integral component of basic maternal/child health and general health services.

It may be sufficient for Dr. Sulaiman, the director of Health Planning and principal proponent of family planning in the MOH, to send a letter--as promised--indicating such authorization to each state permanent secretary. It was suggested that the National Council of Health, which is the highest health policy body, might be asked at its upcoming February 1984 meeting to give a formal endorsement to this activity.

Role of the Planned Parenthood Federation of Nigeria (PPFN)

The PPFN has provided valuable service in the past and should be encouraged to maintain an active, yet somewhat altered role in the future. Given its status as a private organization, the PPFN may be in a position to introduce innovations in the delivery of services (e.g., commercial retail sales, community-based distributions) which state governments are not ready to undertake. The experience of other countries at similar stages in the evolution of family planning suggests that the PPFN and its state affiliates may be well placed to emphasize IE&C and family planning education efforts.

Since the PPFN will continue to enroll new acceptors and serve previous acceptors, we suggest that the PPFN reporting system and the national service statistics system, which will be developed, should be compatible (See Section VIII). We recommend that the PPFN send quarterly reports of new acceptors and active users (number of visits by continuing users or couple-years of protection estimates), by state and method, to the FMOH Family Planning Evaluation Unit. This way, national and state trends of contraceptive acceptance and use can be assessed more comprehensively than would otherwise be possible.

Supply of Injectables and Foaming Tablets

Two issues concerning these two commodities need to be considered. First, the injectable hormonal compound, Depo-Provera, cannot at present be provided by any U.S. source. This means that other sources of supply and distribution will have to be established.

Second, the foaming tablet, Neo-Sampoon, which seems to be fairly well received in Nigeria, is manufactured in Japan. Since AID is not authorized to purchase and distribute non-U.S. contraceptives when equivalent or comparable U.S.-manufactured products are available, a decision will need to be made on whether to introduce a substitute product or whether to encourage the Nigerian program to seek support elsewhere for Neo-Sampoon purchases.

University College Hospital Training Centre Graduates

Graduates of the Family Planning Unit's Training Centre of the Department of Obstetrics and Gynecology, University College Hospital, Ibadan, are to be found in at least 17 of the 19 Nigerian states. Many of these graduates are thus in states which will not be included in the preliminary wave of states designated for accelerated family planning efforts.

UCH graduates are provided with a limited supply of commodities at the time of graduation, but this quantity is generally rapidly depleted. At present, no provision for resupply exists, so that graduates are frequently frustrated by their inability to make further use of their training. One could consider developing a system for resupply. Because graduates are working in SDPs that are widely scattered throughout their states, such a system would, in practice, prove sufficiently expensive and unworkable and, therefore, we would not advocate it.

Two courses of action can be pursued. First, future UCH training should be linked to the needs for trained personnel in states as they become ready to embark on government-provided family planning activity. Second, as states are identified as approaching the take-off stage, former UCH graduates should be located so that the program can capitalize on their training. When training has not been recent, this would need to be remedied by refresher training.

The Pathfinder Funded training program at the Family Planning Unit of the University College Hospital, Ibadan has trained 566 providers since 1980.

This program has drawn its trainees predominantly from Oyo, Ogun and Lagos States. (See Table 5 for graduates per state). Because no follow-up was done after trainees completed the six-week course, it has not been possible to estimate the percentage of those who are actively utilizing their service delivery skills in their respective states. More recently a "feedback questionnaire" is being given to participants to complete and mail back to the UCH Training Center six months after graduation. These questionnaires have not been analyzed yet. A casual look however, suggests that most of the returned questionnaires come from graduates who are in active clinical practice. There is a need to compile a list of all graduates who are still in practice. Such a list will be very

useful in providing a pool of trainees who can be called upon by the agency responsible for in-service training of service providers in each state.

Ondo States has taken a lead in developing such a list by sending out a questionnaire to all nurses and midwives in the state health facilities. The questionnaire is intended to determine what kind of training if any, the providers have had in Family Planning, whether they are currently delivering service and if they will be interested in acquiring family planning skills. We recognize that there are other training programs besides UCH (both domestic and overseas) that have trained several Nigerian providers over the years. We suggest that a list of such "certified family planners" be kept in each state so that they can be involved in their states' family planning effort right from the the program planning and development stages.

AID may want to consider the UCH Training Centre as a source for the following family planning assistance in Nigeria:

- o Provision of technical assistance to states in the training of trainees and in-service and refresher training for the service providers. Such technical assistance will include assistance to individual service providers in setting their in-service training.
- o Provision of technical assistance to the Nigerian Army in the implementation of its family planning program. The 23 recent graduates from the UCH Family Planning Program have returned to their various military hospitals and work with a small supply of commodities from the UCH. Once the program gets under way it is expected that technical assistance will be provided to these graduates in setting up their service statistics, clinic management, and commodity management procedures.
- o Campus training of state pre-service trainees. This should be a one-month family planning training program at UCH designed for the principals and nurse midwife tutors at the schools of midwifery and nursing in the various states. This will be a very important long term function of the UCH since it will essentially be developing the institutional capabilities of the various states to train and qualify all their cadres of health care providers in family planning.
- o Serve as clearinghouse for family planning training materials. This is closely related to its role as the key institution developing other institutions in Nigeria to train family planning providers. To do this effectively the UCH Center itself needs to keep abreast of developments in the family planning field and establish

and maintain close links with institutions within and outside Nigeria. The graduates of the UCH program need to be put on a mailing list to be recipients of updates in family health contraceptive technology.