

*48 Month Progress Report  
and  
Workplan for Year V October 1988 to September 1989*

**CONTINUATION AND EXPANSION  
OF FAMILY PLANNING  
OPERATIONS RESEARCH IN ZAIRE**

Cooperative Agreement DPE-3030-A-00-4051-00

**TULANE UNIVERSITY  
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# I. OVERVIEW OF O.R. PROJECTS AND HIGHLIGHTS OF FINDINGS TO DATE

The cooperative agreement (No DPE-3030-A-00-4051-00) between Tulane University and USAID for the continuation and expansion of Family Planning Operations Research in Zaire was originally designed to cover a five year period from October 1, 1985, to September 30, 1989. It has recently received a no-cost extension through September 30, 1990, to allow for completion project activities and for more in-depth analysis and reporting of results through various channels. The objectives of the agreement are

- 1 To increase the use of modern methods of contraception among women of reproductive age, leading to a reduction in morbidity, mortality, and fertility in Zaire
- 2 To strengthen the technical capacity of Zairian institutions in the field of operations research, design and evaluation of family planning programs

The project is to achieve these objectives through (1) direct support of certain family planning (FP) service activities, (2) applied research to improve the delivery of FP services, and (3) transfer of research skills and microcomputer technology (hardware and software) to local institutions

The original agreement called for eight sub-projects to be carried out during the life of the project. As we begin the fifth year of this agreement, the Zaire OR project consists of 10 sub-projects, nine of which are currently active, one which has been completed. Progress to date and plans for Year V (October 1988 to September 1989) are described for each in the sections below. The geographical distribution of the sub-projects is shown in the map in Figure 1

The Zaire Family Planning Operations Research Project has focused on three main areas: (1) the impact and cultural acceptability of community-based distribution (CBD) programs, (2) the acceptability of tubal ligation in the context of a sub-Saharan country, and (3) AIDS prevention and condom utilization. Highlights of findings in these three main areas are as follows:

## A Community-based Distribution Programs in Zaire

The CBD program in Zaire, known locally as PRODEF (Programme d'Education Familiale), is currently operating in seven health zones (100,000-150,000 inhabitants per zone). These include four urban sites (one health zone each in Matadi, Kisangani, Mbuji Mayi, and Kinshasa) and three rural health zones (Nsona Mpangu and Sona Bata in the region of Bas Zaire, and Miabi in Kasai Oriental, outside of Mbuji Mayi). Training is underway for distributors in one additional zone: the health zone of Kikimi in Kinshasa.

There are approximately 275 active distributors in the program at present (see Appendix A, Table 1). Whereas prior to 1987, the distributors were all female, as of 1987 there has been a tendency to select both male and female distributors. One of the reasons for this change was to promote more widespread use of the condom, in part for AIDS prevention. Since the Bas Zaire projects which

FIGURE 1 MAP OF ZAIRE O.R. SERVICE/RESEARCH SITES



- CBD Proj
- \* AVSC Model Sites
- ▲ AVSC Followup Study
- KINTAMBO Research
- Contraceptive Continuation
- ✚ AIDS Education

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have only female distributors have sold few condoms to date, it was hypothesized that male distributors would do better in this respect. Thus, the CBD programs in Kisangani, Mbuji Mayi, Miabi, and Kinshasa (both zones) have both male and female distributors. Since this change is fairly recent, we are still accumulating data which will allow us to compare the performance of male versus female distributors in terms of contraceptive sales.

The purpose of the CBD projects is to increase contraceptive use in selected populations, while at the same time learning more about the effectiveness of different strategies. The data in Appendix A, Table 2, indicate the performance of each site in terms of couple-years-of-protection (CYP). While the numbers are still relatively small, it is noteworthy that CBD provided an additional 19 percent CYP to what the national family planning program achieved in 1987 through its clinic-based program.

The data for 1987 show a decrease in contraceptive sales in comparison to 1986. This results in part from the non-availability of the pill at the central level in Kinshasa (which resupplies the CBD projects) during the last quarter of 1987. A similar stockout problem occurred with condoms in mid-1988, but will have less impact on the CBD statistics because of the relatively limited use of this method in the program.

In terms of the research questions, the large number of distributors in the program (approximately 275) will allow us to examine a number of issues:

- Do male and female distributors differ in terms of performance, as measured by total CYP? (Preliminary findings do not show a significant difference, but more data are needed to arrive at a definitive conclusion.)
- Do male and female distributors differ in terms of their performance in selling condoms? (Again, preliminary data do not support this hypothesis, but the final results are not yet in.)
- Do male and female distributors differ in terms of their turnover rate from the program? (The original Bas Zaire project with all female distributors had very low turnover, whereas the Kisangani project with both male and female distributors has experienced significant problems in this area. Data are now being collected to answer this question.)
- (In the Kisangani program) Are nurses who serve as distributors after hours more effective in terms of contraceptive sales than their counterparts with no medical training?
- Are certain socio-demographic characteristics associated with distributor performance as measured by CYP? Data are being collected on all distributors, which will then be analyzed in relation to CYP provided by each, in an effort to identify traits or behaviors which are positively associated with strong performance.
- What impact does CBD have on contraceptive prevalence in the short-term of two to three years? In the long term of at least five years? Followup studies to answer these questions are now underway in the three Bas Zaire projects (Matadi, Nsona Mpangu, and Sona Bata).

## **B. The Cultural Acceptability of Tubal Ligation in the Context of sub-Saharan Africa**

Tulane is involved in the research component of a collaborative project between the Projet des Services des Naissances Désirables (PSND, the Family Planning Services Project) and the Association for Voluntary Surgical Contraception (AVSC). The research component consists of two parts: (1) qualitative research based on focus groups of VSC acceptors, potential candidates and husbands regarding attitudes toward tubal ligation, and (2) a quantitative followup survey of women who have undergone tubal ligation in the past five years.

The results from the focus groups are available and being diffused through different channels. The quantitative follow up survey is still in progress. However, the most noteworthy aspect of this research is the comparison of the Zaire results with a second research project which is a spinoff of the Zaire study, financed by AVSC and carried out in four sites in Kenya. The population in these four catchment areas of active VSC programs were strongly supportive of the idea of tubal ligation once a couple had all the children they wanted. Whereas the Zaire results showed the attitudes which might be expected in an African country where tubal ligation has been available primarily as a medical intervention, the Kenya results suggest that such attitudes may change in response to increased availability of quality, low-cost VSC services.

## **C. AIDS Prevention and Condom Utilization**

In a country with a high prevalence of HIV infection (estimated at 6-8 percent in the capital city of Kinshasa), it is not surprising that family planning service providers are enlisted in the fight against AIDS. The PSND, with support from Tulane, is involved in both research and service activities related to AIDS and its prevention.

The major research contribution is a city-wide survey of knowledge-attitudes-practice relating to AIDS, which was cited in the *New York Times* (10/10/88) as the "most exhaustive of its kind in Africa." (See Appendix B). The total sample includes approximately 3000 men and 3000 women of reproductive age. While data entry is still in process, the findings from the first 2900 cases (divided between men and women) show that

- Over 97 percent of men and women of reproductive age in Kinshasa have heard of AIDS
- Nine in ten respondents (that had heard of AIDS) know the four main modes of transmission
- There are some misconceptions about transmission by mosquitos and by casual contact among at least one-third of the population
- Over 85 percent believe that AIDS can be prevented, the main modes cited by respondents were to decrease the number of sexual partners, avoid prostitutes, and avoid injections with unsterile needles
- Respondents are less likely to spontaneously mention condoms as a means of preventing AIDS, although 70 percent of men and 42 percent of women recognized this to be a means of prevention when the question was asked directly

- Half the men and women in this study have had their first sexual experience by the age of 17
- Twenty-two (22) percent of married men and 2 percent of married women admitted having extra-marital relations in the past six months, these findings are believed to underestimate the actual prevalence of this phenomenon
- Knowledge of condoms is very high among all segments of the population except women without a stable partner. However, less than one in five of the men and women interviewed have ever used condoms. And only one percent of married men and two percent of married women reported regular condom use with their spouse, in these few cases, it was for the purposes of avoiding pregnancy rather than STDs
- Condom use was slightly higher in the case of extra-marital relations than in conjugal relations, and use was more consistent.
- At least half of the men interviewed believe that condoms tear easily during sex, can stay in the vagina after sex, and diminish sexual pleasure. About one-third of the female respondents voiced these complaints, whereas close to half did not have an opinion about condoms
- Close to half of all respondents believe there is an AIDS vaccine
- Close to half of the men and one-quarter of the women believe that AIDS is curable
- Half the male and close to two-thirds of the female respondents feel that they are at no risk of getting AIDS

The final report on this survey will be available by December 30, 1988

At the same time, one of the three sites slated for CBD/AIDS prevention activities is operational and the second will be by November 15, 1988. In the first phase, CBD workers are trained and established to sell three contraceptive products in their neighborhoods, including condoms. In the second phase, groups meetings will be held to create greater awareness among the population of their personal risk of contracting AIDS, the fact that there is no vaccine or cure, and means of prevention, including condom use. While this activity is very small in comparison to the need among this urban population of four million, it nonetheless represents *the first systematic attempt at AIDS prevention at the community level based on organized interpersonal communication activities*

## II. PROGRESS ON EACH SUB-PROJECT AND PLANS FOR YEAR V

There are a total of 10 sub-projects being conducted under this cooperative agreement. The objectives, progress to date, and activities for year IV (Oct 87 to Sept 88) are as follows

### Sub-project #1

#### Nsona Mpangu, Bas Zaire: Long-term Evaluation of the Impact of Community-based Distribution (CBD) on Contraceptive Prevalence

##### A. Objective

To test the impact of CBD efforts in three treatment and one comparison area. The interventions in each area are as follows

*Treatment Area A* Distribution of contraceptives and four basic medications in CBD posts and existing dispensaries since 1982, with household distribution of these products in 1982-1983

*Treatment Area B* Distribution of these same products in CBD posts and existing dispensaries since 1982, but no household distribution in 1982-1983

*Treatment Area C* Distribution of these same product in CBD posts and existing dispensaries since 1986 only (no household distribution)

*Treatment Area D* Comparison, no activities

The purpose of the research is to evaluate the long term impact (over a seven year period) of CBD on contraceptive prevalence. Of particular interest are the questions

- Does prevalence continue to increase after the initial gains during the first two years of a program or does it plateau once the "predisposed" are already reached?
- Do villages that come into the program later "catch up" to those that have had services over a long-term period or is time a factor in the level of prevalence attained by the program?

##### B. Accomplishments to Date

This project, known locally as PRODEF (le Programme d'Education Familiale), was the first and is now the oldest CBD effort in Zaire, having started service delivery in 1981. Currently, there are 40 distributors and seven dispensary nurses actively involved in the program. They receive quarterly supervisory visits, during which they are resupplied.

Data on couple-years-of-protection (CYP) for the Nsona Mpangu project are shown in Figure 2. The level of CYP has increased steadily since the onset of the program in 1981, but dropped off in 1987, in part because of the non-availability of the pill at the central level in Kinshasa during the last quarter of 1987.

Work on the cost analysis of this project (i.e. cost per couple-month-of-protection) is progressing well. A preliminary report on the "Calculation of Cost per Couple-Year-of-Protection: Preliminary Findings from PRODEF-Matadi/Nsona Mpangu, Zaire 1985-87" was completed in July 1988 and submitted to AID/W for review.

The followup survey for the purposes of evaluating the impact of the program on contraceptive prevalence is currently in the field and approximately 1500 of the expected 3500 questionnaires are completed. Interviewer training and pretesting of the questionnaire was completed in June-July 1988 under the supervision of Ms. Amelia Duran-Bordier, a graduate student/consultant from Tulane.

In an effort to further expand CBD using the existing PRODEF structure, the staff has introduced the concept of CBD to authorities in three smaller urban areas of Bas Zaire: Muanda, Boma, and Tshela. Recruitment of distributors is underway, and training for these distributors is scheduled for December 1988.

In brief, all activities outlined in the Workplan for Year IV for this project have been completed.

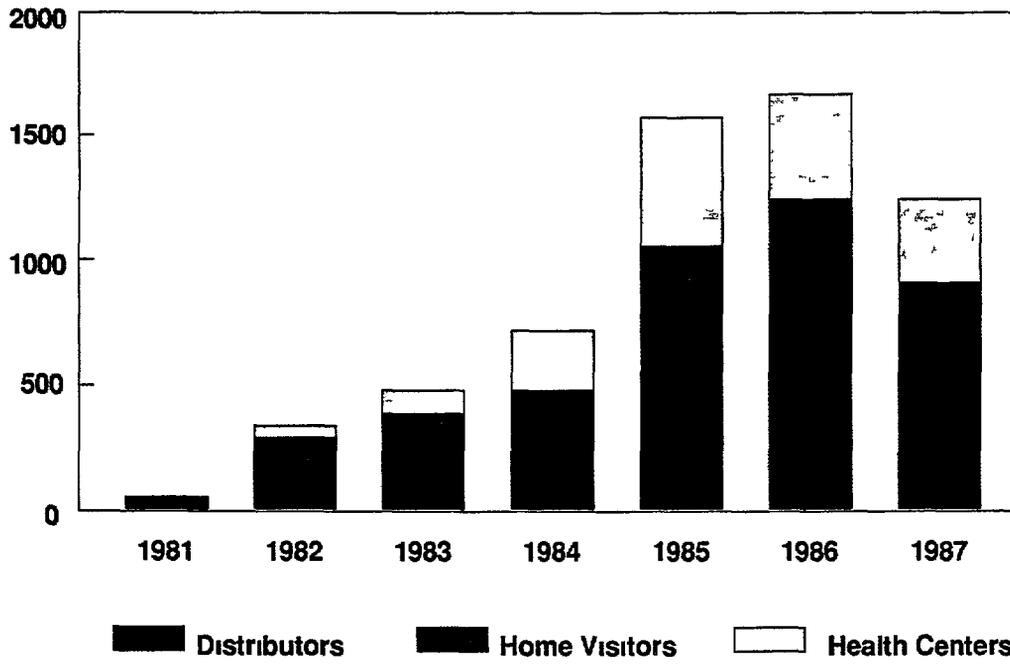
### **C. Activities for Year V**

- 1 Conduct routine supervision and resupply of distributors and nurses participating in the project
- 2 Continue data entry and processing for service statistics and cost analysis
- 3 Finalize recruitment and train new distributors in three additional sites (Muanda, Boma, and Tshela)
- 4 Finalize the data collection for the followup survey
- 5 Enter and process data on microcomputer
- 6 Analyze results and prepare final report
- 7 Prepare final report on the cost per CYP of the program

### **D. Problems to Date**

During Year IV of the project, Dr. Nlandu Mangani, the Director of the PRODEF-Matadi/Nsona Mpangu project moved from his post as Medical Officer for the Health Zone of Nsona Mpangu to the position of Medical Advisor for the PSND in Kinshasa. The headquarters for this project has been moved to Matadi, although the program continues to operate in the rural area.

**Figure 2. COUPLE YEARS PROTECTION  
ZONE OF NSONA MPANGU**



Two main problems have arisen from this change. The new Medical Officer for the Zone had hoped to "inherit" the PRODEF project, when he did not, he tried instead to discredit it in many of the communities where it existed. Since then, he has had numerous other difficulties with local officials, to the point that he may well be removed from his position. However, his actions have not helped the cause of PRODEF, especially in the months just preceding the final evaluation of project activities.

Second, supervision has been irregular in the rural zone, in part because of the numerous activities being undertaken by the project staff, including preparation for the followup survey and expansion of CBD to three smaller urban areas in Bas Zaire. While there have not been any stockouts of contraceptives, this lack of regular supervision has undoubtedly had a negative effect on program performance. Efforts are underway to remedy this problem. (In fact, all distributors are being visited and supervised as the interviewers travel village to village for the followup survey.)

## **Sub-project #2**

### **Expansion of the Matadi Project to Include CBD Workers and Continuation of Distribution through Dispensaries**

The original PRODEF-Matadi project tested two strategies: (a) making contraceptives available at low cost through existing dispensaries, vs (b) three rounds of household distribution of contraceptives, in addition to making contraceptives available at low cost through existing dispensaries. Both strategies increased prevalence significantly, but household distribution did not make enough of an additional impact to justify its expense. Thus, since 1983, the project has consisted of the distribution of contraceptives through five dispensaries in Matadi.

#### **A. Objective**

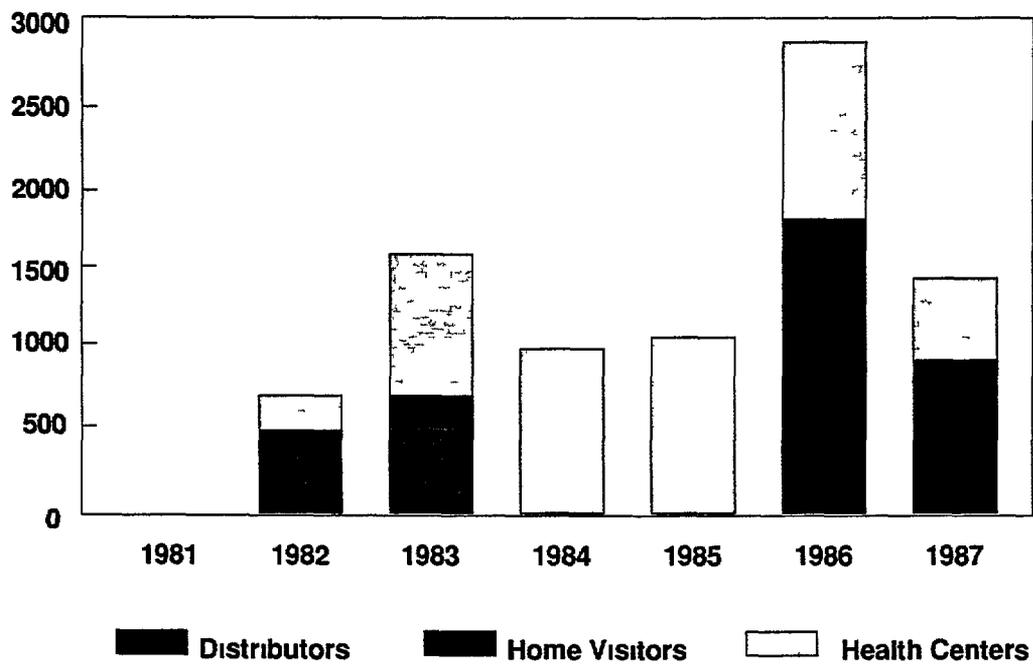
To test the cultural acceptability of CBD workers in an urban setting and determine the preference for type of service provider when FP services are accessible both through dispensaries and CBD posts.

#### **B. Accomplishments to Date**

The Matadi CBD program using the "community depot" approach (i.e. distributors selling products from their homes) began in late 1986 and has expanded since that time to 35 active distributors (see Appendix A, Table 1). The total CYP for the Matadi program increased markedly from 1985 to 1986 with the arrival of the CBD workers at the community level. However, there was a dramatic decrease in 1987, due in part to the problem of the non-availability of the pill at the central level in Kinshasa, see Figure 3. This was particularly serious for this project, where over 90 percent of the CYP corresponds to the pill (see Appendix A, Table 4).

Analysis of the cost per CYP data for Matadi was done jointly with that of Nsona Mpangu, as reported in the document cited above.

**Figure 3. COUPLE YEARS PROTECTION  
ZONE OF MATADI**



The followup survey for Matadi will be conducted by the same team currently interviewing in the rural area. Data collection for Matadi is expected to begin in December. While this is a few months behind schedule, it will still allow for the processing and analysis of the results within the lifetime of the project. Both the Nsona Mpangu and Matadi surveys will have an added module--on AIDS--which will represent the first available AIDS K-A-P data from the Interior of Zaire.

Finally, Matadi has served as one of the two test sites for the qualitative evaluation of distributors, explained in detail under sub-project #10, below.

### **C Activities for Year V**

- 1 Continue to routinely supervise and resupply distributors and nurses in the PRODEF project
- 2 Continue data entry and processing for service statistics and cost data
- 3 Complete data collection for the followup survey
- 4 Enter and process data on microcomputer
- 5 Analyze results and prepare final report
- 6 Prepare final report on the cost per CYP of the program

### **D. Problems to Date**

One potential problem for the Matadi project was the departure of Dr. Nlandu from Bas Zaire. He remains titular head of the project, but all the day-to-day activities are supervised by Cne Matondo Mansilu, who has been with the project since 1981. In fact, the operation continues to run smoothly under her direction, and the Matadi program does not seem to be affected by this change.

The transfer of the headquarters of this project from Nsona Mpangu to Matadi in fact favors the activities in Matadi. The program continues to have a strong backing among local authorities. However, there is a troublesome decrease in the service statistics for Matadi. The drop in CYP for 1987 can be explained by the nonavailability of the pill. However, the pill has been available for most of 1988. Nonetheless, data from the first four months of 1988--when multiplied by three to get a projection of CYP for all of 1988 (see Appendix A, Table 2)--show a substantial decrease in CYP between 1987 and 1988. The project directors continue to study this situation and intend to renew their efforts to maintain a high level of morale among the Matadi distributors. It is also hoped that the arrival of an outside team to evaluate the distributors in the Matadi program in September 1988 (described under sub-project #10, below) will have served as a motivating force.

## **Subproject #3**

### **Sona Bata, Bas Zaire: A Test of Dispensary-based versus Community-based Distribution of FP Services**

#### **A. Objective**

To test the cultural acceptability, impact on prevalence and relative cost-effectiveness of two different strategies to the delivery of FP services in some 40 villages

#### **B Accomplishments to Date**

The Sona Bata project, which from the start adopted the name PRODEF from the original project, currently has 31 distributors and 11 nurses at health centers participating in the project. The CBD program began in April 1986 and has continued to run smoothly since that time.

The project staff have learned to use the microcomputer located in Sona Bata for data entry of surveys, service statistics, and more recently cost data. Their operation serves as a model for the successful use of this equipment in a rural area where electricity is problematic.

The program has expanded from selected villages in the Zone of Sona Bata to the neighboring town of Kisantu, which is located on the main route between Kinshasa and Matadi. While this expansion includes only 10 distributors, these women are all "femmes commerçantes" (market women or women with small shops). This represents the first attempt to use such individuals in CBD in Zaire, and the results from the first few months are very promising. Sona Bata will soon expand to a second town, also on the Kinshasa-Matadi road, with a similar activity.

The followup survey in Sona Bata is underway. Interviews were trained and the questionnaire pretested under the direction of Dr. Nancy Mock from Tulane University. Data collection has been completed in over half of the sixty villages to be included in the survey. The questionnaire also includes the AIDS module.

#### **C. Activities for Year IV**

- 1 Continue the routine supervision of distributors and nurses in the program
- 2 Continue data entry and processing of service statistics and cost data
- 3 Finalize data collection on the followup survey to measure prevalence in the different treatment areas
- 4 Enter and process data on microcomputer
- 5 Analyze results and prepare final report
- 6 Prepare final report on the cost per CYP of the program

## **D. Problems to Date**

One important problem for the Sona Bata project continues to be cost recovery from the sale of basic medications (aspirin, chloroquine, vermoz and oral rehydration salts) From the start, the program has given the distributors a 50 percent commission on the sale of both contraceptives and basic medications However, they have priced the medications at the same level as the health centers in the zone (which is reasonable) By giving the distributors 50 percent of all sales, they do not recuperate enough to cover subsequent purchases of these medications (The original PRODEF project, which also gave 50 percent to distributors, did not run into this problem, because the Matadi program sells contraceptives only, which are given to the project free of charge, thus, the profits from the sale of contraceptives in the urban area go to cover the "losses" on the sale of drugs in the rural area) For the time being, project funds are used to cover the shortfalls, but the real problem involves the future of the activity if/when the current funding is terminated

A second problem concerns the client load of CBD workers in the Sona Bata project Whereas distributors in the Nsona Mpangu project (which is also rural) have an average of about 30 clients per month (i.e. they sell contraceptives equivalent to 30 couple-months-of-protection), the distributors in the Sona Bata program have averaged about six clients per month since the beginning of the program and, if anything, there has been a slight decrease over time (see Appendix A, Table 3) Given that this program is among the best organized and supervised of the CBD projects in Zaire, one possible explanation is the size of the villages served and the potential number of clients Results of the followup survey will shed light on this subject In the meantime, the project staff believes that the best move to bring more clients to the project is the expansion to these neighboring towns, which is being done at low cost and with promising results

Third, the project has experienced considerable problems in both supervising distributors and conducting the followup survey due to the lack of repair parts (including a new motor) for the Landrover AID/W did give Tulane approval for the purchase of these items in late September, and it is hoped that the parts will arrive in Zaire shortly to resolve this problem

### **Sub-project #4**

#### **PSND Kinshasa: Diagnostic Research on the Causes of the Sub-utilization of the Model FP Clinic and Efforts to Promote its Use**

##### **A. Objective**

- 1 To determine via a sample survey of women of reproductive age and a series of 20 focus groups among men and women in the target population (a) attitudes toward FP in general and (b) knowledge of, attitudes toward, and use of the model FP clinic, the Centre Libota Lilamu
- 2 To conduct group meetings in all blocks of the zone of Kintambo over a 5 month period to educate the population about FP and the Centre Libota Lilamu
- 3 To assess whether there was an increase in clinic utilization following this 6-month motivational effort

## **B. Accomplishments to Date**

This is the first of the ten sub-projects to be completed. The activities outlined above were conducted, the results analyzed, and the findings written up in the PSND Etude de Recherche No 3, "Resultats du Programme de Motivation dans la Zone de Kintambo pour Augmenter l'Utilisation du Centre Libota Lilamu." A summary in English is also available.

The quantitative survey among women and the focus groups conducted among men and women in the target population indicated that close to half of this group did not even know of the existence of the Centre Libota Lilamu. Moreover, the rumors circulating about modern contraceptives (e.g. that they cause infertility, excess weight gain/loss, cancer or even death) constituted a major obstacle to more widespread adoption of these methods.

The intervention undertaken by the PSND/OR Unit to inform the population of the Center's existence and to combat the negative rumors regarding the methods was a series of small group meetings on a block-by-block basis in the zone of Kintambo (one of the 24 administrative zones in the city of Kinshasa, in which the Center is located). Thus, for a period of six months a team consisting of two male and two female educators conducted meetings throughout the zone, eventually reaching some 3800 women and 900 men.

Despite this intensive IEC activity at the community level, there was no increase in clinic utilization which could be attributed to this motivational effort. The number of new acceptors, active users, consultations for infertility, and total visits to the clinic did not increase as a result of the intervention.

While the Centre Libota Lilamu can not be considered representative of clinic facilities in Zaire, nonetheless these findings underscore the importance of further experimentation with non-clinical approaches to service delivery -- community-based distribution and social marketing -- the former of which is a major component of the Tulane OR project in Zaire.

### **Sub-project #5**

#### **Mbuji Mayi: Community-based Distribution with Male Participation**

##### **A. Objective**

To test the effectiveness and cultural acceptability (1) of community-based distribution as a service delivery model and (2) of males as CBD workers.

##### **B. Accomplishments to Date**

The original project called for a quasi-experimental design, which would compare areas with just female distributors vs. areas with male and female distributors in both a urban health zone in Mbuji Mayi and in a rural health zone on the outskirts of the city. As part of the design, a baseline survey was conducted in late 1986 in both the urban and rural areas.

However, the selection of distributors by sex for a specific location has not proven practical at the field level. Instead, both male and female distributors have been recruited into the program, we are now proceeding to evaluate their relative effectiveness in terms of the volume of contraceptives sold. Sales data for the urban component of the Mbuji Mayi program have only been available since November 1988. Preliminary results (shown in Appendix A, Table 5) do not show marked differences in the performance of the two groups, as judged by average CMP per distributor by month. However, additional data (covering at least a one year period and preferably a two-year period) are needed to arrive at any definitive conclusions.

The 36 Month Progress Report explained the problems which were experienced in the rural area of this project and concluded that the program would probably operate in the urban area only. However, it has been possible to resurrect the rural component. In September 1988 a total of nine nurses and 26 distributors were trained in the rural zone of Miabi. These include both males and females, which will allow us to extend our comparisons of the relative effectiveness of the two groups of distributors to the rural zone as well.

An audit of the project's financial accounting system was done by a local auditing firm. The findings indicate that there were errors due to inexperience of the person responsible for keeping the books. However, the auditor was able to work with the team to rectify this situation. More important, the report showed no significant anomalies in the use of funds.

We did not accomplish two tasks outlined in the Workplan for Year IV (page 13)

- to train project personnel in the coding of costs for the cost analyses to be conducted subsequently, and
- train project personnel in the use of the microcomputer for processing service statistics, data entry of costs and word processing

However, this training is scheduled for November 7-19, 1988, in Kinshasa

### **C. Activities for Year V**

- 1 Supervise and resupply the distributors in the program
- 2 Conduct training for coding of costs and use of microcomputer for data entry and word processing
- 3 Conduct a qualitative evaluation of the distributors in the program (see sub-project #10, below)
- 4 Analyze service statistics and produce a final report on the relative effectiveness of male and female distributors
- 5 Analyze and report the cost per CYP in this project

## **D. Problems Encountered to Date**

The Mbuji Mayi project, which was one of the greatest sources of problems in Year III, began to operate quite smoothly during Year IV under the direction of Dr Ntumbak Makala. The distributors in the Mbuji Mayi program are not quite as productive as their counterparts in Matadi and Kinshasa in terms of volume of contraceptives sold (see Appendix A, Table 5), but this may also relate to the fact that this is one of the most traditional areas of the country. Also, being the diamond-mining center of Zaire, families may have more income and not feel the economic burden of a large family to the same extent as in other areas.

The project was given a second-hand Jeep by the PSND, which is maintained under the Tulane OR Project. This vehicle is in very poor shape. The problem of transportation, especially with the expansion to the rural zone of Miabi, will need to be resolved, possibly with the purchase of a motorcycle.

### **Sub-project #6**

#### **Kisangani: A Test of Two Strategies for FP Service Delivery**

##### **A. Objective**

To test the relative impact on contraceptive prevalence and the cost-effectiveness of an urban CBD program (in the health zone of Kisangani) versus clinic-based services (in the health zone of Kabondo), with a third health zone (Lubunga) serving as a comparison area. Each health zone contains between 100,000 and 150,000 people, the three together cover Kisangani, the fifth largest city in Zaire.

##### **B. Accomplishments to Date**

The major accomplishment during Year IV was to get this project back on track after some very serious problems in late 1987.

The Kisangani project began with a baseline survey in late 1986. Over forty distributors were then recruited in spring 1987 and began work in June 1987. The problems began soon thereafter. First, the local medical community pressured the Chief Medical Officer of the Region to have the pill removed from program. Second, there was criticism of the quality of the distributors in the program and their ability to effectively serve the clients. Third, it became clear in autumn 1987 that the coordinator of the Kisangani project was not able to manage the administrative aspects of the project, nor effectively deal with the problems of the medical community.

In late 1987 the original coordinator was replaced by Dr Wembodinga Utshudinyema. Training of some forty new distributors took place in late Spring 1988, and they have been in operation since June 1988.

The new set of distributors includes both men and women, in addition, at least one-quarter of the distributors are nurses who work as distributors in their off-hours. This will allow us to analyze not only the relative effectiveness of male vs female distributors, but also the effectiveness of nurses vs non-medical personnel as distributors. Results from the first few months of service delivery suggest that the female distributors have a higher average CMP per distributor per month (24 CMP per month) than do male distributors (16 per month), see Appendix A, Table 5. However, further data are needed to arrive at more solid conclusions.

Kisangani served as the first test site for the qualitative evaluation of distributors. This work was supervised by Ms. Denise Daly, an graduate intern at AID/Zaire who was authorized by the Mission to participate in this research.

In relation to the problems experienced in late 1987, Tulane commissioned a financial audit of the Kisangani project. This pointed to a number of irregularities and confirmed the need to remove the coordinator from his responsibilities. The auditing firm has worked with the project staff to strengthen its financial procedures, and this aspect of the program is now running smoothly.

There were several tasks planned for Year IV which were not completed. These include the same two items as for Mbuji Mayi: coding of cost data and training in microcomputer use for entering and tabulating service statistics. Two members of the Kisangani team will participate in the training to be held in Kinshasa on Nov. 7-19, 1988.

## **C Activities for Year V**

- 1 Supervise and resupply distributors in the program
- 2 Conduct training for coding of costs and use of microcomputer for data entry and word processing
- 3 Finalize the analyze of the qualitative evaluation of distributors
- 4 Analyze service statistics and produce a final report on the relative effectiveness of male and female distributors, also, on the effectiveness of nurses vs non-medical personnel as distributors
- 5 Analyze and report the cost per CYP in this project

## **Sub-project #7**

### **Motivations for and Barriers to Voluntary Surgical Contraception (VSC) for Women**

#### **A. Objective**

- 1 To identify factors which constitute motivations for and barriers to VSC for women, using two methodologies
  - (a) focus groups among three selected categories of the population women who have undergone VSC, active users of reversible methods that have at least 5 children, and husbands of active users who have at least 5 children,
  - (b) a followup (quantitative) survey among at least 500 acceptors of VSC to learn more about the consequences of VSC in this society
- 2 To collaborate with the Association for Voluntary Surgical Contraception (AVSC) in a program to establish model centers for VSC in 3 urban and in 3 rural locations in Zaire

#### **B. Accomplishments in Year IV**

The two main activities of this sub-project during Year IV were (a) to finalize the analysis of the 29 focus groups in five different regions of the country on the topic of tubal ligation, and (b) to complete preparations for and begin fieldwork on the quantitative followup survey of women who have had a tubal ligation

Results of the 29 focus groups have been submitted to AID/W and AID/Zaire in the form of a paper entitled, "Attitudes of Acceptors, Potential Candidates and Husbands toward Tubal Ligation in Zaire"

With regard to the quantitative followup survey, 12 sites were identified which fulfilled the criterion of having names and addresses for at least 50 women having undergone tubal ligation in the preceding three years (excluding those who had cesarean sections) Training of interviewers took place in two phases, in December 1987 and February 1988 Field work has been completed in six sites and is ongoing in six others Data collection should be finished in all sites by December 1988, and analysis of the 500 some cases will begin in early 1989

#### **C. Activities for Year V**

- 1 Finalize fieldwork on followup survey
- 2 Code and enter data from questionnaires
- 3 Process and analyze data, prepare final report

## **D Problems encountered to Date**

It is difficult to conduct a 12-site study in a country with very poor communication mechanisms. The simple question of transferring funds for local research costs has posed considerable problems and has resulted in substantial delays in certain sites. However, most of these problems have been resolved.

One problem relating to this project concerns the role of the "research institution" in a joint service-research project. AVSC has been very conscientious in following up on all aspects of the service project, but the local person in charge of the VSC activities has proven very ineffective. Thus, less progress has been made on the service side of activities than was hoped.

The division of labor is such that Tulane is expected to conduct the research, while AVSC is to oversee the service aspects. However, AVSC representatives visit 2-3 times a year, whereas Tulane has a permanent presence here. The overall interests of service delivery would probably have been better served by Tulane's taking a more active role in the service segment of this project, even though that was not foreseen in the original division of labor. Rather, Tulane has focused its efforts almost entirely on the research.

This problem is worthy of study since the Tulane-AVSC collaboration on this project has been labelled by some as a model for collaboration between AID service intermediaries and OR projects. While all partners remain on extremely good terms and both intermediaries are doing what they agreed to do, the service program is not operating as effectively as expected. The question remains as to how such a situation should be dealt with on future activities.

## **Sub-project #8 Incorporating Education/Prevention Activities for AIDS into a Contraceptive Community-Based Distribution (CBD) Project in Kinshasa**

### **A. Objective**

- 1 Assess the feasibility of incorporating an educational component on AIDS into the community-based distribution of family planning services
- 2 To increase knowledge among the target population of
  - the nature of AIDS and the severity of the disease
  - the modes of transmission
  - measures to decrease risk of contracting AIDS
- 3 To increase the use of modern contraceptive methods among married women 15-44 in the target population

- 4 To increase the use of condoms among males who have multiple partners
- 5 To reduce the number of sexual partners among males and females in the target population

This project represents a controlled field experiment in which the intervention in the experimental group (three administrative zones in Kinshasa) will consist of installing a network of CBD posts and conducting a series of community meetings on AIDS throughout the zone, a comparison group (two zones) will have no special intervention. A baseline survey has been conducted in both the experimental and comparison areas, it will serve as a standard against which to compare results from an eventual followup survey to determine the degree to which the objectives are achieved.

## **B. Accomplishments in Year IV**

While the original design of this project called for the baseline to be conducted among both men and women in only five of the 24 administrative zones of Kinshasa (three experimental and two comparison), the decision was later taken to expand to a city-wide survey which will cover all 24 zones. It was felt that data which would be representative of Kinshasa as a whole would be of far greater worth to the scientific community grappling with the AIDS problem than the study of five zones. Moreover, in doing so the survey would constitute an update (five years later) of the original contraceptive prevalence survey for Kinshasa.

While we are still convinced of the worth of this activity, its implementation has consumed a major part of the energies of the staff of the PSND/OR Unit over the past 18 months. We are fortunate to have the services of Cn Bakutuvwidi Makani and Cn Kinavwidi Lewu as consultants, they were the country directors of the 1982-84 CPS conducted in collaboration with Westinghouse.

Data collection took place from January to September 1988 in all 24 zones of Kinshasa. The sample was to include 2500 men and 2500 women of reproductive age (which included oversampling in the experimental and comparison zones to assure sufficient numbers for subsequent analysis). However, the actual numbers obtained are closer to 3000 cases for each sex.

Data entry is in process and to date over half the data has been entered. These data served as a basis for a preliminary report of the subject of "Knowledge of AIDS, Sexual Behavior and Condom Use in the Context of AIDS Prevention," parts of which were presented by the Director of the PSND, Cne Chirwisa Chirhamolekwa, at a recent workshop of experts in the field on "Means of Preventing the Spread of SIDA."

The main findings of the report are highlighted in Section I of this report. The final report on the AIDS section should be available by the end of December 1988. The results of the contraceptive prevalence survey will be forthcoming in early 1989.

The service component of the project consists of establishing CBD posts in three zones of Kinshasa and introducing an AIDS education component into these activities. The three zones chosen for this activity are the health zones of Makala, Kikimi, and Kitokimosi.

The CBD program is up and running in the health zone of Makala, with 25 distributors in the field. Though data are only available for the first two months of activity, these distributors did well in terms of the average monthly CMP per distributor (see Appendix A, Table 3). The AIDS educational intervention will begin in November 1989.

The distributors in the health zone of Kikimi are undergoing training at the time of this report. They will be supplied and in operation by mid-November.

Prospection of the third zone, Kitokimosi, will begin in late November, and the CBD component should be in place by the end of December 1988.

### **C. Activities for Year V**

- 1 Finalize the data entry and editing
- 2 Analyze and prepare final report
- 3 Establish CBD in the third selected health zone
- 4 Launch AIDS educational activity in three health zones
- 5 Monitor service statistics on contraceptive sales, including condoms

### **D. Problems Encountered to Date**

The main problem has been the administrative difficulties entailed in managing a survey of this size. However, with the data collection now completed, this problem is largely resolved. The delays in initiating the service components of the project resulted from the great investment of time and human resources needed to conduct the survey. This could have been avoided, had the survey been somewhat less ambitious.

### **Sub-project #9**

#### **Kinshasa. Study of Continuation of Contraceptive Use and Reasons for Abandoning Contraceptive Methods**

##### **A. Objectives:**

- 1 To determine the percentage of new acceptors who are still active in the program seven months after initiation
- 2 To determine the percentage of new acceptors who are actively using contraceptives (even if they no longer use the original FP service) seven months after initiation

- 3 To determine the reasons why
  - a clients discontinue use of the specific FP clinic, and/or
  - b clients discontinue the use of a modern contraceptive method
- 4 To compare discontinuation rates by clinic and by method (taking into account in the latter case the self-selection process inherent in choosing a method)
- 5 To identify clinic procedures which determine "who gets what," which may influence satisfaction with the method/services

## **B. Accomplishments to Date**

This study is being conducted by the Regional Committee/Kinshasa of the IPPF affiliate, AZBEF. Funding is being provided under the Tulane OR project, although Family Health International is providing technical assistance to this effort.

This study requires data collection at three points: an admission interview for new acceptors at time of first visit, a followup interview for each subsequent visit to the clinic, and a followup interview for home visits to dropouts. A total of 1300, 1967 and 213 interviews of the three types, respectively, have been completed. Data entry has been completed for all admission questionnaires, and home visit questionnaires. The remaining data entry will be finished by the end of November.

Once the data entry is completed, a representative of FHI is expected to travel to Zaire to work on the analysis.

## **C Activities for Year V**

- 1 Complete data entry
- 2 Process data and analyze the results
- 3 Prepare a final report

## **D. Problems Encountered to Date**

The study director for this project, Cn Tshiswaka, left Kinshasa to take a job with an international agency in mid-1988. Unfortunately there was no one of his technical level associated with the study who could step in and take over his role. Rather, one of the administrators was responsible for overseeing the final stages of data collection.

## **Sub-project #10**

### **Development of a Model for Evaluating the Quality of Care in CBD Programs in Zaire**

#### **A. Objectives:**

- 1 Assure that women who use the services of CBD workers are properly screened for use of the pill (if that is the method they choose), that they receive correct information about the products and how they are used, and that they are referred to other levels in the health system when appropriate
- 2 Strengthen the position of existing CBD programs if they come under attack in the future over the issue of quality of service
- 3 Develop a methodology which could be used in other CBD programs outside of Zaire as well

#### **B Accomplishments in Year IV**

The first step in this project was to develop documentation which would be standard for all AID-funded CBD programs in Zaire, regarding content of training, medical standards, collection of service statistics, and other points. This has resulted in three documents

- (English title) A Guide for Carrying Out Community-based Distribution Programs in Zaire
- A Manual for the Training of Distributors in CBD Programs
- an "aide-memoire" (a reminder or reference), intended as training material and subsequently as a reference for distributors regarding the main points in the CBD training course

The first two of these documents have been recently printed in final form. The third is still undergoing modification, since the most recent version, intended as a quick reference guide for individuals with less than a high school education, was 120 typewritten pages. Thus, it will be edited and simplified before being given to distributors.

The second step in this activity has been the development of three instruments for the evaluation of the quality of distributors' performance in the Zaire CBD program (although the instruments could easily be adapted to other countries). These three instruments include

- *a knowledge test for distributors* to assure that they are able to answer basic questions about the contraceptives and other medications they sell (correct use, side effects, contraindications)
- *an "observation guide,"* consisting of a list of points which a distributor should cover during visits to a potential (new) client as well as to a continuing user; also included is a subjective measurement of rapport between distributor and client
- *a short questionnaire to be administered to clients of distributors in the program,* to determine whether the clients know the correct use of the method chosen and whether they are satisfied with the services of the distributor

This three-pronged approach to the evaluation of distributor performance has now been tested in two programs Kisangani and Matadi. The latter was done in connection with a three-week workshop, sponsored jointly by the Tulane FP/OR Project, the PSND, and the Zaire School of Public Health, which was held in September 1988. The eleven participants, including four from other countries (Burkina Faso, Mali, and Togo) and seven from Zaire, spent the third and final week of the workshop in Matadi where they applied these different methodologies to an ongoing program. The experience proved valuable for the participants, and the results were very useful to those responsible for the program in Matadi.

### **C. Activities for Year IV**

- 1 Finalize the "aide-memoire" for use by distributors
- 2 Conduct the qualitative evaluation in other CBD sites not yet tested
- 3 Distribute the manual to other AID-funded programs for possible use elsewhere
- 4 Prepare an article for the family planning literature which summarizes the approach and uses Zaire as a case study

### III. RESEARCH PUBLICATIONS AND DISSEMINATION OF FINDINGS TO DATE

#### A. Documentation and Findings Produced in Year IV

Of the ten sub-projects under this cooperative agreement, nine are still in progress. Moreover, most are designed to yield results only in the last year of the five-year agreement. During the past year the project has concentrated primarily on the preparation of "how-to" documentation in French, for use on the FP/OR project in Zaire and for distribution to those involved in similar projects in other francophone African countries.

Three of these manuals are

- *Guide pour la Réalisation des Programmes de Distribution Communautaire des Contraceptifs au Zaire* (A Guide for Carrying Out CBD Programs in Zaire), by Kashangabuye Mahama, Nlandu Mangani, Jane Bertrand and Susan McLellan, 1988
- *L'Evaluation Qualitative des Distributeurs dans un Programme de Distribution Communautaire des Contraceptifs*, by Jane T. Bertrand, Samuel Wishik, and Denise Daly, 1988 (Also available in English)
- *Manuel pour l'Analyse des Coûts dans un Programme de Distribution Communautaire*, (Manual for Cost Analysis of Community Based Distribution Programs), by Mombela Kinuani, Mark McBride, Jane T. Bertrand and Nancy Baughman, 1988 (Also available in English)

The third manual describes the methodology used in calculating cost per CYP and is the basis for the first such report generated entirely in Zaire.

- "Calculation of Cost per Couple-Year-of-Protection: Preliminary Findings from PRODEF-Matadi/Nsona Mpangu, Zaire, 1985-87," by Mark McBride, Mombela Kinuani, Jane T. Bertrand, and Nancy Baughman, July 1988

The results of the Kintambo Motivation Project, previously available in French only, have been summarized in a report entitled, "The Kintambo Motivation Project to Increase Clinic Utilization in Kinshasa, Zaire."

Results of the Zaire FP/OR Project have also been presented at the following meetings:

- "AIDS-related Knowledge, Attitudes and Practices in Kinshasa, Zaire 1987-88," by J. T. Bertrand, B. Makani, K. L. Niwembo, C. Chirhamolekwa, S. E. Hassig, IV International Conference on AIDS, June 12-16, 1988, Stockholm
- "Attitudes toward AIDS, HIV Infection and Condom Use in Healthy Textile Workers and their Wives in Kinshasa, Zaire," Kathleen Irwin, J. T. Bertrand, et al., IV International Conference on AIDS, June 12-16, 1988, Stockholm

- “Sexual Behavior and Condom Use in the Context of AIDS Prevention,” presented by Cne Chirwisa Chirhamolekwa, at the Seminar-Workshop on Means for Preventing the Spread of AIDS, Kinshasa, October 10-14, 1988
- “Evaluation and Promotion of Quality in the Educational Components of Family Planning CBD Services in LDCs,” by Jane Bertrand and Samuel Wishik, accepted for presentation at APHA, Boston, Nov 14-17, 1988

Other publications and presentations which have been mentioned in previous progress reports are repeated directly below for readers who have not had access to previous reports

## **B Publications in French**

Results from the original Bas Zaire project which have been published during the current cooperative agreement include

- Bertrand, J T , Nlandu Mangani, Matondo Mansilu, Mark McBride and Jeffrey Tharp 1986 “Strategies pour la fourniture de services de planning familial au Bas Zaire ” *Perspectives Internationales du Planning Familial*, (numero special) 2-10 (translated from original article in English )
- Nlandu Mangani, Matondo Mansilu, and Jane T Bertrand 1986 *La Promotion des Naissances Desirables au Bas Zaire* New Orleans, LA Tulane University (Monograph)

Under the current cooperative agreement, the results of the PSND projects are being published in a series of research reports in French, of which the following are currently available

- PSND Etude de Recherche No 001 “Naissances Desirables et Le Centre Libota Lilamu Connaissances et Utilization par la Population Feminine de la Zone de Kintambo,” Aout 1986
- PSND Etude de Recherche No 002 “Opinions et Attitudes des Hommes et des Femmes de Kintambo envers les Naissances Désirables,” Sept 1986
- PSND Etude de Recherche No 003 “Resultats du Programme de Motivation dans la Zone de Kintambo pour Augmenter l’Utilisation du Centre Libota Lilamu ”

## **C. Publications in English**

Data from the original Bas Zaire project, published under the current agreement, include

- Article which appeared in English in *International Family Planning Perspectives*, vol 12, no 4, 1986, cited above
- Tsui, Amy O , Julia DeClerque, and Nlandu Mangani 1988 “Maternal and Sociodemographic Correlates of Child Morbidity in Bas Zaire The Effects of Maternal Reporting ” *Social Science and Medicine* 26(7) 701-713

Two manuscripts which are under review for publication include

- Bertrand, Jane T , Chirwisa Chirhamolekwa, Kashangabuye Mahama, Balowa Djunghu and Kashwantale Chibalonza “Post-partum Events and Fertility Control in Kinshasa, Zaire ”
- Chibalonza, Kashwantale, Chirwisa Chirhamolekwa and Jane T Bertrand “Attitudes toward Tubal Ligation among Acceptors, Potential Clients, and Husbands in Zaire ”

#### **D. Presentation of Findings at Professional Meetings**

- The above mentioned article by Amy O Tsui and co-authors was presented at the Population Association of American meetings in April 1987
- The above-mentioned report by Kashwantale Chibalonza et al on tubal ligation in Zaire was presented by Susan Hassig of Tulane University at the APHA meeting in New Orleans in October 1987

#### **E. Dissemination of Findings within Zaire**

- The CBD workshop held in June 1987 and attended by 30 participants represented the first attempt under this cooperative agreement to share the experiences learned in the different CBD projects with other Zairian professionals
- The “Workshop on Family Planning Operations Research in Francophone African Countries,” held jointly by the Tulane FP/OR Project, the PSND, and the Zaire School of Public Health, was attended by four participants from other African countries and by (seven) representatives of four Zairian institutions involved in family planning service delivery or policy formation

## IV. TRANSFER OF TECHNOLOGY AND INSTITUTION BUILDING

One of the primary objectives of this cooperative agreement is to strengthen the technical capacity of Zairian institutions in the field of operations research, design and evaluation of family planning programs

To this end, the main activity has been the establishment of the Operations Research Unit within the Projet des Services des Naissances Desirables (PSND), which is the urban family planning services project. This is a governmental institution which has the primary responsibility for family planning in Zaire.

The information contained in this section has been previously reported in the Progress Report for Year III. However, it remains one of the chief accomplishments of the Zaire FP/OR program, and thus is again mentioned herein for those who did not see the earlier report.

Within this Unit we have developed different areas of competence. Since all large scale survey work requires computerization, we have put a special emphasis on this. There are five microcomputers in the OR Unit, which are in constant use for data entry, data processing, graphics and word processing. We are fortunate to have the services of Cn Balowa Djunghu, who came to the project with some computer skills and developed substantially more over the past 36 months. He, as well as three Zairian colleagues, underwent a four week microcomputer course at the Social Development Center in Chicago in 1986, which also improved their abilities in this area. As well as overseeing all aspects of PSND computer work, Cn Balowa periodically assists other institutions with computer problems (e.g. he has served as a trainer for both the School of Public Health and the Nutrition Planning Center).

In addition to the five microcomputers at PSND, the Operations Research Project has three micros functioning in the Interior of the country (at Sona Bata, Kisanangani and Mbuji Mayi). In each case Zairian personnel were trained on site by Cn Balowa to use the micros for data entry of the surveys (involving from 1500-2200 cases each). To date, we have had positive results in keeping the machines going in these isolated locations, although two of the three have had to be repaired in Kinshasa.

Five large scale surveys have been carried out under this cooperative agreement. The most ambitious is the CPS/AIDS survey which included close to 3000 men and 3000 women in Kinshasa. The technical assistance for this activity is being provided largely by two Zairian demographers from the Institut National de la Statistique, Cn Bakutuvwidi Makani and Cn Kinavwidi Lewu. They in turn are providing excellent on-the-job training to four staff members within the OR Unit on all aspects of questionnaire design, interviewer training, pretesting of the instrument, mapping, and interviewing. With this experience, the PSND will have one of the strongest survey research teams in Zaire.

We have also developed some survey research capability in each of the locations in which a large survey has been conducted. Local personnel were used as supervisors, interviewers, and coders. However, this experience is limited primarily to the data collection phase, whereas the Kinshasa survey englobes all aspects of the research process.

In addition to quantitative research techniques, the OR Unit has also developed a capacity for conducting qualitative research, specifically focus groups. The personnel of the Unit have been involved in three different studies (for a total of 60 focus groups).

## V. FINANCIAL STATUS OF THE SUB-CONTRACTS

The total budget for this cooperative agreement is \$2,801,034 for a five-year period, of this total, \$1,025,000 is budgeted for sub-contract expenses. A breakdown of amounts budgeted vs expended for each sub-project as of August 30, 1988, appears in the table on the following page.

While the original project budget called for \$1,025,000 to be used in sub-project costs, Tulane has obligated only \$986,370 to date to its sub-contractors. However, as the data on the following page indicate, the currently obligated amount should cover sub-project costs in the final year of activity.

One item which does not appear in the original budget is a final conference for the presentation of project results. Such a conference is scheduled for June 1989 in Kinshasa, and will be directed primarily to decision-makers, administrators and field personnel involved in population policy and/or family planning service delivery.

## Financial Status of Sub-projects: Zaire FP/OR Project

1	2	3	4	5	6	7	8
Sub-Contractor	Project or Activity	Amount Budgeted	Amount paid to project as of August 1988 *	Amount justified by project with receipts **	Estimated Costs September 1988 to June 1989 ***	Total expected cost	Estimated balance as of June 30, 89
						7 = 4 + 6	8 = 3 - 7
Ministry of Health (PSND)	PSND - General incl VSC and Kintambo	\$239,917	243,800	178,953	30,950	274,750	<34,833>
	CBD/AIDS	134,700	75 041	72,939	18,000	93,041	41,659
	Continuation study (ENCODISC)	29,000	17,641	14,888	8 000	25,641	3,359
	Mbuji Mayi	144,363	87,849	65,531	24,000	111,849	32,514
	Kisangani	116,310	83,234	62,279	20,000	103,234	13,076
	Misc	-----	10,873	10,873	-----	10,873	<10,873>
	SUB-TOTAL (MOH)	664,290	518,438	405,463	127,950	619,388	44,902
Baptist Community of West Zaire (CBZO)	Matadi/Nsona Mpangu	193,868	126,386	97,772	30,000	156,386	37,482
	Sona Bata	128,212	115,621	111,307	22,000	137,621	<9,409>
	Misc	-----	17,110	17,110	-----	17,110	<17,110>
	SUB-TOTAL (CBZO)	322,080	259,117	226,189	52,000	311,117	10,963
TOTAL	(ALL)	986,370	777,555	631,652	179,950	930,505	55,865

## Notes to Financial Status Table:

- \* “Amount paid to Project as of Aug 88” Includes all advances, reimbursements, wire charges, etc
- \*\* “Amount justified by Project with receipts” Refers to monthly financial reports submitted by sug-contractor to Tulane University The significant difference between “amounts paid” (by Tulane), and “amounts justified” by Projects) reflects

- (1) cash-on-hand in Zaire,
- (2) lag time between receiving funds, expending them, and requesting reimbursement,
- (3) the continually decreasing value of the Zaire relative to the Dollar

### Example

- 1) Tulane pays to Project USD 10,000
- 2) This is converted at a 150/1 rate into 1,500,000 Zaires
- 3) The project spends 1,500,000 Zaires and submits all receipts to Tulane
- 4) Suppose that by this time the exchange rate has changed to 200/1
- 5) Tulane receives receipts for 1,500,000 Zaires and considers that the Project has justified USD 7,500 (1,500,000 / 200) even though the project spent USD 10,000
- 6) In brief, even with sound financial management of program finances in Zaire, there is a significant discrepancy between “amount paid to project” and amount justified by the project”

- \*\*\* Estimated costs for are based on the following

PSND - General	\$ 2,500/month X 10 months	= \$25,000
- AVSC	\$ 10,000 till end of study	= \$10,000
- Kinstambo	\$ 0 (Completed)	= \$ 0
AIDS - Research	\$ 8,000 to complete study	= \$ 8,000
- Service (CBD)	\$ 1,000/month X 3 sites X 10 months	= \$30,000
Continuation Study (Data entry only)		= \$ 1,500
Mbuji Mayi CBD in urban and rural zones		
\$ 2,500/month X 10 months		= \$25,000
Kisangani CBD	\$ 2,500/month X 10 months	= \$25,000
Matadi CBD in urban, rural, 3 new sites		
\$ 3,000/month X 10 months		= \$30,000
Sona Bata CBD expanded	\$2,200/month X 10	= \$22,000

**APPENDIX A**

**SUMMARY STATISTICS ON THE  
CBD PROGRAMS IN ZAIRE**

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**TABLE 1****Number of Sites and Number of Distributors  
per Site<sup>1</sup> per Year in Zaire's CBD Programs**

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	1981	1982	1983	1984	1985	1986	1987	1988
Nsona Mpangu (rural)	33	33	33	36	36	41	41	40
Matadi (urban)	--	--	--	--	--	18	28	35
Sona Bata (rural)	--	--	--	--	--	32	32	32
Mbuji Mayi Urban Zone Dibindi	--	--	--	--	--	--	20	43
Kisangani Urban Zone Kisangani	--	--	--	--	--	--	40	37
Kinshasa Urban Zone Makala	--	--	--	--	--	--	--	24
Miabi (rural)	--	--	--	--	--	--	--	26
Kinshasa Urban Zone Kikimi	--	--	--	--	--	--	--	38
<b>TOTAL</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>36</b>	<b>36</b>	<b>91</b>	<b>161</b>	<b>275</b>

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<sup>1</sup> The number of distributors refers to the number of individuals who possess project materials (including contraceptives) as of the end of the calendar year

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**TABLE 2****Couple Years of Protection (CYP) for Each Site by Year  
(Current Cooperative Agreement only)**

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	1985	1986	1987	1988 <sup>2</sup>
Nsona Mpangu	1649	1826	1333 <sup>1</sup>	381 <sup>3</sup> (4 months)
Matadi	1111	1452	1418 <sup>1</sup>	1005 (4 months)
Sona Bata (rural)	--	208 (9 months)	210	168 (5 months)
Mbuji Mayi	--	--	55 (2 months)	356 (6 months)
Kisangani	--	--		750 (2 months)
Kinshasa	--	--	--	828 (1 month)
<b>TOTAL</b>	<b>2760</b>	<b>3486</b>	<b>3016</b>	

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<sup>1</sup> This drop can be explained in part by the non-availability of adequate supplies of pills at the national level during the fourth quarter of 1987

<sup>2</sup> The available data for each program (ranging from 1 to 6 months) have been extrapolated to estimate the probable level of CYP for 1988. The number of months on which the estimate is based is shown in parentheses

<sup>3</sup> Incomplete reporting, to be adjusted subsequently

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**TABLE 3****Average Monthly CMP per Distributor  
per Site over Time**

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	1985	1986	1987	1988	Average for Program
Nsona Mpangu	33	33	27	*	31
Matadi	--	105 (3 months)	37	42 (4 months)	61
Sona Bata (rural)	--	8 (9 months)	5	4	6
Mbuji Mayi	--	--	19	17	18
Kisangani	--	--		20	20
Kinshasa	--	--	--	36	36

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\* Data pending

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**TABLE 4**

**Method Mix: Percentage of Total CYP Corresponding to Each Method, by Year<sup>1</sup>**

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	1985	1986	1987	1988 <sup>2</sup>
Nsona Mpangu	08/88/04	50/40/10	65/20/15	46/31/23
Matadi	69/30/01	85/12/03	86/05/09	93/03/04
Sona Bata	--	59/31/10	65/19/16	44/36/20
Mbuji Mayi	--	--	54/33/13	62/20/18
Kisangani	--	--	N A	33/21/46
Kinsahsa	--	--	--	40/35/25

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<sup>1</sup> The numbers in each cell represent the percentage of the total CYP corresponding to pill/spermicide/condoms, respectively

<sup>2</sup> Based on months for which data were available

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**TABLE 5****Performance of Male vs Female Distributors in Terms  
of Average CMP, per distributor per Month**

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	1985		1986		1987		1988	
	Male	Female	Male	Female	Male	Female	Male	Female
Nsona Mpangu	NA	33	NA	33	NA	27	NA	*
Matadi	NA	--	NA	105	NA	37	NA	42
Sona Bata	--	--	NA	8	NA	5	NA	4
Mbuji Mayi	--	--	--	--	16	20	19	17
Kisangani	--	--	--	--	NA	NA	16	24
Kinshasa	--	--	--	--	--	--	37	34

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NA -- No male distributors in the program

\* -- Data pending

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**TABLE 6**

**The Comparative Performance of Distributors versus Health Centers in the Three Tulane-funded Programs with Both Types of Service, measured in terms of Average Monthly CMP per Provider**

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	1985		1986		1987		1988	
	Dist	H C	Dist	H.C.	Dist	H C	Dist	H C
Nsona Pangu	33	44	33	46	27	61	*	*
Matadi	No Dist.	173	105	105	37	63	42	43
Sona Bata	--	--	8	10	5	3	4	5

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\* Data pending

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# In Zaire, a Limit to AIDS Awareness

By JAMES BROOKE

Special to The New York Times

KINSHASA Zaire Oct 3 — The gates of a presidential complex here are about to swing open for what health officials call the condom conference.

The high level preoccupation with condoms reflects startling results from a new survey of public opinion about AIDS in Kinshasa, a city with one of the highest AIDS-virus infection rates in the world. Based on 4,000 interviews, the survey is believed to be the most exhaustive of its kind in Africa.

The results of 968 interviews showed that after two years of intensive public health campaigns involving pop songs, posters, comic books, television and radio programs, 99 percent of men interviewed knew that AIDS was transmitted by sex and 60 percent knew that condoms block transmission of the deadly virus.

But asked if they use condoms, 5 percent of 435 married men said yes and 1 percent of 435 married women said yes. According to the survey, 22 percent of men who said they had extramarital affairs used condoms. The pollsters did not survey condom usage among single people.

### Condoms 'Not Very Accepted'

"Condoms are not very accepted in Zaire," Bosenge N Galy, director of the National Committee to Fight Against AIDS, said of the survey results. "Very few people have moved from knowledge to action."

With heterosexual sex the primary mode of transmission among African adults, the AIDS-causing HIV-1 virus has infected from 6 percent to 8 percent of Kinshasa's adults.

Preliminary medical surveys indicate that the infection rate may be leveling off in this city of three million. But surveys of Kinshasa prostitutes found that the infection rate rose from 27 percent in 1986 to 40 percent in 1988.

In another survey, researchers at Kinshasa University Hospital found recently acquired immune deficiency syndrome was the cause of 26 percent of all deaths of people between the ages of 15 and 20.

### \$47 Million in Outside Aid

Alarmed about the growing public health problem, international donors, including the United States, pledged this year to give Zaire \$47 million to pay for one of Africa's largest public health campaigns on AIDS. Local anti-AIDS campaign offices have opened in 9 of Zaire's 11 regions.

The public opinion survey, which is

financed by the United States Agency for International Development, indicated that more than 85 percent of the 968 Kinshasa adults interviewed identified the four principal means of AIDS transmission in Africa — sex with an infected person, injections with infected needles, transfusions with infected blood and transmission from infected mother to baby at birth.

"Awareness of AIDS is now almost universal in Kinshasa," said Jane Bertrand, an associate professor of public health at Tulane University, who directed the study.

But 53 percent of the men interviewed and 63 percent of the women said that they were at no risk of getting AIDS.

People still ask "Does it really exist?" Dr N Galy said. "They say, 'We only see white people dying of AIDS.'"

African newspaper and television

The dominant view in the capital seems to be that it won't happen to me.

coverage rarely use images of local AIDS victims. To illustrate AIDS articles, many African editors rely on file photographs or film from Europe or the United States.

Dr N Galy said that publishing such photographs would be an invasion of a patient's privacy, but that the issue would be debated next week at the conference to promote the use of condoms.

### Nature of New Treatment

The effort to make the public aware suffered another setback last December when a Zairian scientist, Zirimwabagabo Lurhuma, announced at a news conference here that he was testing a possible cure for AIDS.

The research has yet to be published in a scientific review, but the news caused a sensation here.

The population was in euphoria, Dr N Galy said. "We had to get him on television to say that nothing can replace prevention."

Nevertheless, the damage had been done. Pollsters found that the number of men believing that AIDS can be

cured doubled, reaching 57 percent, and that 43 percent believe that a vaccine now exists for AIDS.

Dr Lurhuma's treatment involves injections of a substance that he says has antiviral properties and that stimulates the immune system. Dr Lurhuma declined in an interview to reveal the formula for the substance, which he calls MMI.

In an initial test starting here in mid-1987, Dr Lurhuma and an Egyptian colleague, Ahmed Shaik, inspected patients suffering from an advanced stage of AIDS known as Stage 4 under an international classification system. Nineteen patients underwent the treatment, a seven-week series of 20 injections with MMI.

The remaining patients served as a control group and did not undergo special treatment.

"Thirteen months later, the entire control group was dead," Dr Lurhuma said. "Eight of the 19 are alive."

### Some Skepticism Voiced

European and American scientists have greeted Dr Lurhuma's findings with caution, noting that he has failed to disclose what substance he is using and that his methodology and results are yet to be scrutinized by outsiders. In response, Dr Lurhuma said that this month he would submit an article on his results to the British scientific magazine *The Lancet*.

"It's interesting, provocative work — like every new product, there should be randomized controlled trials," said Robert W. Ryder, the American director of project SIDA, a research project here largely financed by the Centers for Disease Control and the National Institutes of Health.

In trials of another product that has already been proved to help against AIDS, Dr Ryder is treating 18 Zairian AIDS patients with azidothymidine or AZT, the only drug approved for treatment of the disease in the United States. Scientific studies have established that AZT prolongs the lives of some AIDS patients.

Through Western aid, Zaire has joined a movement across Africa to screen blood for the presence of HIV antibodies and thereby avoid transmission through transfusion of contaminated blood.

And large shipments of condoms are being imported, many with wrappers stamped with a leopard, Zaire's national symbol.

The World Health Organization just sent in half a million condoms, said Dr N Galy. "I hope we can find the people to use them."