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# **SENEGAL**

## **Population Sector Analysis and Proposed Strategies**

### **Final Report**

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**SENEGAL:  
POPULATION SECTOR ANALYSIS AND PROPOSED STRATEGIES**

EXECUTIVE SUMMARY .....	5
1. INTRODUCTION .....	7
1.1 Background .....	7
1.2. Purpose of Analysis .....	8
1.3. Methodology .....	8
1.4. Priorities Established .....	8
2. SITUATION ANALYSIS .....	9
2.1. The Population Sector in Senegal .....	9
2.2. Demographics and Current Trends .....	10
3. PRIORITY ONE: GENERATE DEMAND .....	21
4. PRIORITY TWO: STRENGTHEN INFRASTRUCTURE .....	26
5. PRIORITY THREE: PROMOTE PRIVATE SECTOR INVOLVEMENT ...	33
6. PRIORITY FOUR: CREATE SPECIALIZED PROGRAM SUPPORT ACTIVITIES .....	45
7. PRIORITY FIVE: INTEGRATE FAMILY PLANNING WITH HEALTH INTERVENTIONS .....	49
8. PRIORITY SIX: COORDINATE WITH OTHER DONORS .....	55
9. SUMMARY OF STRATEGY RECOMMENDATIONS .....	57
Annex A Profile of Senegal as an Emergent Country .....	58
Annex B Breastfeeding Guidelines for Optimal Child Survival and Child Spacing	64
Annex C The Balance Sheet: Constraints and Factors which Favor FP in Senegal	65
Annex D Cooperating Agencies' Contribution to Family Planning in Senegal ..	66
Sources .....	68

## ACRONYMS

ACNM	American College of Nurse Midwives
AID	Agency for International Development
AIDS	Acquired Immune Deficiency Syndrome
APSPCS	Association des Postes de Santé Privés Catholiques au Sénégal
ASBEF	Association Sénégalaise pour le Bien Etre-Familial (Senegalese IPPF affiliate)
AVSC	Association for Voluntary Surgical Contraception
BUCEN	United States Census Bureau
CA	Cooperating Agency
CBD	community-based distribution
CDC	Centers for Disease Control (Atlanta, USA)
CEDPA	Center for Development and Population Activities
CERPOD	The Centre for Applied Research on Population and Development
CFA	Communauté Financière Africaine (Senegalese Franc)
CMW	currently married women
CNTS	Confédération Nationale des Travailleurs Sénégalaise
CONAPOP	Commission Nationale de la Population
CPR	contraceptive prevalence rate
CPSP	Country Program Strategic Plan (formerly CDSS)
CPT	contraceptive procurement table
CU-T380A	Copper T 380A intra-uterine device
CYP	couple years of protection
DHS	Demographic and Health Survey
EDS	Enquête Démographique et de Santé (DHS '86)
EC	European Community
EPI	Expanded Programme for Immunization
FHI	Family Health International
FP	family planning
FPIA	Family Planning International Assistance
FPLM	Family Planning Logistics Management Project (JSI)
FPMT	Family Planning Management Training Project (MSH)
FPSD	family planning service delivery
FY	fiscal year
GNP	gross national product
GOS	Government of Senegal
IEC	information, education and communication
IMR	infant mortality rate
ENTRAH	Program for International Training in Health (UNC)
IPPF	International Planned Parenthood Federation
ISTI	International Science and Technology Institute
IUD	intra-uterine device
JHPIEGO	Johns Hopkins Program for International Education in Gynecology and Obstetrics
JHU/PCS	Johns Hopkins University/Population Communication Services
JSI	John Snow, Inc.
KAP	knowledge, attitudes and practice

MCH	maternal and child health
MIS	management information system
MOH	Ministry of Health
MOHSA	Ministry of Health and Social Action
MSH	Management Sciences for Health
MSP/AS	Ministère de la Santé et de l'Action Sociale
MST	maladies sexuellement transmissibles
MWRA	married women of reproductive age
NCNW	National Council of Negro Women
NGO	non-governmental organization
OR	operations research
ORS	oral rehydration salts (or solution)
ORT	oral rehydration therapy
PDRH	Projet de Développement des Ressources Humaines
PHC	primary health care
PRB	Population Reference Bureau
PSF	Projet Santé Familiale et Population (Family Health and Population Project)
PVO	private voluntary organization
RAPID	Resources for the Awareness of Population Impacts on Development
SIDA	syndrome d'immuno-déficience acquise (French acronym for AIDS)
STD	sexually transmitted disease
TA	technical assistance
TFR	total fertility rate
TOT	training of trainers
UN	United Nations
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
UTH	university teaching hospital
VAT	value added tax
VSC	voluntary surgical contraception
VSPP	Volet Secteurs Privé et Parapublic (private sector component of PSF)
WHO	World Health Organization

## FIGURES

- Figure 1 Population of Senegal by Age and Sex
- Figure 2 Senegal: Key Indicators
- Figure 3 Profile of a Modern Contraception User in Senegal
- Figure 4 Age au Premier Mariage
- Figure 5 Contraceptive Knowledge and Practice Senegal - Married Females
- Figure 6 Desire for Additional Children
- Figure 7 Evolution of Senegal's Family Planning Program: A Timeline

## EXECUTIVE SUMMARY

This analysis of Senegal's population sector was undertaken at the request of the United States Agency for International Development (USAID) in Dakar and is part of a larger assessment of the entire health sector conducted by a POPTECH team in late summer 1990. The Mission has undertaken a review of its portfolio in an effort to determine the scope and direction of its involvement over the next five years. The Mission now emphasizes consolidating its programs by focusing efforts on policy and program needs, reducing the number of projects, sharpening conditionality, integrating new projects into an overall strategy and insisting on an active role for the Government of Senegal (GOS).

This report examines the current health and family planning situation, describing the cultural and political climate, the USAID contribution, GOS policy, and other donor activity.

According to United Nations (UN) data, the population of Senegal is approximately 7.5 million and will peak at approximately 19.8 million in 2025. In addition to tremendous population growth, the population is also becoming increasingly concentrated in urban areas, enormously effecting this resource-poor country.

USAID/Dakar has the most extensive experience and has made the largest investment in the population sector of any of the major donors. In light of this, the following suggestions are made as areas of concentration for the Mission over the next five years; they are delineated as Priorities One through Six:

- Generate demand for modern contraceptives by introducing the concept of family size limitation through policy dialogue, information, education and communication (IEC) and through social marketing.
- Strengthen USAID's infrastructure investments by developing a logistics management system, a management information system (MIS) and a contraceptive procurement plan;
- Promote private sector involvement in family planning (FP) both in direct service delivery and, especially, in the commercial sale of contraceptives;
- Create specialized program support activities to foster the introduction of long-term and permanent methods and to study and develop plans for program expansion;
- Integrate family planning and health interventions, such as HIV/acquired immune deficiency syndrome (AIDS) and other sexually transmitted disease (STD) prevention, child survival, and maternal health;
- Support other donors' efforts in the population sector, such as the United Nations Fund for Population Activities' (UNFPA) training plan and the World Bank's activities emphasizing policy dialogue.

For each priority, the report presents strategic recommendations to enhance efforts to increase the number of couples with access to, and using, modern contraceptive methods.

## 1. INTRODUCTION

### 1.1 Background

The goal of United States assistance to Senegal (FY 1990) is to increase per capita growth and food security through an orderly process of financial stabilization, structural reform and carefully selected project activities in the key areas of agriculture, natural resources, health and family planning. (Source: FY 1990 Annual Budget Submission, Senegal) To accomplish this goal, the U.S. assistance strategy gives priority to assisting the GOS in expanding delivery of health, nutrition and family planning services which increase human productivity and enhance the quality of life.

Historically, USAID/Dakar has strongly supported the health and population sector in Senegal. Of total current obligations--approximately \$157 million including bilateral and centrally-funded activities--about one-quarter have been utilized for health and population. Perhaps two-thirds of these funds have been used for FP and population-related activities. Currently, there are two major bilateral activities in the sector, the Rural Health II Project (\$12 million, ending in 1991) and the Family Health and Population Project (Projet Santé Familiale et Population, PSF) (\$20.6 million, ending in 1992). PSF has the following benchmark objectives:

- 1) Expand awareness of modern contraceptive methods to include 95% of women of childbearing age in urban areas.
- 2) Expand IEC efforts to include key targets groups such as policy makers and members of the medical community.
- 3) Expand family planning services to 150 centers by early 1990. Increase the number of women using contraceptives to 100,000 in the same period.

PSF is scheduled for an evaluation FY'91 which will answer questions concerning project design, flexibility, program management and the level and appropriateness of technical assistance (TA).

In addition to bilateral projects, twenty-three centrally-funded health and population contractors have provided approximately \$6.3 million in technical and financial assistance to Senegal. Annex D summarizes how sixteen cooperating agencies (Cas) have contributed to family planning in Senegal.

USAID/Dakar has also pursued a policy agenda which focuses on the development of replicable models of self-supporting, community-based primary health care (PHC), including comprehensive child survival and voluntary family planning programs, collaborating with other major donors and key leaders in the Senegalese health sector.

Currently, USAID/Dakar is undertaking a comprehensive review of its entire portfolio to determine the scope and direction of the Mission's assistance over the next five years. Early in 1991 the Mission will produce a Country Program Strategic Plan (CPSP).

Overall, USAID/Dakar is charting a course which calls for program consolidation. To this end the Mission intends to:

- (i) focus resources on critical policy and program needs,
- (ii) reduce the number of active projects (possibly increasing size),
- (iii) sharpen conditionality,
- (iv) link new projects to overall sector strategies, and
- (v) require active GOS participation.

### 1.2. Purpose of Analysis

This population analysis is part of a broader health sector assessment conducted by an eight-member team during late summer 1990, intended to assist the Mission in making strategic choices concerning its investments in the sector. This approach is especially important because of the Mission's predisposition to emphasize child survival and family planning within the overall portfolio. It is also responsive to a growing concern among Senegalese leaders and the donor community that demographic factors, principally rapid population growth and urbanization, have an important, negative impact on Senegal's socio-economic development and structural adjustment programs.

### 1.3. Methodology

For this report, the team drew initially upon the wealth of existing information available on the population sector, demographic and programmatic trends, and USAID's and other donors' inputs. Subsequently, attempts were made through extensive discussions and interviews with Mission staff, contractors, GOS personnel and Senegalese private sector groups, to clarify and evaluate successes and problems and to identify opportunities to maximize USAID's contributions to a strong national family planning program.

### 1.4. Priorities Established

The assessment team identified six priority activities for USAID to focus on over the next five years:

- 1) Generate demand for methods of child spacing and family size limitation through policy dialogue, IEC, social marketing and the assurance of quality service at existing sites.
- 2) Strengthen infrastructure to bolster Mission investments in population, developing a contraceptive procurement system and improving the logistics management system and management information system (MIS).
- 3) Promote increased private sector involvement in family planning, both in direct service delivery and, especially, in the commercial sale of contraceptives.

- 4) Create specialized program support activities such as voluntary surgical contraception (VSC), Norplant and operations research (OR) to foster the introduction of longterm and permanent methods and to study and develop plans for program expansion.
- 5) Integrate family planning and health interventions such as AIDS and other STD prevention, child survival, and maternal health.
- 6) Support and coordinate with other donors' effort in the population sector.

Each of these priorities is addressed, along with recommendations for implementation, following the situation analysis.

## 2. SITUATION ANALYSIS

### 2.1. The Population Sector in Senegal

According to the AID Office of Population's Family Planning Services Division (S&T/POP/FPSD), Senegal's population sector is defined as "emergent", as determined by Senegal's low contraceptive prevalence rate (11.3% of married women of reproductive age use some method of contraception, either modern or traditional; 2.4% use modern methods), high incidence of contraceptive usage among urban women (6.7% of urban women use contraceptives compared to .3% of rural women), and limited family planning services available through government and private providers.<sup>1</sup> The population sector encompasses specific programs and actions, such as family planning services and population education, which have a direct influence on demographic behavior. Also, the sector includes socio-cultural norms and conditions, laws which affect demographic change such as age at marriage, female literacy, religion and post-partum practices (e.g., lactation and abstinence).

Until their merger on April 1, 1990, GOS public sector population activities were divided between the Ministry of Health (MOH) and the Ministry of Social Affairs. As a result of the May merger, the Ministère de la Santé Publique et de l'Action Sociale (MOHSA) was created. The interministerial Commission Nationale de la Population (CONAPOP), is tasked with taking the lead in population policy matters.

Until recently, the remainder of the population sector was comprised of the major donors, several governmental agencies, a small International Planned Parenthood Federation (IPPF) affiliate--the Association Sénégalaise du Bien-Etre Familiale (ASBEF)--

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<sup>1</sup> S&T/POP/FPSD postulates that developing countries--and their FP program needs--can be categorized into groups from "emergent" to "mature", and that such a framework of analysis is useful in determining AID inputs. Annex A gives a more detailed profile of Senegal as an "emergent" country, summarizing demographic and population factors, current program elements, and priority needs.

along with some scattered non-governmental organizations (NGOs) and university-based research.

UNFPA considers Senegal a priority country and has invested \$9.8 million in population and family planning since 1972. Now in the third year of its four year \$4 million Phase II program, it is hoped that Phase III will be developed in January 1991 jointly with the USAID program.

The World Bank is beginning to emerge as a major donor, in collaboration with the European Economic Community (EC). Proposed for the health and population sector, the \$45 million *Projet de Développement des Ressources Humaines (PDRH)* will fund one quarter of Senegal's contraceptive needs. The Bank is providing \$20 million for the project and is seeking additional donor resources for the remainder of the project.

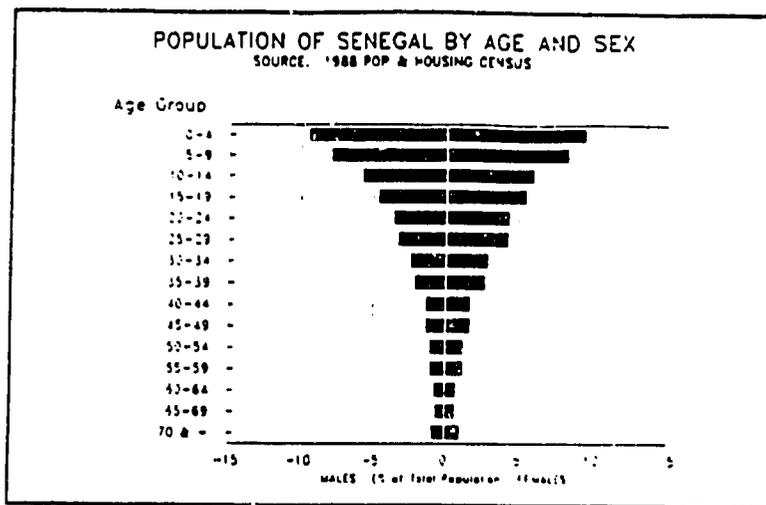
Over the past five years, NGOs have played a growing role in the population sector, as have private sector providers (i.e., clinics and practitioners). The commercial sector has been notably sluggish; commercial contraceptive sales play a lamentably minor role and the number of health providers in private practice is very small.

Although population is seen as a priority for the MOHSA, views held by GOS officials are by no means uniform on the direction of the national FP program. However, there is consensus that as a vertical program, FP is not sustainable in the long term and at some point must be fully integrated into the national health system. Also, the GOS will not be able to sustain a FP program on its own in the near or medium term. Regarding program priorities, the general view is that public education efforts need continued input and MOHSA officials express some reservations about vigorous promotion of private sector involvement.

## 2.2. Demographics and Current Trends

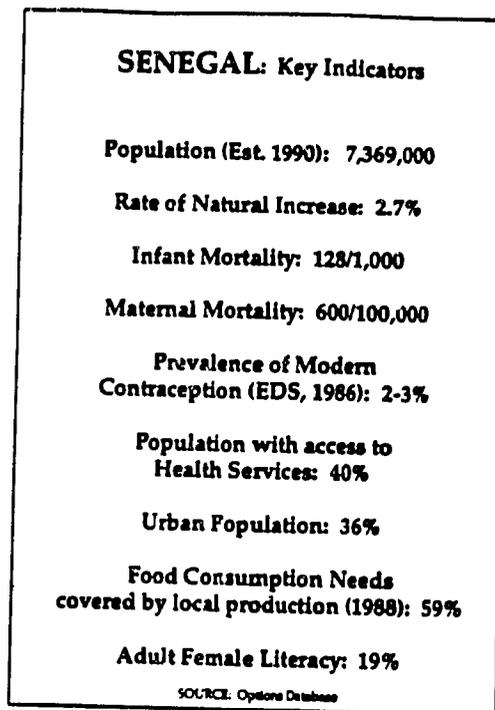
The population of Senegal (1990) is between 7.4 million (PRB,UN) and 7.6 million (World Bank). The current rate of natural increase is 2.7%. Other relevant figures include a crude birth rate of 46 per thousand, a crude death rate of 19 per thousand, infant mortality at 128 per thousand and maternal mortality of 600 per hundred thousand. The total fertility rate is 6.4. Senegal has a high dependency ratio, as illustrated in Figure 1; 44% of the population is under the age of 15.

**FIGURE 1**  
**Population of Senegal by Age and Sex**



Approximately 64% of the population is rural, but urban migration continues at a rapid rate. The urban growth rate, reported at 4.2%, is much higher than the rural growth rate.

**FIGURE 2**



According to the Center for Applied Research on Population and Development (CERPOD), Senegal is on par with neighboring countries in terms of overall fertility and demographic indicators. With a lower infant mortality than most Sahelian countries, and a significantly higher gross national product (GNP)—except for Cape Verde—Senegal could experience more rapid fertility reduction than its neighbors. When looking at other indicators, such as ratio of doctors to population, Senegal surprisingly compares

unfavorably to its neighbors. This argues for an emphasis on a community or para-professional based family planning service delivery structure.

Simultaneously, the population of Senegal is rapidly increasing and shifting in geographic orientation, a situation which makes examination of demographic trends essential. Population Reference Bureau (PRB) data show an approximate 1% drop in both the crude birth rate from 46.7 to 45.4 during the period 1969/70 to 1986/87. Though this decrease is encouraging, it does little to offset continuing population growth. As health care improves and infant and maternal mortality decrease, any decrease in the population growth rate due to declining fertility is far outpaced by increased survival. World Bank projections show the population growth rate peaking between 1995 and 2000 at 3.17, placing total population at approximately 10.4 million in the year 2000 and 19.8 million by 2025, a disastrous situation for such a resource-poor country.

Conducted in 1987, the RAPID II analysis of Senegal includes two demographic studies and six population-development models illustrating the impact of a large population on Senegal's limited resources. The six models relate the effects of such population growth in various sectors. Total consumption of foodgrains would double, with an 8.5% difference between low and high fertility scenarios. As domestic production covered only 59% of consumption in 1988, Senegal's agricultural resources would be overwhelmed by such an increase in demand and would move the country even further from its target of food self-sufficiency. A fuelwoods model was more optimistic, with reforestation efforts potentially keeping pace with demand, provided that more efficient methods of consumption are explored. The health and education sectors face serious problems; in both cases an increased percentage of the national budget would be required even to maintain current levels of service, with a large portion of these funds being used for salaries, creating a negative net impact on service delivery.

### **The Cultural Setting**

Senegal is a conservative country: three aspects of this conservatism are significant constraints to family planning programming. The first is socio-cultural. Senegal is a traditional, polygamous, rural, Islamic, tribal society. The influence of Maribous and other traditional leaders is strong, even among urban dwellers. Family ties and values take precedence, and men are the decision makers. Although tribal conflict is not as great a problem as it is in much of Africa, the diversity of languages and cultural norms in a predominantly illiterate population presents special problems for IEC campaigns.

The second aspect is extreme medical conservatism. Senegal derives its Western medical tradition from France. Essentially a medical trade group, the Conseil de l'Ordre de Médecins, exerts tight control over medical decisions and resists participation by para-professionals in areas which it considers its purview. The most obvious examples are resistance to nurses and midwives providing FP services, and excessive regulation of oral contraceptives. Slow to accept a "public health" perspective, the medical community favors, by default, curative care for the wealthy elite. Although Senegal legalized

contraception in 1980 and embraced the 1978 Alma Ata Declaration of "Health for All by the Year 2000", change is slow and resistance comes from the highest levels of the medical community.

The third aspect is bureaucratic conservatism. In line with French colonial tradition, health systems are centralized and hierarchical, with blockages at any point in the system capable of stopping progress further down the line. Budgetary flows (both allocations and disbursements) and distribution of personnel follow the same pattern. The World Bank is leading ongoing policy dialogue and structural adjustment efforts in the sector. Positive change in this area will undoubtedly facilitate growth of FP services, but it will also force program planners to integrate FP into regional health plans and programs since integration is the will of both GOS and the donor community.

### **The Policy Climate**

Senegal's health system has suffered many funding, management, logistics, and human resource problems. Generally, advances in addressing these problems have been slow. By far the most important achievements are the elaboration and approval of a national population policy and the elimination of restrictions (i.e., laboratory tests) on prescription of oral contraceptives. In both these areas, USAID can be justifiably proud of the role it has played.

A variety of USAID and UNFPA-funded policy activities (RAPID presentations, study tours, TA missions, studies, meetings and policy dialogues) contributed to a major milestone in Senegal: the "Déclaration de la Politique de Population" in April 1988. Prepared by CONAPOP and approved by both the President and an interministerial commission, this broad policy calls for reduced population growth rates and integration of population policy into global development strategies. The VIII National Development Plan (November 1989) calls for enhanced childspacing activities, and management directives recently handed down from the President's Office to the MOH contain numerical family planning service delivery targets.

Funded by USAID in 1987, Family Health International (FHI) conducted hormonal studies in three countries culminating in a "Symposium International sur le Bilan Paraclinique Préliminaire à la Contraception" in Dakar, February 21-23, 1990. The experts attending the symposium (including key Senegalese clinicians) recommended suspension of requirements for laboratory tests (liver function studies, cholesterol, etc.) prior to prescribing oral contraceptives. This recommendation was subsequently accepted by MOH. Once this decision is passed to all Senegalese health providers it will pave the way for wider pill prescription, social marketing of oral contraceptives, and perhaps, in time, community-based distribution (CBD).

Policy and bureaucratic progress still needs to be made to:

- **CREATE A NATIONAL FP PROGRAM** - A national FP program plan exists "on paper", but was hastily put together in response to a World Bank requirement and needs to be revised, finalized and implemented.
- **BROADEN THE ROLE OF NURSES** - Bureaucratic policies must be clarified. Nurses, who are usually men, reach "deeper" into the community than midwives and sometimes act as blockages to FP. The role of other medical para-professionals in FP should also be expanded.
- **IMPLEMENT COMMUNITY-BASED DISTRIBUTION (CBD)** - Senegal must soon begin to experiment, perhaps through OR, with delivery modes, using community-based agents so the program can expand to rural areas.

### **Keeping Track: Demographic Data Collection**

Demographic data collection and other research play an important role in measuring program progress, determining future program directions (especially OR and pre-introduction trials) and affecting policy (e.g., pill safety studies).

Senegal is fortunate to possess excellent human resources to conduct research on a wide variety of topics. On the negative side there are literally hundreds of studies (most of which lack executive summaries) which are difficult to access and to utilize for program planning. Moreover, the volume of written material (i.e., evaluations, assessments, action plans and proposals) produced by GOS, NGOs and donors makes information management for decision-making a nearly impossible task.

Conducted in 1986, the AID-funded Demographic and Health Survey (DHS) provides basic information for most of the current knowledge concerning Senegal's population dynamics. The Mission allocated funds to assist Senegal (through the United States Census Bureau (BUCEN)) to conduct and analyze data from its 1988 census. Data analysis is proceeding at a record pace. Now being analyzed, the current knowledge/attitudes/practices (KAP) study will provide additional program-specific data. Columbia University and FHI have assisted Senegalese researchers to conduct OR and product introduction studies.

Properly planned, managed and disseminated, demographic and study data form a key resource for the national FP program.

### **Demographic Transition**

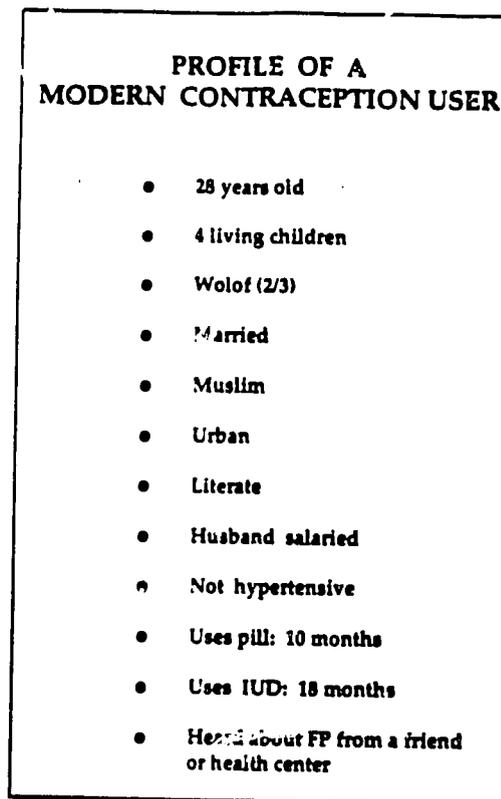
Senegal is in the early stages of demographic transition—faced primarily with rapid population growth and urbanization. When looked at in terms of proximate

determinants of fertility (selected key behaviors or factors, such as female literacy, family planning or breastfeeding, which correlate with certain fertility patterns), trends are both discouraging and encouraging.

### Modernization

In general, trends which tend to "modernize" (urbanization, women in the economy, literacy, etc.) favor fertility reduction, usually through delayed marriage and use of modern contraceptives. According to the EDS, 22% of women who have received secondary levels education use a modern method of contraception, in contrast to 6% of women who have not gone past the first level of education, and 1% of those who have not received any education. This positive trend is further substantiated by the data in Figure 3 which presents the profile of an "active family planning user" drawn from a Columbia University record review study at urban clinics in six regions of Senegal.

**FIGURE 3**



While "modernizing" can be positive, it can also counteract "traditional" practices (mainly breastfeeding and post-partum abstinence) which also positively impact upon childspacing. Although a decline in traditional fertility regulation practices is to some extent inevitable, program planning needs to encourage such practices to the extent

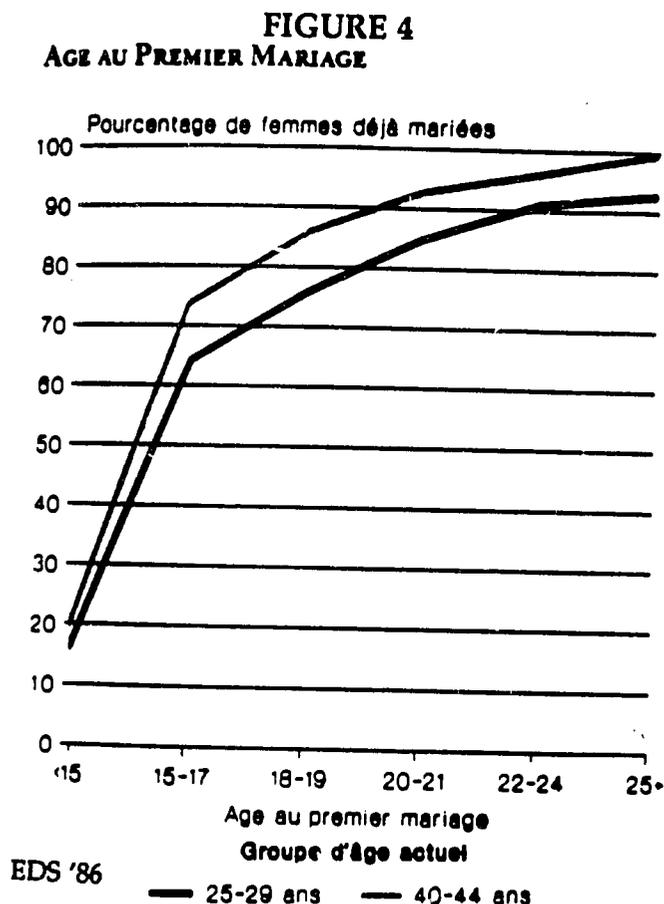
possible, in particular when alternatives (i.e., access to modern contraception) are not readily available.

### Infant mortality

Infant and maternal mortality rates are still high, although large scale immunization campaigns sponsored by United Nations Children's Fund (UNICEF) and other public health interventions are gradually lowering these rates. Lowering infant mortality is important to the success of FP programs. Women tend to have more than the desired number of children because they know that a certain number of children will not survive infancy and childhood. Since public health programs can provide greater assurances of child survival, women will become more open to spacing and even limiting their births (the latter being a more highly charged issues). Also, infant mortality and family planning are closely linked because birth intervals are one of the most important predictors of child survival. Child survival also improves maternal health, since there is less "pregnancy wastage" (i.e., women having pregnancies and births which do not result in a surviving child). Family planning can assist a woman in having fewer, better spaced births and still achieve her desired fertility.

### Female literacy

Female literacy and school attendance is gradually improving. In 1985 literacy for women over 15 was 19%. Due to changing customs, the cost of living and a series of changes in family law over the last two decades, the average age of marriage has risen slightly (Figure 4) and, on paper, the status of women is improved.



Health and population sector activities directly affect the status of women. Women who are not constantly burdened with childbearing, or do not experience the debilitating effects of too many pregnancies spaced too closely, are in a better position to be productive members of the country's economy. Likewise, as women become more educated they tend to delay marriage and childbearing and have few children. Thus, programs in other sectors, such as education or women's affairs, can impact on the acceptance of FP by providing economic and education possibilities to women and by including discussions of FP.

### Infertility

Probably due to the high incidence of STDs, the infertility rate in Senegal—estimated at 14%—is high. Infertility and STD treatment provided through the family planning program may improve fertility somewhat and so may seem paradoxical, but there should be off-setting gains in the overall acceptability of family planning as a result of these related inputs.

### Breastfeeding

Too little data exists on breastfeeding trends as they affect fertility. Most studies, few in number, focus on maternal-infant nutrition, adequacy of breastmilk and newborn diarrhea or growth patterns. The EDS estimates that 31% of married women of reproductive age (MWRA) are in a state of post-partum amenorrhea, a condition prolonged by breastfeeding and which averages 16 months for Senegalese women.<sup>2</sup> The EDS also estimates that 99% of women breastfeed up to four months, and 60% supplement with only water. Supplementation (and diarrhea) seem to begin around three months, with a negative trend towards earlier supplementation. In rural areas women feed often and on demand, but sometimes consume inadequate calories during famine season. Evidence suggests that breastfeeding duration and frequency may be decreasing among urban women, especially elites, although this is not yet perceived to be an important health problem.

Senegal's family planning program appears to be relatively passive on breastfeeding (which is included in the Service d'Alimentations et Nutrition Appliquées and is not integrated with family planning). Given present breastfeeding practices, breastfeeding is having a positive impact on fertility reduction. It is important that traditional

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<sup>2</sup>Post-partum amenorrhea—the absence of menstrual periods following the birth of a baby—comes about because ovulation (and thus the ability to conceive a child) is frequently suppressed for up to one year when a woman fully breastfeeds on demand. Since post-partum amenorrhea is dependent upon the amount of breastfeeding done by the newborn, full, on-demand feeding with little or no supplementation is normally required to achieve a contraceptive effect through breastfeeding. Worldwide, more births are averted through breastfeeding than by any other method of family planning. Annex B presents guidelines for breastfeeding to be effective for child spacing.

breastfeeding practices be reinforced and that programs be sensitive to avoid substituting modern contraceptives for effectively contraceptive breastfeeding.

### Demand for Contraceptives

Demand for contraceptives in Senegal is limited. According to the EDS, women generally favor a large family, 7.2 children, which is even higher than the current average number of children per woman. Only 19% of women want no more children and the majority of these women already have six or more children. But there is some interest in spacing children. Almost 40% of the women in the EDS reported wanting to wait at least two years before their next pregnancy.

### Use of contraceptives

To increase the use of effective contraception entails moving people through a continuum of awareness, knowledge, interest/motivation, trial, assessment, retrial/commitment. The EDS provides some information concerning the present status of consumers on this continuum related to modern contraceptives:

#### i) Awareness

Awareness is the indication that an individual has heard of a particular contraceptive method. As would be expected by the lack of felt need for contraceptives, consumer awareness of contraceptive methods is relatively low:

<u>Modern</u>		<u>Traditional</u>	
Pill	53.7%	Rhythm	19.2%
IUD	31.5	Withdrawal	13.9
Injectable	28.0	Abstinence	77.1
Vaginal	10.5	Gris-Gris	65.2
Condom	31.9		
Female Sterilization	56.0		

A component of PSF, the Volet Secteurs Privé et Parapublic (VSPP) mounted a national multi-media campaign in 1988-89 to generate public awareness of the need for family planning. Project reports indicate an increase in awareness of contraception after the campaign. It is not clear, however, whether the campaign was successful in changing basic attitudes that affect demand. The KAP study currently being analyzed will provide a more up-to-date assessment of current attitudes in urban areas.

#### ii) Knowledge of Methods and Sources

Knowledge indicates that an individual is aware of a particular method and understands its specific benefits and proper usage. EDS findings indicate that women do not know

about various contraceptive methods. Following are statistics which indicate the percentage of women in Senegal who report that they did not know about the problems associated with a given method:

Pill	45%
IUD	40
Injectable	48
Vaginal	37
Condom	41
Gris-Gris	28

A relatively high percentage of women who knew of methods, however, did know of at least one source to obtain them:

Pill	72%
IUD	82
Injectable	83
Vaginal	86
Condom	72
Female Sterilization	89
Male Sterilization	85
Rhythm	98
Implant	87
Gris-Gris	92

### iii) Interest/Motivation

Currently, there is little interest or motivation evident for the use of contraceptives, due in part to the low approval rate for contraceptive use. Overall, there is a 44.8% approval rating in Senegal, with a 60% rate in urban areas and 33% in rural, and 75% among literate and 36% among illiterate Senegalese. It is important to uncover the source of disapproval and to address it directly in order to increase demand for contraception. Since it appears that urban women are more receptive to use of contraception, they may be a more appropriate target for efforts to increase demand.

The reasons given for non-use of contraceptive methods are varied: want more children (50%), lack of information (12%), religion/custom (8%) or contraceptives are difficult to obtain (0.4%). This clearly indicates that half of Senegalese women are not contracepting because they want more children and would seem to indicate that "access" is not hampered. This must be explored more systematically.

### iv) Trial

As would be expected, trial of modern methods is low (6.3%), and it is primarily among the urban elite. Interestingly, trial of modern methods is highest among women in their thirties. Unlike many other countries, younger women do not report wanting to delay childbearing or have fewer children, nor are they more likely to try contraceptives. They

do however, report slightly more favorable attitudes toward contraception than their older counterparts.

Evidence exists to suggest an increase in contraceptive use since the EDS, which pegged use of modern methods at 2.4%. A study in one of the conservative regions in Senegal, Diourbel, reported 13.7% prevalence with about a 5% use of modern methods. A recent OR study found that contraceptive continuation patterns were 10 months for the pill and 18 months for the IUD. This pattern supports the use of these methods for spacing, but those intervals are too short to have a significant impact on fertility reduction.

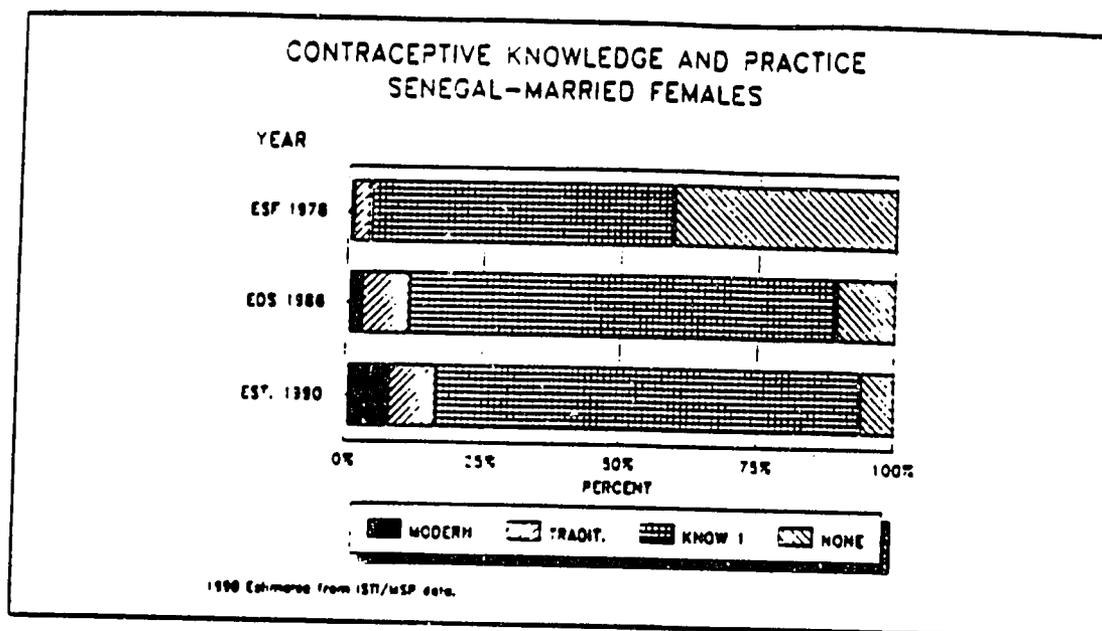
### Family limiting

To the extent that FP is practiced in Senegal, it is by women who want to space their children, not those who want to limit the number of children and their family size. To reduce actual fertility it is essential to address the extremely high desired family size and begin to introduce the concept of limiting. This must be done with extreme care, working closely with opinion leaders; MOH personnel identified the "perception that family planning is to stop having children" as a significant program constraint. In the medium term, the program needs to encourage a longer continuation of contraception by women who are spacers, as well as educating women to be limiters, while emphasizing the childspacing and child survival benefits of FP.

3. **PRIORITY ONE:** Generate demand for modern contraceptives by introduction of the concept of limitation through policy dialogue, IEC and social marketing.

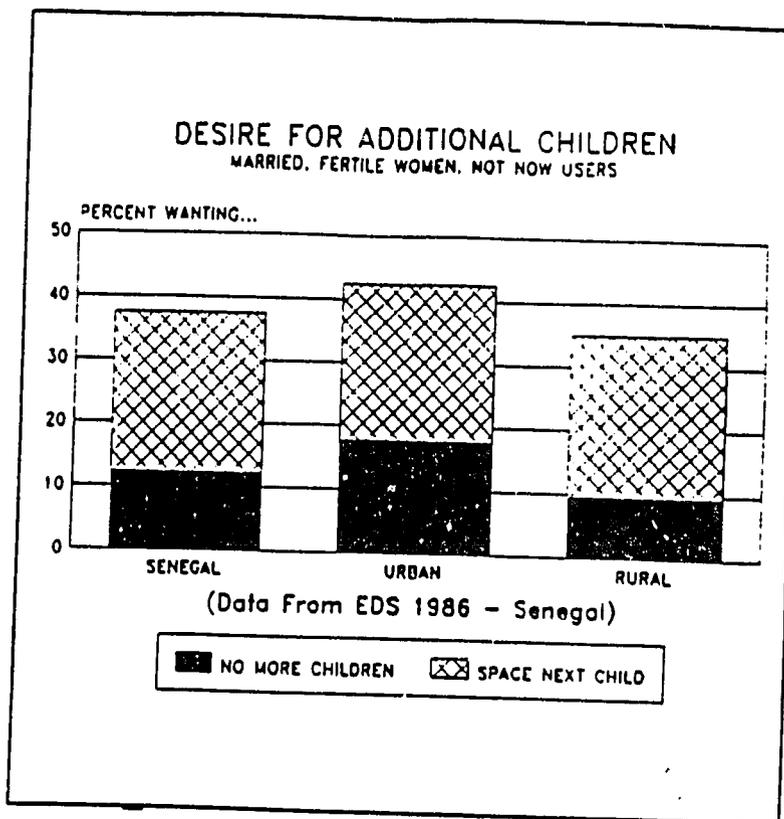
Contraceptive prevalence (11.3% for all methods, 2.4% for modern methods) is very low in Senegal. Though knowledge and use of modern contraception have grown in the past 12 years, as is shown in Figure 5, there is extremely limited demand for use of modern contraceptives, especially for limiting the number of children. Additionally, the demand that does exist is centered mainly among the urban elite.

FIGURE 5



One particular indicator of demand, the "desire for additional children," has important program implications. Figure 6 shows 1986 EDS data which indicates that among currently married, fertile women who are not presently contracepting: 42.5% of urban women either want no more children (17.7%) or want to space their next child (24.8%); 35% of rural women either want no more children (9.5%) or want to space their next child (25.5%); overall, 37.4% of Senegalese women (married, fertile, not now contracepting) want either no more children (12.2%) or want to space their next child (25.3%).

**FIGURE 6**



The EDS determined that the total fertility rate (TFR) in Senegal is 6.4. Though women are having on average 6.4 children, the desired number is 6.8; that is, women desire a slightly larger family than they are actually having. For married women, the desired family size is even higher; 7.2. Desired family size is slightly lower in urban areas; 5.5.

These figures are supported by the Diourbel Study (August 1989) which found that the ideal family size was 7.2; 6.8 for females and 7.8 for men. The urban/rural difference was only slightly different than the earlier EDS study, with 5.8 for urban and 7.6 for rural females. Urban males indicated a desire for 6.4 children and rural males, 8.7. Though contraceptive use may be higher, desired family size has not changed.

Only 19% of married women in Senegal were limiters and wanted no more children. However, 61.6% of those limiters already have 6 or more children and 59% are over 45 years old. These women are limiters only after they have achieved large families or are beyond desirable child rearing ages.

There is some interest in the spacing of children in Senegal. Almost forty percent (39.7%) of women in the EDS reported wanting to wait two or more years for their next child. Desire to space accounts for the vast majority of the present prevalence of 11.4%, as well as the 32.6% who have ever tried contraception.

Initially, it appears encouraging that 32.6% of women have tried family planning. However, the method mix is comprised primarily of post-partum abstinence, with only 6.3% having ever tried modern contraceptives and only 2.4% currently using a modern method.

When the natural birth spacing provided by breastfeeding (on average 16 months) is considered with the median desired birth interval, which is between 14 months after the first birth, and 19 months after the fifth or later child, it becomes obvious that there would be little demand for modern contraception for spacing. In essence, women are already spacing children as much or more than they want.<sup>3</sup> Thus, while there are some indications of an increase in demand for modern contraceptives in urban areas, the available data indicates a very limited demand for modern contraceptives for the purposes of either limiting or spacing.

Since women are already spacing their children in appropriate intervals, using traditional practices of post-partum separation and breastfeeding, additional fertility reduction and increased contraceptive prevalence can only be achieved through the promotion of limitation.

Limitation of family size is a very sensitive issue in Senegal. Though the national policy addresses the need to encourage limited family sizes this concept has not been accepted in practice. Any effort to begin programs directed at the encouragement of limitation must begin with a policy dialogue and policy commitment to promote this concept.

Once an agreement has been reached at the policy level, initial efforts must proceed with great caution. The desire for large families is firmly embedded in Senegalese culture. Campaigns to address the issue must be carefully crafted, based on consumer research and tested with both target audiences and opinion leaders. The idea of limitation should not be addressed directly, but should be subtly introduced through well accepted concepts such as the health of the mother and child, educational, and economic arguments which have been shown to be accepted by target audiences. (Delanoe, Diop and Niang, 1989; Diourbel Study, 1989).

Research should be conducted to determine specific themes to motivate specific target audiences and the appropriate channels of communication for each group. Campaigns should be carefully pretested and monitored to ensure the desired impact. The

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<sup>3</sup>An exception to this pattern are urban and literate women who breastfeed for significantly shorter periods and return to fertility sooner. Urban women breastfeed on average 16.2 months and become fertile after 12.4 months; literate women breastfeed 15 months and return to fertility after 10.4 months. The earlier return to fertility indicates a reduction of the intensity of breastfeeding in the final months. The urban population is at greater risk of short birth intervals and has generated the demand for modern contraceptives that exists by replacing a traditional form of contraception with a modern one.

evaluation of the PSF IEC campaign reinforces the need for a well targeted and coordinated campaign. Each component of the campaign must support general themes and have an appropriate dissemination strategy. Information and themes presented in mass media efforts must support materials used in interpersonal communications. The impact of each component of the campaign will be determined by its exposure to the target audience.

IEC efforts to reduce desired family size should initially target urban audiences who are more accessible to communications efforts and have better access to supplies and services. Urban audiences are less likely to disapprove of contraception and will be more influenced by present economic constraints. An urban IEC effort can also pave the way for new and improved service delivery and supply programs, including social marketing and community-based distribution.

Demand generation activities should start by introducing the concept of reduced family size while reinforcing current patterns of breastfeeding and spacing. The vast majority of contraceptors use or have used traditional methods, especially post-partum abstinence, to space children. Abstinence, however, does not play a major role in affecting birth intervals and has no effect on limitation of births. Traditional breastfeeding practices however, are significant in birth spacing and should be reinforced in any future IEC campaigns. Where traditional breastfeeding practices are changing, particularly among the urban elite, birth spacing can be supported by supplies provided by the commercial sector: pill, condom, injection and vaginal suppository.

IEC efforts to encourage the limitation of family size should be conducted in close collaboration with social marketing efforts (See Priority 3). Encouraging the concept of family spacing is obviously not enough to encourage women to contracept. Women must be given information about and access to specific products in order to act on their desire to limit families. A social marketing project should be developed which works closely with and supports the IEC effort by offering products and services that can women use to reduce their fertility.

Counseling services and one-to-one communication efforts will also be crucial in the effort to encourage women to change their opinions about family size and their desire to contracept. It will be important that midwives, doctors and other family planning counselors support the desired behavior change and the use of modern contraception.

## **RECOMMENDATIONS**

To generate broader and deeper demand for modern family planning, USAID should:

- Conduct policy dialogue on the need to promote limitation of family size in order to reduce fertility and generate demand for modern contraception.
- Introduce the concept of family limiting through combined IEC and social marketing advertising campaigns.
- Develop social marketing programs (per Priority 3) to provide specific product information to encourage women to use contraceptives to limit births.
- Develop counseling and one-to-one communication efforts to support the idea of limiting and to encourage and support the use of modern contraceptives for limiting family size.

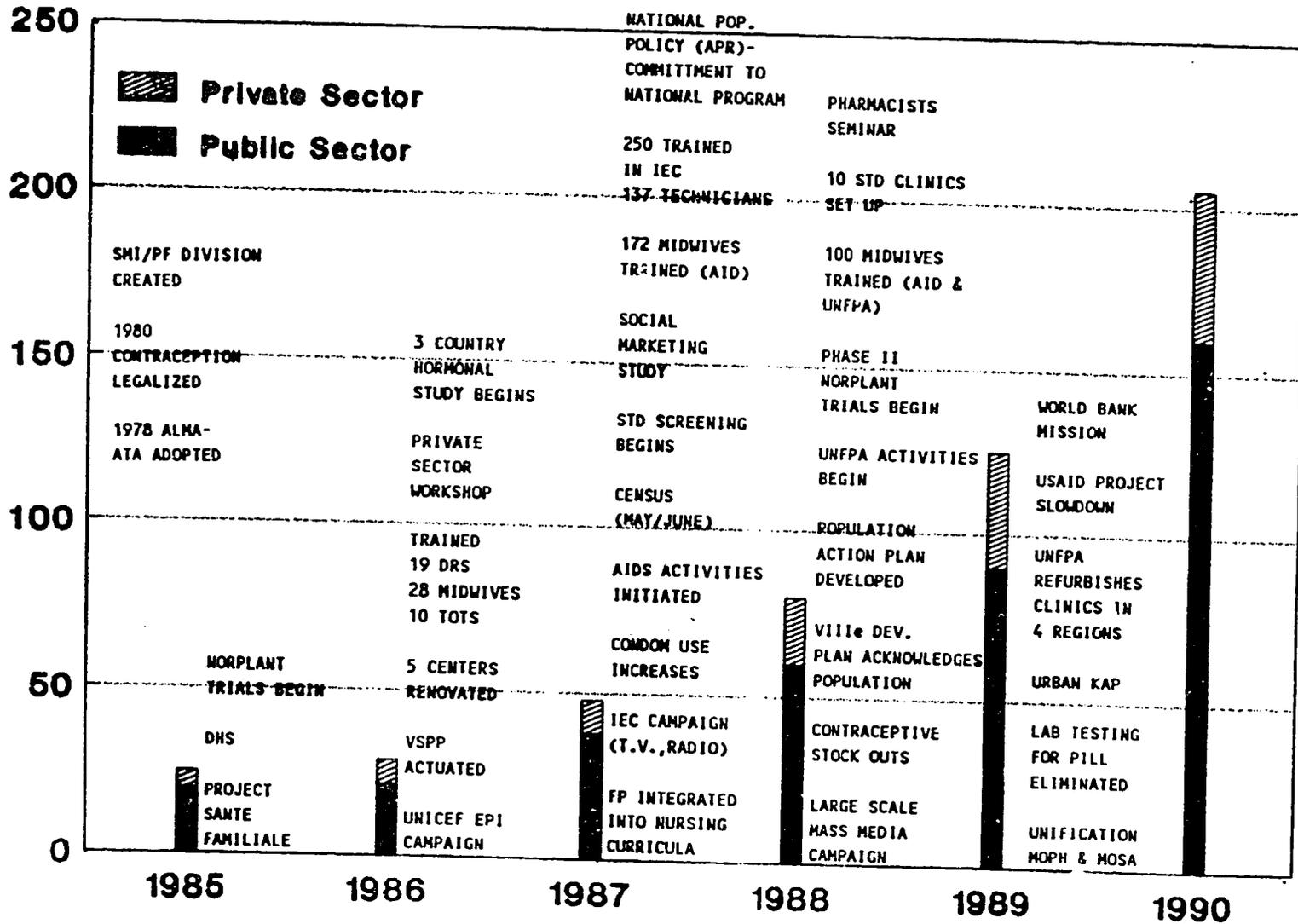
4. **PRIORITY TWO:** Strengthen infrastructure investments by developing a logistics management system, MIS, and a contraceptive procurement system.

USAID/Dakar has made a large investment in family planning in Senegal over the last decade. Much of this investment has been in the form of human and physical infrastructure for provision of modern, non-permanent methods of contraception. It includes approximately 120 clinics with trained personnel and basic equipment. Although the basic infrastructure is in place, clinic utilization and continuation rates are low not only because of lack of demand, but also because of a variety of managerial and logistics problems and lack of staff motivation and skill. Existing USAID-financed clinics serve primarily young mothers attending mother and child health (MCH) clinics in urban or peri-urban areas. Although these clinics do not by any means reach the bulk of the eligible population, and although significant potential exists in the private sector, it is important not to "throw away" gains made painstakingly during the early project years. With relatively small additional investments (particularly in the form of TA), improvements can be made in the existing public sector clinic network. This network can then also function as a back-up for newer strategies, such as social marketing and rural community-based distribution.

Over the past five years, Senegal's FP program has made dramatic gains. Figure 7 is a graphic presentation of the synergistic relationship between program growth and diverse types of activities which reinforce one another. The working hypothesis is that interaction between many different activities will produce maximum program growth.

Figure 7

# EVOLUTION OF SENEGAL'S FAMILY PLANNING PROGRAM; A Timeline..



Prior to 1985, program development was slow and few acceptors were being served. Beginning in 1986, the program began to develop with the number of acceptors rising sharply:

1985: 16,543  
1986: 18,509  
1987: 31,988  
1988: 42,769  
1989: 53,769

Corresponding to the rise in the level of acceptors was an increase in the number of public and private/parastatal clinics offering services, from fewer than 25 in 1985 to approximately 120 by the end of 1989 and over 200 (including new clinics opened through the UNFPA project) by the end of 1990.

The investment, primarily by USAID, in human resource development is equally impressive. Clinical FP training to the IUD competence level was provided between 1986 and May 1989 to 300 midwives (only 38 trained outside Senegal), 65 physicians and 32 nurses. Training in techniques of FP motivation and IEC was provided to approximately 438 persons, mainly social workers, creating a large reservoir of trained personnel.

The existence of about 200 equipped and staffed clinical service points represents an enormous infrastructure investment upon which to build. Moreover, with the gains made by the USAID project and the launching of UNFPA-funded activities in the four areas not yet covered by USAID, the idea of a "national FP program" is beginning to solidify among Senegalese and donors alike.

However, it is clear from supervision reports and user data that not all clinics operate at peak service potential and that many women do not receive optimal quality care. Both low continuation and high drop-out rates are causes for concern. Even assuming even distribution of users (which is not the case: private clinics serve a greater number of clients than public clinics), the average number of acceptors per clinic would be about 450. Since this figure is cumulative and includes women who contracept for a very short time and dropout, it represents an overly optimistic view.

Field reports by International Science and Technology Institute (ISTI) consultants and discussions with MOH personnel suggest possible causes of low utilization and high drop-out rates (as well as a lack of demand): poor treatment of clients by providers ("accueil"), lack of counseling, poor clinical skills, health personnel (including the midwives and nurses themselves) unaware that midwives and nurses can supply oral contraceptives, poor record-keeping and lack of supervision. While a study of the reasons for high drop-out rates is currently under way, performance in most of these areas can be improved through TA.

Another area of major concern is commodity procurement and contraceptive logistics management. Currently, USAID provides the largest financial commitment towards contraceptive procurement. Projections through 1992 are:

1990: \$510,618  
1991: \$322,124  
1992: \$430,069

Included in these figures are contraceptives for social marketing programs, but not condoms provided for AIDS/STDs. Unless the GOS or another donors--such as the World Bank--begins to assume some costs, USAID's recurrent cost burden for contraceptives will continue to increase, as will the Mission's responsibility for managing this in-kind donation.

Undoubtedly, one factor in poor clinic performance is the numerous contraceptive stock-outs at both the clinic and national levels which have occurred over the last few years. Essentially a management issue, stock-outs are exacerbated by the fact that the public sector (USAID/UNFPA donated commodities) has a growing contraceptive monopoly. If, for example, the average woman has several public and private or NGO sources of inexpensive contraceptives (e.g., the local clinic, the family planning association, a mission hospital, several local pharmacies, a social marketing program), she has a "safety net" from which to receive contraceptives should her usual clinic or supplier run out. If, on the other hand, virtually all the contraceptives in the country are from a sole supplier (in this case USAID/UNFPA through the government), stock-outs will affect all suppliers and the woman has little hope of finding her method.

A means of avoiding such contraceptive stock-outs is the development of an management information system (MIS). Operational data or service statistics are an important component in the implementation of any family planning project. The data are required to meet donor requirements, manage logistics, staff and other resources, monitor performance and evaluate programs. Failure to generate accurate service statistics can mean the program will have problems ensuring contraceptive availability, providing quality services, and getting continued support from funders. Service statistics data collection becomes an MIS when the data generated is systematically used for decision making.

The major role MIS plays in the success of many family planning programs is widely recognized. In the case of PSF, an effective MIS is both a legitimate project output and is required to meet the reporting requirements of USAID. Through more effective use of resources, early identification of service problems and logistics planning, a MIS will contribute to increases in the number of couples protected from unwanted pregnancies, and improve the quality of services and contraceptive use. In addition to meeting USAID reporting requirements, an MIS is necessary to provide ongoing monitoring of project impact and to make mid-course adjustments in service delivery, IEC or program management strategies.

The overall goal of these activities is to improve clinic performance and ensure that existing service sites are functioning optimally. Given the high number of mothers and babies who come for pre-natal and well child care, average performance of clinics should at least double every year over the next three or four years. These activities need to ensure that contraceptive supplies are adequate and that changes in method mix are reflected in forecasting of contraceptive requirements at all levels of the system.

## RECOMMENDATIONS

Using both in-country consultants, where available, and external contractors, USAID should provide short and medium term TA to:

- Improve the MIS for clinic record-keeping and reporting, including design or revision of clinic record-keeping forms, in-service training for clinic level and central level staff in record-keeping and uses of data for clinic and program management, and set-up of a regular mechanism for performance feed-back from central levels to clinics.
- Design and implement a contraceptive logistics system for public sector clinics. This includes forms for ordering and supplying contraceptives, a "push-pull" system of resupply, training for all levels--from store clerks to clinic staff--in logistics and stock management, and regular audits of contraceptive supplies. (Based on the experience of the Family Planning Logistics Management (FPLM) project in Kenya, this will be a long process which will take one to three years to fully implement.) Training in forecasting must be provided to key MOHSA technicians, so that they can monitor contraceptive orders placed with both UNFPA, USAID and other sources.
- Provide quality assurance, clinical supervision and counseling, involving "hands on" technical assistance and training (including training of trainers). TA also includes development, adoption and dissemination of clinical practice guidelines, counseling manuals, protocols and the use of patient flow analysis to improve clinic performance. Initially, USAID should consider providing funds for regular supervisory visits to all 200 clinical sites as an essential activity.

Additional activities should be undertaken by USAID to prepare Senegal to confront the problem of over-dependence on donor (particularly USAID) supplied contraceptives. Activities which will help achieve this goal need not involve large investments, but could be the key to future program sustainability. The Mission should:

- Conduct policy dialogue with the GOS in the area of reduced duties and other restrictions on commercial contraceptives and contraceptive advertising, plus encouragement of social marketing programs. (Social marketing is discussed more fully in Priority 3).
- Conduct seminars and dialogue with key leaders and strategic planners in several ministries (Health, Finance, Plan) on long term contraceptive needs, introducing the notion of "contraceptive security" (to parallel the "food security" issue) and a "safety net" for contraceptives. Dialogue should lead

to a long-term procurement plan calling for gradual assumption of contraceptive procurement costs by the GOS, the private sector and other donors. Other donors, particularly UNFPA and the World Bank, should participate in this dialogue.

- Conduct small studies or which introduce and further test the idea of user fees, along the lines of the Bamako Initiative.<sup>4</sup>
- Conduct policy dialogue and/or programmatic funding in order to fully integrate contraceptives into essential drug schemes and PHC schemes, particularly those funded by other donors.
- Continue ongoing TA to Senegal's current "management by objective" approach which sets targets for its health system, to assist in setting realistic targets and monitoring achievements against expectations.

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<sup>4</sup>The Bamako Initiative was passed in September 1987 in Bamako, Mali by the Health Ministers of the World Health Organization (WHO) Africa Region at their Regional Committee Session. The resolution invites Member States to: (a) encourage social mobilization initiatives to promote community participation in policies on essential drugs and child health at the district level; (b) ensure regular supply of essential drugs of good quality and at the lowest cost, to support the implementation of PHC; (c) define and implement self-funding mechanisms at the district level.

5. **PRIORITY THREE:** Promote private sector involvement in family planning through (1) commercial sale of contraceptives and (2) direct service delivery by private providers, employers/insurers, and NGOs.

The private sector has a major role to play in expanding demand for, access to, and use of modern contraceptives in Senegal. The rationale for exploring the private sector's potential role in the delivery of health and family planning goods and services is multifaceted. Since the private sector is already a dynamic force in most countries it can assist overburdened governments with decreasing resources to meet growing populations' demands for services. From a donor point of view, since the private sector often operates more efficiently than the public sector, investments in the private sector can produce self-sustaining services, unlike many traditional public sector projects which remain donor dependent. Thus, building the capacity of the private sector is in the best interest of both the public and the private sector.

The economy in Senegal has been directed by a statist mentality and interventionist policies since independence, but some adjustments and reforms have taken place in the last decade. While it is difficult to gauge the extent of the Government's commitment to fostering the private sector, the policy environment seems more supportive of private sector initiatives than in the past.

The private sector is a significant force in the Senegalese economy at large, contributing 85% of GDP and employing 92.5% of the total workforce (2.4 million people) The "private sector", however, is not monolithic: there are formal and informal components to it, and difference in rural and urban areas.

The formal or "modern" private sector employs only about 2% of the total work force--51,000 people--and it is declining. An estimated sixty-five thousand jobs have been lost since 1984. Despite its small size, the formal sector is high profile and well organized, with many business, employers' and artisans' associations. The private sector controls virtually 100% of commercial trade.

Parastatals are important in Senegal in that they represent a major investment by the GOS, yet they account for approximately only 7.5% of GDP, employ only about 1% of the total workforce, and are widely considered a drain on the economy. Parastatals' borrowings have virtually eliminated private sector access to longterm debt, making it practically impossible for the private sector to invest and plan longterm. In 1985-7, parastatals held 96% of the banking sector's longterm credit, and 40% of total banking credits.

Access to the banking sector is one important constraint on the private sector which reinforces the role of the informal sector. Most Senegalese have difficulty obtaining banking services as banks are weak or insolvent, and maintain minimum deposit levels, which discourages small accounts. Without deposits or other collateral it is difficult to

arrange credit. Banking system reform and restructuring efforts are currently underway, but are proceeding slowly.

The basic issues related to understanding and expanding the role of the private sector in health and family planning service delivery in Senegal are as follows:

- The limits of the formal private sector for health and family planning in Senegal must be recognized; it is not a panacea, readily available to fill all the gaps left by the public sector service delivery system. Interventions must be specific, appropriate, and adequately supported in both technical and monetary areas, whether they are with private providers, employers, retailers, or community organizations.
- The only private sector avenues for serving large, national populations will involve social marketing, CBD, and traditional healers. That is, other large scale national networks do not currently exist for health and family planning service delivery in the private sector, and their creation will be a significant undertaking.
- The commercial infrastructure for health and pharmaceutical products in Senegal is well developed only within urban and semi-urban areas. The commercial market for contraceptives is weak because of the extremely limited size of the present market. Present pricing structures have emphasized skimming policies<sup>5</sup> which direct sales to higher income consumers where profit margins are more attractive. However, commercial manufacturers and marketers are interested in supporting market development to lower income consumers.
- Some structures for service delivery do exist and should be built upon. The first step, though, must be a rigorous evaluation of what exists. How well has VSPP tapped into the private sector? How viable are NGO health facilities such as ASBEF's, the Croix Rouge, and the Catholic health posts?
- Acceptor targets for private sector activities must be realistic; often the objectives of the kinds of projects the private sector is most suited to and in need of--institutional strengthening, training, marketing--may not be oriented toward or result in the delivery of large numbers of family planning acceptors.

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<sup>5</sup> A price skimming strategy uses high prices to reach elite consumers. The effect of such a strategy is to sell fewer products at a very high profit margin.

- "Tapping" or mobilizing private practitioners and retailers, both modern and traditional, is difficult, as their professional or trade associations tend to be quite conservative; they do not recognize themselves as the "resource" donors perceive them to be for innovation, social change, introduction of new products, etc.
- The severely constrained access to credit/capital may limit entrepreneurial start-up ventures.

### **Commercial Market for Family Planning and Health Products**

The commercial contraceptive market in Senegal is comprised of ethical products--those products, such as oral contraceptives and injectables, which are distributed under government regulations--and non-ethical products, such as condoms and vaginal tablets, whose distribution is not limited by government regulations. The availability of Norplant is currently restricted to public sector clinical trials.

#### **Oral Contraceptives**

A wide range of oral contraceptives is available in Senegal. Two of the major international contraceptive manufacturers, Wyeth and Schering, are well represented in the market; Ortho, Smith-Kline and Roussel are also evident. At least twelve brands of pills are available, including high dose, low dose and triphasic, at a wide range of prices.

Even the lowest priced pills are in the range of 350 CFA per cycle, approximately \$1.35 at today's exchange rate. Though these prices make pills considerably cheaper than condoms which sell for 200-300 CFA per unit, and vaginal tablets which sell for about 100 CFA for one unit, they are outside the price range of most consumers.

Since the commercial market comprises about half of the total market, it is very small. In 1988, the market was estimated to be 156,430 cycles per year. Presently, it is thought to be approximately the same size.

A social marketing project for orals should be developed using products that are already on the market, replacing the current skimming price strategy. There is no need to disrupt the market and increase donor costs by using donated orals.

As has been done in numerous other countries, an arrangement should be made with one or more manufacturers to have them lower the cost of an appropriate product (usually the market leader) in exchange for advertising and other demand creation activities that will be supported during the initial market building period (3-5 years). After that period of time, all marketing activities would again be borne by the private sector, while continuing to sell product at social marketing prices. Experience

documents this; social marketing contractual agreements reinforce it. There are no further recurrent donor costs.

Once commercial prices are reduced to more affordable levels, urban and peri-urban health centers can prescribe commercial pills to their clients, or may sell the social marketing brands. This shift to the commercial sector can free donor resources for those who cannot afford, or do not have access to, these products.

In Senegal, social marketing of ethical products, including the pill, is presently restricted to ethical outlets which service predominantly urban centers. Initial social marketing efforts should be directed at these outlets. However, efforts should be explored to expand distribution once the project is established.

### Condoms

The current condom market (May 1990) has a variety of brands and a variety of presentations including three, six, and twelve pack. Unit prices make them a relatively expensive method. In 1988, the commercial market volume was estimated to be in the range of 390,900 units annually, with Derby being the market leader because of its availability and low cost. Black market prices are approximately 50 CFA per unit.

In April 1990, the VSPP director reported that duties on condoms were eliminated. Duties were composed of 60% import duty and 20% value added tax (VAT). Condom prices were therefore checked during August 1990. There was little evidence of a reduction in prices from earlier reports. Prices are still very expensive—in many cases, more expensive.

There is presently an effort by the VSPP to design a social marketing project for condoms. The proposed project is to use donated commodities which can be sold at lower prices, around 55 CFA per unit. After the demand for the product is established and price levels are confirmed, the product can be purchased through receipts from sales. If this design is employed, rather than a more commercial model, it will be very important for the project to be designed to ensure future purchase of condoms. Condoms purchased on the open market are significantly less expensive than those purchased by USAID, since USAID must purchase the more expensive American products. Reducing the dependence on USAID donated product will allow resources to be more efficiently utilized.

The level of cost recovery will depend on the ultimate pricing structure. This is both a desirable and a feasible strategy and will reduce the donor burden of the marketing effort. The design stage is critical in ensuring that the social marketing effort is commercially viable. The staff of the project's implementing agency will need to explore cost recovery options and alternatives for commercial sector partnerships.

The initial phase of this project will target distribution to pharmacies with subsequent phases extending distribution to consumer outlets. The extension of distribution to more accessible outlets will be important to the success of the effort. Pharmacies are not expected to be very interested in the product since profit margins will be smaller than competing products with higher prices. Their incentive will be to promote the more profitable product. Additionally, it will be important to extend distribution to more accessible outlets.

The social marketing effort is to be managed by SANFAM, who will then contract for distribution with a consumer products distributor. It will be important to design the effort to be as commercial as possible and not to develop a large project infrastructure that will need to be supported, either through sales or donor financing.

### Vaginal Spermicides

Cones Rendelle contraceptive suppositories, the market leader, are packaged in a vial of ten cones and sell for 1000 CFA. Pharmatex suppositories, while widely available, are almost twice the price, 2000 CFA for 10 and 20 for around 3500 CFA. Distribution, though not formally restricted, is limited to those channels approved by the government. Most pharmacies visited did not have spermicides. There is little demand for this product.

### Injectables

The only injectable contraceptive on the market is Schering's Noristerat, which is sold for around 200 CFA per unit. This product requires clinical administration but it is sold primarily in pharmacies. Women obtain prescriptions and then purchase the products in the pharmacies. The present volume of sales of Noristerat is minimal, about 500 units per month.

### Oral Rehydration Salts (ORS)

There is presently no commercial market in ORS. Since 1985, UNICEF has distributed 700,000 packets through the public sector. However, estimated annual need is in the range of 2 million packets. A distribution audit determined that severe distribution disruptions exist, with 40 out of 55 centers surveyed out of stock.

Given the present situation of commercial distribution, there is an obvious need to strengthen the commercial delivery of family planning and health products. This objective can be achieved not only through demand generation activities as outlined in Priority 1, but also through rationalizing the public/private delivery of goods and services, allowing the private sector to flourish where that infrastructure is strongest, and supporting public programs where the private sector has limited capacity.

Private channels should be reinforced for oral contraceptives, condoms and ORS in urban and peri-urban areas. In those areas, once the price of private products is accessible, public health centers should no longer distribute oral contraceptives (many already do not because of stock-outs) and doctors and midwives should prescribe the low priced social marketing products. This rationalization of source will allow donor resources to be better spent where they are necessary and allow a greater measure of cost recovery.

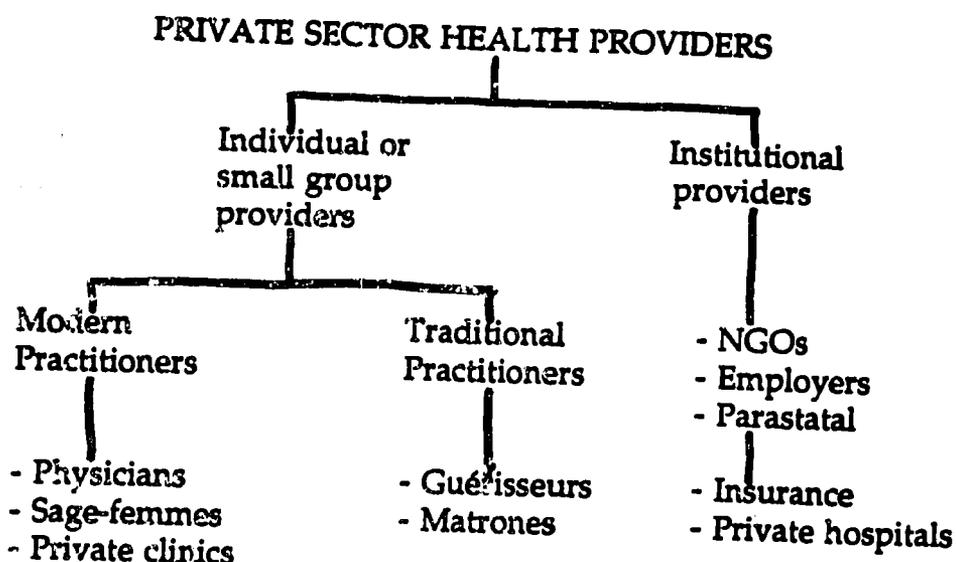
In rural areas, where commercial distribution of ethical products is very limited, public centers should continue to distribute products. Other ethical contraceptives which are more expensive and require clinical services (IUDs and injections) should continue to be distributed by the health centers.

There is presently no policy or plan to obtain ORS other than from UNICEF donations. Efforts to distribute donated products through public channels have not been successful. Adequate demand exists and prices of ORS can be low enough to develop a commercial market in the product. If a means of local production cannot be found, ORS product are available in many other countries in the region. The critical issue is to ensure a consistent supply source at a price that is accessible to local consumers.

### **Private Sector Delivery of Health and Family Planning Services**

In the area of health services delivery, the private sector incorporates two broad kinds of providers:

- individual private practitioners and their small clinics, providing both "modern" and "traditional" health services,
- institutional, nongovernmental providers of services: NGOs or private voluntary organizations (PVOs), employers, parastatal insurance carriers, and private hospitals.



With the exception of the traditional healers and a few of the institutional providers, the private health sector is not large or highly developed, and access to its services is limited, primarily due to high prices and maldistribution.

With the advent of such innovations as social marketing through commercial channels, or accessing the traditional healers, the scope of the private sector is quite large. The private sector will not supplant the public sector in health and family planning service delivery; rather, it can provide a complementary outlet—primarily, but not exclusively, for the paying client.

In the private health sector currently there are approximately 150 physicians in private practice, several private polyclinics, 150 private pharmacies, 16 sage-femmes with private practices and one private hospital. Over 80% of the private clinics and physicians and midwives in private practice are in greater Dakar, as are more than half of the private pharmacies. The high prices charged make their services inaccessible to most Senegalese. In the non-profit arena there are 68 private Catholic health posts (59 outside Dakar), 13 Croix Rouge medico-social centers and two ASBEF clinics. Such NGO services probably cover 5-10% of the population (the Catholic health posts alone average over 600,000 consultations annually).

Thus the modern private sector—the nonprofit NGO providers of care, the for-profit urban practitioners, and the health services provided by employers—may already be the provider of choice for 20-30% of the population.

The family planning service delivery activities of ASBEF are quite important, if limited. ASBEF currently operates a Model Family Planning Clinic in Dakar as an example of appropriate high quality women's health care and family planning service delivery, with another, smaller operation at Louga.

Workplace provision of health services is not uncommon in Senegal, especially among larger employers and parastatals, and through the VSPP of the USAID Projet Santé Familiale, some employers now include family planning in their range of services. Many employers have on-site clinics or cover services through social insurance programs, known as "Institutions de prévoyance maladie" or IPMs. On-site health facilities range from one-room first aid stations to a full scale hospital. IPMs have generally fared poorly as a private mechanism for health sector financing. Research into their scope and potential is needed.

Traditional healers form an important element in the private sector delivery of health service. Traditional practitioners, both healers (guérisseurs) and traditional birth attendants (matrones) are found throughout the country. It is estimated that over 90% of the population, both urban and rural, avail themselves of their services, finding them more accessible, more affordable, and more desirable than formal health care. The status of traditional healers is extralegal, meaning that no laws yet recognize or constrain their practice. Although several efforts have been made to organize them or enlist them in formal "modern" health programs, little real progress has been made in tapping this extremely useful resource.

If traditional practitioners are included, the private sector then virtually 100% of the Senegalese population patronizes it for health and family planning. The EDS found that more than half of the modern method acceptors had used a private source for their contraceptives.

According to a leader of the "Regroupement de médecins, dentistes, et pharmaciens chômeurs", an organization representing the interest of unemployed health professionals, there are approximately 60 unemployed physicians in Senegal (one of whom is a gynecologist and about one-third of whom are women). In addition, there are 30 unemployed pharmacists and 10 dentists. Most of these unemployed professionals are in Dakar, but the group feels relocation to rural areas offers a new physician the best chance of succeeding in private practice. Although their numbers are small, USAID could explore the possibility of working with the group to create a franchised network of community doctors' clinics targeting underserved areas, a varied approach successfully employed in Mexico, the Dominican Republic, and the Philippines (with technical assistance from the Enterprise Program).

The groundwork for direct service delivery private sector activities has been laid by USAID/Dakar through VSPP. VSPP's official mandate was to establish family planning service delivery activities within the health services of private or parastatal entities (employers); less formally, it has included private clinicians, laboratories, and pharmacists within this framework.

VSPP was to have been a \$1.5 million effort; as of this writing, it had expended only one-third of that amount, but all PSF activities have stalled and there will be no further

funds for VSPP under the current configuration. Activities may be continued under a new subcontract with SANFAM, a new Senegalese NGO formed essentially of VSPP staff, but the nature and timing of that transition is unclear.

As of the end of 1989, the number of VSPP participating organizations was 26, with 40 family planning service delivery activities in six regions (Source: International Science and Technology Institute, Annual Report, 1989, Santé Familial et Population). Thirty of the "centers" (more accurately, service points) provide counseling and services for modern family planning methods; ten provide natural family planning information. A VSPP survey found that a further 18,000 couple years of protection (CYP) were provided by private physicians and pharmacies during 1989. The VSPP has had significant interaction with Senegalese pharmacists, which has resulted in a commitment to mobilize this sector for child survival and family planning, although this remains to be launched.

The VSPP has many more project possibilities, including working with private clinics (training and provision of contraceptive supplies), establishing a program to help install medical practitioners in poorer neighborhoods (for general practice with family planning included), and launching a much-studied but as yet unspecified social marketing effort.

VSPP has worked to implement family planning service in Senegal with a wide range of private sector partners thus far. The experience has underscored several important points that future private sector efforts must take into consideration. For example, the private sector requires its partners (donors) to, in effect, undertake a joint venture when establishing a new capacity to provide family planning services; to a businessperson, that means sharing capital risks, as a donor would, but it also means putting the whole arrangement on a business footing, with real attention paid to the future viability of the operation. VSPP efforts seem not to have focussed adequately on the sustainability issue.

Another feature of working with the private sector that is surprising to many is that greater than anticipated amounts of TA may be required. Often, being involved in health and family planning is a new pursuit for private sector partners, and despite the private sector's oft-acclaimed efficiency and effectiveness, there is definitely a learning curve. TA in such areas as training, record-keeping, IEC, and quality assurance are particularly necessary, and ideally should be provided by local resources so that longterm direct relationships can be built. VSPP has only recently begun to create such local relationships. In Senegal, family planning NGOs, such as ASBEF and SANFAM, may fill the gap for local TA resources, but they themselves must be strengthened first.

Senegal is fortunate to have a basically supportive government/policy environment for private sector health and family planning efforts. This is a critical consideration. Explicit government concurrence is often desired before the private sector will proceed. The public sector may also be needed over the medium and long term for continuing

technical inputs (such as training, commodities, etc.). The fact that VSPP was established as a para-public entity has probably helped, not hampered, its early years.

To work well with the private sector, donors must be flexible, responsive and timely--perhaps more so than in the usual bilateral mode. The private sector is results--and action--oriented and they expect those who presume to work with them to be likewise. Stock-outs, lapses or delays in funding, or overburdensome reporting requirements will frustrate private sector partners and can jeopardize nascent activities. Unfortunately, VSPP has suffered some of these set-backs.

One way to expand the scope and impact of private sector service delivery interventions --and to improve their cost-effectiveness--is to work through "apex" organizations such as employers' or professional associations. Although demonstration projects may be necessary, it is not practical to cover the country one employer at a time, or one provider at a time. Achieving a "critical mass" for private sector family planning is crucial. The VSPP has not yet fully explored this avenue for gaining broader access to (and impact from) the private sector.

Identifying or creating local entities to act as "brokers" for private sector family planning is also effective. They may be the local family planning association, a parastatal health, family planning or insurance organ, or a private health consultancy or management venture. Such brokers actually sell their services in design of programs, training, IEC, or other necessary inputs, to the private sector providers being enlisted. VSPP has not established or brokered any such fee-for-service TA relationships.

The sustainability of private sector family planning services is not only financial; continuing access to technical support services and supplies is crucial. Local technical resources must be identified and direct relationships fostered (i.e., not always through the donor as intermediary). However, financial sustainability of programs is paramount, as without the commitment and the means to carry on after donor funding ends, even private sector activities will fizzle out. Sustainability planning--making sure the partner is aware from the outset of the need to assume all costs, forecasting requirements for the post-donor period--is critical. VSPP has not done this, and it is a major flaw. Co-financing of such activities from the outset, and good planning, can mitigate the impact of the termination of donor funding.

## RECOMMENDATIONS

USAID is uniquely qualified to assist Senegal in the development of private sector activities. USAID is the recognized leader in the development of social marketing projects and in the stimulation of private sector partnerships for population activities. Senegal represents an excellent opportunity to merge the existing infrastructure with USAID technical assistance in the development of private sector sources of products, and, to a somewhat lesser extent services.

To foster an expanded role for the private sector delivery of health and family planning goods and services, USAID should:

- Promote commercial delivery of modern contraceptives by developing a social marketing project to expand the present market for contraceptives and ORS. This project should include the major elements of a social marketing program: negotiated partnerships with the private sector; a marketing strategy which addresses the opportunity provided by the current market; provision of quality contraceptives with a priority for sourcing from private enterprises; consumer research to determine marketing strategy; development of advertising, promotion, and other campaigns to address consumer motivation and information; development of an appropriate pricing strategy based on consumer and market information; creation or reinforcement of a distribution system to ensure the continuous supply of contraceptives which are easily accessible to the consumer; training of physicians, pharmacists and other retailers to support consumer decisions with appropriate information. Social marketing projects can take up where IEC campaigns leave off by promoting specific products and developing a consistent and accessible supply of products. The social marketing project should be designed to take maximum advantage of the commercial infrastructure, avoiding the use of NGO intermediaries, if at all possible.<sup>6</sup>
- Rationalize the provision of family planning and health products and services between the public and private sectors. Private sources of supply should be reinforced in urban and peri-urban areas where the

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<sup>6</sup> The exact nature of any social marketing program depends on current specific needs, emphasizing the elements which are weakest in the current market. Generally, social marketing programs reduce the price of at least one line of contraceptives, while sometimes the effect is to suppress all prices in response to competition and in other situations prices are already at acceptable levels. Social marketing programs make contraceptives more accessible and desirable, thereby increasing both sales and the size of the market for contraceptives. Often increased sales are noted in non-social marketed brands and products as well as project contraceptives. The magnitude of the increase in sales is dependent upon the scope of the marketing effort and any impediments to use of contraceptives.

infrastructure is the strongest. Public sources should be reinforced for clinic-based longer term methods and to provide services in rural areas where the private sector cannot meet the need.

- Evaluate and then build on the VSI P experience in the private sector, which is largely company-based service delivery, with a new emphasis on co-financing and sustainability, creation of linkages with local technical resources, and establishment of a local "broker" for private sector family planning service delivery.
- Expand contacts within the realm of the for-profit health care marketplace (private physicians, nurse-midwives, clinics, pharmacies) so that a viable activity can be begun with them: e.g., establishing a revolving fund to assist médecins-chômeurs to form practices offering basic health and family planning services in underserved areas (a "community doctors" approach); organizing/regularizing and creating incentives for use of public personnel in their after-hours private practices for PHC and family planning; strengthening professional associations (physicians, sage-femmes, traditional practitioners) so they are aware of and can assume a larger role in the attainment of national PHC and FP objectives.
- Provide TA to existing service delivery NGOs (ASBEF, Croix Rouge, Association des Postes de Santé Privés Catholiques au Sénégal) with an emphasis on management, marketing, entrepreneurship, growth/survival, self-reliance, etc., and on quality of care.

6. **PRIORITY FOUR:** Create specialized program support activities - VSC, Norplant, OR, CBD, etc.

Undoubtedly, USAID's major TA and funding should be concentrated on activities which support the recommendations for Priorities 1-3, as they are directly related to short and medium term expansion of access, utilization, quality and acceptability of FP services. Funding for activities in Priority 4 should be modest--most support will necessarily come through "buy-ins" to central AID contractors with specialized expertise. However, despite modest investments, these activities are essential to long term strategy for service expansion and demographic change in Senegal. While short or medium term effort can (and should) focus on "easier to capture" groups (urban or peri-urban areas, spacers, etc.), as the program develops over the next five years, it will need to make two important shifts:

1. Method mix must begin to reflect greater use of long term or permanent methods (voluntary surgical contraception and Norplant); and
2. Program expansion must take place to rural areas, where purchasing power is limited and CBD systems are essential to achieving full coverage.

The use of long term methods is essential because they are far more efficient than spacing methods (even the IUD, which has a high drop out rate in Senegal) in generating CYP and thus impacting on fertility rates. This can be illustrated using the TARGET computer model to project CYP with different assumptions. Two different case scenarios for Senegal are included. Both assume an increase in modern contraceptive prevalence rate (CPR) from 3.0% in 1991 to 5.8% in 1995. The effect of increasing the number of VSC procedures (relative to other methods) by even a modest number is to increase CYP by 40,000, as illustrated below:

**CASE ONE**

1991 Modern CPR = 3.0%  
1995 Modern CPR = 5.8%

1991 VSC procedures = 300  
1992 VSC procedures = 300  
1993 VSC procedures = 300  
1994 VSC procedures = 300  
1995 VSC procedures = 300

Total CYP achieved 1991-1995: 270,100

**CASE TWO**

1991 Modern CPR = 3.0%  
1995 Modern CPR = 5.8%

1991 VSC procedures = 900  
1992 VSC procedures = 1000  
1993 VSC procedures = 1200  
1994 VSC procedures = 1300  
1995 VSC procedures = 1400

Total CYP achieved 1991-1995: 310,000

Similar results can be achieved with Norplant due to its high continuation rates.

Currently, few VSC procedures are being performed, and the infrastructure for service provision (particularly minilaparatomy and counseling) is minimal. UNFPA, projecting contraceptive needs over the next five years, projected almost no utilization of VSC.

Although demand is low, the EDS suggests that 17.7% of women want no more children. Evidence from other countries suggests that to ignore VSC would represent a missed opportunity to build up an infrastructure which will make rapid expansion possible when/if women make the shift from being predominantly spacers to limiters (as suggested in the IEC recommendation). Gently and persistently, the Association for Voluntary Surgical Contraception (AVSC) has assisted selected Senegalese institutions to incorporate VSC in their services and training surgeons and OB/GYNs to perform procedures and service providers to counsel couples. Although to date results have been somewhat discouraging, efforts should continue.

A similar situation exists with Norplant. FHI, designated by AID as the point agency for Norplant introduction in Senegal, assisted Senegal to undertake initial pre-introduction trials which had promising results but involved very few women<sup>7</sup>. A second round of trials is underway. Norplant has the disadvantage of being expensive and physician dependent, but the advantage (over VSC) of not being permanent (and thus not subject to Islamic objections).

Expansion of contraceptive services to rural areas will involve strategies different from current clinic-based or commercial-based programs. CBD is the mode of service delivery which has proven to be most effective in rural areas where health infrastructures are non-existent or poorly developed. Relying for support on health centers or health posts, CBD utilizes basic health care workers (PHC workers, barefoot doctors, etc.) or other community leaders, such as local traditional birth attendants, teachers or chiefs as resupply agents for contraceptives and as motivators to villagers in an effort to seek more permanent methods at secondary facilities. In many African countries, it has been shown that CBD agents, if properly trained and supervised, provide high quality FP services in a consistent fashion and provide culturally appropriate follow-up and support for rural women who want to use contraceptives. Given the paucity health personnel country-wide and the maldistribution in urban areas, CBD is one of the few viable options to explore as the program extends to rural areas. Pilot experiences will be important to long term planning of introduction of CBD in Senegal.

Widescale CBD is undoubtedly premature in Senegal, since it was only in February 1990 that approval was granted for nurse-midwives to prescribe oral contraceptives without special laboratory examinations. Still, OR studies conducted by Columbia University provided useful information on constraints and opportunities in rural areas. The Population Council proposes to undertake similar operations research in rural delivery systems and other areas relevant to program expansion. Results from these efforts, which are not costly, can result in enormous savings by suggesting appropriate methods

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<sup>7</sup> Most of the fifty women in the first trial were relatively young (31.1 years), had five or more children and had never used contraceptives. The Population Council, which has a regional office in Dakar, is taking the lead in Norplant introduction worldwide.

to deliver services when the program is expanded to national scale. Results from these studies will enable the Senegalese to take the policy decisions necessary to allow CBD. AID has also undertaken OR in PHC, particularly ORT, providing useful program data.

As stated in Priority 2, USAID's support for data collection and analysis efforts, both census and EDS, is critical to Senegal's and USAID's ability to determine effectiveness of its efforts. As the program advances, financing issues will take on additional importance. Specialized AID contractors (e.g., REACH, PRITECH, PRICOR) have provided, and can continue to provide, data which will support major policy actions by the Senegalese government.

AID has a strong comparative advantage in providing TA in the areas described above. Centrally funded contractors have expertise and language capability to provide the specialized support for these crucial activities. Moreover, USAID/Dakar has in the past made effective use of central contractors for expertise not available through bilateral contractors or in-country, and a number of the central contractors have both experience and existing professional relationships in Senegal.

## RECOMMENDATIONS

It is recommended that USAID continue to utilize Cas through a "buy-in" mechanism in order to provide specialized technical support to activities which will advance the long term strategies of its population program. Funding for these activities can be modest, relative to other programmatic inputs, but it is crucial to program evolution. Specifically, USAID must continue to:

- Develop VSC (minilaparotomy) service delivery and counseling/referral capabilities at the university teaching hospital (UTH) and regional levels. As awareness and acceptance of family limitation increases, programs should be expanded to include active promotion of these services with a target of some 2,000-3,000 procedures per year by 1995.
- Support regulatory approval and introduction of Norplant, including training of providers and counseling and promotion. Although the method is costly, the Mission should evaluate use-effectiveness against initial and program costs, as compared to other methods, before making decisions on subsidizing this method. In any event, private sector promotion is recommended. USAID should subsidize training of private sector providers and facilitate commercial introduction of the method.
- Conduct OR in areas related to program effectiveness (e.g. quality of care, continuation studies) and in strategies for community-based services in rural areas (CBD, community doctors, etc.). Results of these studies need to be disseminated and utilized in policy dialogue with Senegalese leaders.
- Continue the current level of effort in technical and financial assistance to demographic and health surveys and specials studies. Long-acting contraceptive methods, surgical contraception and Norplant are virtually unobtainable in Senegal. There is a widespread perception among both Senegalese health providers and donors that sterilization is illegal. Although not approved by Islam, except for medical reasons, there is no legal prohibition of voluntary surgical contraception in Senegal.

7. **PRIORITY FIVE:** Integrate family planning with health interventions such as AIDS and other STD prevention, maternal health, and child survival.

## **HIV/AIDS**

In Senegal, a low to medium African country in terms of prevalence and seriousness of the AIDS/HIV problem, 307 cases of AIDS were reported by the end of March 1990. As in many African countries, AIDS/HIV is probably underreported. Although testing facilities exist, the health system is generally passive, relying mainly on testing of hospital patients, self-selected clients or screening blood donors. Senegal's AIDS program--the Programme National de Prévention du SIDA--estimated seropositivity at 0.6% among controls, 1.5% among hospital patients and 15.8% among at-risk groups.

In 1988 USAID spent \$486,376 on AIDS/HIV activities in Senegal. Obligations for 1990/1991 are planned at \$570,000 to fund conference travel, blood screening, surveillance, applied research, PVO assistance and public information campaigns. USAID also provides condoms for STD/AIDS prevention and FP: 2.7 million pieces in 1991. STD prevention and treatment is already a major component of the Senegalese program--high risk groups' use of condoms is likely to serve a dual purpose.

A 1988 study carried out in urban Dakar/Pikine reported that about half the population studied (55.8%) recognized AIDS as a STD (as opposed to about one-third who understood how syphilis is transmitted). The same study estimated that only 30% of the population was "well informed" on AIDS/HIV, and that most denied having casual sexual contacts. Still, the study identified some 1,613 prostitutes in the area, with condom use reportedly high. About one-fifth of the population in the study was determined to be at risk for AIDS/HIV. Embarrassment and lack of knowledge were identified as barriers to condom use. The study recommended an education and condom use campaign directed at the high risk groups.

Senegal appears to have been pro-active with respect to the epidemic. It established the Comité Nationale de Lutte Contre le SIDA in 1986, predominantly under the sponsorship of MOH and a number of studies, educational campaigns and other activities have been carried out. With assistance from WHO an elaborate, ambitious, detailed medium term (1990-91) national program which utilizes national and regional SIDA committees has been developed. The plan calls for epidemiological activities (sentinel monitoring, improvement of laboratory testing, a fulltime expatriate epidemiologist, etc.), training of health personnel, IEC activities (mass media), enhanced testing and data collection and follow up of seropositives. The plan requests condoms be donated but does not elaborate on an aggressive plan for large scale condom distribution or social marketing of condoms.

The achievement by GOS of complete funding for this plan is perhaps unrealistic, but for USAID to continue moderate levels of support would be advantageous. USAID has

a comparative advantage in AIDS/HIV programming with good technical capability, a vested interest in the research undertaken by the Senegalese, and practical experience in preventive programs such as condom distribution and IEC.

### **Other STDs**

Although reliable national level statistics are lacking, small scale studies and clinic records give a general idea of the scope of the problem. MOH estimates that 20% of all outpatient consultations are for STDs or complications and that 60% of sterility is caused by STDs. The prevalence of gonorrhoea is between 5-10%; syphilis at 1.2% and chlamydia at 12%. These figures may represent an underestimation of the STD problem.

Knowledge concerning the extent of the STD problem was sketchy until 1984. Since then, efforts and resources have been put into expanding facilities for diagnosis and treatment. The design of PSF included provision for the integration of STD education, diagnosis and treatment into its family planning activities. Further provisions were made to equip and renovate two national and ten regional laboratories, as well as to purchase antibiotics. Supervisory visits reveal variability in cleanliness, efficiency and skill level of lab technicians. Generally, departmental lab technicians can do gram smears for gonorrhoea, wet smears for trichomonas vaginalis and mycosis and RPR tests for syphilis with regional labs usually capable of doing more complex testing. The EC provides TA and supplies to regional laboratories. The governments of Italy and Germany provide TA for the maintenance and repair of laboratory and hospital equipment.

Given the extent of the problem, the MOH emphasis on integrated health services, USAID's historical experience in supporting STD preventive services and the fact that 40% of family planning clients use IUDs (STD or suspected STD is a contraindication for IUDs), continued assistance is an important part of family planning expansion. Still, as the program matures questions of sustainability in treatment (antibiotics) and diagnosis (reagents, test kits and breakable supplies) must be addressed. Mission donations for recurrent cost items are considerable, as is the corresponding logistical support.

### **Maternal Mortality**

The GOS' goal is to reduce maternal mortality 50% by the year 2000. By any standards, Senegal's maternal mortality (between 600-800 per 100,000 and probably underreported) is unacceptably high. Family planning--reducing the number of high risk pregnancies by childspacing and avoiding undesired births--will in and of itself impact positively on maternal mortality.

Other interventions aimed at reducing maternal mortality can be incorporated side by side with contraceptive services. Maternal mortality research conducted with the assistance of Columbia University noted that the vertical family planning program

resulted in distortions in resource use, with midwives and lifesaving modern equipment underutilized in family planning services while overworked in maternities. Prenatal and postnatal care visits often represent "missed opportunities" because family planning information and services are not routinely provided. On the other hand, in many countries, postnatal care is routinely provided in the context of family planning visits.

Maternal mortality studies and subsequent strategy/planning meetings identified interventions (some at very low cost) which can be made at each level of the health system, as well as at the community and governmental level. Opportunities to integrate family planning need to be pursued. For example, the French have committed themselves to ensuring Caesarean section capability in each province. (Many women die en route to Dakar for Caesareans.) Integrating a small minilaparotomy unit for VSC would be a simple and cost effective addition. Other interventions, such as integration of FP and pre- and postnatal care require more planning, but correspond to the GOS strategy and will ultimately pay-off in increased family planning client loads.

### Child Survival

Birth spacing is an important pillar of child survival although it is sometimes overlooked. It has been estimated that spacing births two years or more could reduce infant mortality by 10%. The following infant mortality rates (IMR) figures indicate how closely infant mortality and birth interval are related (Source: EDS 1986).

<u>Birth Interval</u>	<u>IMR</u>
<24 months	114.9
24-47 months	72.4
48+	57.9

The major causes of child mortality in Senegal are:

	<u>Under 1</u>	<u>Under 5</u>
Diarrhea	25.5%	23.9%
Respiratory	26.5	23.1
Malaria	3.1	9.1
Measles	2.0	7.0
Tetanus	9.5	5.4

Immunization and diarrheal disease control through ORT are thus key child survival interventions. UNICEF is the lead agency in expanded program for immunization (EPI); mass immunization campaigns have been the main vehicle to achieve substantial coverage of the population. The issue of maintaining this high coverage is one which UNICEF and the GOS have yet to address. Although diarrheal disease can be cheaply and easily treated through the use of ORS or of a home-mixed rehydration solution, ORT has not

been highly successful in Senegal. According to the EDS, only 7% of diarrhea episodes received this simple treatment; 30% received more expensive and less effective treatment using pharmaceutical products. Thus, the proper marketing and distribution of ORS could be an effective intervention to reduce infant mortality, and one which could be integrated with the social marketing of contraceptives.

## ORS

Research indicates a considerable unmet demand for ORS. Presently this demand is not met through the development of home solution or from present donations of solution from UNICEF. Additionally, there does not appear to be a consistent policy about how the demand for ORS will be met.

If commercial manufacture of ORS solution is not possible in Senegal, at least commercial distribution can make the product more accessible. At present consumers pay unnecessarily for ethical products to treat diarrhea. Commercial marketing and distribution of ORS can meet a need that is not presently being met by either public or private sources. Initially, marketing donated ORS may be necessary. However, by stimulating demand for an ORS product, a market can be created which will ultimately make a fully commercial effort possible.

Developing a strategy for either importation or local production of ORS for commercial distribution is important. A preliminary feasibility study done by PRITECH indicated that local production may be more expensive. Since price will be a major factor, considerable weight should be given to securing the least expensive product.

## RECOMMENDATIONS

Currently in a phase of program consolidation, the Mission will concentrate on a selected number of inputs in the health sector. This is in contrast to some previous efforts (which still may be preferred by certain MOHSA officials), in which USAID has funded a broad range of health activities in a specific geographical area. Since USAID has a strategic advantage in certain technical areas (e.g. AIDS/HIV, child survival), a program consolidation approach focusing the bulk of its level of effort on certain types of health sector interventions is recommended.

However, in narrowing the scope and number of its health sector interventions, USAID should not limit itself to a program which covers only family planning or contraceptive services. Although the demographic situation and unmet need argue clearly for an emphasis on family planning, there are both programmatic and philosophical arguments to include strong components in key related areas. Programmatically, activities in STD prevention and treatment, reduction of maternal mortality and child survival fit very well into an ongoing program. Not only does integration increase program acceptability, it also promotes efficient resource utilization and is in line with the GOS policy of integrated maternal and child health services.

Specific interventions recommended include:

- Incorporate ORS into the planned Contraceptive social marketing program. (See Priority 3)
- Continue the planned level of effort in AIDS/HIV prevention, including surveillance, blood screening, applied research and condom distribution. Incorporate sale of condoms for AIDS/HIV prevention into the social marketing program and insure that the public sector contraceptive logistics system includes clinics, PVCs or service providers to special target groups (e.g. urban youth, HIV positives, "high risk" groups) whether or not they provide other methods of family planning.
- Incorporate AIDS/HIV prevention messages in multimedia IEC campaigns.
- Continue USAID funding (of reagents, equipment) and TA to the STD diagnosis and treatment component in the public sector family planning program. USAID should also consider funding private sector STD counseling and diagnosis facilities, both to enhance quality of care in family planning and as an income generation tool for PVOs and NGOs. USAID should continue to provide antibiotics and other drugs for STD treatment, although a plan should be devised to phase down the Mission's support and/or begin a social marketing effort.

- Support studies and policy dialogue activities (through Columbia University and FHI) which previously produced a national plan to reduce maternal mortality. The plan includes activities at all levels. USAID should strongly support these activities, particularly those which involve low cost interventions which can be integrated at existing family planning clinics. IEC campaigns should include messages directed at prenatal and post-partum care. USAID should consider additional funding for post-partum clinics which will include general maternal health interventions and family planning counseling and services. The Mission should also consider funding integration of curricula on maternal mortality in pre-service training of all medical professionals.
- Continue to fund TA, operations research, training and evaluation in these areas in addition to sale of ORS through social marketing programs. If possible, these activities (especially training) should be merged with in-service and pre-service training in family planning.

8. PRIORITY SIX: Coordinate with other donors' efforts in the population sector, particularly UNFPA and World Bank.

Senegal's population program is donor dependent, and will continue to be in the foreseeable future. While donor coordination does not require any direct commitment of funds in the Mission's proposed program, it does have enormous implications for AID project design and for the overall programmatic health of Senegal's population effort. Major conclusions and facts about the current situation which are presented elsewhere in the report are summarized here as background for the recommendations:

- USAID is the major donor (in TA and funding) in the population sector in Senegal and is likely to remain so; the Mission has a very clear comparative advantage in certain programmatic and technical areas, notably private sector development, method introduction (VSC, Norplant), logistics and MIS, and IEC/mass media campaigns;
- UNFPA is the second largest donor (both in technical assistance and funding), supporting a range of activities across several ministries in the public sector; as a multilateral agency, UNFPA has a comparative advantage in leadership within the donor community;
- World Bank is likely to enter the sector with a significant presence, but as yet has no clearly defined role;
- Other donors have been very lax and noncommittal (in both funding and other kinds of support) regarding population assistance, but this is beginning to change as GOS commitment increases; UNFPA and the Ministère du Plan are not focal organizations for multi-donor coordination efforts;
- Senegal is moving toward a National Family Planning program, which exists on paper but is not yet a reality. Donor funding has been organized on a regional basis (USAID has six regions, UNFPA four); UNFPA supports elimination of this approach;
- Contraceptive supply is an area requiring immediate and continuous coordination because of the growing AID/UNFPA monopoly on supplies in Senegal, because agencies are using different assumptions to project commodities needs, because AID cannot supply all types of contraceptives, because the Government of Senegal is being expected to take over logistics management, and because recurrent stock-outs are handicapping the national program.

## RECOMMENDATIONS

USAID should place a high priority on donor coordination in both program planning and implementation. Coordination needs to be more significant than occasional meetings to describe activities; every aspect of the program needs to be discussed in open forum with Senegalese and donor representatives. USAID should, for example:

- Facilitate UNFPA's multi-donor efforts and focus its--USAID's--efforts (and funding) on areas where USAID has a comparative advantage. Use its influence to support added donor inputs and to focus new donors (World Bank) in appropriate ways. The Mission should encourage UNFPA to continue funding service delivery training and infrastructure development in the public sector, as well as ongoing activities with other government ministries. USAID should enter into active negotiations with UNFPA and the World Bank to determine which agencies take the lead in particular areas. Joint planning needs to take place. World Bank is well positioned to fund infrastructure and other large investment costs while UNFPA should be encouraged to work with the ministries of Plan, Education and Youth and Sports. USAID should maintain its longstanding, strong technical assistance role in a variety of areas.
- Place high priority on developing a common policy dialogue agenda among donors. USAID should consider non-project assistance for key policy changes (such as elimination of duties on contraceptives, acceptance of non-clinical distribution of contraceptives, etc.)
- Plan logistics and commodities procurement at yearly workshops bringing together all parties; likewise, development of MIS should be a joint effort among donors and government/private sector partners.
- Reflect joint and synergistic efforts of all donors in programmatic targets, to assist Senegal in making a national program a reality.

## 9. SUMMARY OF STRATEGY RECOMMENDATIONS

USAID has long been the leading, largest, and most experienced donor in the population sector in Senegal. USAID's program has made remarkable progress over the last five years and is well positioned to make further dramatic gains. Annex C summarizes the current constraints and factors which favor population programming in Senegal. This annex was drawn up by an expert group of Senegalese health professionals during the preparation of the July 1990 national FP program document (draft). It should be noted, however, that this list is generalized and does not reflect the distinction between rural and urban areas (where progress is less and more advanced, respectively) and fails to illustrate the key concept of FP program development as a continuum, with advances coming in a slow, step-by-step fashion. In sum, progress to date has been good, but efforts must remain broad-based, evolutionary and coordinated. Because the reduction of Senegal's excessively high population growth rate through voluntary family planning is of the highest priority in achieving overall development objectives, it is recommended that USAID continue and increase its financial and technical commitment to the population sector.

USAID's operational focus should be on increasing the number of women (or couples) having access to and utilizing high quality, modern contraceptive services, including long acting contraceptives and sterilization. Policy dialogue must be conducted around the need to promote limitation of family size in order to reduce fertility and generate demand for modern contraception.

Access to services should be expanded in both the public and private sectors. Public sector programs should focus on development of a strong, integrated and sustainable national family planning program based on firm GOS commitment. Private sector activities need simultaneously to increase access and decrease costs to the consumer while stimulating the commercial sector to become more active. IEC and social marketing are crucial initiatives in this area. Social marketing should be designed to take maximum advantage of the commercial infrastructure. Contacts with the for-profit health care marketplace should be expanded.

AID should not limit itself to a program which comprises only family planning or contraceptive services. Complementary programs such as maternal mortality reduction, STD and AIDS/HIV programs and selected child survival interventions should be integrated into USAID's assistance package. Initial efforts should be targeted to urban areas with program areas being phased in as the program is able to absorb it.

USAID should continue to utilize Cas to provide greater operational flexibility through specialized technical assistance. TA should be provided to improve MIS, design and implement a contraceptive logistics system and provide quality assurance, clinical supervision and counseling. Operations research should be conducted in areas related to program effectiveness

To maximize resource utilization USAID should coordinate its efforts closely with other key donors (UNFPA and World Bank) operating in areas where USAID has a comparative advantage. Priority should be placed on developing a common policy agenda among donors.

ANNEX A

PROFILE OF SENEGAL AS AN EMERGENT COUNTRY<sup>6</sup>

<u>Program Characteristics</u>	<u>Emergent Countries Overall</u>	<u>Situation in Senegal</u>
CPR (%)	8%	All Methods: 11.3% Modern Methods: 2.4% (EDS '86)
Use higher among urban "elites"	Yes	"Practically all" modern method users live in urban areas. 6.7% of urban women use a modern method; 0.3% of rural women do. (EDS '86)
Status of FP service delivery	Only limited services available through govt and private providers.	At the end of 1989, FP services were available through the <i>Projet Santé Familiale (PSF)</i> (USAID) at 94 public and 30 private sector service points (plus 19 more offering natural family planning) in 6 regions, and the UNFPA sponsored <i>Projet Bien-être Familial</i> had an additional 27 sites in the 4 other regions.  For comparison, the MSP/AS health infrastructure currently consists of 10 regional hospitals, 43 health centers, 659 health posts and over 1400 "cases de santé." As MSP/AS summarized through Dec. 1988, FP had been established at 25% of hospitals, 26.7% of PMI centers, 62% of health centers, 5.8% of health posts, and 1.6% of rural maternities, or 3.7% of the whole health infrastructure, not including cases de santé.

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<sup>6</sup>The AID Office of Population's Family Planning Services Division categorizes AID recipient countries into five groups according to contraceptive prevalence (modern methods), from "emergent" countries with less than 8% CPR to "mature countries", with prevalence over 50%.

Program Characteristics

Emergent Countries Overall

Status of FP service delivery (cont'd)

Services not widely known

Methods not widely known

Situation in Senegal

80% of currently married women (CMW) who knew a given method knew where to get it, except for pills and condoms; over 28% of women who know of pills and condoms did not know where to get them. (EDS '86)

67.6% CMW know at least one modern method (87.5% of urban CMW, 58.1% of rural) 23.8% CMW know a traditional method (90.1% of urban CMW, 30.9% of rural). Note: highly variable by region. Women most knowledgeable about modern methods in West, then in order, Center, South and Northeast. (EDS '86)

Columbia Maternal Mortality Study found that 50% of women knew any method of child spacing; 10% knew of a modern method.

The MSP/AS identifies a positive association between educational attainment and knowledge of FP methods; the level rises from 46% of women with no schooling, to 87% among women with primary education, to 97% among women with secondary education (or beyond).

<u>Socio-economic Characteristics</u>	<u>Emergent Countries Overall</u>	<u>Situation in Senegal</u>
TFR	6.4	6.4 (1990 World Population Data Sheet, PRB '90) 6.6 (EDS '86)
Life expectancy	49 years	46 years (PRB '90)
IMR	116/1000	128 (PRB '90) 125 (Child Surv. Rpt to Congress, '90) 86.4 (EDS '86) Note: there is <u>much</u> regional and urban/rural variability. A 1988 ORANA study in Diourbel and Fatick estimated IMR at 300/1000.
Labor force in agriculture (%)	76%	81% (1980) from <u>Economically Active Population Estimates and Projections, 1950-2050</u> , ILO, 1986
GNP per capita per year (\$)	\$347	World Bank estimates for per capital GNP increased from \$510 ('87) to \$650 ('88). Most feel this is an artifact not reflective of real gains.
Urban population (%)	26%	36% (PRB '90)

Program Needs of  
Emergent Countries Overall

Situation in Senegal

Build support and credibility for FP

In the last ten years there has been slow but steady progress in this area, in the context of "child spacing." In 1980, contraceptives were legalized. In 1981, the Direction de Planification Familiale was created at the MSP. A favorable national population policy was articulated in April 1988. However, most observers note that the medical community is ambivalent about family planning, and that there is only weak integration of FP into maternal and child health (MCH)/primary health care (PHC). The historic split between FP and public health (which were housed in different ministries) is being ameliorated by the merger of the Ministère de la Santé Publique and the Ministère du Développement Social into the Ministère de la Santé Publique et de l'Action Sociale (MOHSA).

Training of key personnel

In 1988, there were 407 physicians, 1600 nurses, 474 midwives, and 1131 "agents de santé." Since 1984, clinical FP training has been provided to 65 Mds, 32 nurses, and 300 sages-femmes. In IEC, 300 agents de santé and 512 voluntary female workers have been trained. In addition to expanding clinical FP training of MSP health personnel, specific needs currently identified include training in FP management for PSF administrators and in interpersonal communication (for all).

Develop policies and strategies

National population policy exists, as does a current policy/strategy document (July 1990). Strategies are based on three key "principles" or objectives: (1) to provide services to identified target populations (post-partum women; risk groups of women under 20 and over 45; and "spontaneous demand"); (2) to extend access to services (by integrating into PHC, working with private sector, mobilizing community-level health resources, and development of social marketing); and (3) to pursue the "paramedicalization" of FPSD which now lies completely within the scope of Mds and sages-femmes only (by involving the whole range of health personnel in service delivery ; doctors, sages-femmes, nurses, matrones, and agents de santé). The following table indicates who could offer which services:

	VSC	IUDs	Pills	Injec- tables	Condoms	Spermicide	Referral
Mds	X	X	X	X	X	X	
Sages-femmes	X	X	X	X	X	X	
Nurses	X	X	X	X	X	X	X
Matrones		X	X	X	X	X	X
Agents de santé			X		X	X	X

Program Needs of Emergent  
Countries Overall

Develop policies and strategies  
(cont'd)

Generate demand

Situation in Senegal

Current focus is on regional and departmental health plans (PRDS and PDDS) which must address population issues and strategies. It is not clear how well these plans will fulfill this requirement, not how their implementation will proceed.

A public education campaign (mass media) was undertaken in 1988-89 including TV/radio spots, TV/radio dramas, radio telethons, advertising, etc. With 67.6% of CMW knowledgeable of a modern FP method, and 37% who say they either want no more children or to space their next child, one challenge is to translate that knowledge and that desire into demand for services (presentation at a service point) and correct use of method.

While services are not adequate to meet existing demand, neither is existing demand sufficient to impact population growth significantly. Further demand must be generated.

Program needs of Emergent Countries Overall

Meeting needs of urban elite

Develop clinical services (create service delivery, clinical training, and referral capabilities)

Donor participation and coordination

Situation in Senegal

The majority of acceptors are urban dwellers and the majority of service points are in urban areas. Various social marketing of contraceptives schemes are under discussion, which would also primarily serve urban dwellers. Since Senegal is nearly 40% urban, and the trend is continuing, serving this population well would be a significant start. Serving rural women will require the national family planning program to make one or more of the following innovations, in addition to integrating FP into services at the health post level (which is already a stated priority): operationalize some kind of outreach system using community-based motivators and/or service providers, access the informal private sector, or incorporate traditional health practitioners.

This is the area of greatest need. MSP (and USAID) must decide between strategies which would expand the number of service points and those which would improve the quality and effectiveness of services currently (theoretically) available at existing sites. Logistical considerations are also paramount (assuring continuous adequate supplies, etc.). Clinical FP training facilities and capabilities exist in-country, but efforts to improve and expand them are also needed.

It has been calculated that foreign aid accounts for 70% of the national budget for primary health. In this environment, donor coordination has become a major effort in the last three years. The World Bank, the UN agencies, USAID, and other bilateral donors meet regularly.

## Annex B

### **Breastfeeding Guidelines for Optimal Child Survival and Child Spacing**

- Begin breastfeeding as soon as possible preferably within the first hour after the child is born.
- Breastfeed whenever the infant is hungry, both day and night.
- Breastfeed exclusively through 4-6 months.
- Begin appropriate complementary semi-solid foods after 4-5 months of age, but continue to breastfeed.
- Continue to breastfeed, even if mother or baby becomes ill.
- Position the infant so that its mouth covers both nipple and areola and latches on properly.
- Avoid using bottles, pacifiers (dummies), or other nipples.
- Eat and drink enough to satisfy mother's hunger.

Adapted from *Guidelines for Breastfeeding in Family Planning and Child Survival Programs*, Institute for International Studies in Natural Family Planning.

## Annex C

### The Balance Sheet: Constraints and Factors which Favor FP in Senegal

#### CONSTRAINTS

- Pronatalist Tradition
- Fatalism
- Perception that Islam is unfavorable to FP
- Disinterest by men
- Rumors
- Rejection of "limitation" - suspicion of FP
- Poor integration of FP with other health services
- Too few service points
- Poor quality services
- Cost, especially lab tests
- Stock-outs (contraceptives)
- Too few trained personnel
- No anti-natalist legislation
- FP not part of pre-service health training
- High mobility of health personnel
- Poor MIS, use of data
- High infant and maternal mortality

#### FAVORABLE FACTORS

- Changing mores in modern sector
- Religious leaders favorable
- Cadre of motivators showing results
- Women's literacy increasing
- More women's groups
- Urbanization
- Inflation, economic burden of children
- Medical community realizing FP helps decrease maternal, infant mortality
- Key leaders concerned with negative impact of population growth
- Donor assistance
- International environment favorable
- GOS population policy
- Decentralization
- Increased interministerial involvement
- Technical interchange

## Annex D

### Cooperating Agencies' Contribution to Family Planning in Senegal

Sixteen cooperating agencies contributed to Senegal's program, as follows:

- AMERICAN COLLEGE OF NURSE MIDWIVES (ACNM). Through the International Science and Technology Institute (ISTI) contract, important TA was provided in clinical management, service protocols, etc.
- FAMILY PLANNING INTERNATIONAL ASSISTANCE (FPIA). Funded, through the National Council of Negro Women (NCNW), the precursor project of VSPP.
- COLUMBIA UNIVERSITY. Conducted several important OR efforts in rural and urban areas; also conducted a non AID-funded maternal mortality study.
- FPMT (Management Sciences for Health). Provided U.S. and Senegal-based training and support in management and systems development.
- FPLM (John Snow, Inc.) and CDC. Provides assistance in preparing contraceptive procurement tables (CPTs) and forecasting annual contraceptive requirements.
- ENTERPRISE PROGRAM (JSI). Organized a workshop (with ISTI) on work-based FP which gave VSPP added momentum.
- Family Health International (FHI). Organized Norplant pre-introduction trials and various studies.
- POPULATION COUNCIL. Has just opened a regional office in Dakar. Potential exists for a key role in policy dialogue, OR and Norplant introduction.
- PROGRAM FOR INTERNATIONAL TRAINING IN HEALTH (INTRAH). Assisted early training and training of trainers (TOT) efforts; did early feasibility review for private sector.

- **RAPID/OPTIONS (Futures Group).** Contributed to development of Senegal's population policy and assisted USAID in defining the impact of population growth on development.
- **ASSOCIATION FOR VOLUNTARY SURGICAL CONTRACEPTION (AVSC).** Has patiently and sensitively promoted VSC among Senegal's conservative OB/GYN elite.
- **UNITED STATES BUREAU OF THE CENSUS (BUCEN).** Provided essential TA to conduct 1988 census and provides assistance in analyzing census results.
- **CENTER FOR DEVELOPMENT AND POPULATION ACTIVITIES (CEDPA).** Provides a link with Senegalese women's programs and their concerns through small, community-based efforts.
- **JHPIEGO (JOHNS HOPKINS).** Contributes to training of doctors and other health professionals, especially in TOT and STDs. Becoming involved in private sector health professional training.
- **JHU/PCS.** Provided TA to ISTI/GOS's mass media campaign.
- **DHS.** Conducted demographic and health survey in 1986.

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