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**Multi-Year Population Strategy
for Senegal**

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NOTE:

The text that follows was prepared for the review and use of the USAID Mission in Senegal. Dr. Sarah Clark, Chief of the Policy Development Division, Office of Population, USAID, directed the team of consultants who prepared the report during their stay in Senegal from February 19 to March 5, 1981. The work was funded in part under the Integrated Population-Development Planning Project, No. AID/DSPE-C-0062 with the Research Triangle Institute (RTI), Research Triangle Park, North Carolina.

In addition to Dr. Clark, Dr. James C. Knowles, IPDP Program Director and Senior Economist at RTI, Dr. John B. Tomaro of the Office for International Programs at RTI, and Dr. Jean Lecomte, Public Health/Family Planning Consultant, participated in the mission.

Mr. William Bair, Population Adviser with the USAID Regional Office in Abidjan, Ivory Coast, visited Senegal during the period of the assessment and acted as a Resource Person. Mr. Bair's considerable experience and knowledge of population activities in other countries were important aids to the work of the team in Senegal.

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Introduction and Summary

At the request of the USAID mission, a population assessment team composed of A.I.D. and contract employees visited Senegal in February and March 1981 to:

- design a comprehensive population strategy based on the concern expressed in the CDSS (1982);
- to advise the mission on how to proceed with its bilateral Family Health Project (0217), signed in 1979 with the Government of Senegal, but not implemented.

The team found a helpful and supportive atmosphere in the mission for considering population issues and a recently changed, more positive situation in Senegal itself. Therefore, the team has proposed an ambitious, multi-faceted strategy.

The work of the team was divided into five areas. The recommendations below follow the work plan of the group.

Demographic Data

Recognizing the need for awareness of demographic realities and for an adequate data base for planning, the team extensively reviewed the demographic situation in Senegal. The census, as yet incomplete, and the Senegalese Fertility Survey reveal very high fertility patterns.

The team recommends that:

- analysis and studies be pursued and/or carried out on a limited scale through central contracts to develop research capabilities at the Census Bureau (BNR) and to advance population policy formation.

Research Capability

There are many national and regional institutions which have the capacity to study the interrelationships of population and development. However, population research is not currently underway in many of them

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nor have many had extensive relationships with other A.I.D. programs.

Over the long-term, the USAID program in population will be strengthened by supporting analysis in and developing relationships with these institutions. The team recommends that:

- Battelle develop activities with CONAPOPOP and that another research organization build on established contacts. Support of discrete applied studies will expand capability of Senegalese and regional organizations to address population questions relevant to Senegalese development.

Population Policy

The Government of Senegal has taken many positive steps toward forming a national population policy. However, not all officials recognize the consequences of rapid population growth or support an action program. The team recognizes the importance of supporting informed discussion of population-related issues, while allowing the policy formation process to evolve without direct U. S. involvement. Therefore, the team recommends that:

- support be channeled to CONAPOPOP both to follow-up the RAPID project and to develop a series of applied studies and analytic seminars on population issues at the national level.

The team also recognizes the policy impact of successful delivery of family planning within this process.

Family Planning Programs

The problems attendant on the family planning project were by far the most difficult considered by the team. Implementation has been blocked for two years. However, quite recently progress has been made and the two ministries involved have begun a dialogue that could resolve the problem. The team makes the following recommendations:

- top USAID leadership should participate as necessary in resolving the implementation problems.

- the Family Health Project (0217) should be modified to emphasize the following elements:
 - - Management development;
 - - Training of clinical personnel as can be accommodated effectively;
 - - Assessing and upgrading of existing MCH facilities;
 - - A broadening of the scope of maternal and child health and family planning services and training (including a limited emphasis on both clinical and public health aspects of infertility);
 - - Strengthening information, education and communication programs;
 - - Supporting ASBEF, the private family planning association.

In order to make the project work, the team recognizes the importance of building a critical mass of trained clinicians and middle and top level managers of family planning programs. This issue has been given special emphasis. Accordingly, the team recommends that:

- training opportunities be developed through the project, if possible, and/or through centrally funded contracts.

Further, it is suggested that the mission explore alternative service delivery modalities both in support of or independent from the Family Health Project. Subsidized sales of contraceptives through the private sector and community based distribution of contraceptives in project areas could be considered.

Population Impact of Other USAID Projects (Section 104d)

As evidenced by the CDSS, USAID/Dakar recognizes the need to incorporate population factors in all development efforts and gives particular emphasis on developing elements within projects designed to improve the status and role of women. The team recommends that:

- population impact and demographic analysis be strengthened in projects and that, where appropriate, family planning services and commodities be delivered through on-going projects.

Activities of Other International Organizations and Donors

The team reviewed population programs of other donor agencies and international organizations. The program of the UNFPA is especially important; it is an extensive program and provides support to many of the same institutions that A.I.D. is proposing to support. Coordination is, therefore, quite important not only to avoid duplication, but to avoid a high profile for A.I.D. in the population field. The team recommends that:

- the mission director and the person responsible for population matters initiate an informal but regular coordinating mechanism with the UNFPA. From time to time, it will be important to include other donors.

Implications of Recommendations for USAID Management

The program outlined above is admittedly ambitious. It is highly desirable to proceed at once on a broad front and to build up a solid population constituency in Senegal. As outlined, the program requires coordination of centrally-funded training and research projects, design and negotiation of a bilateral population project, review of the population implications of the mission's total program, and consultation with other interested agencies in Senegal. The team recommends that:

- mission staffing include a full-time direct hire population officer to coordinate this program in country.

Recognizing the time delay and current staffing constraints, the team recommends:

- as an interim solution only, that project amendment and negotiation take place with the assistance of a short-term consultant and temporary assignment of direct hire staff, and that the role of one of the technical advisors called for in the project as currently designed be expanded to cover some of these functions.

I. Current Demographic Situation

A. General Background

According to the preliminary results of Senegal's first complete Population Census (1976), the population in 1976 was 5.1 million. This figure is approximately 600,000 more than expected, based on estimates obtained from two earlier demographic surveys (1960-61 and 1970-71). This finding caused the government to revise upward its earlier estimate of the population growth rate, from 2.2 percent to 2.9 percent, although it should be noted that unofficial estimates of the population growth rate have ranged as high as 3.2 percent. It is clear that Senegalese fertility is very high and probably rising (see discussion below of Senegal Fertility Survey), while mortality has been falling more or less steadily over the past thirty years. If current trends continue unabated, Senegal's population is projected to rise to 11 million by the year 2000 and to 26 million by the year 2025.

Senegal's population is growing very rapidly and could grow more rapidly over the next 10-20 years. Although the country's overall population density is not very high (25 persons per square kilometer, as compared to 19 for Africa as a whole), much of the territory can support only a very sparse population. The density issue, which is cited often, has little relevance for conditions under which most people live. At present, one of Senegal's principal demographic problems, is that of population distribution. Cap Vert, with only 0.4 percent of the country's land areas, has 16 percent of its total population (and 55 percent of its urban population). Moreover, the substantial internal migration

flows continue to be largely in the direction of Cap Vert. In addition to the extremely high population density in Cap Vert (and its attendant problems of crowded living conditions and unemployment), the area which has traditionally played the most important role in Senegalese agriculture (the central Peanut Basin) has begun to show clear signs of overpopulation and environmental deterioration due to overly-intensive (albeit crude) cultivation practises. Although much of the country's southern and eastern regions appear to be under-populated with good agricultural potential, the costs of developing those areas are enormous.

Besides the already mentioned demographic characteristics of rapid growth, mal-distribution, and a youthful age structure, internal migration movements tend to be quite large and often seasonal in nature. Some of these flows have undoubtedly contributed to the country's development (e.g. flows from the overly-populated Peanut Basin to the under-populated East). However, a large part of the flow continues to be rural to urban in nature and directed largely to the already overpopulated region of Cap Vert. Migrant flows of the latter variety were particularly heavy during the drought period of the early seventies. From 1972/3 to 1976, for example, the population of Dakar grew at an annual rate of 8.2 percent (compared to an annual rate of 6.1 percent for the entire period 1955-1976). These and other population movements, both internal and external, are described in detail in the final report of the Senegambia Migration Study.

While a poor distribution of the existing population is the most obvious demographic problem in Senegal, the rapid growth rate poses more subtle obstacles to development. The major effect of Senegal's high

fertility and declining mortality is an age structure with about 45 percent of the population under 15 years of age. Should Senegal attempt to increase school enrollment rates dramatically, the preponderance of youth in the total population (growing at a rate of perhaps as high as 3 percent per annum) would make the budgetary implications of such a program enormous. The current age structure of Senegal's population also represents a very high dependency burden, particularly from the standpoint of producing a sufficient quantity of food.

The following analysis of a most recent study, gives much more detail on the status of the nation's fertility.

B. Senegal Fertility Survey - Enquête Sénégalaise sur la Fécondité (SFS)

In association with the World Fertility Survey, the Bureau National du Recensement, Direction de la Statistique, conducted a nation-wide survey of almost 4,000 women (30 percent urban) in 1978. The data have already been processed and analysed, and the final report is expected in March, 1981. The discussion which follows is based on a preliminary report (the second) which presents a limited number of tables relating to nuptuality, fertility, mortality and contraceptive knowledge and use.

Nuptuality: Mean age at marriage among women ages 30 and above is approximately 16.1 years. The patterns for younger women do not show any rise in age at marriage. Indeed, among women under 20 at the time of the survey, a significantly larger proportion married below the age of 15 (as compared to ages 15-19) than older age groups. Once married, the women surveyed in the SFS spent an average of 94.5 percent of their time in marriage, the percentage being somewhat lower among urban as

compared to rural women (91.9 percent versus 95.6 percent). This difference reflects higher divorce rates in urban areas.

Fertility: The SFS data show that women 40 years and older have had an average of about seven live births. This is very high, even for Africa, and is consistent with the view that Senegal's population has been growing rapidly. The data presented in the provisional report do not provide a basis for assessing directly whether fertility has been falling over time.

Only 4.1 percent of women ages 25-29 have not had at least one live birth (this falls to about 3.5 percent among women 35 years of age and older). Moreover, the SFS shows that about two-thirds of all women 35 years of age and older have had at least six live births (with 85-90 percent having at least three births).

There is a tendency for fertility (even completed fertility) to be inversely related to age at first marriage, but the relatively small number of women 45 years of age and older who married at age 20 or older makes it difficult to regard the evidence as highly conclusive (the observed is in any case only about one birth).

There is no urban-rural fertility differential among the sample women in the SFS, even after controlling for age. This is surprising given the fact that the socio-economic conditions in Senegal's urban sector are so different from those of the rural sector. Regional fertility differentials are also very weak, but Cap Vert, Thies and Casamance areas exhibit fertility rates of approximately five percent higher than other regions. The preliminary report presents no evidence on fertility by education or husband's occupation, but the absence of significant

urban-rural and regional differentials suggests that these are probably not very marked.

Mortality: The SFS data show child survival rates of about 65 percent among women ages 40 and above, and significantly higher rates for younger women. Using Brass techniques (with all of the questionable assumptions they imply in the case of Senegal) one obtains the following conclusions:

1. The infant mortality rate is 156 percent per thousand live births;
2. The mortality rate for children between the ages of one and five is 102 per thousand;
3. The mortality rate between ages five and 20 is about 60 per thousand.

These rates, while high, imply that a woman with only two live male births could be 91 percent confident of having at least one son survive to age 20, while a woman with three male births could be about 97 percent confident of such outcome. Moreover, given that about 80 percent of all deaths under the age of 20 are likely to occur before the child reaches age five, a woman's chances to replace lost children are substantial. One may conclude from this evidence, as well as from much of the available statistical analysis, that even substantial declines in mortality rates in Senegal are unlikely to have much impact on fertility. Indeed, the SFS data show a very weak relationship between fertility and child survival rates, even when woman's age is held constant.

The information on child survival rates and its apparent disassociation from fertility-regulating practises needs to be examined closely and, if verified, employed to challenge the common perceptions that decreases in the rate of infant mortality must precede the implementation and acceptance of fertility-regulating practises.

Patterns of Breast-feeding: The length of breast-feeding can be an important natural factor affecting fertility. The SFS data indicate that Senegalese women tend to breast-feed on average for about 24 months (which is quite long even by African standards). This extended breast-feeding would appear to be an important factor keeping Senegalese fertility lower than it might otherwise be. Moreover, the SFS data indicate that there are quite significant differentials in length of breast-feeding according to age, literacy, and place of residence. For example, women under 35, literate women, and women residing in urban areas have a median length of breast-feeding about six months less than women 35 and over, illiterate women and rural women. These observed differences in breast-feeding practices probably explain, at least partly, the lack of any observed differential between urban and rural areas. They also indicate that one can expect fertility levels to rise, perhaps significantly, over time as length of breast-feeding declines or as bottle formula feeding takes its place.

Contraceptive Knowledge and Use: Some method of contraception is known by about 60 percent of the SFS sample women, although modern methods are known to only about 20 percent (about 25 percent among women 20-34 years of age). Urban women are more aware of contraceptives than are rural women (70 percent versus 55 percent); literate women are more aware than illiterate women (80 percent versus 58 percent). Regional differentials in knowledge of contraception are not great (with exception of the Fleuve and Senegal-Oriental regions, where only about 45 percent of the sample women have knowledge of contraceptives).

Contraceptive use, even of traditional methods, is extremely low. Only about 10 percent of the sample women report ever having used contra-

ceptives, and only 1 percent report every having used a modern method. There is no significant variation in contraceptive use with age, parity (except zero parity), or with place of residence. Literate women, however, have made greater use of contraceptives than illiterate women (19 percent versus 10 percent).

Surprisingly, contraceptive use is lowest (6 percent ever use) in the Cap Vert/Thies region, while it is highest (24 percent ever use) in Casamance. The authors of the SFS provisional report attribute this surprising regional pattern to a less frequent use of traditional methods in the more developed region. However, if this were the case, one would expect a similarly reversed pattern with respect to literacy, since literate women would presumably be less likely to use traditional methods.

C. Conclusions and Recommendations

Senegal remains a very traditional society, with a low age at marriage and with fertility patterns highly suggestive of natural fertility. Altered patterns of breast-feeding and improved health have probably had more to do with whatever minor fluctuations in fertility have occurred than changing marital patterns or contraceptive use.

Of the three proximate determinant variables of fertility, as defined by Bongaarts, none is significant in the analysis of Senegalese fertility. Since age of marriage is still quite low, fertility is not inhibited by lack of sexual exposure. Breast-feeding patterns are quite prolonged; if the period is reduced, fertility may even go up. Finally, there is no effective measure of the probable effect of induced abortion on fertility.

Mortality continues to be high but reductions in mortality will probably not have much impact on fertility. Low levels of female literacy (10 percent among the SFS sample women) pose an obstacle to contraceptive use. Regional differentials in observed contraceptive use require closer study but more information will probably be available in the SFS Final Report.

The findings of this brief analysis are as interesting in their presentation as their omission. Infertility in Senegal -- an often-raised question -- is statistically quite low, and subfecundity is also relatively low. Whether these data, after further analysis, will alter Senegalese perceptions remains to be seen. The results of the infant mortality sections also bear further scrutiny. The results here need to be very carefully analyzed as to the robustness of the estimates of infant mortality, and their implications for completed family size.

None of the analyses in the preliminary report show desired or expected family size of the women interviewed nor do they provide any information on the desire of women to limit their fertility. Unfortunately, since the survey questionnaire was not made available, further analysis of this important area could not be done. However, since Senegal's fertility pattern is so close to natural fertility, it may be that analysis of desired family size will not reveal a substantive demand for contraception. Nonetheless, if possible, this analysis should be carried out in order to guide the efforts of the birth-spacing program. The team recommends that:

- analysis and study of these data sets be continued on a limited scale through centrally-funded projects.

Specific modalitites for undertaking much needed analysis and possible institutional association are described at the end of Section II.

II. Research Institutions and Capabilities

A. Government Institutions

1. Directorate de la Statistique (Statistics Division)

The Statistics Division, which is in the Ministry of Finance and Economic Affairs, consists of three divisions; one (Division des Enquêtes et de la Demographie - DED) contains the Census Bureau (Bureau National du Recensement - BNR) which is responsible for conducting all household surveys. The Division des Enquêtes has a professional staff of twelve demographers and statisticians, as well as a complement of vehicles needed for carrying out field operations. DED uses the IBM 370 (Model 145) computer belonging to the Ministry of Finance. DED's main activities are to design and carry out surveys, process the data obtained in these surveys and produce tables based on the raw survey data. In addition, DED does some analytical work, particularly in the area of demography. It is also clear (see discussion below) that DED is not the only organization in Senegal collecting data through household surveys.

In recent years DED conducted Senegal's first Population Census (1976), supported by UNFPA, as well as a program of post-censal surveys. The first of these was the Senegal Fertility Survey (1978), also with support from UNFPA; the second was a labor force survey (1979), with UNFPA support and the technical collaboration of the I.L.O. (DED apparently had a number of disagreements with the I.L.O. about how the labor force survey should be carried out). Although not strictly a part of this post-censal survey program, DED is also currently carrying out a mortality survey (longitudinal) in the Thiès Region, with indirect

funding from A.I.D. through the Institut du Sahel (Bamako). In addition, DED has plans to carry out a migration survey, an agriculture survey and a household budget survey. The BNR has encountered problems in obtaining funding for the migration survey and the household budget survey. Of the two, the budget survey is probably more urgently needed for planning purposes than the migration survey.

The Senegal Fertility Survey, part of the World Fertility Survey, is widely acknowledged to be a nearly unqualified success. Preliminary results have already been published, and a two volume final report is expected to become available in March, 1981.

While the labor force survey has been carried out, UNFPA has apparently withheld funding for its analysis. A proposal to use these data to study the urban informal sector has been forwarded for possible funding under the Integrated Population and Development Planning Project (IPDP) funded by A.I.D. Since the amount of money involved is relatively small (about \$13,000) and since the planners have indicated that information on the urban informal sector is of high priority (discussions with Mr. Dieye), the study should probably go ahead.

In meetings with the team, DED staff requested support for Senegalese participation in the UN Statistical Office Household Capabilities Program. This was cited as the most important need. However, there has been very little collaboration between U.S. institutions and the BNR to date. Given the absence of collaboration with U.S. institutions and the difficulties cited above in data processing, A.I.D. should be reluctant to participate in funding the Household Capabilities Program.

DED, along with comparable institutes in many other developing countries, has had serious problems publishing its data within a reasonable period of time. Delays in the 1976 census are particularly severe, although it should be kept in mind that it is Senegal's first census. Problems with computer software, lack of continuity in programming staff, and some questionable decisions at early stages have delayed the publication of the census. Currently, census data are available in published form for only six of eight regions. Apart from preliminary tabulations of the total population, there is still no published census data for the country as a whole. Of far greater concern is the assessment made by a number of users of the published census data that the data themselves (at least the published tables) contain serious errors and unclear definitions.

DED's professional staff have little computer expertise or experience. The Computer Service is a separate entity in Statistics; the computer programmers do not have even a rudimentary familiarity with demographic concepts and there appears to be a lack of communication between the two. There is a high turnover in programmers, a common problem among developing countries, because the salary scales for programmers are too low relative to those in the private sector. DED has been acting effectively as a training institution, providing experienced programmers to the private sector. DED has attempted to remedy this situation by regrading programmers on the salary scale. The Director also hopes that the private sector will soon be saturated with programmers. According to those working in the field, however, there is no evidence that this is occurring.

Still, DED is regarded by many to be a generally well-run organization, capable of collecting data of good quality. According to all reports, DED has also worked closely and effectively with planners in the Ministry of Planning. It is also clear that DED has a number of very competent people on its staff who realize where their problems lie, and have shown considerable candor in chronicling their failures along with their successes. (See, for example, the 1979 Annual Report of the Statistics Division). It is also clear, however, that DED will require further training of its staff, particularly in the use of computers, if it is to avoid some of the problems encountered in the past. IPDP and other training resources should be made available for this purpose.

2. Ministère du Plan et de la Coopération (Ministry of Planning and Cooperation)

The Ministry of Planning is charged with the task of preparing Senegal's Development Plan. The Directorate of Planning has a Division of Human Resources which, until recently, housed a UNFPA-funded Population Planning Unit (Unité de Population) described elsewhere.

As things currently stand, the activities of that Unit will be carried out through the Commission National de la Population (CONAPOP) which has responsibility for incorporating demographic variables into the Plan and provides a Ministerial-level forum for discussion of Senegal's population policies. In addition to the Population Planning Unit, the CONAPOP Secretariat has an Executive Secretary, formerly the Director of BNR and one of the country's most competent demographers. Support to this Unit, through the centrally-funded Battelle project, is recommended.

3. Amenagement du Territoire (Regional Planning Unit)

This unit (AT), located in the Ministry of Urban Affairs, Housing and the Environment, is responsible for developing a long-range plan for the development of the various regions of Senegal (the Plan National de l'Amenagement du Territoire). It is basically a regional and physical planning authority which works to determine where industry and infra-structure should be located over a 10-20 year planning period. It is also concerned with the development of the country's natural resources and with tracing the implications of long-term regional development programs such as OMVS. As part of its work, AT develops regional population projections, which require the results of the still to be conducted migration survey, and constructs demographic profiles on a sub-regional level, which require reliable census data. Amenagement du Territoire is a consumer rather than a producer of basic data.

A current UNFPA-funded project in AT 1) uses census data to study size patterns of villages and how they are distributed geographically; 2) carries out in-depth sociological studies to determine reasons for migration; and 3) studies possibilities for developing human settlements to serve as an alternative to Dakar.

The possibility of assisting AT in the use of computerized mapping techniques has been explored. This work should proceed if AT provides qualified staff to collaborate with a contractor and to serve as the focal point for the effective transfer of technology.

B. Non-Government Institutions

Senegal has a number of research institutions, all situated in Dakar, which can conduct research, collect and analyze data, and organize workshops, conferences and seminars in the area of population and development.

Some of these organizations operate at the national level; others operate at a sub-regional, regional (i.e., pan-African), or international levels.

C. National Institutions

1. University of Dakar

The University of Dakar has a number of institutions which conduct research on demography and economic development. The largest is Institut Fondamental d'Afrique Noire (IFAN). IFAN is a venerable research institution founded in 1936 and formerly known as the Institut Français d'Afrique Noire. IFAN has a large staff and conducts research in a number of areas, particularly in the social and cultural field. Mr. Mamadou Niang, one of IFAN's staff, recently completed a study for UNFPA on law and population in Senegal. Another IFAN staff member, Ms. Fatou Sow, was one of the authors of the final report of the USAID-funded Senegambia Migration Study.

The Economics and Geography Faculties have also conducted research in the population field. Centre de Recherche Economique Appliquée (CREA) is a research institute affiliated with the Economics Faculty and has conducted a survey, in collaboration with CRED (University of Michigan), on out-migrants to France from the Bakel area of the Fleuve Region. Unfortunately, the data, sent to the U.S. two years ago, have not yet been analyzed. Given the study's potential value to learning more about the impact of migration on agricultural production and the presumably low marginal cost involved, support for analysis of these data under IPDP should be actively explored.

The University only recently acquired computer facilities, an IBM Model 1130 with 32k bytes of core storage and 1 megabyte of disk storage.

This 15 year old machine was purchased for \$100,000 and probably has less actual computational power than newer mini- and micro-computer systems costing less than \$10,000. On the bright side, the University does have at least one highly competent computer specialist, Mr. Jean Paul Dispagne (a Senegalese), who assists University researchers in the use of the computer and who encourages its wider use by the faculty.

The University of Dakar tends to take a somewhat Ivory Tower approach in its research. The social science faculty in particular does not appear to work very closely with government planners. One reason for this is probably an academic tradition which places greater emphasis on qualitative as opposed to quantitative research. Increased availability and use of computer facilities at the University will probably have a salutary effect on this condition.

2. Ecole Nationale d'Economie Appliquée (ENEA)

ENEA is a consortium of five colleges with a total enrollment of 180 students. Each college provides technical training for a different branch of government service. The five colleges are: College de la Statistique, College de l'Animation, College de la Planification, College de la Coopération, and College de l'Enseignement Moyens Pratiques. ENEA faculty gives students practical training in their respective areas of specialization. Students have gained research experience by collecting and coding data on faculty research projects. As part of the Joint Assessment activities conducted with the Government of Senegal, USAID supported a study on the impact of A.I.D. project beneficiaries, conducted by the College de l'Animation. In the population field, ENEA has already completed a project studying migrants to France from the Fleuve Region

(Bakel) and plans to carry out a project studying female migrations from the Casamance Region to Dakar. The former study was specifically designed to determine how remittances from migrants were being used.

ENEA's faculty are keen to undertake other applied research projects in the population area. ENEA's students constitute a highly motivated cadre of potential enumerators who can provide a quick turnaround on surveys of limited scope. Since experience gained by the students in carrying out such projects is transferred to their respective Ministries after completing their training, there is every reason to encourage ENEA's involvement in future population research.

3. Société Nationale d'Etudes du Développement (SONED)

SONED is a private sector firm with considerable experience in the field of development planning. It has carried out studies on behalf of the Ministry of Planning. Although SONED has not been particularly active in the population field, it currently is studying migration in West Africa. SONED is such a strong institution from the standpoint of technical expertise that it must be considered as a major potential collaborator in any future population research. Unfortunately attempts to make an appointment with someone at SONED were unsuccessful.

D. Regional Institutions

1. Institute for Economic Development and Planning (IDEP)

IDEP is a UN-affiliated African regional institution that trains planners, conducts research and provides technical assistance in the area of development planning. IDEP is supported by the UN Economic Commission for Africa (ECA), UNDP and UN member countries in Africa. It has perennial funding problems because member government contributions usually amount to only 40-50 percent of planned figures.

IDEP provides formal training for planners, all of whom are nominated by member governments. The course consists of three cycles given over two academic years, leading to a diploma. Each cycle may be taken separately, but in this case no diploma is granted. There is only a small population component in the program (the manpower planning module), but it does include courses in mathematics, statistics and data processing. A population component could be added if planners were to show sufficient interest (IDEP's program is officially reviewed by the Conference of Planners held in Addis). The second cycle (three months) consists of work in one of several optional areas. Currently the only options are industrial strategies and policies and industrial project evaluation. Current plans call for the addition of materials on regional planning and integrated rural development. The third cycle (six months) consists of a research project, preferably of an applied nature, on some development problem in the planner's country of origin. From a sample list given the team, these projects tend to be qualitative rather than quantitative in nature.

In addition to the formal training course for planners, IDEP has also held conferences, workshops and seminars at the regional (Africa), sub-regional, and national level. Recent seminars have been on the Future of Africa (1977), and the Problems of Industrialization in Africa and Asia (1976).

IDEP staff carry out research on development problems according to their individual interests. No outside funding is typically involved. The research topics tend to be of a macro-economic and qualitative nature and focus on problems of theory and development strategy. Current

staff has interest in industrialization strategy, agriculture, rural development and the New International Economic Order.

IDEP has encountered difficulty funding some scholarships for its two-year course for planners. This is probably symptomatic of government perceptions of the value of the training imparted. It is clear that the program needs some reorientation toward the quantitative side. IDEP staff are eager to bolster course work in the area of data processing and would like to have assistance from institutions with expertise in data processing. IDEP staff would like to attend any future seminar on the use of micro-computers in planning. In connection with any possible assistance in re-orienting IDEP toward more quantitative work, it would be necessary to provide it with some limited computer facilities (e.g., Apple II or Apple III). Attempts to link this to a simultaneous build-up of the program in the population area would be successful only if pressure is exerted by planners.

2. Council for the Development of Economic and Social Research in Africa (CODESRIA)

CODESRIA, a newly formed organization of African research institutes, was established to mobilize African researchers to furnish a uniquely African perspective on African development problems. This pan-African organization obtains funding from a number of sources. CODESRIA develops its own agenda of studies and conferences before seeking outside funding. The program to date has emphasized rural development and relations between developed and developing countries, including the role of multi-nationals in development. "Population Policy and Economic Development in Africa" is listed as one of CODESRIA's priority research themes, and three of the 19 seminars sponsored to date have involved

population and demographic themes -- i.e., "Population Dynamics Research in Africa," "Population, Resources and Environment in West Africa," and "Vital Statistical Registration in West Africa".

CODESRIA works mainly with the African academic community rather than with planners. It publishes a journal, African Development, and distributes copies of all seminar papers in both English and French. One of CODESRIA's goals is to break down barriers between the Anglophone and Francophone research communities; all seminars and conferences provide simultaneous translation in English and French. CODESRIA also publishes a number of directories, African Development Research Annual, Roster on Social Scientists, Directory of African Research Institutes, and a bi-monthly newsletter. A.I.D., through its contractors, should continue contact with CODESRIA, and possibly collaborate in supporting work in population and development.

3. Organisme de Recherche sur l'Alimentation et la Nutrition Africaine (ORANA)

ORANA is a sub-regional organization composed of most of the Francophone countries in West Africa. It has been engaged in collecting data and conducting research on nutrition in West Africa for the past twenty years. Current research interests include: 1) the effect of frequent pregnancies on the nutritional status of mothers and children; 2) the effect of the drought on fecundity; 3) the relationship between infection and malnutrition, particularly as it affects child mortality in the age group 1-4 years; and 4) the problem of anemia among women. ORANA has completed a series of nutrition surveys; results have been used by the Ministry of Planning to set food consumption targets. ORANA

also offers nutrition courses to doctors, pharmacists and midwives as part of their regular training.

ORANA should be regarded as a possible collaborator in any research studies that examine the link between child-spacing and maternal and child health and nutritional status.

4. Office de la Recherche Scientifique et Technique
Outre-Mer (ORSTOM)

ORSTOM, a large French organization, sponsors and carries out research in a number of scientific and social science fields in developing countries. It has been responsible for much of the existing demographic research on countries in the Sahel region. It has two offices in Dakar that conduct research projects in a number of fields. Current projects in the social sciences include a study of the effects of water hole development on livestock raising practices among nomads living in the Louga and Fleuve Regions, a longitudinal study of demographic conditions in the Sine Saloum Region (supported in part by USAID), a study of migration in the Fleuve Region (Bakel), and a study of migrant patterns of adjustment to life in Dakar.

Senior researchers at ORSTOM are mainly French nationals. Senegalese are employed principally as support staff, and there is little attempt to train them or broaden their responsibilities. While there are a few exceptions to this general rule, trained Senegalese researchers tend to encounter some difficulty in finding support for their projects.

Given the scope of ORSTOM's involvement in research in Senegal, both past and present, it is important to coordinate with them to avoid duplication of efforts and to ensure a maximum exchange of information between researchers working on related problems. The possibility of

supporting Senegalese researchers working at ORSTOM is something which should be considered on a case by case basis.

5. Environnement et Developpement des Tiers Monde (ENDA)

ENDA is a UN-funded organization that works at the community level to promote social awareness of environment and development. ENDA's purpose is to integrate environmental and development planning. ENDA's mandate includes the following activities: 1) training through workshops and conferences; 2) action-oriented research; 3) diffusion of materials publicizing research and environmental activities; and 4) technical assistance to governments, research institutes, and other UN organizations. It also develops environmentally appropriate technology; an example of this work is the design of fuel-efficient stoves.

ENDA's program to date has included a substantial amount of work on housing, research on the use of various plants in traditional medicine, and studies of the impact of modern technology on rural eco-systems. In addition to its work on fuel-efficient cooking techniques, ENDA has worked on wind energy and biogas. ENDA has also applied solar energy to the task of drying fish in Senegal and has worked for several years with Promotion Humaine to provide appropriate technology to the poor, in the areas, notably of low-cost housing and energy-efficient cooking techniques. Apart from publishing a few studies tangentially related to population, ENDA has done very little in the population field. According to the director, available staff do not have the requisite skills.

E. Conclusions and Recommendations

In the course of reviewing the research needs and capabilities in Senegal, it became apparent that the Senegalese experience, contacts,

and relationships with American researchers and institutions are minimal. However, it was equally apparent that these Senegalese organizations should be developing a more profound understanding of the impact of population dynamics on Senegal's social and economic development. Since it is important to involve both university faculties and the members of the applied research institutes in studies on demographic variables, attempts should be made to foster collaborative research between American and Senegalese professionals where the interests of USAID and the Senegalese coincide.

Emphasis should be placed on developing a relationship with ENEA for the study of problems on the national level, and with CODESRIA, IDEP, and ORANA on the international (continental) level. Additionally, the experience gained from the conduct of the World Fertility Survey, during which the Senegalese did the field work with intermittent but high quality technical assistance from London headquarters, should serve as the prototype research model. Therefore, the team recommends that:

- The centrally-funded IPDP contract provide technical assistance to the DED and CONAPOP;
- Battelle and other contractors support research studies underway at CONAPOP and BNR;
- The IPDP contract should support regional seminars involving CODESRIA and IDEP.

Since the BNR has had some positive interaction with the U.S. Bureau of the Census through a mapping course, and with other U.S. institutions in the conduct of analysis, it is recommended that:

- USAID develop a working relationship with the BNR through centrally funded contracts with the U.S. Bureau of Census, Dualabs, and the Population Reference Bureau, as appropriate. These U.S. institutions should assist, where reasonable and appropriate, the work of the census and attempt to develop a

collaborative relationship with the institution which carries out most of the data collection for the Senegalese government.

If the initial interaction is promising and the basis of a relationship is formed, further assistance can be provided to the DED to develop the data base for planning purposes.

The Battelle core project, described elsewhere, can be employed to establish relationships through CONAPOP with those institutions that have not yet actively worked in the field of population, but possess necessary capabilities (SONED and ORANA). The team recommends that:

- Battelle establish a core project with CONAPOP to work with these Senegalese organizations to develop applied studies of population projects.

It is suggested that research on a range of health/fertility issues is imperative and will complement the analysis of census data and information on fertility, mortality and morbidity. Studies that clearly show the relationships between poor nutrition and high fertility, high infant mortality and high fertility, and increasing family planning acceptance and improved child survival rates would likely encourage program planners to endorse family planning as part of good maternal child health care as well as prompt potential acceptors to practice family planning.

Efforts of the team to survey the field of biomedical research were hampered because planned visits by representatives from the International Fertility Research Program (IFRP) and the Center for Disease Control (CDC) were not carried out.

The International Fertility Research Program (an A.I.D. contractor) is currently collecting limited data on births at two maternity centers in Dakar - Abass N'dao and Le Dantec. These IFRP data forms include

questions on antenatal, postpartum care and child-spacing practices. Repeatedly asking questions on these areas of care should suggest to both provider and client the elements of good maternal care. Since the IFRP began collecting data last November (1980), the studies are not complete and no results are available. This research could provide crucial information on the relationship between obstetrical and pediatric care and the rates of maternal, infant and child morbidity and mortality. It should also suggest the interventions required to improve the rates.

In the field of biomedical research, the team recommends that:

- IFRP expand its program of Maternity Care Monitoring and that Center for Disease Control be invited to explore the possibility of an abortion survey.

Additional initiatives in health and family planning, e.g., cost effectiveness of family planning on health, condom preference in Senegal, IUD acceptability, etc., can be considered in the future as part of a Battelle core project or another centrally-funded project, or as part of the USAID mission funded bilateral program.

III. Population Policy

In this section of the report, attention is given to recognizing the implications of rapid population growth and to identifying government strategies to deal with it. First, the overall picture of population policy in Senegal is summarized, a brief review of the socio-cultural barriers to effective action in Senegal follows, and the conclusions of the team are reported.

The absence of a clear, concrete picture of the manifest effects of population growth and the resources needed to analyze the question rationally are serious limitations to formulating a government policy advocating effective action. The lack of a database makes informed discussion of the question difficult. Debate tends to be based on traditional, even emotional, arguments rather than documented evidence. Even within this context, there have been many notable changes in the past few months.

A. The Actual Situation in Senegal

The UNFPA Needs Assessment Mission conducted in 1978, provides a benchmark against which to measure population policy in the current Senegalese setting. Prior to that time, the subject of population issues had been limited to political statements, such as those of President Senghor who identified the impact of population growth on development issues. Prevailing conditions prompted the UNFPA team to recommend the:

- establishment of a National Commission of Population reporting to the Prime Minister;

- establishment of a unit within the Ministry of Plan to examine the impact of population on other development efforts;
- repeal of the French colonial law prohibiting abortion and the dissemination of contraceptive information and material.

The goal of each of these discrete recommendations was to improve leadership awareness of deleterious impacts of rapid population growth on social and development goals.

By February 1981, the Government of Senegal had carried out the three recommendations of the UNFPA (abortion, however, remains prohibited), and taken other steps toward developing an action program, including support to ASBEF, the private family planning association.

B. Commission Nationale de la Population (CONAPOP)

CONAPOP, established in October 1979 by decree of the President of Senegal, reports to the Minister of Plan rather than the Prime Minister as recommended by the UN. Members of CONAPOP are traditional, political, governmental and non-governmental representatives. The first full meeting of CONAPOP, held in May 1980, considered the effects of rapid population growth on education, public health, migration, employment and per capita income. CONAPOP also discussed a program consisting of motivation efforts such as education, information, incentives and disincentives, such as enforcing the age at marriage, provision of birth control to women at high risk and other services. Although the report of that meeting is not available, informed sources indicate that no consensus on the definition of the problems was reached and that no action program was defined and approved.

Eventually, the Executive Secretariat of CONAPOP will be staffed by six demographers, three planners, a sociologist, an economist and a systems analyst. At present, however, the staff is composed of an executive secretary and one additional demographer. (See below, for discussion of the Population Unit).

CONAPOP has asked A.I.D. to provide support for staff, experts, and office equipment. This request was part of the motivating force behind this mission.

C. Unité de Population (Population Unit)

The UNFPA-supported Unité de Population, originally housed within the Ministry of Plan and Cooperation, (Direction de la Planification), was designed to:

- integrate population variables into development plans; and
- serve as the staff for CONAPOP.

Although the project got underway in August 1979, the Unit was not linked with CONAPOP until 25 February 81 because of bureaucratic difficulties. Staff have now physically been reassigned but the situation is still not stable. This instability may have an adverse effect on the work of the project.

The Unit is staffed by a UN expert, an economist-demographer with wide experience in French-speaking Africa, and two counterparts - whose salaries are paid by the government - (one demographer and one planner). The UN provides salary and support for the expert and operation

expenses for the office. Activities under the project will consist of a seminar on the integration of population and development planning and study tours of approximately three months duration for each of the two counterparts. Delays and poor communication have prevented project staff from preparing the population component of the sixth four year plan (1981-1985). However, the staff are now in the process of reviewing it.

In addition to the creation and placement of two institutions within the government, another important step was taken in December 24 when the National Assembly legalized contraception by repealing the decree of 1933 enforcing the French colonial law of 1920 banning abortion, contraception, and the dissemination of materials describing them. However, the vote to change the old law was not unanimous. Several deputies remarked that "contraceptive methods are immoral and not appropriate in Islamic and developing countries." Still, repealing the law banning contraceptives illustrates the government's willingness to address the population issue in a public forum. It should be noted that condoms are now packaged and appear in the supermarkets which serve the Western community.

D. Recent Events Supporting Population Activities

Several other encouraging developments have taken place in other sectors in the very recent past.

First, the Senegalese Family Planning Association (ASBEF) was reorganized and reactivated in November. Mr. Khouraiichi Thiam, the Executive Secretary and former Director of Planning and Instruction at the Ministry of Education, accepted his new duties at the request of

Mme. Maimouna Kane, Secretary of State of Promotion Humaine, and His Excellency Abdou Diouf, former Prime Minister and now President of Senegal. Under the direction of Thiam and Mme. Tamaro Diallo, President of ASBEF, the organization has carried out two important activities. A training course on family planning for mid-wives was conducted. Thiam also personally visited a number of important marabouts throughout Senegal. The marabouts reportedly expressed their support for "child-spacing" activities but opposed any abortion or sterilization services.

ASBEF has two units, one a model maternal and child health clinic and a yet to be developed information, education and communication division. The model maternal and child health center is staffed by a full time mid-wife, and a gynecologist and pediatrician who have hours once weekly. Two staff will join the information, education and communication section in March 1981, at which point the information, education, and communication activities will increase. To date, ASBEF has received a small grant from IPPF (\$2,500). These funds were used to survey the attitudes of the marabouts in the rural areas, and to enlist the support of this powerful group on behalf of the government's efforts in family planning.

A second encouraging sign was the elevation to the Presidency of Abdou Diouf, former Prime Minister. President Diouf, a Moslem, has been supportive of the country's need to space births and to reduce rates of growth. During the visit to Senegal of Mr. Douglas Bennett, the former A.I.D. Administrator, President Diouf raised the subject of family planning. He appears to be forcefully supportive of actions that would encourage the country to achieve a reduced rate of population growth.

The government's position has moved from restrictive to permissive. Contraceptives are permitted to be sold; family planning is practised in private clinics and discussion on the issues is encouraged.

None of this is to say that social, cultural and traditional barriers which block development of a firm consensus have been removed. Indeed, according to recent newspaper accounts, the provincial governors of Dioubel and Senegal-Oriental have stated that their areas are underpopulated and require more hands to be productively developed. A government sub-commission responsible for developing policies that will be incorporated in Sixth Plan (1981-85), has denied the existence of a population problem and the need to develop a policy that would advocate spacing births and reduce rates of growth. In its Rapport provisoire, this National Commission on Education, Employment and Population, chaired by Papa Kane, recognizes some of the demographic realities of Senegal (2.7 percent national growth rate, 5 percent growth in Cap Vert, rapid increase in the infant and child age group 0-4 and the school age population) but concludes: "p. 23. De fait, il n'y a pas à proprement parler des problèmes démographiques au Sénégal : il serait plus juste de parler des problèmes dans les domaines de l'éducation, de l'emploi, de la santé, de l'alimentation,... que l'évolution démographique est tout juste à réléver...Il est beaucoup plus réaliste de chercher une solution économique aux problèmes démographiques que de vouloir s'en remettre à une politique démographique pour résoudre des problèmes économiques".

Perhaps the most discouraging element is the exceedingly low priority attached to family health actions. The government has not yet resolved the problem between Promotion Humaine and Ministry of Health which is

blocking the implementation of the A.I.D. Family Health Project (0217). A UNFPA designed project between the same two ministries and which advocates an approach similar to A.I.D.'s, but for different regions, has yet to be formally submitted by the government.

E. Barriers To Effective Action

The primary barrier to effective action in the field of family planning is the absence of government consensus, as indicated above. Additionally, there are well-known factors in Senegalese society that impede the effective delivery of family planning, either clinically or through other means. The following is a brief re-capitulation of these factors.

1. Value of Children

In his recent and still unpublished paper on "Droit et Population", Mamadou Niang studies the factors favoring and opposing a policy of limiting or spacing births. In his analysis, procreation represents wealth and social prestige within the traditional Senegalese definition of the family. A woman's position is greatly enhanced by fertility. Children should be many, of both sexes, and are valued as a living link with the ancestors of the family. These traditional values are reinforced by Islamic social practise; wives in polygamous unions are favored according to the number of children each has, and children are riches measured by their social value and longevity, not their economic cost or benefit. The value attached to children has resulted in very high fertility.

2. Anti-Modern Attitudes

Niang has also identified a set of attitudes held by persons who associate family planning and birth-spacing with some deplorable

elements of modern Western culture, -- juvenile delinquency, drugs and prostitution. In addition, Africans only one generation from independence have fears that the adoption and promotion of a population program represents a return to colonial and racist practices. Those who favor a return to the strong, extended family and other pastoral ways do not identify a role for family planning. This attitude may have some currency as well with intellectuals and political leaders.

3. Perceptions of Islam

While there is nothing in the Koran itself which explicitly prohibits the practice of modern contraception, it is a common belief that limiting births is contrary to Islam. While Islam does emphasize the positive value of large families, there are precepts that support abstinence and coitus interruptus as methods. Both abortion and sterilization are explicitly forbidden. However, the tenets of Islam are transmitted through local religious leaders (marabouts) who may, in fact, interweave traditional values with Koranic inspiration which may effectively oppose family planning.

4. Perceptions of an Empty Land

Another commonly held notion is that Senegal does not have a population growth problem but a population distribution problem. In fact, there are vast expanses of uninhabited countryside and areas where overall population densities are low. But these observations must be seen in their relative context. Many of the empty areas are not capable of supporting additional population. Other areas such as the cities and the Peanut Basin are quite densely populated. In the latter areas, the intensity of agriculture has resulted in severe environmental degradation and depletion of the soil. Moreover, the cost in human and financial

terms of re-distributing population from densely populated areas to sparsely populated lands is exorbitant. Plans for resettlement in Senegal do not provide a very viable option in spite of its appeal to land use planners. Resettlement can almost never keep pace with population growth rates.

F. Conclusions and Recommendations

It is the conclusion of the team that a variety of culturally sensitive activities should be attempted in the current more permissive climate in Senegal. However, the government should not be pushed to enunciate a policy until it has had time to develop a thorough consensus and to conclude debate on the issues under the auspices of the CONAPOP. The U. S. Government should contribute positively to the ongoing debate. The team advises that policy interventions on the part of the U. S.

Government be confined to:

- participating in the resolution of the implementation problems of the Family Health Project (outlined in Section IV)
- supporting research institutions analysing key policy issues (discussed in Section I and II); and
- supporting outreach programs to leadership groups through overall program support to ASBEF (discussed in Section IV).

The National Population Commission (CONAPOP) made an informal proposal to A.I.D. for substantial funding for its activities. However, given the difficulties and instability associated with the recent transfer of the UNFPA-funded project (Unité de Population), USAID involvement should be delayed. It may interfere with the successful operation of this activity. In addition, direct and substantial support should not be provided until it becomes clear that Senegal is moving

forward in service delivery and that CONAPOPOP is playing a major role in support of such efforts. The team recommends that:

- the Battelle Institute, under its Population and Developing Planning Program, explore the possibility of developing a core project with CONAPOPOP.

Under a core project, technical assistance is provided to an identified institution to develop a series of policy papers on four or five salient population issues. A leadership seminar at the national level takes place to discuss the results of those analyses within an approximately 12 to 18 month period. The studies are not necessarily completed by the host institute, but are developed in collaboration with academic and other research institutes. Technical assistance, as needed, is provided on site by Battelle staff and consultants. Since much of the ground work has already been done through this mission, a preliminary visit by contractor staff from Battelle could be easily and quickly arranged. It should also be noted that Battelle backstop would be provided primarily by Moses Ebot, a bilingual Battelle research scientist, based in Cameroon.

The team recommends that:

- support to CONAPOPOP staff in training and research continue to be provided;
- a micro-computer and the RAPID program be installed in the CONAPOPOP headquarters through a central project with the Futures Group which developed and presented the RAPID analysis for Senegal in January, 1980. In addition, training for staff can be provided. CONAPOPOP will then make further presentations to interested groups within the country, update and expand the analysis and other sectors as needed.

All of these actions are on-going or can be initiated immediately. Execution of any can only be complementary to activities in other areas. It should be noted however, that an effective program actually delivering family planning services is probably the most useful tool to convince policy makers of the efficacy and acceptability of family planning.

IV. Family Planning Program

While there has been some reluctance on an official level to admit the existence and nature of a population problem in Senegal, and at times considerable resistance to the suggestion that family planning services should be provided, recent positive developments indicate that there is willingness in both the public and private sectors to make services available.

First, as noted in the prior section, ASBEF (Association Sénégalaise pour le Bien Être Familial) was recently reactivated. The association has a Board of Directors consisting of representatives from the public and private sectors and operates in close but informal contact with Promotion Humaine. Second, the law prohibiting the promotion and distribution of contraceptives was repealed last December. Finally, in late February and early March, meetings took place between representatives of Promotion Humaine and the Ministry of Health during which the issue of implementing the USAID Family Health Project (0217) was discussed. Reports indicate that Promotion Humaine and the Ministry of Health succeeded in defining overall policy, assigning work tasks and composing a list of needed materials. While an official request has not been prepared and submitted to USAID, one is expected before the end of April, 1981.

These three developments would suggest that after considerable delay Senegal is poised to begin a family planning program. The apparent progress in resolving the conflict between Promotion Humaine and the Ministry of Health is encouraging. It is in this context that the team reviewed the Family Health Project (0217).

The team proposes that the existing project be amended to allow funds obligated under the project to support the initiatives described below, and to provide additional funding as necessary. Activities that fall outside the project will be supplemented by centrally-funded projects, as described in other sections.

In order to begin to develop significant support for family planning activities within the public and private sectors, it is necessary to train leaders to recognize the dimensions of Senegal's population problems and to expose them to the manner in which the leaders of other countries are dealing with similar problems. Managers, providers and communication personnel also need to be trained to understand the problems, and to design and implement the comprehensive activities required.

At the same time, a person should be added to the USAID/Dakar staff who can coordinate USAID central and bilateral assistance to the S n galese effort, and can collaborate with other donors and bring USAID resources to bear in a positive fashion that address population issues throughout the USAID program. Finally, the Government of S n gal must be made aware of the public demand for fertility services, and the context in which people are prepared to accept these services.

A. Training

The leadership of ASBEF and those at the Ministry of Health and Promotion Humaine responsible for population programs and family planning services must be trained. Currently, of the 23 nurse-midwives trained by USAID, fewer than five are actively providing any family planning services. Three nurse-midwives are working at the Protection Maternelle et Infantile de Medina (a maternal child health clinic in a very busy

section of Dakar), and providing family planning services and infertility work-ups with the support and under the direction of Dr. I. Sy, Director. A fourth midwife has left government service to open her own clinic in Rufisque. The other midwives are not offering any family planning service.

From all reports, the midwives are all highly motivated and very pleased with the training. Moreover, among the more than 15 midwives personally interviewed by team members over the last six months, there is a conviction that family planning services are in demand among the population.

However, none of the women are chiefs of the service in the clinics; all are required to follow the orders of the clinic director (medecin-chef). None of the clinic directors has been trained in the administration or delivery of maternal child health/family planning services. In essence, there is no Senegalese clinical management structure in place, trained and motivated -- as are the midwives -- to permit and encourage the midwives to provide family planning as a component of good maternal child health care.

There are several training programs in French for top level leadership. These could be utilized along with observation/study tours to provide exposure to other country programs, the development of needed management skills and encouragement for more vigorous program implementation.

1. John Hopkins (JHPIEGO) course for administrators of family planning programs is a reproductive health/family planning program designed to develop the skills and concepts needed for organizing a

service delivery program. One or two top leaders from the Ministry of Health at the policy level as well as leaders from the Medina or other leading Protection Maternelle et Infantile centers could be nominated for the course that takes place from July 13 to 31, 1981. ASBEF leadership could also be included. Applications need to reach Baltimore by April 1. All fees will be paid for under the centrally-funded project.

2. The University of Connecticut offers a French language course in program management, leadership training for family planning, maternal and child health and social welfare programs. This could be helpful for three to five persons from Promotion Humaine, ASBEF and the School of Midwives. This would require a PIO/P to draw on funds obligated through the bilateral project or other mission training funds.

3. The University of Chicago's French language course in Communication for Social Development puts a strong emphasis on the reasons for population programs and provides general communication, program planning and evaluation skills. A group of five top leaders from Promotion Humaine, the Ministry of Health, ASBEF and the School of Midwives would be a mutually reinforcing group capable of implementing programs on their return to Senegal. A PIO/P from the bilateral project or other mission training funds would be needed.

4. Additionally, in combination with one or more of these programs consideration should be given to organizing an observation trip to Tunisia, Mexico, Colombia or Haiti for six to eight top leaders. Many of the logistic requirements could be handled by a centrally-funded contract with UNC/INTRAH; the travel and per diem costs would be added to the PIO/P from project or other mission funds. A mission staff

person should accompany the group to help interpret the experience and develop the relationships necessary to project implementation. DSB/POP/ TI AID/W backstop officer, as well as the proposed host country missions, should be contacted if this is desired.

There is no guarantee that training the top leadership will change the existing situation. However, without training, the current level and quality of service will likely continue.

B. USAID Staffing

The addition of a senior population person to the staff of USAID/ Dakar is a key element of the strategy outlined in this paper. In addition to coordinating the provision of USAID resources in population to the Government of Senegal, he/she would also be responsible for making the mission personnel aware of the demographic implications of other development activities. It would be useful for this person to have an understanding of population/family planning research of both an operational and survey variety. Additionally, this person should have sufficient background in economics and rural development to assist the mission in assessing the relationship between demographic growth and other development variables. This person should be fluent in French/English and have experience in managing maternal child health/family planning projects. Finally, the person should be familiar with USAID procedures and the resources available under centrally-funded projects.

C. Demand for Family Planning Services

Although there have been difficulties in implementing the USAID Family Health Project (0217) and only a modest amount of service is being offered by the midwives trained at Santa Cruz, one should not

conclude that there is little demand for family planning services. In fact, there are indications (albeit anecdotal) of substantial and increasing demand within the urban areas of Dakar and Pikine, and some knowledge and interest in controlling fertility in the rural areas of the Sine Saloum and the Casamance.

The family planning clinic at Medina (Dakar), in which three midwives, one nurse and one social worker offer services under the supervision of the clinic director, has seen a steadily increasing number of family planning clients since opening in 1977. According to the testimony of the midwives, the clients have come from areas around Dakar as well as Cap Vert and other regions. As recorded the total visits by year were:

1977 -	202
1978 -	907
1979 -	3832
1980 -	6540

The number of acceptors by method is not available for the period 1977-79. The following table records the services given in 1980.

pill -	1923
IUD -	809
Noristerat -	149
infertility work-ups -	107
pregnancy tests -	60

Not all the clients would indicate their marital status. Of those who did respond, 460 were married, 79 were single and 110 divorced. It should be recorded that the family planning clinic is on the second floor of the Medina clinic, and that there are no signs directing women to the center. The only publicity is by word of mouth. (Reportedly a large number of condoms were distributed but no figures are available.)

While visits to Pikine (near Dakar), three rural villages in the Casamance and a health post and village health hut in the Sine Saloum did not generate any data on demand, discussions on fertility issues with health personnel and village leaders (heads of women's groups) indicate that there is some willingness by women to replace the old fertility regulating practices with modern methods, and at least a willingness among those visited to include family planning methods within the local health service program. These are only impressions gleaned from discussions with villagers who often tell guests what they want to hear.

It would be very useful to make every effort to assess accurately the level of demand for family planning services. However, presently non-clinical distribution schemes would be premature. High priced contraceptives are available in some pharmacies and condoms can be found in some supermarkets (\$3.60 U.S. for 12). This distribution mechanism is worthy of further review in the future. Presently, there is little evidence to suggest that family planning methods would be acceptable outside the health centers. Moreover, it is very clear that the Government of Senegal is firmly committed to placing the delivery of family planning services within the health clinic structure. It should be noted, however, that the government presently intends to have the bulk of these services provided by paramedical personnel.

Given the data on visits to maternal child health clinics in 1980 in the four regions where other USAID development programs are underway, it is apparent that a considerable amount of service is being provided and that the maternal health child clinic structure provides an important

avenue for service delivery. According to the annual report (1980) of the maternal child health service of the Government of Senegal, more than 45,000 women made prenatal visits to maternal child health centers in the regions of Cap Vert (26,000), Casamance (5,000), Fleuve (6,000) and Sine Saloum (11,000). Additionally, there were more than 40,000 visits for infant care; in most cases these children were brought by their mothers. If each woman made two visits for infant care, more than 20,000 women visited the centers. Therefore, perhaps as many as 60,000 women visited maternal child health centers in the four regions in 1980. (This figure does not include the number of births that took place at maternity centers, and it is suggested that there were many more births than pre-natal visits).

These figures indicate that a significant number of women in the fertile age group are using maternal child health services, and suggest that family planning information and services may be welcome in this setting. The Government of Senegal is "supportive" of family planning within the maternal child health context, and when provided in this setting, women appear to be using the service. It would seem wise to begin to use this channel before striking out in a new direction.

D. Family Health Project (0217)

For more than a year and a half implementation of the Family Health Project (0217) has been delayed by bureaucratic rivalry and conflicts between the Ministry of Health and Promotion Humaine. Recent positive developments suggest that the two ministries are coming together to resolve their differences. A request defining government policy on family planning and outlining in detail the specific requirements and

tasks of Promotion Humaine and the Ministry of Health in terms of the Family Health Project (0217) will reportedly be sent to USAID/Dakar before the end of March, 1981. The team anticipates that the government's proposal will serve as a good basis for general agreement and future negotiation.

On receipt of this proposal USAID/Dakar can take a comprehensive approach to designing and implementing family planning services in Senegal. While the Family Health Project (0217) is generally an adequate description of the situation in Senegal as it existed two years ago, the nurse-midwife training and service delivery program outlined are only two of the many activities that are now possible and need to be undertaken.

It would be preferable if the initiatives in family planning called for in this paper can be supported within the existing budget. However, it is likely that the project will require additional funds.

The activities mentioned should be discussed and defined in a manner that will involve representatives from the Government of Senegal who will have implementing authority (Ministry of Health/Promotion Humaine), from ASBEF, and from other donor groups who have an interest in population service activities (UNFPA, SIDA, CIDA). On its part, the mission is encouraged to participate more actively in resolving apparent difficulties. Some specific suggestions are given below.

From a review of the project file on the Family Health Project (0217), it would seem that more use could have been made of working groups or regular meetings between USAID/Dakar and Government of Senegal personnel followed by memoranda of understanding or implementation letters identifying

specific actions to be taken or explaining procedures. Consideration of this is recommended for future implementation.

Similarly, it appears that more use might have been made of the obligation process as an opportunity for project review or to resolve particular administrative or programmatic issues with the Government of Senegal. Perhaps procedures can be developed for the disbursement process or in future obligations to maximize their utility as managerial tools.

Unity of project purpose, policy and reporting would be enhanced if USAID/Dakar had a single focus of project assistance within the Government of Senegal. This might well encourage the two ministries to cooperate more fully. However, given the long-standing nature of the dispute between the ministries and their presumed administrative limitations, it is suggested that USAID/Dakar adopt a more pragmatic approach which emphasizes program implementation more than institution building objectives. At the least, efforts should be made to deal directly (financially, technically and for reporting purposes) with the Ministry of Health, Promotion Humaine and any other governmental or private agencies supported under the project.

Through this team assessment, steps were taken to seek advice from, and to inform, other aid agencies. As the project design is defined it will be important to review the overall strategy and initial activities with other international aid agencies. Several have an interest in working in the maternal/family planning/population field. Moreover, the participation of other aid groups will strengthen the program and move it forward more rapidly by increasing the financing for these initiatives

and/or supporting these activities with complementary programs. Other donors can also purchase and provide commodities (e.g. depoprovera/vaccines/vitamins) or equipment (e.g. abortion supplies) that USAID cannot or will not supply.

Other donors interested in supporting activities in maternal child health/family planning/population have experienced problems similar to those encountered by USAID. Donor cooperation could prompt the elimination of obstacles and a more rapid and effective project implementation.

E. Project Elements

The project should support activities that will develop leaders and managers, train service providers and motivators/communicators, fund the pioneering activities of ASBEF and use this channel to involve and extend private sector resources, and assess, upgrade and expand family planning services through the existing units of Senegal's extensive but modestly equipped health system. Wherever possible, project specific activities should be supplemented by centrally-funded training and operational research programs.

1. Leadership and Management Training

Leadership and management are key elements in any service delivery program, and neither is adequately developed at present. While there are a number of physicians, nurse-midwives and nurses trained in modern contraceptive techniques and working in government maternity and maternal child health centers, there is no management structure currently available that is trained and prepared to coordinate the integration of family planning services in the total maternal child health program. Without proper management and good planning it is difficult to see how

family planning services can be smoothly incorporated into the existing structure, especially when little is known about the overall operation of the Government of Senegal maternal child health system.

In order to establish a firm management base and develop leaders supportive of the objectives of family planning programs, individuals in the Senegalese society must be identified, recruited and trained to develop and administer programs providing family planning services within the context of an upgraded maternal child health program, initially in urban areas.

2. Training Service Providers

The nurse-midwife training program defined in the Family Health Project (0217) is entirely appropriate if it takes place in the context of the other activities recommended. However, in relation to the training itself, several points need to be emphasized. First, record-keeping should be kept as simple as possible. The records described in the Project Paper appear too complex for available personnel to collect or analyze. Second, the topic of infertility should be given more attention. While the incidence may be no more than 3 percent (Senegal Fertility Survey), infertility is considered a "major" public health problem. Sub-fertility is equated with infertility. Nurse-midwives regularly deal with women in polygamous unions, who because they have fewer children than other wives, risk divorce. The midwives must be prepared to deal with this problem. While there will be some tendency to deal with this matter on an individual curative basis, emphasis should be given to broader, public health preventive measures. Whether family planning methods can be useful techniques in resolving

suspected infertility problems should be explored.

Third, an effort should be made to select and train supervisors from among the student nurse-midwives. If there are several, each should be given some management training. Moreover, the project should provide the means necessary for the supervisors to travel (mobyettes, per diems) and conduct adequate surveillance procedures.

Physicians in government service requesting training can probably be accommodated under the centrally-funded JHPLEGO program. It might be advisable to make some funds available to ASBEF to support physician training at Johns Hopkins, The Margaret Sanger Center, or elsewhere.

3. Assessment and Upgrading of Existing Maternal Child Health Centers and Maternities

Baseline information is needed on the personnel, equipment and supplies, medicines and other consumable commodities, and patient profile, volume and service demand throughout the maternal child health clinic system. Information on patient characteristics and patterns of use are needed to provide essential data on levels of demand. This information will also indicate the management skills and trained personnel required to meet the demand. The assessment should begin in the urban-based maternal child health/family planning centers before moving to the rural areas.

An assessment of the current system's strengths, deficiencies and impact of the population desiring services is also required in order to determine whether, and in what manner, family planning services can be integrated successfully. This is not to suggest that family planning services cannot be added until an assessment of the total maternal child

health system is complete. Rather, the assessment should be carried out in stages by a Senegalese team. The facilities would then be upgraded and the services integrated as conditions allow.

An assessment of the existing structure would consider the current responsibilities of present clinical and non-clinical service personnel, and suggest the number by category of persons who require additional training, as well as the number of additional personnel that need to be trained. The names and clinic locations of the nurse-midwives trained in the Santa Cruz program are available but there is minimal information on the quality of service currently provided or the need in terms of client demand for additional personnel.

This assessment should begin in the Cap Vert region and move to the other regions as management, staff availability, equipment and supplies, and client demand warrant. The appraisals should be conducted by a Senegalese team of at least two persons. It is suggested that the following maternal child health centers be visited in the first assessment: Medina Primary Maternal Child Health Center, Bel Air Maternal Child Health Center, Pikine Center, Abass N'Dao Maternity, Le Dantec Maternity and Maternal Child Health, and Rufisque Primary Maternal Child Health Center. Each of these centers has at least one Santa Cruz trained midwife, and all are offering pediatric, pre- and post-natal services, including some family planning. It is suggested that the analysis of these operations will provide information on the "best case" of maternal child health/family planning services in Senegal.

An assessment of another group of maternity/maternal child health centers should begin once the first study is complete. This study process would continue until all the centers in the project area have been evaluated.

Naturally, recommendations for action will follow each assessment and be implemented as soon as possible. The assessment team is advised to keep the renovations simple, within the limits of the resources available, and scheduled in a manner that ensures the briefest period possible between review and the implementation of services. It is anticipated that the caliber of the assessment and actions recommended will improve as the study continues throughout the country.

Supplies necessary to equip the first group of maternal child health/ family health centers surveyed should be ordered with the supplies for the model clinic at ASBEF (noted below). These should be made available as needed. It is important that supplies other than family planning commodities and equipment be ordered and received. Vitamins, oral rehydration solutions, vaccines and food supplements should be components. Since project support was provided through Sahel Development Project funds, a range of items can be purchased. It is necessary to emphasize, as the Minister of Health already has, that if the family planning program is to be truly integrated into maternal child health, the components of the maternal child health will have to be strengthened.

During visits to maternal child health centers, it became apparent that some basic needs must be met to provide family planning services. However, requirements are generally simple. Conversations with government officials and some documents suggest that the Ministry of Health may be

under the impression that extensive renovations are required before family planning can be offered. Since this issue will certainly come up in negotiations with the ministry, some basic guidelines should be established to assist those who will be assessing the clinics and those negotiating with the government. The following are suggested:

a. Family planning information and certain supplies (of orals, condoms, vaginals and injectables) require no additional room or equipment. These services can be initiated as soon as trained personnel and supplies are available. However, many locations (particularly those serving as reference points) should be able to supply IUD's as well. Since this is a medical intervention, although often done by paramedical personnel, simple equipment is required and medical back-up must be readily available. An insertion kit, materials for sterilization (probably by solution), and an adequate table, light and stool are needed for a gynecological examination and IUD insertion.

b. The existing pre-natal consultation room could be used for family planning service delivery including IUD.

c. Adequate room is available, but the space requires painting and cleaning. Posters on nutrition, family planning and other maternal child health themes are needed.

d. General organization and operational procedures (schedules, job description, use of time and space) for the whole maternal child health centers need to be reviewed and revised. Record keeping procedures should be reviewed; simplicity must be stressed. Procedures to ensure maximum coverage of women in the fertile age group should be established. An effort should be made to identify and follow-up women in the high-risk category.

4. Support for Information, Education and Communication Activities

The communication means and personnel needed to promote family planning activities are available in Senegal, but largely unexploited. Efforts must be made to develop these means, motivate and train personnel, and develop appropriate messages.

Since religious and governmental leaders have repeatedly stressed the point that family planning services should be provided as a health measure, a message needs to be developed that emphasizes the positive impact of family planning, as child-spacing, on the health of mothers and their children. In this connection, promotional materials aimed at reaching women in the fertile age group, as well as course and informational material designed to reach students and opinion-makers, should mention family planning as a necessary health component of each maternal and child activity. The message should strive to form in the mind of the potential client, student or member of the local elite, that there is a direct and positive relationship between family planning and good nutritional practices, obstetric and well-baby care. Messages on nutrition for nursing mothers should talk about the quality of food, its preparation, breast-feeding and child-spacing. Good maternal care should be described as including pre- and post-natal care, proper diet and child-spacing. Healthy children are vaccinated at appropriate intervals, well-fed and properly spaced. In other words, the messages should be based on the universal desire of parents to have healthy children by emphasizing the role that family planning plays in ensuring good health.

In the early stages of the campaign to encourage the practice of family planning, the message should be designed to reach health providers

to whom the community comes for care, and those at all levels of society who shape the opinions of others. Women's clubs, professional associations, unions, and many other groups fall into the latter category.

Since the repeal of the 1920 law banning the sale and promotion of contraceptives, the media can be used to deliver more pointed references on the importance of family planning. Senegalese radio and TV have recently begun to carry the message of child-spacing. There is, however, nothing in the local papers or, with one or two exceptions (Medina clinic and ASBEF), on posters attached to the walls of maternal child health clinics.

In addition to developing the message and taking advantage of the media to reach the general population, personnel in both the public and private sectors need to be trained and motivated to understand and promote family planning as a good health practice. The Ministry of Health has 420 midwives, 1124 male nurses, 935 female nurses and 303 social workers (1978). While a number are attached to hospitals and/or involved in clinical work in health centers, a large group of paramedical personnel is in day-to-day contact with pregnant, newly delivered, nursing and high-risk mothers. They should be trained in information, education, and communication techniques and given simple teaching aids illustrating the intimate relationship between health/family planning and nutrition.

The personnel of Promotion Humaine are in touch with people, especially women and youth in the rural areas, through such structures as "maisons familiales," "maternités rurales," "centres d'enseignement moyen pratique," "foyer des jeunes," etc. Since Promotion Humaine also has responsibility

in the national maternal child health/family planning program for promoting the family planning services provided through the maternal child health clinic network, there is a great need to train regional and local personnel, and to give each necessary teaching aids, motivational and demonstration material.

ASBEF can also play an important role in generating support for family planning activities (see the section following). In fact, ASBEF has already begun a campaign that uses radio, 30 minutes weekly, and TV 15 minutes weekly, to bring the message of family planning, as child-spacing, to Senegalese society.

It is not within the scope of this report to provide details on training programs in information, education and communication, nor can it estimate the type and amount of material needed. However, it is essential that a great deal of attention and sufficient financial support be given to the information, education and communication component of the USAID family planning program. A sound basis for this action can be established by supporting training. As noted elsewhere in this report, personnel from the Ministry of Health, Promotion Humaine, and ASBEF should be selected to attend the family planning communication course at the University of Chicago. Personnel of Promotion Humaine might also find the programs and materials of the American Home Economics Association appropriate and useful.

It is obviously important to select a contractor with relevant experience and good skills in information, education and communication to provide the long-term technical assistance called for in any USAID-supported family planning project.

F. Support for ASBEF Activities

Family planning activities within the private sector have been limited to service delivery by a few private clinics, doctors and midwives, and some pharmacies. No systematic effort has been organized to provide family planning information and motivation to the public at large or to special groups, e.g., youth, workers, medical communities, etc. The family planning message has been essentially confined in the "word of mouth" channel.

In July, 1980 the Senegalese Family Planning Association (ASBEF) was revitalized. ASBEF is composed of a board of twelve high ranking government officials and personalities from the private sector. Mme. Tamaro Diallo, the President of ASBEF, is a technical advisor to the President of Senegal. Staffing is described in detail in Part III. Although rather new, ASBEF has already begun the following activities:

- radio broadcasts of family planning messages (30 minutes a week); and
- survey-interviews of the principal religious leaders (marabouts) in the eight regions of the country. (No written report of this survey has yet been published. Indications are that the marabouts are in favor of family planning for birth spacing purposes but opposed to abortion and sterilization.)

While ASBEF is a non-governmental, private family planning association affiliated with the IPPF-London, it is closely but unofficially linked with Promotion Humaine. The Director of the Promotion Humaine's office for Bien Être Familial is in the ASBEF headquarters. Promotion Humaine pays the rent of ASBEF's headquarters (1,000,000 CFA/month). Promotion Humaine is also the governmental sponsor (Ministère de Tutelle) of ASBEF and, as such, acts in an advisory capacity to ensure that ASBEF's activities are in keeping with the overall governmental policy

on family planning. This close link makes it imperative that Promotion Humaine be kept abreast of any plans to support ASBEF activities. It probably also means that steps must be taken to avoid competition between ASBEF and Promotion Humaine and to give Promotion Humaine support for its activities in family planning. While the team welcomes the governmental support and approval apparent in the close relationship between ASBEF and Promotion Humaine, USAID should supply its support in such a way to emphasize the private, independent nature of ASBEF's role.

Although not well defined in terms of operational targets, the overall objectives of ASBEF are:

- to provide comprehensive maternal and child health/family planning services in a model clinic in Dakar. ASBEF also wants to explore ways to provide maternal and child health/family planning in the Ministry of Health facilities in the regions;
- to motivate, educate and inform the population on birth-spacing and contraceptive practice;
- to create a regional ASBEF in each province of the country (8); and
- to train personnel in maternal and child health/family planning service delivery and information, education and communication techniques.

Specific program plans and initiatives appropriate for ASBEF are considered below.

1. Training

ASBEF is both a consumer and supplier of training. In addition to the training opportunities suggested for ASBEF staff at Johns Hopkins University for program administrators and the University of Chicago for communicators (Described in Section III), ASBEF has the potential to

train regional officials from different ministries in the objectives and programmatic activities of family planning. The family planning association can teach practical ways for personnel from government departments to participate in information, education and communication, and service delivery programs. Preliminary instruction can be provided in a seminar held at ASBEF headquarters in Dakar for 40-50 representatives from the following ministries:

Health
Promotion Humaine
Education
Youth and Sports
Social Action

The staff of ASBEF would be assisted by a sociologist and a communicator, from CESTI for example. In time, a series of eight regional seminars would be held.

2. Outreach to Religious Leaders

As noted above, the Executive Director of ASBEF has conducted a series of interviews with the "grand marabouts" of Senegal. As is widely recognized, these religious leaders have enormous influence on the lives of their many followers. If each has a favorable attitude toward "child-spacing" practices, as reported, it would be very worthwhile to compile and analyze the information on the interviews, and to publish a summary. This report should be discussed with the marabouts, and their advice should be solicited on the design of the communication program suitable for reaching potential acceptors.

Since the Government might not want to approach the marabouts of Senegal, ASBEF may be able to follow-up on a regular basis.

3. Outreach to the Medical Community

As a private, non-governmental organization, ASBEF is well-placed to host a seminar attended by private practitioners. During this seminar the following topics could be discussed:

- benefit of birth spacing from the point of view of the health of the mothers and children;
- medical indications of contraceptives; and
- updated knowledge of efficacy, side effects and safety of various modern contraceptive methods.

The meeting could also provide an opportunity to conduct a small "on the spot" survey on the knowledge and attitude of the medical community toward family planning, as well as to collect information on the type and amount of family planning services delivered in the private sector. Participants could share information on their experience offering family planning in Senegal, and explore the possibility of establishing a cooperative service program in which ASBEF would be a referral agency. For example, ASBEF might develop a system in which clients could be referred to private clinics that noted their formal affiliation by displaying some distinctive plaque and by charging a reduced fee for ASBEF referrals. This could also be an opportunity for ASBEF to supply contraceptives to private doctors for subsidized utilization.

4. Program Specific Research

ASBEF is well-placed to conduct a survey of the private clinics and pharmacies operating in the urban areas of Senegal. The survey should be designed to obtain more information on the availability, cost and sales of modern and traditional contraceptive methods. This survey should be done by Senegalese researchers supervised by ASBEF personnel.

It would determine the extent of demand and the prospect for establishing widespread commercial distribution of contraceptives.

While it is appealing to propose that commercial sales of contraceptives will be significant and cost-effective, there is still no evidence to suggest that there is a sizeable market among members of the lower socio-economic levels of Senegalese society. Still, it is appropriate to begin to assess the current level of demand and the prospects for launching a contraceptive retail sales program.

Information on private sector services in family planning is wholly lacking. Yet, there are a number of clinics in Dakar and other urban centers that are advertising and offering family planning services. A survey should be done to obtain more information on their experience.

5. Service Delivery

The ASBEF model clinic should be equipped, but also relocated. While there is no objection to giving ASBEF the means to offer services, it seems pointless to open a clinic at the association's headquarters, located two blocks from the Le Building Administratif in one of the most luxurious sections of Dakar. The clinic should be moved to a location where it can offer a modest amount of service to urban clientele from the lower socio-economic ranks. The center can be used as a training site for nurse-midwives interested in learning family planning methodology. It can also be developed as a base from which to conduct operations research on interventions appropriate for introducing family planning as child-spacing into up-graded maternal child health and maternity centers in urban and later in rural areas of Senegal.

6. Other Activities

ASBEF has the potential to undertake many other activities. An ASBEF newsletter should be developed and distributed to members of the medical community, religious leaders, government officials, women's clubs and youth groups. This newsletter would be used to carry the family planning message to influential members of Senegalese society. ASBEF should also be encouraged to develop a documentation center where materials could be collected and placed at the disposal of government officials and others interested in knowing more about ASBEF's activities and family planning programs around the world. The documentation center would also be a valuable resource during training courses and seminars.

G. Alternative Service Delivery Strategies

1. The prospect of conducting, as an operations research project, an experimental project in community-based distribution of contraceptives in one of the USAID-supported project areas of Senegal has been given careful and detailed consideration. As defined by the Office of Population, such projects start with a measurement of health status and family planning use in a defined target area. A design and implementation plan for the health and family planning interventions is carried out by a centrally-funded contractor collaborating with a local institution. The basic element of the project is the door-to-door delivery of simple medicines and family planning information and commodities. A year or longer after the project is implemented, a social and cost assessment is conducted. If the program is considered successful, it can be expanded to other areas. If the assessment indicates that the interventions have had minimal impact on health status and/or contraceptive prevalence, the

project can be terminated or redesigned.

Community-based contraceptive distribution programs have been on-going successfully for several years in Morocco and Tunisia, and have been recently implemented in Zaire, Sudan and Nigeria; all are countries with populations similar to Senegal's -- predominantly rural, poor, illiterate and Moslem.

In Senegal, there are many obstacles to successful operations research:

- a low level of health services available for project support;
- inadequate project management; and
- bureaucratic rivalries among government ministries.

However, if an activity can be started in an area where USAID has already demonstrated a commitment to improving the health and well-being of women and children, e.g. Sine Saloum, the first obstacle might be overcome. If the interventions address the primary health needs of women and children as identified, for instance, in the redesigned Sine Saloum Project, and if family planning is promoted as a health-improvement measure, present project managers may be able to carry out the program. Finally, the positive relationships established during the Joint Assessment may provide a model for resolving ministerial rivalries and implementing operations research programs.

For family planning programs to attain their overall objectives, i.e., the provision of service to all in need, the largest and broadest possible service coverage must be achieved. To restrict the delivery of the family planning services only to health facilities will put family planning beyond the easy reach of a great number of people in need, especially the rural poor.

While it might not be immediately possible to provide services outside the health facilities, the prospect of utilizing the service delivery channel developed by the Sine Saloum Rural Health Project provides a unique opportunity to begin testing the practical feasibility, medical safety, and social acceptability of offering family planning services almost at the doorsteps of the rural population.

It is proposed that oral contraceptives and condoms be provided to 10-15 Village Health Huts (one service district within the Sine Saloum Project). These contraceptives would be added to the medical supplies already available. Since the villagers regard the health hut as a pharmacy rather than a health facility, these commodities might be purchased and utilized, especially if the paramedical personnel of the health post are trained to provide basic information on family planning. (It is suggested that the initial supply of pills be given at the health post, where a nurse-midwife can examine the patient; resupply can be done at the village health hut.)

For a minimum investment, -- training of the health post and health hut personnel and the provision of contraceptives -- potentially high impact can be achieved. A positive attitude on the part of acceptors to this distribution mechanism could lessen resistance to suggestions that family planning cannot be provided through non-medical channels, many of which are available in Senegal, e.g. rural women's, youth, development and vocational centers.

It is suggested that this approach is worth investigating, not as an alternative to clinic-based distribution, but as a supplement to this activity. USAID/Dakar is therefore encouraged to consider this option

and the experience of other countries carefully, and to request more information and follow-up as needed. The mission is also urged to receive Ms. Elizabeth Maquire, USAID, and contractor staff to discuss the project further and to begin to design an operations research protocol for Senegal.

2. The team is divided on the option of recommending the subsidized sale of contraceptives, condoms and perhaps oral contraceptives, through private commercial channels. Three conditions make this an attractive option:

- the recent repeal of the colonial law prohibiting the sale and advertisement of contraceptives, and their resulting availability, although at high cost;
- the desire on the part of A.I.D. to support the government's effort to develop the private sector. (The private sector may have more flexibility than the existing, cumbersome health delivery system); and
- The availability of traditional contraceptives in public markets frequented by the majority of people.

There are, on the other hand, arguments against such an approach. One is the concern that all family planning services be directly linked to health measures, as advocated in the 1982 CDSS. Another is the potential negative impact of a highly viable U.S. supported effort on other programmatic activities.

Under any circumstances, this project idea should be developed slowly and with sensitivity. Appropriate outlets for distribution, attendant publicity, and accompanying materials must be carefully considered and defined. Perhaps ASBEF could use its good officers with the government to assess official interest and support, since government approval is required to import the duty-free contraceptives that are distributed

through commercial channels.

Margot Zimmerman and Michael J. Free (PIACT) did much of the background work in December 1979. Their report outlined the steps necessary to begin to determine contraceptive preferences, and appropriate distribution networks and education materials. The present situation is more promising than conditions when the PIACT report was written. It is therefore recommended that a two-person team, one from AID/W and one from a contractor, be permitted to examine further the commercial possibilities. This team would arrange for research to begin and work with the mission health or population officer to outline actions within the next twelve to eighteen months.

H. Conclusions and Recommendations

Section IV provides an exhaustive review of family planning activities and opportunities in Senegal, and suggests programs worthy of support by USAID. The important elements that need to be addressed in the proposed program are leadership training, the demand for family planning services, and the placement of staff with population experience in the mission.

The team recommends that:

- existing training opportunities be exploited through the Family Health Project (0217) or through centrally funded projects, as necessary;
- demand for services be more accurately assessed, perhaps through support to ASBEF, as described below; and that
- mission staffing be expanded to include a full-time population officer.

Since official attitudes toward family planning activities appear more supportive than previously, the team recommends that:

- the mission open negotiations with the Government of Senegal for project implementation of the Family Health Project (0217), modified to include the following elements:

- a thorough development of the management aspects of the program;
- the training of clinical personnel who can be accommodated effectively;
- an assessment and upgrading of existing maternal and child health facilities;
- a more comprehensive program of maternal and child health and family planning services and training, including a limited emphasis on both clinical and public health aspects of infertility;
- an effective information, education and communication program; and
- support to ASBEF, the private family planning association.

The team recognizes the unique contribution the private sector can make in the area of family planning, in this case, through ASBEF. The role that private family planning associations have played in bringing services to people, influencing favorable policy changes and training communicators and services providers is well documented. ASBEF has an energetic and influential staff and directorate who have the potential to implement and influence the development of significant programs in Senegal. Therefore, the team recommends modification and renegotiation of the bilateral project to include substantial support to ASBEF. The funds provided to ASBEF should be in addition to the support given by the IPPF. The most important activities of ASBEF are in areas outside but complementary to the government program. Assistance to ASBEF will allow the association to train a cadre of managers, clinicians and communicators, to bring the family planning message to regional officials, religious leaders, members of the medical community and the general public, to deliver services on a pilot basis, and to be a forum in which issues can be discussed. Therefore, the team recommends that:

- USAID include support to ASBEF in the bilateral Family Health Project (0217) in the form of materials required to produce educational and pedagogic aids (posters, pamphlets, color slides, TV spots, etc.), a vehicle needed to transport personnel and information, education and communication materials to meetings in Dakar and throughout the regions, and the medical equipment necessary to furnish a model clinic at which services and training can be offered.

As indicated above, the team considered both operations research and the subsidized sales of contraceptives as alternatives or complements to the bilateral clinic based program. In the light of improved prospects for implementing the Family Health Project (0217) and the promising role of ASBEF, these project ideas need not be seen as alternatives. The team believes that these activities can provide valuable support to the program and recommends that:

- their development be explored over the coming months, as time and the availability of mission staff allow.

V. Population Impact of Other USAID/Dakar Projects

The team looked at other program activities of USAID/Dakar to determine their complementarity to family planning programs. This examination was conducted from two perspectives. First, since Section 104(d) of the Foreign Assistance Act directs A.I.D. to design programs that support lowered fertility values, several projects were reviewed to determine their potential for providing women with alternatives to child-bearing. Second, the team considered the possibility of incorporating family planning messages, commodities and services in existing programs.

USAID/Dakar mission strategy focuses on projects that increase food production. Few projects have an explicit concern for expanding women's roles. A recent project summary statement indicates that the three projects affecting women directly are limited in scope; by implication such projects would have limited impact on fertility. The three projects are: the Sine Saloum Rural Health Project which is training village health personnel; a Women in Development project in the peanut basin which is organizing women's cooperatives; and the Cereals Production Project (Phase II) which includes a women's extension unit. The role of women as equal partners is recognized within the 1982 CDSS. Recently, a Women in Development person was added to the USAID/Dakar staff. During the next five year period, each health and production program will be revised to incorporate a specific women's component, modeled after the Cereals II project. This new emphasis on the role of women within the overall mission strategy is commendable and should serve to reinforce movement toward lowered fertility.

As noted above, the projects that have mechanisms in place which could be used to deliver family planning information and services are the Food for Peace (PL 480, Title II), and Sine Saloum Rural Health (0210) and the Casamance Regional Development (0205) projects.

A. Food for Peace

The Food for Peace program (PL 480, Title II), administered by the Catholic Relief Services (CRS), delivers food to approximately 221,000 recipients in 327 maternal and child health centers throughout the country. According to Norbert Clemente, CRS director, no family planning information or discussion is associated with the program. This is in keeping with CRS headquarter's policy. Clemente noted, however, that information about family planning, along with currently supplied information on health and nutrition, could be provided if requested by the Government of Senegal through the Ministry of Health, the counterpart agency. It should be noted that existing information materials are designed by CRS. If the Ministry of Health begins to move forcefully in family planning, this public distribution system could be used. However, steps will have to be taken to ensure that acceptance of family planning services is not perceived by recipients or the community as a precondition for food relief.

B. Sine Saloum Rural Health Project

Sine Saloum Rural Health Project (Rural Health 0210) huts are staffed with a midwife, a first-aid technician, and a sanitary officer, and supplied with a series of medications. Contraceptive pills and condoms could be added. However, given current difficulties in project implementation, the addition of a family planning component could be an

unmanageable burden. As soon as possible, however, the option of delivering family planning through the health huts, with health post back-up, should be explored with government counterparts, at least on a pilot basis. Contraceptive information and supplies could be attractive to both the community and the local health personnel.

C. Casamance Regional Development Project

The Casamance Regional Development Project (0205 - Phase II) incorporates a small literacy program for the village workers; it is designed to educate them to manage their own production groups. If this program proves to be successful, it might be used as a means through which basic family planning information can be provided.

These three projects offer a few possible opportunities for providing family planning information and services. An imaginative population officer on the mission staff would be in the position to offer creative suggestions at the time of project design and redesign, and to incorporate elements that have direct as well as indirect influences on fertility behavior.

If an analysis of the demographic impact of program components on beneficiaries is incorporated in project design, A.I.D. personnel and government counterparts will become increasingly aware of the deleterious effect of rapid population growth on development. Therefore, the team recommends that:

- where appropriate, family planning information, commodities and services be delivered through existing projects; and that
- population information and demographic analysis be strengthened in project design.

VI. Population-related Activities of Other International Organizations and Donors

Since the most important source of research and projects on population is the United Nations Fund for Population Activities (UNFPA), this section focuses on UNFPA programs; projects of other donors and international agencies are only briefly reviewed.

A. United Nations Fund for Population Activities

The UNFPA has given financial and technical support to the Government of Senegal for eight projects:

1. General Population Census

The census took place in April 1976. Twenty-two tables of demographic data of questionable value on the national level have been published; analysis is currently underway. Five tables of regional data have been analyzed and published; three tables remain unpublished.

2. Law and Population

This project was designed to produce a monograph interpreting critical Senegalese legal texts and documents on population matters. The project includes a sociological study of traditional beliefs and religious customs. The final report has been submitted to CONAPOP. However, the seminar to review the findings, called for in the project and scheduled to take place late in 1980, has yet to convene.

3. Fertility Survey

This study collected and analyzed data on fertility rates, the interrelationship between levels of fertility and socio-economic and cultural factors, and the knowledge and practice of traditional and modern contraceptive methods. Tables have been published. A provisional report has been prepared and is summarized in Section I of this paper.

4. Amanagement du Territoire

This project examines the demographic factors as an adjunct to improving national and regional socio-economic development planning. The start of this project was delayed due to the lack of regional level census data. This project is discussed in more detail in Section II.

5. Training of Multi-Disciplinary Village Teams

This project uses the "Centre d'Expansion Rurale" to equip rural social workers and administrators with the skills needed to improve the present living conditions of the rural population.

6. Population, Migration and Labor Force Survey

This survey identifies the course and components of migration patterns, and the social and demographic characteristics of the labor force. Under- and unemployment receive special attention. Data on households and the labor force were collected in 1979; analysis is currently underway. Since continued funding of the migration survey by UNFPA is in doubt, the BNR is looking for other sources of financial support.

7. Population Unit

Formerly attached to the Planning Division of the Ministry of Plan and Cooperation and now in CONAPO, this unit provides the Government with the information needed to define a national population policy.

8. Improving the Living Conditions of Women and Children in a Suburb of Dakar

This project is designed to promote better health and nutrition services, to provide sex education for mothers and youth, and to create a neighborhood health committee. The project only recently began.

In addition to these ongoing projects, UNFPA is in the process of preparing the following:

- a program to train Senegalese women to participate more effectively in the urban development process;
- a project that introduces population education in formal and non-formal education;
- a project that incorporates demographic issues in education planning;
- a national program of "Bien Etre Familial"; and
- a program to establish a population communication unit.

Promotion Humaine has responsibility for the national program of "Bien Etre Familial," a three-year project. The project has two parts. The first part, called "Volet Santé Familial", is designed to:

- train medical and paramedical personnel of the four regions (Diourbel, Louga, Fleuve, Sénégal-Oriental) where the project is to be developed;
- strengthen maternal and child health activities including family planning and infertility services; and
- conduct sociological and medical research.

The second part of the project enables Promotion Humaine to strengthen its planning and programming capability, and to train the field personnel in maternal and child health and family planning information, communication, education and motivation skills.

If implemented, the population communication unit will provide the Government of Sénégal with the means to publicize development activities that focus on population-related issues. This communication unit will conduct sociological research, and produce and disseminate educational messages. The project is being revised by the technical departments of the UNFPA.

B. France

French government assistance (FAC) in population has been limited to supporting demographic studies and surveys conducted by ORSTOM, and to providing fellowships for Senegalese trainees. France is not involved in family planning and, according to reports, the French do not wish to be involved.

C. Belgium

The Belgian government supports an integrated, comprehensive health project in Pikine, a suburban area of Dakar. The project is designed to serve a population of 450,000 inhabitants. Project personnel report an undefined but considerable demand for contraceptive services in the three maternities of Pikine. Approximately 80 percent of the women requesting family planning services are in monogamous unions, employed, living in overcrowded dwellings, or divorced and multiparous.

Two Belgian doctors, assisted by a Senegalese midwife trained at Santa Cruz, are in charge of the program. Family planning services are not yet available but Dr. Michel Jancloes, director of the project, plans to incorporate them.

D. World Health Organization

WHO support is designed to develop primary health care programs. WHO is assisting the Ministry of Health in manpower training and applied research. Along with UNICEF, WHO supports two training courses per year in health planning, programming and management, conducted by CESSI. (One is a three month course for top level health administrators; the other is a 15-day course for mid-level personnel.)

WHO is conducting applied research in biology, ecology, sociology and human reproduction. WHO is also doing research on traditional medical practices that are still common in Senegal. However, there is no research underway on traditional contraceptive methods.

E. The World Bank

The World Bank is reviewing a proposal to incorporate family planning services and supplies in its health project. The current Bank health project only calls for funds to renovate health facilities, train hospital administrators and develop an effective drug warehousing and supply system.

F. Conclusions and Recommendations

The activities of several of the aid agencies mentioned above have direct and indirect population implications and should be followed closely by USAID/Dakar. The programs of UNFPA deserve special attention. Representatives of USAID/Dakar and the UNFPA should begin to explore prospects for collaborating in the following areas:

- Training. Candidates for long-term training, short courses and observation travel should be reviewed jointly. Training, seminars, and workshops can be jointly planned and sponsored.

- Contraceptives. USAID may be able to provide most of the contraceptives needed by the total country program. UNFPA can provide injectables, if required, and some specialty items.

- Program Components. By discussing and agreeing on programmatic elements USAID and UNFPA can offer complementary technical advice to the Government of Senegal, minimize program delays and improve project impact. Agreement on the following matters is important:

- the amount of facility repair and renovation required before offering family planning services;
- the design of the record-keeping system, and the format for evaluation;
- the extent of medical and paramedical involvement in service delivery;
- the curricula and location of training courses; and
- the range and type of contraceptives.

This list is representative, not inclusive.

Collaboration with other donor programs reduces the prospect of project duplication and maximizes scarce population funding. Moreover, donor collaboration allows A.I.D. to maintain a low profile in the population field. Therefore, the team recommends that:

- the USAID director invite UNFPA representatives to work with the USAID population officer to establish an informal coordinating group.

Other donors may be invited as circumstances warrant. It would be advisable to involve Senegalese officials, but the group should avoid a formal, political structure which could impede effective action.

Appendix 1

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