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DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control

Memorandum

Date: April 26, 1985

From: Jay S. Friedman, M.A., Program Analyst, Program Evaluation Branch (PEB), Division of Reproductive Health (DRH), Center for Health Promotion and Education (CHPE)

Subject: Foreign Trip Report (AID/RSSA): Senegal--Project Paper Design, March 12-30, 1985

To: Donald R. Hopkins, M.D.,
Acting Director, CDC
Through: Assistant Director for Science, CHPE

SUMMARY

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The present Senegal Family Health Project will end in June 1985. A team of six consultants was assembled to provide assistance to USAID/Dakar in their preparation of a Project Paper (PP) for a follow-on project. My responsibility was the sections of the PP dealing with service statistics, recordkeeping, logistics, and commodity procurement.

Procedures were set forth for logistics and service statistics reporting, as was methodology for training, and computerization and guidelines for further technical assistance. Detailed lists and budgets were prepared for the 7-year life of the project for contraceptives, other supplies, and equipment based on projections of project expansion. The first week of my visit was also spent providing technical assistance in service statistics and logistics to the present project staff.

I. PLACES, DATES, AND PURPOSE OF TRAVEL

Dakar, Senegal, March 12-30, 1985, at the request of USAID/Dakar, AID/POP/CPSD and the Family Health Project to be a member of the design team writing the Project Paper (PP) for a 7-year Family Health Project, which includes a large family planning component. This will be a continuation of the present project ending in June 1985. This travel was performed in accordance with the Resource Support Services agreement between AID/POP/CPSD and CDC/CHPE/DRH.

II. PRINCIPAL CONTACTS

A. USAID/Dakar
1. Dr. Michael K. White, Health-Nutrition-Population Officer
2. Sara Seims, Population Officer

B. Project Paper Design Team
1. William Bair, Private Consultant
2. Maria Wawer, Columbia University
3. Laura Evison, American College of Midwives
4. Elaine Murphy, AID/Washington
5. Carole Kramen, USAID/Dakar

C. Family Health Project
1. Ousmane Samb, Director
2. Massech Seck, Administrator
3. Fallou Gueye, Logistics Officer
4. Aminata Niang, Midwife Coordinator, Cap Vert Region
5. Dr. William Guy, Advisor

D. Dakar School of Medicine
1. Professor Paul Correa

III. BACKGROUND

The present Senegal Family Health Project will end in June 1985. A Project Identification Document (PID) for a follow-on project was approved by AID/Washington in February 1985. To accomplish the next step in formulating the new project, the writing of the PP, a team of consultants traveled to Senegal to work under the direction of the USAID/Dakar Population Officer. The team members and their specialties were: William Bair, Overall Concepts; Maria Wawer, Sexually Transmitted Diseases; Laura Evison, Private Sector Family Planning Initiatives; Elaine Murphy, IEC; Carole Kramer, Economic Analysis; and myself in the areas of service statistics, recordkeeping, logistics, and commodity procurement. My specific scope of work was to recommend procedures in these areas for the new project, including eventual computerization of recordkeeping systems, a training plan, recommendations for future technical assistance, and a detailed procurement plan and budget for contraceptives, supplies, and equipment to be used throughout the 7-year life of the project.

IV. FOLLOWUP TECHNICAL ASSISTANCE

Since my contribution to the PP design was in the areas of service statistics, recordkeeping, logistics, and commodity procurement, I was asked by USAID/Dakar to follow up on the training courses for Family Health Project midwives held in September 1984 on these subjects (see Friedman Trip Report dated October 10, 1984).

The recordkeeping system has been experiencing "teething" problems. Monthly statistics and logistics reports are being received from only about half of the 20 project family planning facilities. The filing system, which generates monthly reports, is not well understood by all project midwives, and the

logistics system, which depends on monthly reports, is not preventing the overstocking of contraceptives at many facilities.

During the week prior to my visit, a consultant to the project (Anthony Boni, AID/POP/CPSD) studied these problems and recommended several solutions. His principal recommendation was that the project logistics officer personally visit each project facility on a monthly basis for a 5-month period to review the records system procedûres, to fill out monthly reports, and train local staff.

The first week of my stay, therefore, was spent visiting family planning facilities in the Dakar area, along with the project advisor and the logistics officer, to begin the implementation of these recomendations. This was successfully accomplished in four facilities: Abass N'Dao Hospital, Rufisque PMI, Pikine PMI, and the Medina PMI. We noticed that while the recordkeeping procedures were not fully understood by all midwives when taught in a classroom in September 1984, they become completely clear when demonstrated in on-site, on-the-job training during these four visits. The project advisor and logistics officer will visit all project facilities on a regular basis during the next several months. I recommended in the PP that this be done in all new facilities as they are brought into the new project each year.

V. PROJECT PAPER DESIGN

The following is a condensed version of the report I submitted to USAID/Dakar, which will form part of the PP or it's technical annexes.

A. Logistics and Contraceptive Supplies Reporting

Contraceptive supplies are issued to project family planning facilities by the project logistics officer (presently Mr. Fallou Gueye). Quantities to be issued are determined by the project logistics officer from reports of each family planning facility. Deliveries are made every 3 months from the project office and should be sufficient to insure that facilities have on hand quantities equivalent to a minimum of 3 months and a maximum of 6 months usage.

Since regular receipt by the logistics officer of the monthly supplies report (which is the reverse side of the project monthly report form), is vital to the operation of the logistics system, a covenant should be inserted in the Project Agreement requesting the Ministry of Health (MOH) to issue a circular (Note de Service?) to project midwives to complete these simple monthly reports by the tenth of each following month. The details of the supply and reporting system, including all forms, can be found in my trip report dated October 10, 1984. A wall chart should be used at project headquarters to monitor receipt of these reports from the field.

As the project expands beyond the present 20 facilities, the operation of the logistics system should no longer be the sole responsibility of national-level project staff. Instead, the Regional Midwife Coordinators should assume the responsibility for the distribution of supplies within their region. The project budget will include small sums for renovating storage areas (depots regionaux), as well as the provision of regional vehicles to be used for supply distribution and supervision by the Regional Midwife Coordinators.

B. Service Statistics

A service statistics system has been designed (by the writer) and put into use in the 20 project facilities presently in operation (see trip report dated October 10, 1984). It provides simple information on client visits and the number of active users, by method. This information is gathered in a simple way from patient and clinic records, which has been taught to all project midwives in a series of seminars using a training manual. The service statistics are collected as part of the monthly report mentioned earlier.

When the project expands to include lower level health posts, the logistics and service statistics system must be expanded to include this type of facility. A simplified version of the present reporting system, based on the quantities of contraceptives distributed, should be developed for these lower level facilities. These data will be used to operate the logistics system, as well as to estimate the number of contraceptive users served by each facility.

In order to stimulate project midwives to complete their monthly service statistics and logistics reports, the project logistics officer and the project advisor should visit new project family planning facilities on a monthly basis during their first 4 or 5 months of operation. During these visits, project personnel can review with midwives and nurses the procedures for filing client records and keeping track of their supplies. The project logistics officer should actually prepare the monthly reports. During the life of the new project, visits of this type of project personnel will be necessary to all new family planning facilities until the reporting and logistics system is well understood by field personnel.

The service statistics system should be able to provide information for feedback to the field on overall progress of the project. This can include regular distribution to the field of a national level report, which could also be part of a newsletter on general project activities.

C. Computerization of Recordkeeping Systems

As the project expands to new areas and includes a greater number of health facilities, it will be increasingly difficult for the project logistics officer to manage the logistics system and the collation of information on the monthly reports. It will almost certainly be necessary to increase the staff in the project office to include an assistant logistics officer and a statistical clerk. In addition, some of the responsibility for service statistics and the logistics system will have to be assumed by the regional midwife coordinators. Computerization can also ease the workload of the project office in carrying out these tasks.

The logistics system is based on reports from the field, which determine supply requirements according to maximum and minimum number of months supply to be kept on hand. The logistics officer calculates requirements and then makes shipments to the field using the form in Figure 1 as a guide.

This type of data is best handled manually until the third or fourth year of the project or until it is determined the increased quantity of data to be handled would be more efficiently handled through a microcomputer system. The nature of the data is such that it readily lends itself to computerization. Centrally-funded technical assistance is available through the Centers for

Figure 1

REPUBLIQUE DU SENEGAL

M.D.S. - M.S.P.

PROJET SANTE FAMILIALE

FORMULAIRE D'EXPEDITION AUX CENTRES

ARTICLE

CENTRE

Figure 3

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	UTILISE PENDANT						
MOIS	Le mois dernier	Les six derniers mois divisés par 6 pour avoir la consommation moyenne mensuelle.	Stock à la fin du mois. d'après le rapport mensuel.	Quantité maximale de stocks colonne 3 fois 6	Quantité minimale de stock Colonne 3 fois 3	A Expédier	OBSERVATIONS

Disease Control (CDC) to install a logistics monitoring system designed for a microcomputer, using already developed software and inexpensive hardware.

The service statistics system, as it already exists, also lends itself readily to computerization. The report form used could be used to easily enter data into a microcomputer, beginning in the third or fourth project year. Monthly, trimesterly, and annual reports could then be prepared for the regional and national levels.

A third area where a microcomputer would be of assistance is the analysis of data collected by a records survey of the characteristics of new family planning acceptors. The first page of the new "Fiche de Consultation" being introduced to project centers is coded for the sociodemographic characteristics, fertility history, and method choice of all new acceptors, as in Figure 2. As an evaluation tool, this information can easily be gathered on a sample basis from the files of project centers during the third or fouth project year. Provision of about $15,000 in the project budget would be necessary for hardware, software, stationery, postage, and training for computerization.

D. Training

Project midwives should be trained in the operation of the logistics and recordkeeping system as their facilities are brought into the program. As mentioned earlier, training of this type is best done on-site, on-the-job in the family planning facility, using the necessary equipment and reporting forms. It should be reinforced through monthly or bimonthly visits to these facilities by the project logistics officer, when possible, in conjunction with the project "field training team."

Recordkeeping, service statistics, and logistics should also form part of the "recyclage" (in-service) training offered to field staff by the field training team. This type of training is desirable two or three times per year for all personnel (in all aspects of service delivery), not only to reinforce their initial training but also to prevent disruption because of personnel shifts among midwives.

Nevertheless, the reporting system is simple enough that, rather than midwives, lower level staff will largely be responsible for it in most larger centers .

E. Further Technical Assistance

1. Further technical assistance in the area of logistics, service statistics, and recordkeeping can be provided by the project technical assistance team. For example, a system of feedback of data to the field should be developed.

   CDC can provide ongoing, centrally-funded, supplementary consultant services through AID/POP/CPSD. Such services might be necessary to standardize recordkeeping and service statistics, systems used by the nongovernmental service providers, to evaluate implementation of previous recommendations and to monitor the contraceptive supply status. This could be on an annual or even semi-annual basis. CDC's

Figure 2

REPUBLIQUE DU SENEGAL
MSAS / MEP
PROJET SANTE FAMILIALE

Région de _____
Dépt de _____
Centre de _____
Numéro _____

N° _____ | | | | | | | 1-6
Date _____ | | | | | | | 7-12
| | | | | | | 13-18

FICHE DE CONSULTATION

I - INTERROGATOIRE

Prénoms _____ Adresse _____

Nom _____ Age _____ ☐ 19 - 20 ☐

Ethnie ☐ 21
Wolof ☐
Serère ☐
Toucouleur ☐
Mandingue ☐
Diola ☐
Autres ☐

Religion ☐ 22
Musulman ☐
Chrétien ☐
Autres ☐

Sit. Matrim ☐ 23
Mariée ☐
Célibataire ☐
Veuve ☐
Divorcée ☐
Séparée ☐

Niveau Inst. ☐ 24
Non-scolarisée ☐
Primaire ☐
Secondaire ☐
Supérieure ☐

Genre de vie ☐ 25
Café ☐
Tabac ☐
Alcool ☐
Autres ☐

Prof. du mari ☐ 26
Néant ☐
Cultivateur ☐
Salarié ☐
Travail à Son compte ☐
Autres ☐

Source inf. PF ☐ 27
Amie / Parent ☐
Mari ☐
Agent santé ☐
Groupement ☐
Radio ☐
Télévision ☐
Affiche ☐
Autres ☐

Antéced Obstr.
Enfants vivants ☐☐ 28 29
Enfants décédés ☐☐ 30 31
Mort-nés ☐☐ 32 33
Fausses couches ☐☐ 34 35
Avortements ☐☐ 36 37
Infection tromp. ☐☐ 38 39
Age dern. enfant ☐☐ 40 41
Allaitement ☐ 42

Antécédents : (O = Oui N = Non, Noter anomalies en détail sous observations)

A) - Menstruels
Durée ☐
Régularité ☐
Dern. Règles ☐
B) - Chirurg. ☐

C) - Médicaux
Cardiovasc ☐
Varices ☐
Diabète ☐
Gastriques ☐
Tuberculose ☐
Ictères ☐
Epilepsie ☐
Hospitalisée ☐
MST ☐
Autres ☐

D) - Héréditaires
Hypertension ☐
Drépanocytose ☐
Test. d'Emmel ☐
Diabète ☐

II - EXAMEN MEDICAL (N = Normal, A = Anomalie)

T.A. ☐
Poids (Kg) ☐
Thyroïde ☐
Muqueuses ☐
Yeux ☐
Langue ☐

Abdomen ☐
Ganglions ☐
Oedèmes ☐
Squelette ☐
Seins ☐
(App. auto-exam) ☐

Auscultation
Cœur ☐
Poumons ☐

Laboratoire
Urine : Alb ☐
Suc ☐
Haematocrit ☐
BW ☐
GS [illegible] ☐

III - EXAMEN GYNECOLOGIQUE (N = Normal, A = Anomalie)

Organes externes
Ecoulements ☐
Ulcération ☐
Vésicule ☐
Kystes ☐
Malformation ☐
Autres ☐

Examen speculum
Vagin ☐
Lésions ☐
Pertes ☐
Col ☐
Taille ☐
Couleur ☐
Position ☐

Examen touché
Utérus ☐
Taille ☐
Consistance ☐
Forme ☐
Position ☐
Sensibilité ☐

Annexes ☐
Ovaires ☐
Trompes ☐
Prélèvements
Frottis Vag. ☐
Frottis Pap. ☐

IV - METHODE CONTRACEPTIVE CHOISIE ☐ 43

Pilule ☐
D. I. U. ☐
Spermicide ☐
Condom ☐
Diaphragme ☐
Autres ☐

past experience would be particularly useful if the logistics and recordkeeping systems are computerized.

2. The present project recordkeeping and service statistics system should provide continuous estimates of the number of active family planning clients; that is, the number of women who have a contraceptive method in their possesssion and are presumably using it. An alternative measure can also be estimated from logistics data using the quantities of each contraceptive method distributed to users, which gives a measure of Couple-Years-of-Protection (CYP).

   An important evaluation tool for family planning programs is the population-based household survey, which provides an accurate estimate of contraceptive prevalence, source of supply, reasons for nonuse, and the number of women "in need of family planning services" who are not being served. Modules can also be added on maternal-child health, nutrition, and other topics, as was done in the Sine-Saloum Family Health survey conducted in Senegal in 1982-1983. Such a survey should be done during the second year, and later in the fifth year of the project, in order to have data available for a subsequent project. Budgetary provision of about $125,000 is necessary for each survey, including provision of vehicles. CDC can provide centrally-funded technical assistance for contraceptive prevalence surveys if project money is available for fieldwork or to collaborate with Westinghouse Health Systems if centrally-funded survey support for fieldwork is requested.

F. Procurement

1. Contraceptives

   Forecasting future contraceptive use and subsequent procurement and distribution through the logistics system in a systematic manner is, of course, crucial to the success of the Family Health Project. While the availability of contraceptives will not, by itself, create demand, experience has shown that frequent stockouts have an adverse effect on contraceptive use. Similarly, overstocking would result in a wastage of project financial resources.

   Project staff will be required to submit contraceptive procurement tables for each contraceptive product in March of each year as part of the Annual Budget Submission (ABS). The tables for the first year project ABS have been filled out (see Appendix), and projections of contraceptive use have been made for the life of the project through 1991. These projections have been based on the objective of having 200,000 active users of project-supplied contraceptive methods by the end of the project, of whom 170,000 are to be supplied through MOH facilities and 30,000 through nongovernmental organization facilities.

   At the present time (March 1985), it is estimated that there are only 10,000 (or even fewer) contraceptive users supplied by the project through MOH facilities. Figures that could be gathered show in Table 1 the numbers of active users in four facilities in the Dakar area.

These figures were obtained through the project recordkeeping system by counting the number of files of clients who have been supplied a method and who have appointments for resupply or an IUD checkup. Dividing the total of 1984 users by the 4 centers results in an average of 500 users per center. Although perhaps somewhat optimistic, these figures were extrapolated to the remaining 15 project centers (for which these data were not available), which gives a total number of project users in March 1985 of roughly 10,000. Based on these figures and projections for the increase in use in the nongovernmental sector during the life of the project, the year-by-year increase in the number of project users is projected in Table 2.

TABLE 1

Contraceptive Users in Four MOH Facilities in the Dakar Area

	Pill	IUD	Condoms	Total
PMI - Medina	507	793	-	1,300
Hopital Abass N'Dao*	52	155	-	207
PMI - Pekine	173	158	1	332
PMI - Rufisque	60	15	70	145
Total	792	1,121	71	1,984

*164 female sterilizations performed in 1984-1985, giving a total of 371 users at Abass N'Dao and 2,148 for the four facilities.

TABLE 2

Total Projected Contraceptive Users, Family Health Project
Public and Nongovernmental Sectors

Project Year	Projected Public Sector Users	Projected Nongovernmental Sectors Users	Total Users
1	10,000	---	10,000
2	18,000	1,000	19,000
3	30,000	4,000	34,000
4	60,000	10,000	70,000
5	95,000	17,000	112,000
6	130,000	25,000	155,000
7	170,000	30,000	200,000

Although IUD use is presently high relative to oral contraceptives, it is felt that this often is the case in a new program and that eventually the method mix will be about 40 percent IUD's, 40 percent orals (divided between low and standard dose), 10 percent condoms, and 10 percent foaming tablets. Condoms and spermicides are presently being used in a number of centers, particularly as secondary methods. Their use as primary methods should increase, along with a relative increase in pill use, as health posts and nonclinical distribution activities are included in the project.

Based on this projection of method mix and projections of total users, a yearly estimate of usage of each contraceptive product is calculated in Table 3.

Actual quantities procured must be based on stock already on hand in Senegal, as well as safety stock equivalent to 100 percent of anticipated use in each subsequent year. These calculations must be done according to an AID contraceptive procurement table for each contraceptive product used in the project. The tables in the Appendix are completed contraceptive procurement tables for the five products to be used in the project: standard-dose pills, low-dose pills, Copper-T (IUD's), condoms, and foaming tablets.

These tables must be completed by the project logistics officer once per year for submission to the technical assistance contract group liaison officer for presentation to the USAID population officer for onward transmission to AID/Washington. Although the tables are a multiyear projection of usage, yearly updates are necessary to account

Table 3

Yearly Estimated Product Use According to Assumed Method Mix and Total Users

Project Year	20% of Users Standard Dose Pill (Users x 13*)	20% of Users Low Dose Pill (Users x 13)	40% of Users IUD (Users x 0.8*)	10% of Users Condom (Users x 180*)	10% of Users Foaming Tablet (Users x 180*)	Total Users
1 (1985/6)	2,000 x 13 = 26,000	2,000 x 13 = 26,000	4,000 x 0.8 = 3,200	1,000 x 180 = 180,000	1,000 x 180 = 180,000	10,000
2 (1986/7)	3,800 x 13 = 49,400	3,800 x 13 = 49,400	7,600 x 0.8 = 6,080	1,900 x 180 = 342,000	1,900 x 180 = 342,000	19,000
3 (1987/8)	6,800 x 13 = 88,400	6,800 x 13 = 88,400	13,600 x 0.8 = 10,880	3,400 x 180 = 612,000	3,400 x 180 = 612,000	34,000
4 (1988/9)	14,000 x 13 = 182,000	14,000 x 13 = 182,000	28,000 x 0.8 = 20,000	7,000 x 180 = 1,260,000	7,000 x 180 = 1,260,000	70,000
5 (1989/90	22,400 x 13 = 291,200	22,400 x 13 = 291,200	44,800 x 0.8 = 35,840	11,200 x 180 = 2,016,000	11,200 x 180 = 2,016,000	112,000
6 (1990/1)	31,000 x 13 = 403,000	31,000 x 13 = 403,000	62,000 x 0.8 = 49,600	15,500 x 180 = 2,790,000	15,520 x 180 = 2,790,000	155,000
7 (1991/2)	40,000 x 13 = 520,000	40,000 x 13 = 520,000	80,000 x 0.8 = 64,000	20,000 x 180 = 3,600,000	20,000 x 180 = 3,600,000	200,000

* In one year it is assumed an active user will use 13 cycles of pills, 180 condoms and 180 foaming tablets. Normally, it is assumed that 0.4 IUD is used per year, as studies have shown the average IUD stays in place 2.5 years. However, since this is a new program with a large percentage of IUD users (60+%) at present this figure will be arbitarily doubled to 0.8 per year. It can be reduced in later years based on actual usage data.

for unanticipated changes in demand, special program efforts, and probable changes in the method mix.

It is recommended that a couvenant be inserted in the project agreement requiring the annual completion of the contraceptive procurement tables by the project logistics office with the assistance of the technical assistance contract group liaison officer. Further technical assistance can be made available to the project for this purpose from CDC when consultants are in Senegal for overall technical assistance.

Funding requirements for contraceptives are based on 1985 prices (information supplied by AID/POP/CPSD), with varying assumptions of increases in prices each year of the project due to inflation. Freight is 6 percent of pill prices, 8 percent of Copper-T prices, 12 percent of condom prices, and 6 percent of foaming tablet prices. Actual funds required are calculated in Table 4.

Funding for pills produced and shipped in a given calendar year is provided for in the second half of 2 fiscal years previous and the first half of the immediately previous fiscal year, as follows:

Fiscal Year Second Half	and First Half	Production/ Shipping Year
85	86	87
86	87	88
87	88	89
88	89	90
89	90	91
90	91	92
91	92	93
92	93	94

Funding for condoms produced in a given calendar year is provided for in the second half of the previous fiscal year and the first half of the same calendar year. Funding for IUD's and foaming tablets in any given calendar year is in the previous fiscal year. Funding has been provided for anticipated usage beyond the life of the project so there will be no break in supplies to a succeeding project.

Table 4

Fiscal Year Funding Requirements for Contraceptives

Fiscal Year	METHOD					
	Standard Dose Pill	Low Dose Pill	Copper T IUD	Condoms	Foaming Tablets	Fiscal Year Total
86-Quantity	129,000	110,000	17,000	123,000	922,000	
Unit Price	.13	.13	.80	.0455	.07	
Cost	16,770	14,300	13,600	5,597	36,540	
Freight	6%	6%	8%	12%	6%	
Total	17,776	15,158	14,416	6,268	38,732	92,750
87-Quantity	330,500	311,500	36,000	1,260,000	612,000	
Unit Price	.14	.14	.83	.047	.07	
Cost	46,270	43,610	29,880	59,220	42,840	
Freight	6%	6%	8%	12%	6%	
Total	49,046	46,227	31,673	66,326	45,410	238,682
88-Quantity	461,500	461,500	50,000	2,016,000	1,260,000	
Unit Price	.145	.145	.86	.0485	.07	
Cost	66,917	66,917	43,000	97,776	88,200	
Freight	6%	6%	8%	12%	6%	
Total	70,933	70,933	46,440	109,509	93,492	391,307
89-Quantity	585,000	585,000	64,000	2,790,000	2,016,000	
Unit Price	.15	.15	.90	.05	.07	
Cost	87,750	87,750	57,600	139,500	141,120	
Freight	6%	6%	8%	12%	6%	
Total	93,015	93,015	62,208	156,240	149,587	554,065
90-Quantity	325,000	325,000	80,000	3,600,000	2,790,000	
Unit Price	.155	.155	.95	.051	.07	
Cost	50,375	50,375	76,000	185,400	195,300	
Freight	6%	6%	8%	12%	6%	
Total	53,397	53,397	82,080	207,648	207,018	603,540
91-Quantity	0	0	0	0	3,600,000	
Unit Price	.16	.16	1.00	.53	.07	
Cost	-	-	-	-	252,000	
Freight	6%	6%	8%	12%	6%	
Total	-	-	-	-	257,120	267,120
92-Quantity	0	0	0	0	0	
Unit Price	.165	.165	1.05	.0545	.07	
Cost	-	-	-	-	-	
Freight	6%	6%	8%	12%	6%	
Total	-	-	-	-	-	0
GRAND TOTAL	$ 284,167	$ 278,730	$ 236,817	$ 545,991	$ 801,539	$ 2,147,154
Life of Project						

As noted earlier, procurement projections were based on the project objective of 200,000 active users at the end of a 7-year period, including 30,000 nongovernmental sector users. However, analysis of present contraceptive usage patterns in MOH clinics, which is the basis of the project service delivery structure, shows that these objectives may be overly optimistic if the present delivery system remains unchanged.

The PMI de Medina, which has been providing family planning service delivery since 1978, has 1,300 active users as of March 1985. No other project clinic has more than a few hundred users.

In order to attain the goal of 170,000 users in the Government sector, relying on service delivery by midwives in health centers only, all 10 centers entering the project during the first project year, as well as the 20 existing centers, would have to have an average of 3,000 users each by the end of the project in 1992. Centers brought into the program during the remaining 6 years of the project need an average number well in excess of the present projections, as in Table 5.

To attain the goal of 170,000 users, the average number of users needed for the centers brought into the project during the last 3 project years, 200-700, are considered reasonable and attainable. However, the goal of 3,000 average users for all brought into the project during the first year of operation is not felt possible by the members of the project paper design team for more than a few of these centers. This opinion is based on the performance of the PMI de Medina, which has been freely providing services since 1978 to a large catchment area using a large staff and adequate physical facilities. Many of the other centers have more restricted catchment areas, have limited physical facilities, and only one staff member. With these constraints, it is unlikely that they can serve enough users to raise the average to 3,000 users.

Therefore, although the procurement plan was drawn up for a goal of 170,000 public sector users, a more reasonable objective under the present system may be 120,000 users by 1991, as shown in Table 5, which itself shows an optimistic growth pattern for the project. In order for the project to attain 170,000 public sector users, it will be necessary to move beyond the presently conceived structure of MOH facilities providing services through midwives only. Operations research could provide new approaches through clinic and staff expansion, outreach activities, or nonclinic-based services, as found in North African Islamic countries such as Morocco and Tunisia.

2. Supplies, Equipment, Drugs

Supplies and equipment needs for future project centers have been based on those articles already supplied to the 20 centers of the project with a certain number of modifications, additions, and deletions. The quantities of each item, as well as the items themselves, were determined through a series of meetings with project staff, including the midwife coordinator of the Cap Vert Region.

Table 5

Projected Yearly Expansion of Contraceptive Use in Governmental Sector, Family Health Project, by Average Number of Users Per Center

Year	Centers Grouped by Year of Entry into Project							
	Year 1 Outlets = 30, including 20 Existing	Year 2 Outlets = 10 Added including 5HPs	Year 3 Outlets = 10 HPs Added	Year 4 Outlets = 10 HPs Added	Year 5 Outlets = 22 Added including 15 Health Posts	Year 6 Outlets = 22 Added including 15 Health Posts	Year 7 Outlets = 22 Added including 15 Health Posts	Total Users Public Sector
	Average Users Per Center							
Year 1	333	–	–	–	–	–	–	10,000
Year 2	500	250	–	–	–	–	–	17,500
Year 3	900	500	50	–	–	–	–	32,500
Year 4	1200	600	100	50	–	–	–	43,500
Year 5	1500	800	150	100	200	–	–	59,900
Year 6	1800	1100	200	200	400	250	–	83,300
Year 7	2200	1500	300	300	700	500	300	120,000
(objective)	(3000)	(2000)	(500)	(550)	(1000)	(750)	(500)	(170,000)

A list of items necessary has been established for "small," medium," and "large" family planning centers. These can be defined as those having fewer than 200, 200 to 500, and more than 500 active users, respectively . In Table 6, a forecast has been made of the number of each type of center entering the project each year, based on the data on centers and health posts in Table 5. The yearly requirement of each supply item was then determined for each type of center. Cost figures were obtained from PIOC's, purchase orders of the present project, and from catalogs in the SMO office. To these were added an amount for inflation. The results were entered on detailed tables supplied to USAID/Dakar, which are also on file at CDC/CHPE/DRH/PEB. The total value of these supplies for the 7-year project period is $474,873.

Additional lists and funding requirements for drugs and laboratory supplies will be the responsibility of consultants who are specialists in these areas.

Table 6

Yearly Increase of New Project Centers

Centers	YEARS							Total
	1	2	3	4	5	6	7	
Large	10	-	-	-	2	2	2	16
Medium	-	-	-	-	5	5	5	15
Small	-	10	10	10	15	15	15	15
Total	10	10	10	10	22	22	22	106

Jay S. Friedman

APPENDIX

CONTRACEPTIVE PROCUREMENT TABLES: FY 1987

1. Standard Dose Orals
2. Low-Dose Orals
3. Copper-T IUDs
4. Condoms
5. Foaming Tablets

APPENDIX

CONTRACEPTIVE PROCUREMENT TABLE
(in 000's)

FY 1987 ABS
Country: SENEGAL Senegal
Project No.
Program: FAMILY HEALTH PROJECT
Product: Standard Dose Orals
Source of Data for Beginning-of-Year Stock:

DATE March 1985

	CALENDAR YEARS							
	1985	1986	1987	1988	1989	1990*	1991	1992
1. Beginning-of-Year Stock (PLEASE READ INSTRUCTIONS TO FILL IN THIS LINE ITEM)	202	350	301	213	291			
PLUS								
2. New Supply of Same Product								
(a) AID supplies received in 1985 to date	0							
(b) additional AID quantities scheduled for shipment but not yet received	174*	-	-					
(c) other sources of supply of same product (host country/other donors)	-	-	-	-	-			
MINUS								
3. Estimated Product Use	26	49	88	180	291	403	520	650
MINUS								
4. Desired End-of-Year Stock Level (equal to ____% of estimated use in subsequent year)	49	88	180	291	403			
EQUALS								
5. NET SUPPLY SITUATION/AID REQUIREMENT (negative number signifies additional supplies of product required from AID; positive number signifies no AID requirement and need to calculate line item #6. (1+2-3-4-5)	301	+213	+ 33	-258	-403			
6. Estimated End-of-Year Stock Level SEE INSTRUCTIONS FOR THIS LINE ITEM. (4+5=6)	350	301	213	* PIO/C	40017			

APPENDIX -

CONTRACEPTIVE PROCUREMENT TABLE
(in 000's)

ANNEX A

FY 1987 ABS
Country SENEGAL
Project No.
Program FAMILY HEALTH PROJECT
Product: Low Dose Orals
Source of Data for Beginning-of-Year Stock:

DATE MARCH 1985

	CALENDAR YEARS							
	1985	1986	1987	1988	1989	1990*	1991	1992
1. Beginning-of-Year Stock (PLEASE READ INSTRUCTIONS TO FILL IN THIS LINE ITEM)	226	388	339	251	291			
MINUS								
2. New Supply of Same Product								
(a) AID supplies received in 1985 to date	0							
(b) additional AID quantities scheduled for shipment but not yet received	188*	–	–					
(c) other sources of supply of same product (host country/other donors)	–	–	–	–	–			
MINUS								
3. Estimated Product Use	26	49	88	180	291	403	520	650
MINUS								
4. Desired End-of-Year Stock Level (equal to ____% of estimated use in subsequent year)	49	88	180	291	403			
EQUALS								
5. NET SUPPLY SITUATION/AID REQUIREMENT (negative number signifies additional supplies of product required from AID; positive number signifies no AID requirement and need to calculate line item #6. (1+2-3-4-5)	+ 339	+ 251	+ 71	- 220	- 403			
6. Estimated End-of-Year Stock Level SEE INSTRUCTIONS FOR THIS LINE ITEM. (4+5-6)	388	339	251					

*PIO/c 40017

ANNEX A

APPENDIX -

CONTRACEPTIVE PROCUREMENT TABLE
(in 000's)

FY 1987 ABS
Country: SENEGAL
Project No.
Program: FAMILY HEALTH PROJECT
Product: COPPER-T IUDs
Source of Data for Beginning-of-Year Stock:

DATE: MARCH 1985

	CALENDAR YEARS							
	1985	1986	1987	1988	1989	1990*	1991	1992
1. Beginning-of-Year Stock (PLEASE READ INSTRUCTIONS TO FILL IN THIS LINE ITEM)	23	20	14	20	36			
PLUS								
2. New Supply of Same Product								
(a) AID supplies received in 1985 to date								
(b) additional AID quantities scheduled for shipment but not yet received								
(c) other sources of supply of same product (host country/other donors)								
MINUS								
3. Estimated Product Use	3	6	11	20	36	50	64	80
MINUS								
4. Desired End-of-Year Stock Level (equal to ____% of estimated use in subsequent year)	6	12	20	36	50			
EQUALS								
5. NET SUPPLY SITUATION/AID REQUIREMENT (negative number signifies additional supplies of product required from AID; positive number signifies no AID requirement and need to calculate line item #6. (1+2-3-4=5)	+ 14	+ 2	- 17	- 36	- 50			
6. Estimated End-of-Year Stock Level SEE INSTRUCTIONS FOR THIS LINE ITEM. (4+5=6)	20	14						

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APPENDIX

CONTRACEPTIVE PROCUREMENT TABLE
(in 000's)

ANNEX A

FY 1987 ABS
Country: SENEGAL
Project No.
Program: FAMILY HEALTH PROJECT
Product: CONDOMS
Source of Data for Beginning-of-Year Stock:

DATE MARCH 1985

	CALENDAR YEARS						
	1985	1986	1987	1988	1989	1990*	1991
1. Beginning-of-Year Stock (PLEASE READ INSTRUCTIONS TO FILL IN THIS LINE ITEM)	351	831	612	1,260	2,016		
PLUS							
2. New Supply of Same Product							
(a) AID supplies received in 1985 to date							
(b) additional AID quantities scheduled for shipment but not yet received	660 *						
(c) other sources of supply of same product (host country/other donors)							
MINUS							
3. Estimated Product Use	180	342	612	1,260	2,016	2,790	3600
MINUS							
4. Desired End-of-Year Stock Level (equal to ____% of estimated use in subsequent year)	342	612	1,260	2,016	2,790		
EQUALS							
5. NET SUPPLY SITUATION/AID REQUIREMENT (negative number signifies additional supplies of product required from AID; positive number signifies no AID requirement and need to calculate line item #6. (1+2-3-4=5)	+ 489	FY 86 - 123	FY 86 1/2 - 1260	FY 87 - 2,016	FY 88 - 2,790		
6. Estimated End-of-Year Stock Level SEE INSTRUCTIONS FOR THIS LINE ITEM. (4+5=6)	831						

* PIO/C's 40017

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APPENDIX

CONTRACEPTIVE PROCUREMENT TABLE
(in 000's of UNITS)

FY 1987 ABS
Country SENEGAL
Project No.
Program FAMILY HEALTH PROJECT
Product: FOAMING TABLETS (UNITS)
Source of Data for Beginning-of-Year Stock:

DATE MARCH 1985

	CALENDAR YEARS						
	1985	1986	1987	1988	1989	1990*	1991
1. Beginning-of-Year Stock (PLEASE READ INSTRUCTIONS TO FILL IN THIS LINE ITEM)	0	342	612	1,260	2,016		
PLUS							
2. New Supply of Same Product							
(a) AID supplies received in 1985 to date							
(b) additional AID quantities scheduled for shipment but not yet received							
(c) other sources of supply of same product (host country/other donors)							
MINUS							
3. Estimated Product Use	180	342	612	1,260	2,016	2,790	3600
MINUS							
4. Desired End-of-Year Stock Level (equal to ____% of estimated use in subsequent year)	342	612	1,260	2,016	2,790		
EQUALS							
5. NET SUPPLY SITUATION/AID REQUIREMENT (negative number signifies additional supplies of product required from AID; positive number signifies no AID requirement and need to calculate line item #6. (1+2-3-4=5)	- 522	- 612	- 1,260	- 2,016	- 2,790		
6. Estimated End-of-Year Stock Level SEE INSTRUCTIONS FOR THIS LINE ITEM. (4+5-6)							