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## Employment-based family planning services

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# **FINAL REPORT**

## **Employment Based Family Planning Services**

Gambia Family Planning Association

### **THE GAMBIA**

Contract No. CI90.35A

July 1990 - April 1993

#### **Gambia Family Planning Association**

J. Tunde Taylor Thomas  
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#### **The Population Council**

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The Population Council, an international, nonprofit organization established in 1952, undertakes social and health science programs and research relevant to developing countries and conducts biomedical research to develop and improve contraceptive technology. The Council provides advice and technical assistance to governments, international agencies, and nongovernmental organizations, and it disseminates information on population issues through publications, conferences, seminars, and workshops.

This project was supported by The Population Council's Africa Operations Research and Technical Assistance Project. The Africa OR/TA Project is funded by the U.S. Agency for International Development, Office of Population, under Contract No. DPE-3030-Z-00-8065-00, Strategies for Improving Family Planning Service Delivery.

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# **I. INTRODUCTION**

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## A. BACKGROUND

The Gambia, an independent republic located midway on the bulge of the West African coast stretches eastward about 450 km inland on either sides of the River Gambia, varying in width from about 50km at the river mouth to about 24km upstream. The country is bounded to the North, East and South by the Republic of Senegal, and in the West by the Atlantic Ocean. The Gambia has an economy which relies heavily on a single commodity - the groundnut -- which covers about 60% of the entire crop land and accounts for 75% of domestic export.

Agriculture is the mainstay of the country's economy with more than 70% of the population engaged in subsistence farming, livestock rearing and groundnut cultivation. It is however, a low productivity sector and contributes less than 25% of Gross Domestic Product (GDP).

The industrial sector is very small and largely concentrated in the Greater Banjul Area (GBA) -- the Gambia's main urban centre. It accounts for less than 8% of GDP and provides employment for less than 3% of the country's labour force. Manufacturing activities are limited to crushing of groundnuts, fish processing, baking, brewing, tanning and production of bricks, soap and plastics.

In addition to agriculture and industry, tourism and commerce are important sources of foreign exchange as well as employment opportunities. The tourism industry provides employment to more than 2% of the labour force on a seasonal basis from October to April. The industry does not, however, have significant linkages to the domestic economy since it is still very much dependent on imported goods.

With a population currently estimated at 890,000 (1991 Projection based on the 1983 Population Census) and a total habitable land area of 10,689 sq km, the Gambia is one of the most densely populated countries in Africa with an average density of 83 persons per sq km of habitable land. The population is estimated to be growing at a rate of 3.4% per annum which, if sustained, is capable of doubling the population in less than two decades. This high growth rate is accounted for by a rate of natural increase of 2.8% and a net migration rate of 0.6% per annum. The urban growth rate, which is compounded by the rural-urban drift, stands at a relatively high level of 8% per annum. Effects of these high growth rates are being manifested by the pressure being exerted by the population on arable land, social services and the environment, which will collectively culminate in severe environmental degradation and depletion of natural resources.

The population, 95% of which is Muslim and the remaining mostly Christians, is comprised of a number of ethnic groups, the four major ones being Mandinka (40%), Fula (19%), Wolof (15%), and Jola (10%) (National Population Policy Document, 1992). Culturally, the Gambia is a pronatalist, male-dominated society where women have little decision-making power. Women are valued for their fertility and it is generally accepted by both men and women that the socio-economic status of women is inferior to that of men. Traditional beliefs and customs are very strong, especially in the rural areas, and the male-child preference leads couples to continue having children in an attempt to fulfil their desire of having at least one son. Certain traditional practices such as early marriage, female

circumcision, and various post-natal rituals aggravate the risk of maternal and child morbidity and mortality.

Available evidence indicate that fertility levels in the Gambia have remained persistently high over the past two decades. The crude birth rate is 50.5 per thousand and the total fertility rate is 6.39, both of which are above the average for sub-Saharan Africa.

Fertility of women in the Greater Banjul Area appears to be much lower than in the rural areas due, probably, to the social amenities and infrastructure the urban population enjoys vis-a-vis the rural masses. The 1983 census showed that the crude birth rate varied from 43.8 per thousand in Banjul to 55.9 per thousand in the Upper River Division. Total fertility rate was estimated at 5.50 in Banjul as against 6.88 in the North Bank Division. Greater access to education in areas with lower fertility rates may be an important underlying cause of the differences: the census revealed a lower total fertility rate of 5.76 for women with primary and post-primary education and of 6.42 for women without education. The census report forecast a drop in the total fertility rate to 5.75 by the end of the century based on the government's current FP input.

From the Gambia Contraceptive Prevalence and Fertility Determinant Survey, 11.5% of all women currently in union want no more children whilst another 36.7% want to wait at least two years before having another child. Adding these two percentages it can be concluded that one out of every two women currently in union is in need of family planning services to limit or space births.

Adolescent fertility has been a growing problem and of concern to parents, government and other agencies due to an upsurge in teenage pregnancies as well as the alarming increase in illegal abortions among teenagers.

The findings of the Adolescent Fertility Survey carried out by GFPA in 1988 showed that sexual activity was prevalent among 50% of single males and 30% of single females in the age group 14-24 years. Half the sexually active females - i.e 15% of the total had been pregnant at least once. Over 65% of the reported pregnancies were unwanted, and most (90%) occurred to young school girls who had to terminate their educational career prematurely to face the challenges of child maintenance under constrained family economic conditions.

While the level of mortality, especially among infants, remains high, the trend over the past has been one of decline as a result of the improvement and extension of medical services through the introduction of a comprehensive primary health care system, expansion of the immunization programme, and strengthening of maternal and child health.

The 1983 census recorded an infant mortality rate of 167 per thousand live births for the country as a whole, but the rate varied from 95 in Banjul to 199 in the Upper River Division. Similarly, the child mortality rate, 1983 national average of which was 260 per thousand live births, varied from 133 in Banjul to 303 in the Lower River Division. The maternal mortality rate, with a national average of 105 per ten thousand live births (1990), is reported to vary from 80 in Banjul to 160 per ten thousand live births in rural areas not covered by Primary Health Care Services. Evidence of an inverse correlation between

mortality and educational level was also provided by the census -- an IMR of 120 per thousand live births among children born to mothers with primary and post-primary education was recorded, as against 169 for children born to mothers without education.

This background information clearly shows the need for family planning in the Gambia. The Gambia Family Planning Association (GFPA), a member of the International Planned Parenthood Federation, has been the main family planning service provider in the Gambia and a leader in this area over the past two decades. Increasingly, however, the Government has become involved with family planning and has actively pursued the integration of family planning services into maternal and child health care. Although some service delivery points originally manned by GFPA have been taken over by the Government, GFPA never viewed this as a set-back, but rather as an opportunity to move into new areas and explore other opportunities for expanding family planning services to groups that are not being reached by Government.

## **B. RESEARCH PROBLEM**

Although the GFPA has always been interested in promoting contraceptive use in the GBA, insufficient funds and the need to prioritise programme expansion in the rural areas, as justified by the background outlined above, have hindered the Association's accomplishment of such an aim. The GFPA operates only two static clinics in the GBA which are open between 8am and 4pm and are, hence, generally available to very few workers. In addition to these two clinics, the Government has three integrated Family Planning and Maternal and Child Health clinics in Banjul. These clinics are also open only during working hours and are therefore used by few workers like the GFPA clinics. According to the 1983 Population Census, 33% of the Greater Banjul urban population are employed in the industrial sector. This, invariably, is a significantly large group who do not have easy access to family planning education and services.

It has been the conviction of many factory managers, leaders of trade unions and the GFPA that a well organized family planning education and service delivery programme could benefit both employees and employers. This operations research study was therefore intended to test the feasibility of a work-based family planning and STD education programme and at the same time experiment with the most effective service delivery approach.

Three approaches were identified which could be used to provide workers in urban areas with family planning services. One was to take services to these workers on a regular basis once every two weeks or month. A second was to establish a service delivery outlet at each work place which would be resupplied on a regular basis but would always have stocks of supplies available to workers whenever they wanted them. A third approach, the prevailing system prior to the interventions, was the reliance on workers obtaining services outside their places of work from clinics operated by GFPA or the Government.

The first two approaches had never been tried in the GBA, there being no experience with which to assess their acceptability to potential clients. Hence this operations research study was intended to test each of these two systems of service delivery in terms of cost



effectiveness, client satisfaction, and contraceptive knowledge and use.

### **C. PROBLEM JUSTIFICATION**

This research project, designed to test two new models of delivering services to workers, is a first attempt at addressing the needs of contraceptive users and prospective users employed in establishments/institutions in the GBA. The data generated by the project and analyzed in this report will be useful to GFPA in developing a family planning programme for all enterprises and factories in the Gambia's main urban centre. In particular, it will help test not only two service delivery models, but also mechanisms for making work-based family planning programmes sustainable.

### **D. OBJECTIVES**

#### **D.1 Long term:**

The ultimate objective of this project was to increase the accessibility of family planning services in the urban and peri-urban areas and thus increase the contraceptive prevalence rate.

#### **D.2 Immediate:**

Specifically, the project aimed at the following immediate objectives:

1. To test the feasibility of introducing employment-based family planning services through two approaches:
  - a. A Stationary Approach where services were provided at the work places by trained employee distributors who worked in conjunction with a GFPA educator/midwife.
  - b. A Mobile Approach where services were provided by GFPA Fieldworkers every two weeks at the various work places.
2. To determine the most effective approach of providing family planning services at employment sites in terms of cost and relative increases in contraceptive prevalence and knowledge of STDs/AIDS.

### **E. METHODOLOGY**

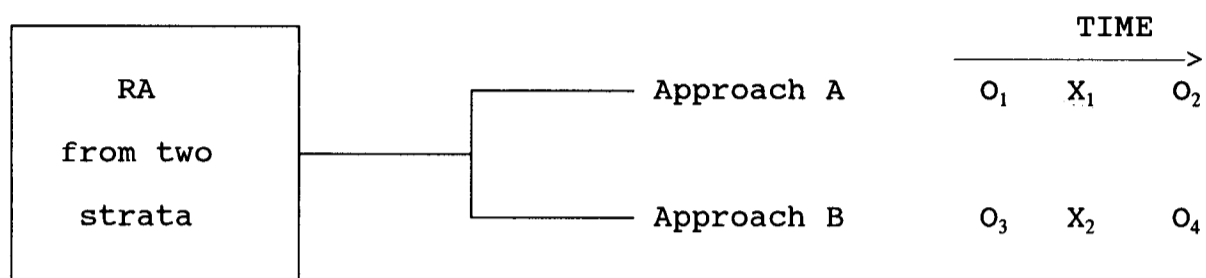
#### **E.1 Research Design**

This study was designed to test the feasibility of a work-based family planning and STD education programme, and simultaneously experiment with the most effective service delivery approach, in terms of operational cost and recipient satisfaction, with a view to

enabling GFPA expand its family planning services in the Greater Banjul Area through employment sites. The two interventions tested were:

1. a Stationary Approach where FP/STD education and contraceptive services were provided by trained employee distributors with support from a GFPA educator/midwife through monthly supervisory visits.
2. a Mobile Approach where FP/STD education and contraceptive services were provided fortnightly by GFPA Fieldworkers at the respective employment sites.

In order to facilitate the testing of these two service delivery approaches, the following quasi-experimental research design was adopted:



where:

RA<sup>1</sup> = Random Assignment from the strata:

- i. sites with 20 - 49 female employees;
- ii. sites with 50 or more female employees.

Approach A = Stationary Approach where services were provided by trained employee distributors (supervised by GFPA educator/midwife) at their places of work.

Approach B = Mobile Approach where services were provided by a GFPA educator/midwife every two weeks to the various work places in this category.

O<sub>1</sub> and O<sub>3</sub> = Baseline survey.

O<sub>2</sub> and O<sub>4</sub> = Follow-up survey.

X<sub>1</sub> = Stationary Approach of service delivery.

X<sub>2</sub> = Mobile Approach of service delivery.

---

<sup>1</sup> Stratification of the participating institutions on the basis of the number of female employees was deemed necessary so as to ensure roughly equal numbers of females in each group.

Participating institutions were assigned randomly to one of the two approaches and referred to Stationary Approach sites or Mobile Approach sites. Employee distributors in the Stationary Approach Sites were responsible for:

- Selling contraceptives;
- Giving accurate instructions and answering basic questions pertaining to the types of contraceptives they provided;
- Referring clients who requested for hormonal contraceptives as well as those with infertility or subfertility problems to one of the two GFPA urban clinics, or to qualified private practitioners.
- Providing, where possible, individual counselling;
- Maintaining a record keeping system.

The GFPA Midwife/educator, in support of the efforts of the employee distributors, provided on-the-job training, individual and group counselling, FP/STD education, and also replenished the employee distributors' contraceptive stocks regularly. In the Mobile Approach sites, the GFPA Fieldworkers were responsible for all aspects of the provision of contraceptive services.

## **E.2 Selection of Institutions and Employee Distributors**

GFPA's management staff, together with leaders of Trade Unions the Gambia, identified potential institutions that could participate in the study after having gone through the objectives and design of the project. A sub-committee comprising of Trade Union leaders and GFPA staff was formed and assigned the task of sensitizing the managements of the identified institutions through the Ministry of Trade, Industry and Employment (MOTIE), the National Investment Board (NIB), and the Gambia Chamber of Commerce (GCC).

Eventually, 15 institutions were selected and assigned to one of the two approaches. About a couple of months after the baseline survey was conducted, one of the institutions, Seagull, became defunct; and another, Amie's Beach Hotel, demonstrated very little co-operation and was therefore dropped from the study. The remaining 13 institutions that participated in the study throughout the duration of the interventions are listed in Table 1. Pelican Sea Food, however, also became defunct a few weeks after the follow-up survey was conducted.

**TABLE 1: Institutions that participated in the project**

## Stationary approach

Institution	Mean number of employees	Number surveyed	
		Baseline	Follow-up
Atlantic Hotel	312	110	128
Bakau Women's Group	490	52	43
Gambia Port Authority	479	113	123
Gambia Public Transport Co.	602	46	83
Nat'l Partnership Ent.	264	61	75
Senegambia Beach Hotel	405	68	97
<b>TOTAL</b>		<b>450</b>	<b>547</b>

## Mobile Approach

Institution	Mean number of employees	Number Surveyed	
		Baseline	Follow-up
Bungalow Beach Hotel	89	43	53
Gambia Fire Services	128	83	97
G.P.M.B.	320	93	93
Lamin Women's Group	172	43	65
Pelican Seas Food	80	43	44
Radville Farms	195	28	73
Sunwing Hotel	335	81	112
<b>TOTAL</b>		<b>414</b>	<b>549</b>

The managements of the institutions categorised under the Stationary Approach were requested to identify, among their employees, a male and a female to be trained as distributors. The criteria for selecting these employees were as follows:

- ▶ individual should be married;
- ▶ aged between 30 and 45 years;
- ▶ respected among their fellow workers;

- ▶ literate in English;
- ▶ fluent in at least two local languages spoken by the workers;
- ▶ should be currently using a modern family planning method.

The selected employees attended a five-day training programme which focused mainly on contraceptive technology, STDs/AIDS, counselling techniques, and record keeping. They were consequently supplied with contraceptives and commissioned on the commencement of the intervention.

### **E.3 Assessment of Programme Effects**

At least two primary effects were expected to be produced by the two interventions. Employees exposed to these interventions should demonstrate increased knowledge about contraceptive methods and STDs/AIDS; and an increase in the contraceptive prevalence among employees. These effects were assessed in a baseline and a follow-up sample survey of employees in the participating institutions.

The baseline survey, which was conducted between November and December 1990, sought information on, among other things, awareness and use of contraceptives, knowledge of STDs/AIDS, and acceptability of employment-based family planning services prior to the introduction of the interventions. Eighteen months after the introduction of the two approaches of family planning service delivery in the respective institutions, the second round follow-up survey was conducted in the same institutions so as to measure the effect of the interventions on contraceptive knowledge and use, and awareness of the common sexually transmitted diseases and AIDS.

The effect of the interventions on contraceptive use was also assessed from the service statistics collected both by employee distributors in the Stationary Approach sites and GFPA Fieldworkers who served the Mobile Approach sites. The information collected, on an on-going basis, included new and continuing acceptors and the quantity of each type of contraceptive issued. These statistics were used to determine the level of couple-month-of-protection (CMP) provided by each approach.

### **E.4 Cost Data**

Since the cost incurred to achieve the programme outputs is one of the critical factors determining the sustainability and replicability of the proposed approaches of delivering family planning services at employment sites, a cost analysis of implementing the interventions was conducted. The analysis, in essence, took into consideration only those costs associated with the provision of the services. This necessitated the collection of service-related cost data for each approach throughout their duration. Those expenditures associated with both approaches were recorded as non-traceable costs.

Thus the cost data collected in connection with the provision of the services through each approach included:

- ▶ personnel costs

- ▶ transportation
- ▶ training of Employee Distributors (in the case of the Stationary Approach)
- ▶ contraceptives.

The non-traceable costs recorded pertained to vehicle running costs and general supplies such as IEC print materials distributed both by Employee Distributors and GFPA Fieldworkers.

## **II. RESULTS**

In this section are presented three sets of quantitative data obtained from:

1. the pre-intervention (or baseline) and the post-intervention (or follow-up) surveys;
2. the service statistics collected during the course of the interventions;
3. the cost data recorded during the implementation of the interventions.

The data derived from both surveys provide the framework within which to assess the relative effectiveness of the two interventions in increasing knowledge and use of contraceptives, as well as increasing awareness of sexually transmitted diseases (STDs) and AIDS. These data are also essential in the assessment of the attitudes of Gambian urban workers towards the provision of family planning services at places of work.

## **A. SURVEY FINDINGS**

The baseline survey was conducted by a team of 12 interviewers and 2 supervisors between November and December, 1990. A total of 905 workers from 15 institutions within the GBA were interviewed. However, two of these institutions -- Seagull and Amie's Beach Hotel, both of which were in the Mobile group -- were excluded from the study because Seagull became defunct and co-operation from Amie's Beach Hotel was shortcoming. Thus 864 respondents from 13 institutions were included in the analysis of the baseline survey. The follow-up survey was carried out in November, 1992 (exactly 18 months after the introduction of the approaches) covering 1086 respondents in the same 13 institutions (see Table 1).

### **A.1 Characteristics of Survey Respondents**

Table 2 provides basic socio-demographic information of respondents by approach and survey. Almost the same proportions of males and females were interviewed in the baseline and follow-up surveys in the Stationary Approach sites, but more female workers were covered in the follow-up than in the baseline survey at Mobile Approach sites -- 24% in the baseline and 35% in the follow-up. This, obviously, also affected the proportion of male respondents covered by the two surveys in the group.

The age composition of the baseline survey respondents in the Stationary Approach sites was similar to that of the respondents covered by the follow-up. In both cases, more than 40% of the respondents were within the 20-29 age bracket -- 43% in the baseline and 48% in the follow-up. A similar pattern applied to the Mobile Approach group, although there is a significant difference in the proportion of respondents aged 25-29 between the two surveys -- 21% in the baseline and 30% in the follow-up. The mean ages of respondents from the Stationary Approach sites in the baseline and follow-up surveys were 31.5 and 30.6 years respectively; and 31.4 and 31.1 years for those from the Mobile Approach sites.



**Table 2: Socio-demographic characteristics of study population by approach and by survey**

Characteristic	Stationary		Mobile	
	Baseline n=450	Follow-up n=549	Baseline n=414	Follow-up n=537
Frequency in %				
<b><u>Sex</u></b>				
Male	68	66	76	65
Female	31	34	24	35
<b><u>Age</u></b>				
< 15	-	-	-	1
15-19	2	2	3	2
20-24	20	20	19	18
25-29	23	28	21	30
30-34	18	22	17	18
35-39	15	15	15	12
40-44	8	6	9	8
45-49	3	3	5	4
50-54	3	2	2	2
55-59	2	1	1	1
60+	0.6	0.4	0.2	2
<b><u>Religion</u></b>				
Islam	92	94	94	94
Christianity	7	6	5	6
Other	1	0.2	1	-
<b><u>Ethnicity</u></b>				
Mandinka	41	44	50	44
Jola	14	12	20	24
Wollof	17	18	8	12
Fula	11	11	6	8
Serere	5	5	4	4
Other	10	9	11	8
<b><u>Education</u></b>				
None	15	14	21	21
Koranic	17	19	28	19
Primary	7	8	7	9
Secondary	42	42	35	42
Vocational	2	3	1	2
High School	14	12	7	6
College/Univ	2	2	1	1
<b><u>Marital Status</u></b>				
Single	34	35	31	38
Married (mono)	43	52	42	46
Married (poly)	19	11	23	15
Divorced	3	2	3	1
Widowed	0.2	0.5	0.7	0.2

Since the Gambia is a predominantly muslim state, proportions of over 90% of respondents reported in both surveys in the two intervention groups being followers of the Islamic faith is not surprising. Christians constituted not more than 7% of the respondents from both groups in both surveys.

Education levels of respondents from the Stationary Approach group were more or less similar in both surveys. A large proportion of them (42%) in both cases finished their education at the Secondary School level, and only 2% attained college/university education. Considerable proportions -- 15% in the baseline and 14% in the follow-up -- had no formal education.

In the case of the Mobile Approach group, more workers with Secondary School education were surveyed in the follow-up than in the baseline -- 42% compared with 35%; and fewer with Koranic education in the follow-up than in the baseline -- 19% compared with 28%. All other levels reflected more or less the same proportions.

At least sixty percent of respondents in each intervention group and in both surveys were married, with at least forty percent being in a monogamous union. Unmarried respondents constituted significant proportions (more than 30%) of the samples in the two groups in both the baseline and follow-up surveys.

Out of the 549 workers interviewed in the Stationary Approach group, 489 (or 89%) indicated that they had been working in their respective institutions for at least 18 months prior to the follow-up survey, i.e. during the implementation of the intervention. Out of the remaining 60 (or 10%) who worked for less than 18 months prior to the follow-up survey, 65% were employed after the intervention had been implemented half way.

In the Mobile Approach group, 483 (or 90%) of the respondents witnessed the implementation of the intervention in their respective institutions; and 81% of the 54 respondents that were employed after the commencement of the implementation process witnessed only the last eight months of the intervention.

The samples selected from the two groups both in the baseline and follow-up surveys, in essence, display no significant statistical differences, and have similar socio-demographic characteristics.

## **A.2 Contraception: Knowledge and Practice**

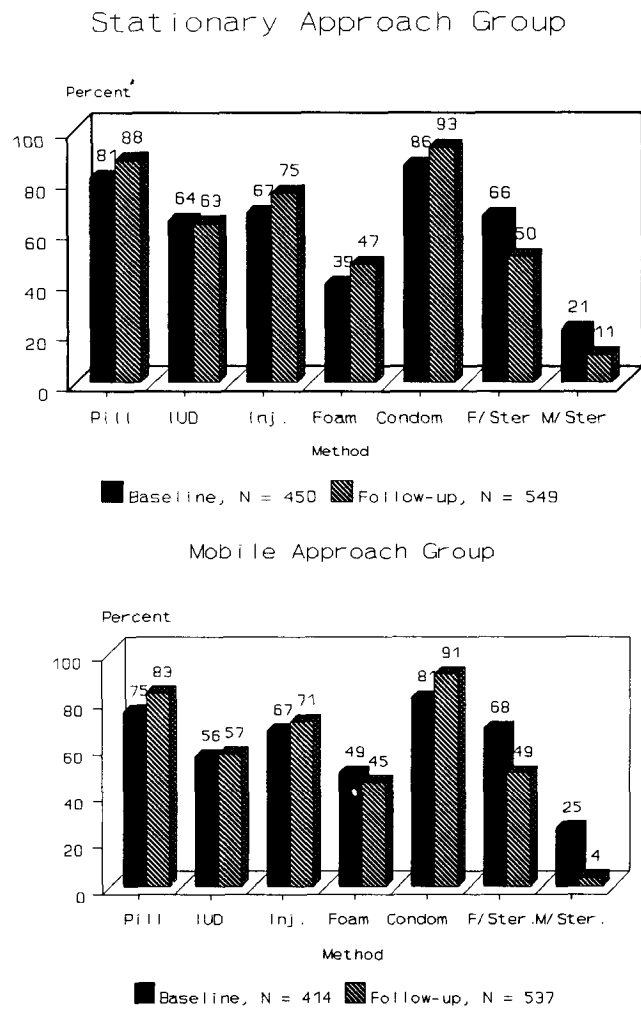
The main aim of this study was to test the feasibility of implementing employment-based family planning service delivery in the Greater Banjul Area in an attempt to increase contraceptive use among workers. Knowledge of contraceptive methods and their respective sources of supply, however, is a necessary precondition for contraceptive use.

To assess the workers' level of awareness of the range of contraceptive methods available in the Gambia, interviewers in both surveys named all the methods, one at a time, and the respondents indicated whether they had ever heard of it.

Respondents in the Stationary Approach group demonstrated an impressive level of awareness of most modern contraceptive methods (see Figure 1). Familiarity was highest with the condom both in the baseline and follow-up surveys (86% and 96% respectively) followed by the pill (81% and 88%). Only two methods -- foam and male sterilization -- were known to less than 50% of the samples in both surveys. In fact fewer respondents (11%) knew of male sterilization after the intervention than before (21%).

Knowledge of modern contraceptive methods was also significant among workers in the Mobile Approach group. The condom, again, was the most widely known (81% in the baseline and 91% in the follow-up), followed by the pill (75 percent and 83 percent respectively). Male sterilization was also the least known among Mobile Approach respondents in both surveys -- 25% in the baseline and 4% in the follow-up.

**Figure 1: Modern methods ever heard of by respondents**



The Gambia, GFPA 1993  
Africa OR/TA Project

It is observed that knowledge of the condom, pill, injectable and IUD increased in both Approaches, as well as foam in the Stationary Approach Group. The indigenous traditional methods of contraception appeared to be well known among respondents both before and after the interventions -- 85% and 73% respectively in the Stationary Approach group; and 86% and 74% in the Mobile Approach group. Awareness levels of these traditional methods, however, dropped between the time of the baseline and follow-up. (See Table 3).

Table 3: Knowledge of Traditional Contraceptive Methods Among Employees

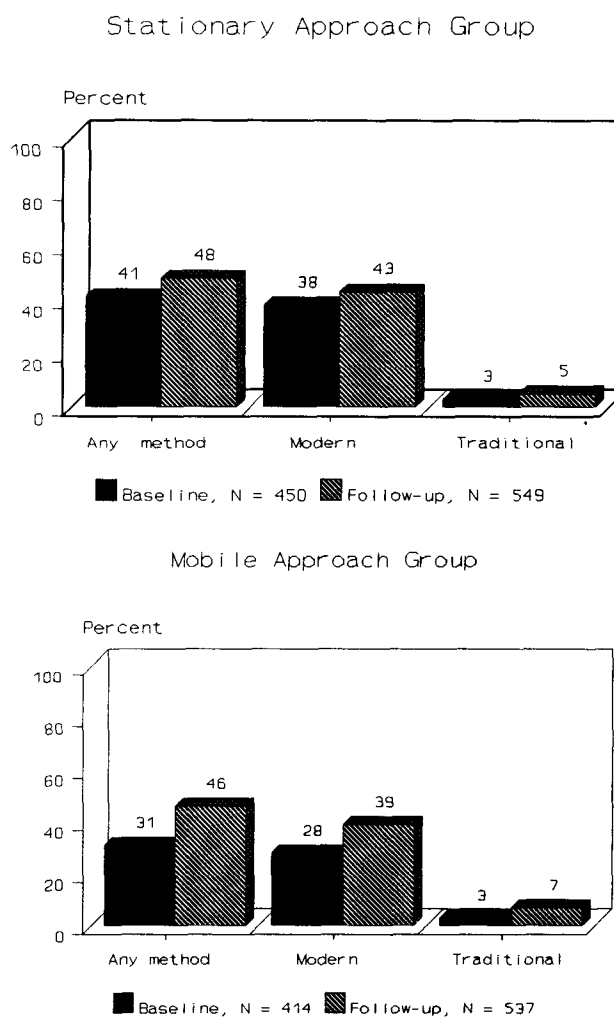
	Stationary Approach		Mobile Approach	
	Baseline n=450	Follow-up n=459	Baseline n=414	Follow-up n=537
Indigenous	85%	73%	86%	74%
Periodic Abstinence	66%	48%	67%	39%
Withdrawal	54%	31%	51%	25%
Others	5%	4%	3%	1%

**A.3 Current Use**

One of the questions this study set out to answer was "can the use of contraception be increased by making family planning services available at places of work?"

Figure 2 indicates that use of a family planning method increased in both groups. The prevalence rate in the stationary approach group increased from 41% at the time of the baseline survey to 48% exactly eighteen months after the introduction of the intervention. The increase of use in the Mobile Approach group was more impressive -- from 31% to 46% -- resulting mainly from the increased use of modern methods as shown in the figure.

**Figure 2: Current use of a family planning method**

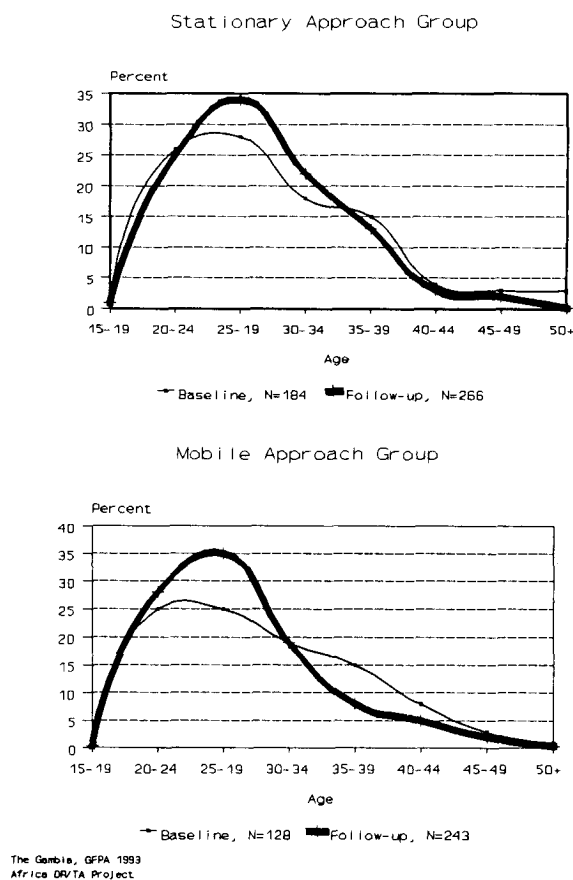


The Gambia, GFPA 1993  
Africa OR/TA Project

**Figure 3: Current users by age**

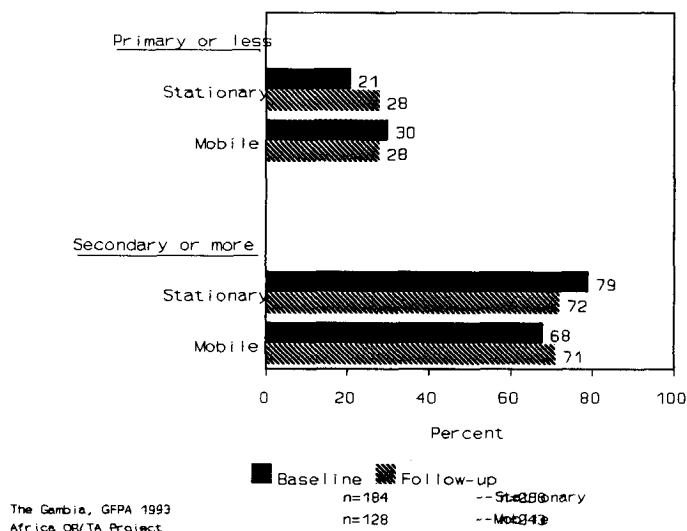
The age composition of all current users was similar in the two groups both before and after the interventions, with at least half of them being in the 20-29 age group bracket. In fact, the proportion of users in this age group increased in the Stationary Approach group from 54% at the time of the baseline survey to 59% at the follow-up. The Mobile Approach Group also registered a similar but considerable increase from 50% to 93% (see Figure 3).

The majority of all current users had attained at least secondary school education, with only 30% or less having had primary education or less (see Figure 4).



**Figure 4: Current users by level of education**

The proportion of all women using any form of family planning method (modern or traditional) increased from 34% before the intervention to 43% after the intervention in the Stationary Approach Group; and from 16% to 28% in the Mobile Approach Group. These increases came about mainly as a result of increased use of modern contraceptive methods. In fact the proportion of traditional method users in the Stationary Approach Group remained unchanged over the span of the intervention (Fig. 5).

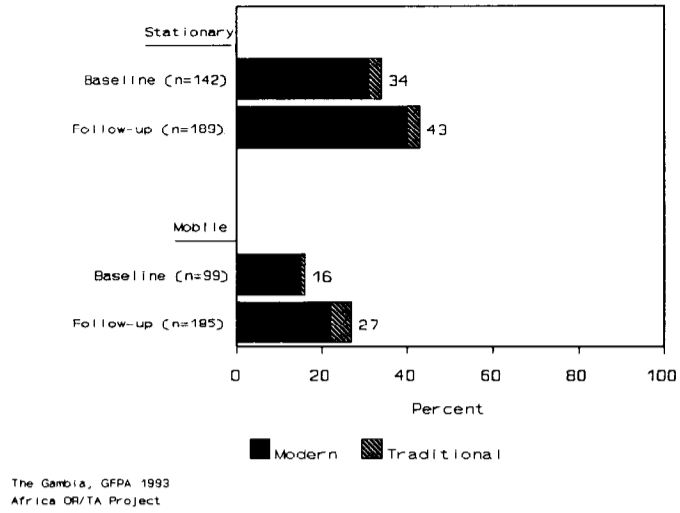


The contraceptive prevalence rate among married women was higher in the Stationary Approach Group. By the end of the intervention in this group, a little less than half of all women in union (48%) were using a contraceptive method, compared to 36% at the time of the baseline.

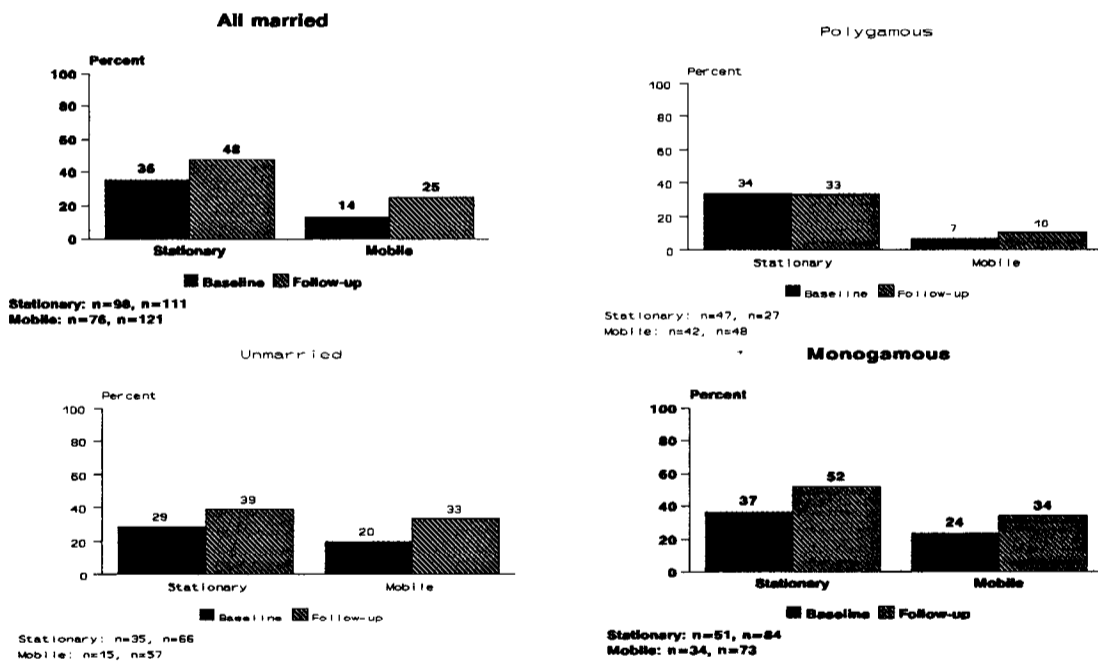
In the Mobile Approach Group, 25% of all married women were practicing family planning at the time of the follow-up survey compared to only 14% before the introduction of the intervention.

Interestingly, contraceptive use was more prevalent among married women in monogamous union than among those in polygamous union (Figure 6). At the time of the follow-up survey, for instance, more than half of all women in monogamous unions were using one form of family planning method; and only 1 out of every 10 women in polygamous union in the Mobile Approach Group was using a contraceptive method.

**Figure 5: Current use of contraceptive methods among female employees**

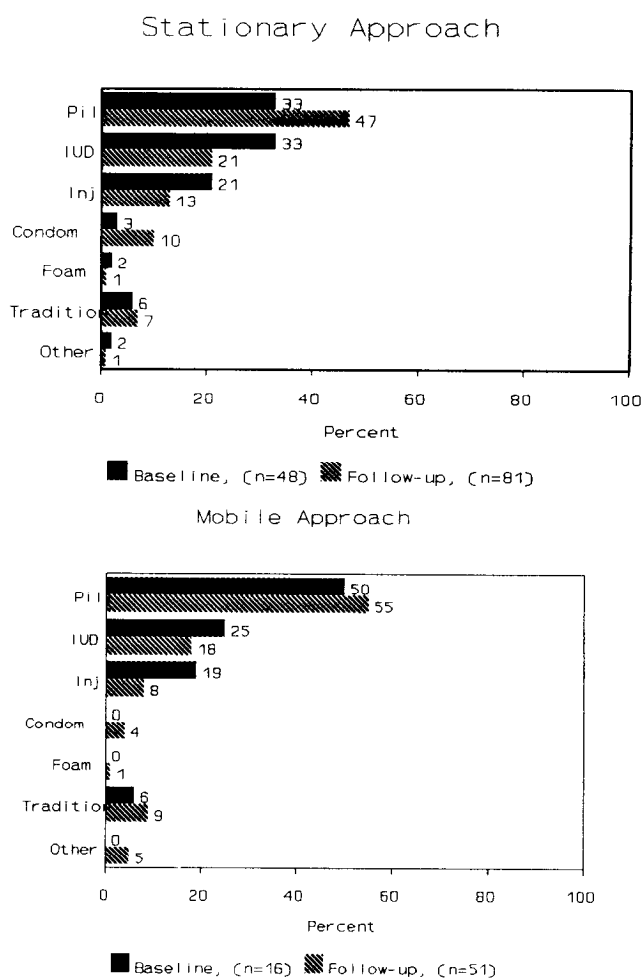


**Figure 6: Current use of contraceptive methods among female employees by marital status**



Among the range of contraceptive methods used by female employees, the pill was the most popular, followed by the IUD and the injectable. The number of pill users increased in both groups between the time of the baseline survey and the follow-up survey. Twenty percent of all women in the Stationary Approach Group were using the pill at the time of the follow-up survey as against 11% at the time of the baseline survey. Similarly, the Mobile Approach Group recorded an increase in pill users from 8% to 15%. The use of IUD, however, decreased minimally in both groups - from 11% to 9% in the Stationary Approach Group, and from 4% to 3% in the Mobile Approach Group. The use of the injectable also decreased similarly (see Figure 7).

**Figure 7: Current use of contraceptive methods among female employees**



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Although the rationale behind the project was to make family planning services easily accessible at places of work, the responses of the women interviewed in both groups on their source of last supplies tend to suggest that the majority of them maintained their initial sources of supply (see Table 4). Those in the Stationary Approach Group were expected to begin obtaining their supplies from their respective employee distributors, but only 4% of all female current users indicated obtaining their last supply from that source. A third of all these users got their last supply from the family planning clinic, and a little under a quarter of them (24%) cited other sources ranging from Private Doctors to Friends/Relatives.

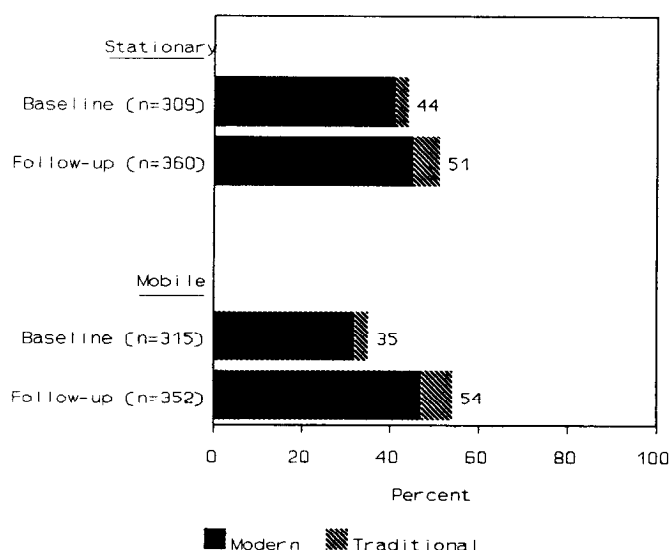
Although GFPA Fieldworkers did not visit Stationary Approach Sites throughout the course of the project, 5% of the women using contraceptives in this group got their last supplies prior to the follow-up survey from GFPA Fieldworkers. This possibility, however, cannot be ruled out simply because some women in this group obtained their last supplies prior to the baseline survey from GFPA Fieldworkers, i.e. before the introduction of the intervention. They may probably have maintained their links (outside the work place) with the Fieldworkers.

**Table 4: Last Source of Methods Among Female Employees Who Are Currently Using Contraception**

	Stationary Approach		Mobile Approach	
	Baseline n=48	Follow-up n=82	Baseline n=16	Follow-up n=51
FP Clinic	31%	30%	38%	16%
Govt. Hospital	29%	13%	31%	8%
Govt. Health Centre	15%	13%	-	10%
Pharmacy	6%	7%	-	24%
Private Clinic	4%	10%	6%	18%
GFPA Fieldworker	2%	5%	6%	2%
Employee Distributor	***	4%	***	***
Other	10%	24%	19%	18%

Since more males were interviewed in each group than females (due to the sex composition of the work forces of the participating institutions), an analysis of current users similar to the one above for females will be worthwhile. At the time of the follow-up survey, more than half the man in each group claimed to be using a contraceptive method -- 51% in the Stationary Approach Group and 54% in the Mobile Approach Group. One can therefore comfortably assert that the involvement of more men in both groups in the practice of family planning contributed immensely to the increases of the contraceptive prevalence rates in the two groups as indicated in Figure 2. Very few of them were using traditional methods (Figure 8).

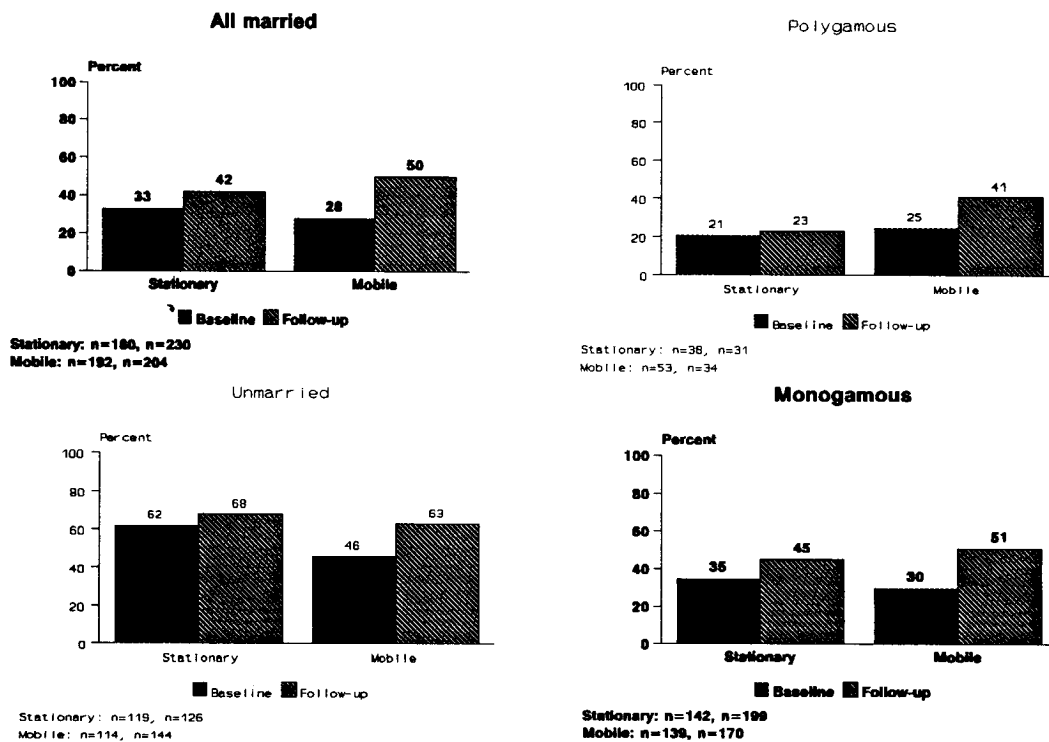
**Figure 8: Current use of contraceptive methods among male employees**





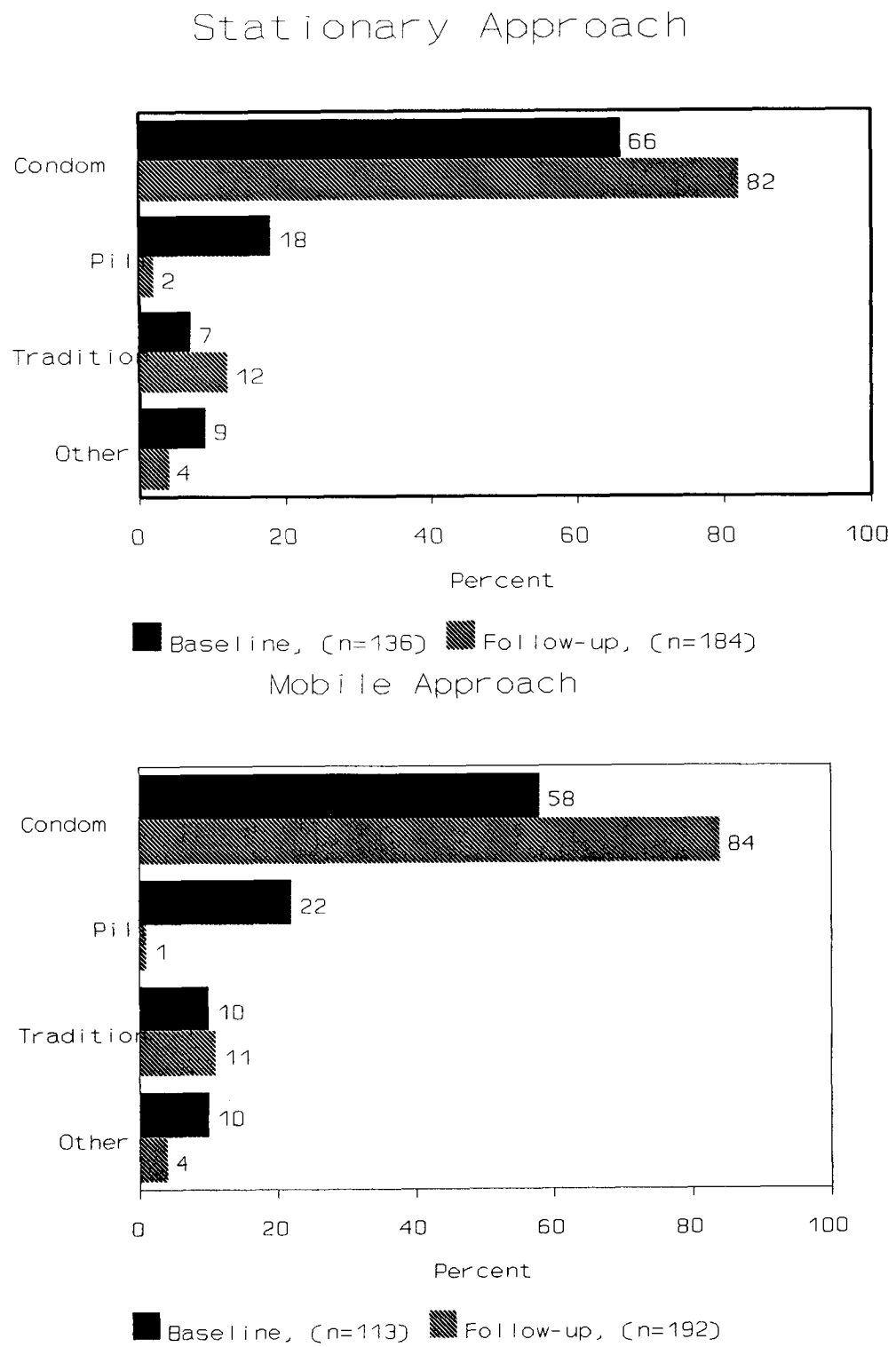
The proportion of married men in the Mobile Approach Group using contraceptives nearly doubled between the baseline and follow-up surveys -- an increase from 28% to 50%, thus indicating that half of all married men in this group were using contraceptives at the time of the follow-up survey (see Figure 9). Similarly, just a little more than half the men in monogamous union in the same group were using contraceptives.

**Figure 9: Current use of contraceptives among male employees by marital status**



Generally, the number of men using contraceptives increased in both groups, and the majority of them were using the condom -- 43% of all men in the Stationary Approach Group and 46% in the Mobile Approach group at the time of the follow-up survey (see Figure 10). In the Stationary Approach Group, a quarter of male current users obtained their last supplies before the follow-up survey from friends/relatives, 22% from pharmacies, 12% from Employee Distributors and 19% from other sources.

**Figure 10: Current use of specific contraceptive methods among male employees**



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**Table 8: Last Source of Methods Among Male Employees Who Are Currently Using Contraception**

	Stationary Approach		Mobile Approach	
	Baseline (n=136)	Follow-up (n=184)	Baseline (n=112)	Follow-up (n=192)
FP Clinic	29%	11%	27%	5%
Pharmacy	25%	22%	18%	13%
Friends/Relatives	15%	25%	13%	8%
GFPA Fieldworker	4%	4%	7%	17%
Employee Distributor	***	12%	***	19%
Govt. Hospital	7%	2%	11%	2%
Govt. Health Centre	3%	3%	9%	2%
Other	13%	19%	14%	32%
No information	4%	2%	3%	2%

The same sources were cited by men in the Mobile Approach Group, and in addition, 19% of the male current users in the group cited the Employee Distributor when in actual fact their institutions were not supposed to have any. This however, can be explained by the fact that during the course of the project, many institutions especially the hotels were flooded with condoms by the Ministry of Health as part of its campaign against AIDS. It is quite probable that those who issued these condoms were the ones referred to as Employee Distributors by the respondents in the group.

### **A.3 Attitudes Towards Employment-Based Family Planning Services (EBFPS)**

The pre-intervention survey in both groups indicated that 88% of Stationary site employees approved of the idea of providing family planning services at the work sites, and 84% in the Mobile sites. Only 3% did not like the idea in the Stationary Group and 5% in the mobile group. However, the post-intervention survey revealed that only 34% of the respondents in the stationary group were aware of the availability of FP Services in their institutions, 5% of whom disapproved of employment-based family planning services.

**Table 5: Approval, Awareness and Use of EBFPS**

	Stationary Sites n=549	Mobile Sites n=537
Approve of EBFPS	84%	81%
Aware of services	34%	62%
Made use of services	17%	34%

A relatively higher proportion of 62% of the respondents in the Mobile Group were aware of the services. This can probably be explained by the attention of people taken by GFPA Fieldworkers during their visits to the Mobile sites for educational sessions. Five percent of them also disapproved of the idea of providing FP Services at places of work.

A little over half of those aware of the services actually made use of them -- 51% in the Stationary sites and 55% in the Mobile Sites. Among respondents in the Stationary Approach group who actually used the services, 86% of them felt that their Employee Distributors were credible, and 14% claimed that they were not credible at all and do not treat them with respect. Generally, more than three quarters (77%) of those who used the employment-based family planning services were satisfied.

In the mobile group, on the other hand, only 2% of the service users doubted the credibility of the GFPA Fieldworkers who provided the services, and 99% admitted being treated with respect. 95% of them were generally satisfied with the services they received.

## A.4 Knowledge of STDs/AIDS

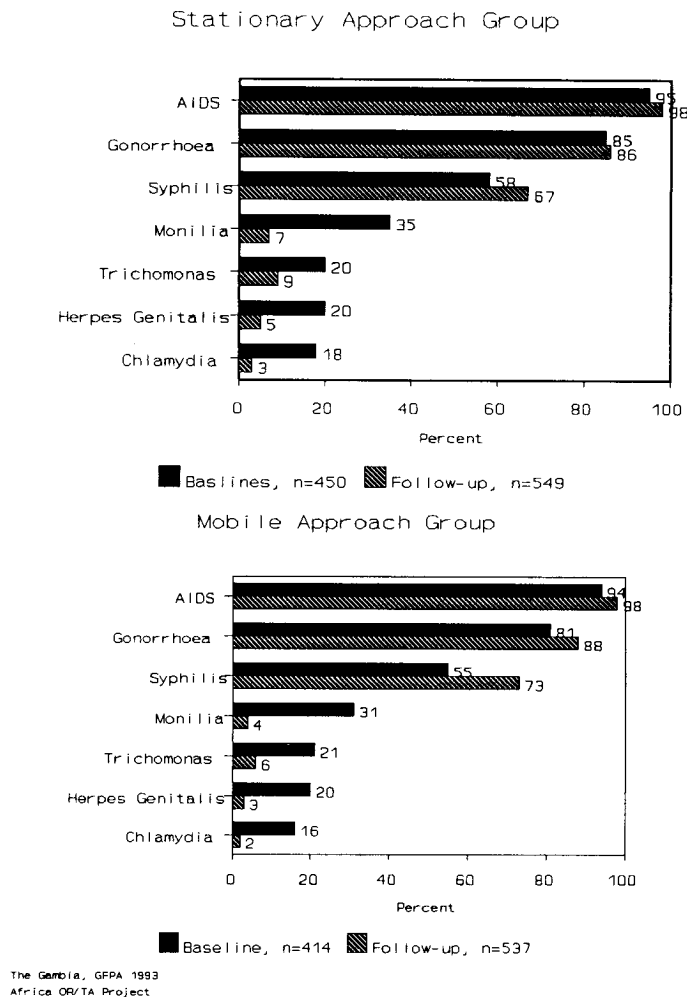
Another aim of the project was to observe whether STDs/AIDS educational sessions held in the work places would increase the knowledge of employees on the subject. Figure 11 shows that although the levels of awareness of AIDS, Gonorrhoea and Syphilis were relatively high among employees of both groups at the time of the baseline, slight increases in knowledge were recorded in both groups for AIDS and Gonorrhoea at the time of the follow-up survey. Relatively significant increases in knowledge of Syphilis were also recorded in both groups -- from 58% at the baseline to 67% at the time of the follow-up survey in the Stationary approach sites; and from 55% to 73% in the Mobile Approach Sites.

Interestingly, knowledge of Monilia, Trichomonas, Herpes Genitals and Chlamydia decreased significantly between the time of the baseline and the follow-up. Knowledge of Monilia, for instance, dropped from 36% to 7% among Stationary Approach group respondents; and from 31% to 4% among Mobile Approach group respondents (Figure 11).

Since at least 90% of respondents in each group were working in their respective institutions throughout the duration of the interventions, the decreases may be difficult to explain. One may, however, assert that they may be due to the fact that these diseases are not often heard of and their vernacular names are not widely known.

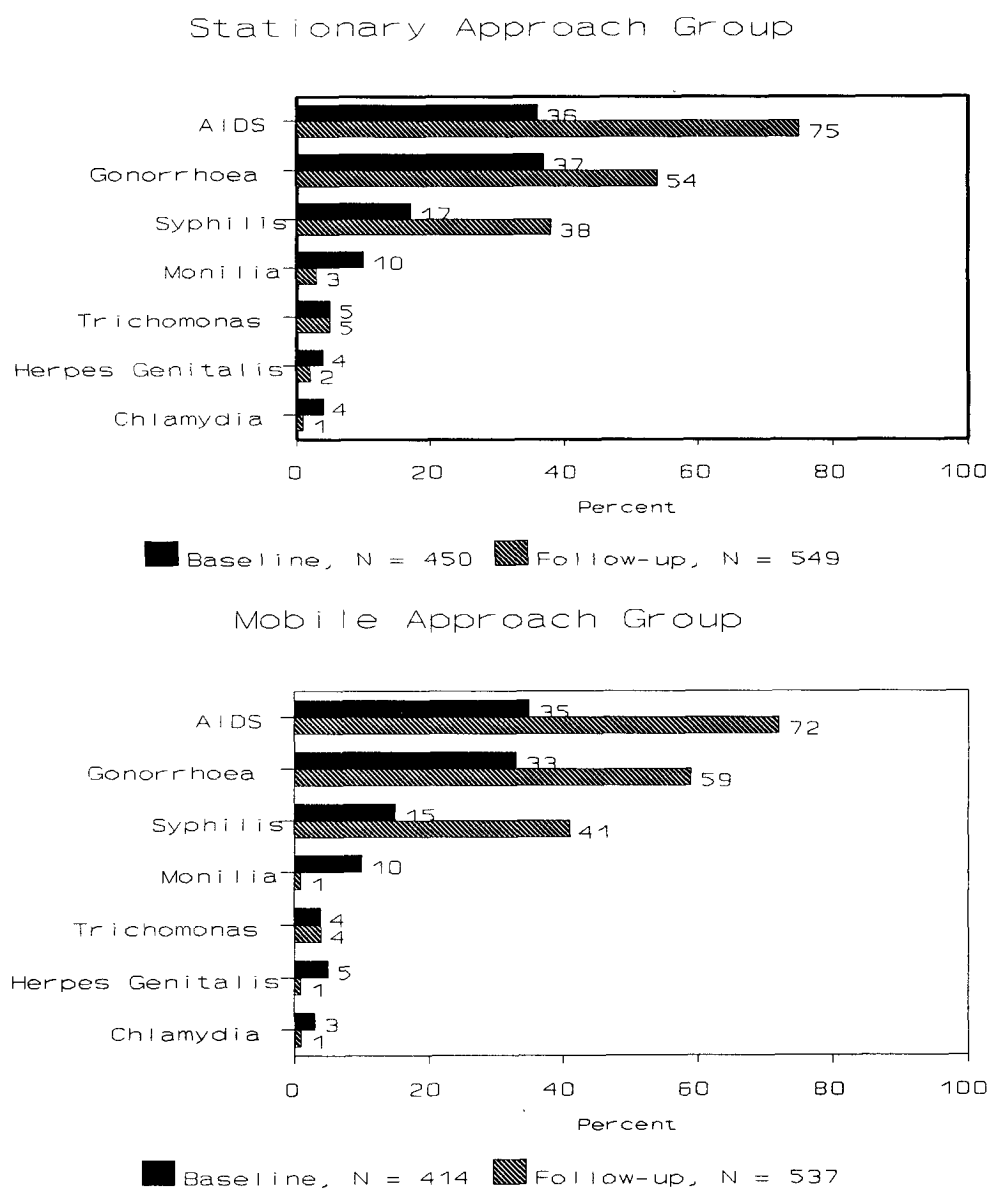
To further support the increases in knowledge of AIDS, Gonorrhoea and Syphilis, the proportion of respondents who knew at least one symptom of these diseases increased dramatically. In fact, with the exception of Gonorrhoea, the proportions more than doubled over the period between the baseline and follow-up surveys (see Figure 12). Knowledge of

Figure 11: STDs ever heard of by respondents



a symptom of Syphilis, for instance, increased from 17% to 38% in the Stationary Approach group, and from 15% to 41% in the Mobile Approach group. Almost three quarters of all respondents in both groups knew of one symptom of AIDS at the time of the follow-up survey.

**Figure 12: Knowledge of at least one symptom of common STDs and AIDS among respondents**



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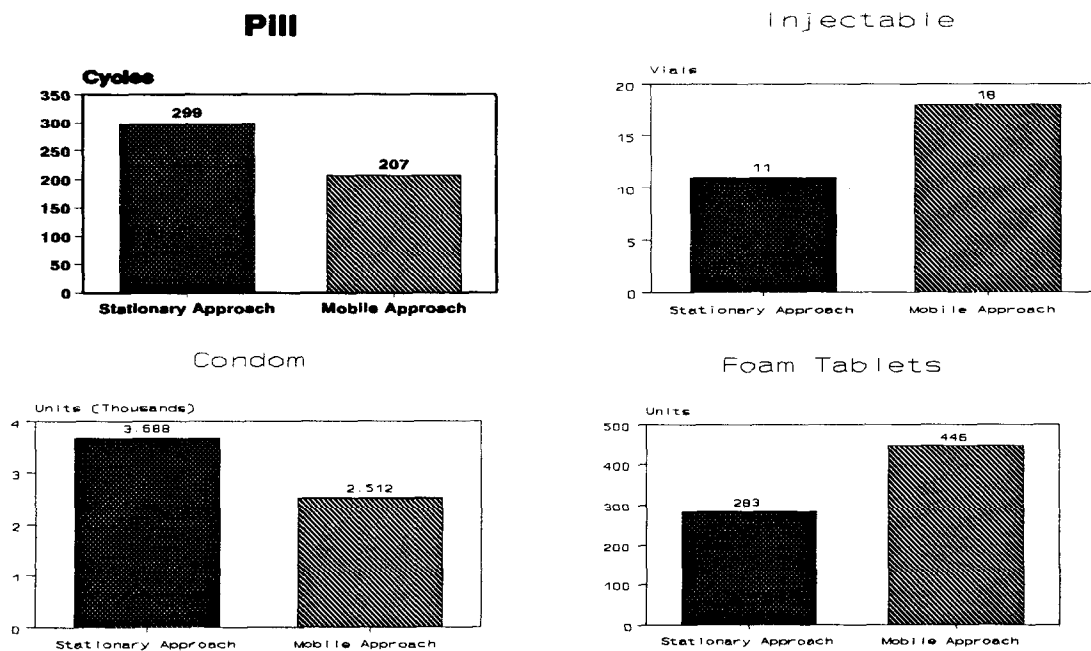
## B. COST EFFECTIVENESS OF THE TWO APPROACHES

The cost effective analysis (CEA) represents the second part of the assessment of the two approaches of delivering family planning information and contraceptive services as well as STDs/AIDS education in work sites. In conducting the CEA, there are two essential and clearly defined components that should necessarily be taken into consideration - i.e. the measure of programme outputs, and the costs incurred to achieve these outputs.

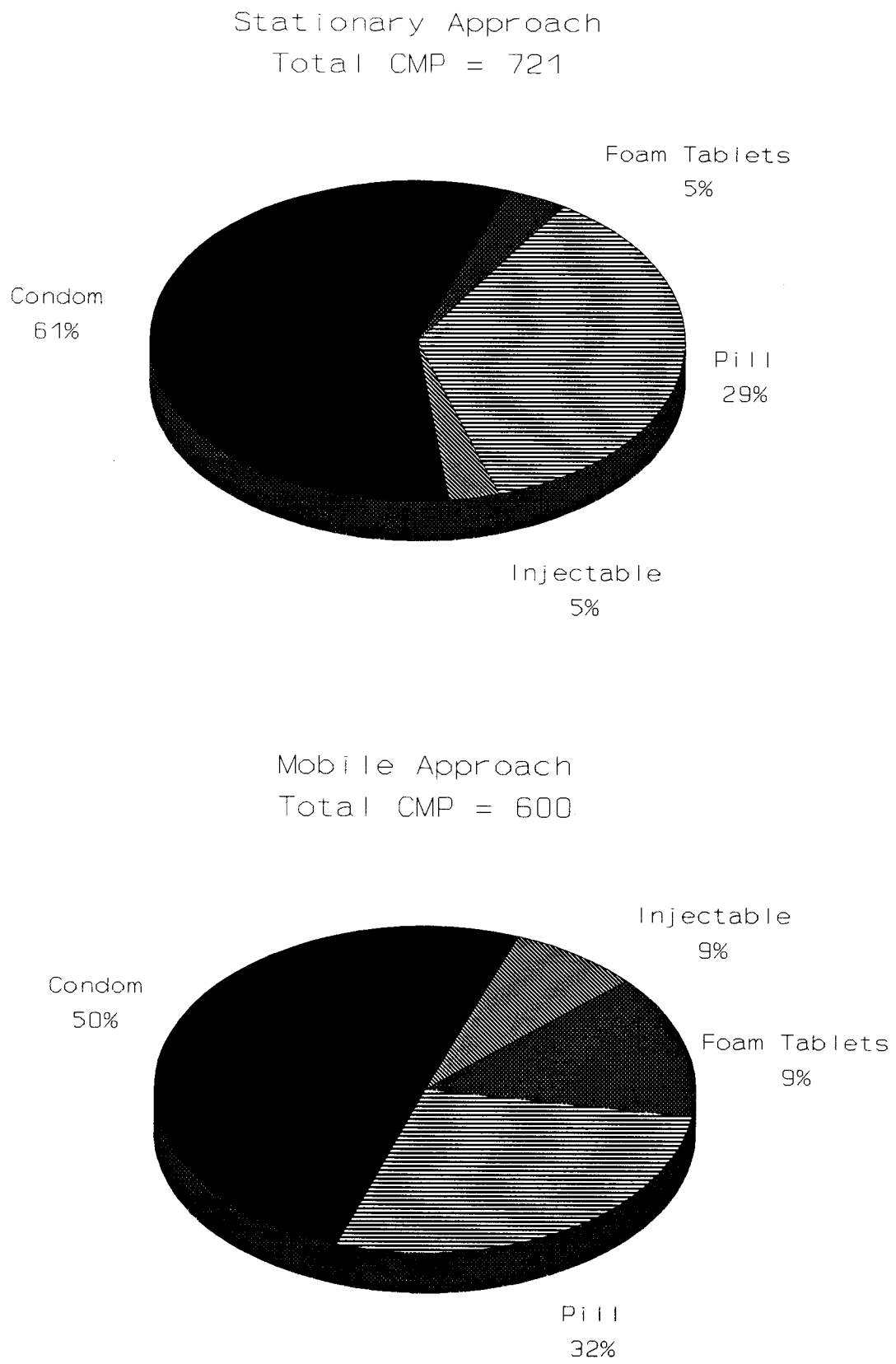
There are several types of programme output measurements one can use in evaluating the effectiveness of family planning programmes. These include couple-years-of-protection (CYP) or couple-months-of-protection (CMP), number of new acceptors, number of visits for contraceptives, etc. These three named output measures could have been used in this analysis, but in the case of number of new acceptors, figures obtained from the Employee Distributors at the Stationary sites were not reliable. Several attempts made for them to distinguish between a visit by a new acceptor and another by a continuing user were futile. Thus, using the figures they presented in the analysis might yield misleading results.

Since all visits for contraceptive services include those made by new acceptors as well as those of continuing users, the number of visits for contraceptive services would be used in this analysis as a programme output measure. Another output measure used is the number of couple-months-of-protection provided by the project. This is based on the volume of contraceptives issued to acceptors by the project, the details of which were properly recorded in both approaches. Figure 14 shows the volume of contraceptives issued to acceptors and Couple-Months-of-Protection (CMP) provided by approach. The Stationary Approach provided a total of 721 CMP, and the Mobile Approach 600. Since a large proportion of the users of the services were males, the Condom was the most widely distributed contraceptive, thus accounting for 61% of the total CMP provided in the Stationary sites, and 50% in the Mobile sites.

Figure 13: Quantity of contraceptives distributed by type and approach



**Figure 14: Couple-Months-of-Protection provided at both sites**

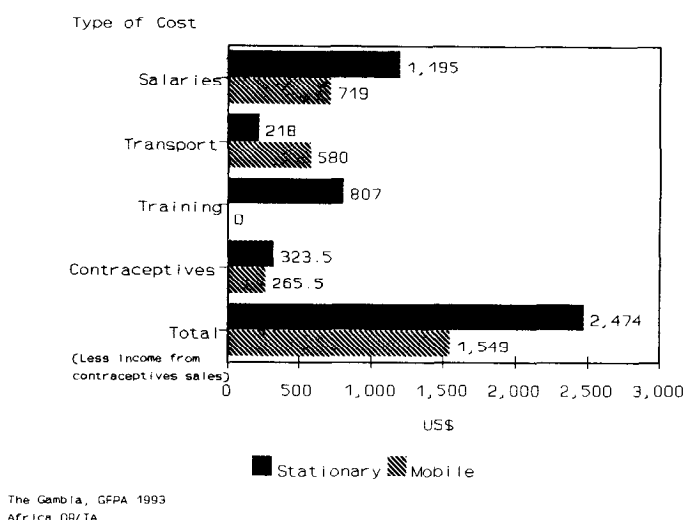




Records were kept by service providers to show the total numbers of acceptor visits - or the number of interactions between provider and the user of contraceptive services -- per month. Since we are interested in only those costs associated with the replication of the most effective approach of providing family planning services and STDs/AIDs education at employment sites, the CEA excludes all costs related to research and donated equipment such as micro-computer and printer. Thus, only those costs associated with the provision of services were taken into consideration as outlined in Figure 15.

Expenditures made entirely for one particular approach were allocated to that approach; and costs that related to both approaches were categorised as non-traceable costs. A total of US\$ 2,543.10 was incurred for the provision of services through the Stationary Approach, US\$ 1,566.37 through the Mobile Approach, and the non-traceable service-related costs amounted to US\$ 2,713.71. It should be noted that it was only the Stationary Approach that incurred costs for training the selected Employee Distributors. Contraceptive

**Figure 15: Service-related costs**



costs were calculated using the prevailing IPPF prices. A total of US\$ 68.74 was recovered in the Stationary Approach Group through contraceptive sale to clients, and US\$ 16.98 in the Mobile Approach Group; the totals in Figure 15 reflect these incomes. Those who could not afford the cost of contraceptives were usually provided with free services.

**Table 5: Non-traceable costs**

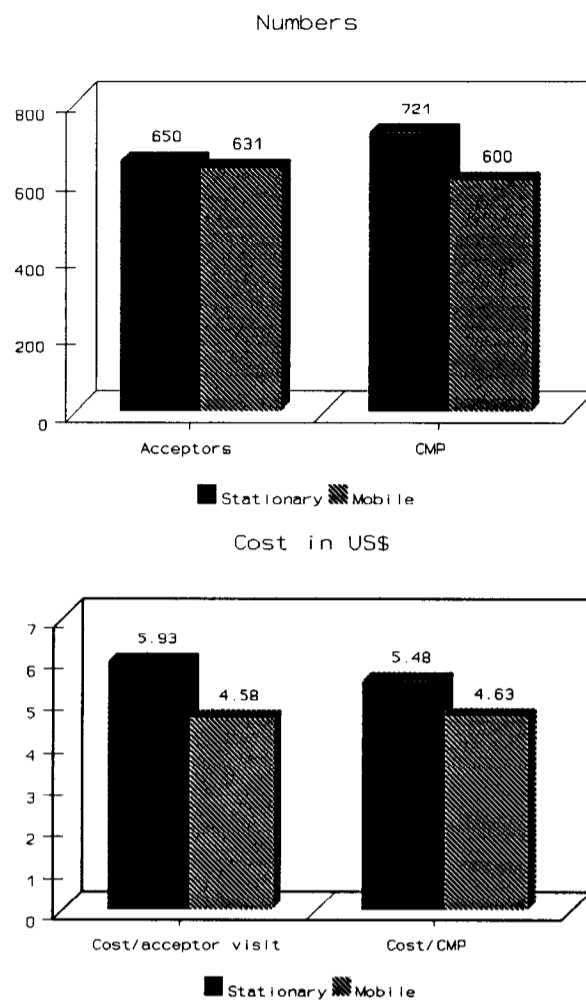
Non-traceable costs	US\$
Vehicle Running costs	119.5
Supplies	2,594.21
<b>TOTAL</b>	<b>2,713.71</b>

In calculating the cost effectiveness of the two approaches, the cost data presented in Figure 15 represent the numerator data, and the number of acceptor visits and CMP provided represent the denominator data in their respective output measurements. It is also necessary to allocate the non-traceable costs to each approach based on the relative outputs (number of acceptor visits and CMP) of each approach. This is obtained by dividing the total non-traceable costs by the total project outputs (acceptor visits and CMP). These non-traceable costs per output measure are then added to the respective cost per output of each approach.

The results obtained are as shown in Figure 16. Both the cost per Acceptor Visit and cost per CMP were lower in the Mobile Approach than in the Stationary Approach -- US\$ 4.58 as against US\$ 5.93 per Acceptor visit, and US\$ 4.63 as against US\$ 5.48 per CMP. Overall, the project measured a cost of US\$ 5.26 per Acceptor Visit and US\$ 5.10 per CMP.

The results, therefore, suggest that it is more cost effective for GFPA fieldworkers to provide family planning services at employment sites fortnightly than to train Employee Distributors to provide the services to their colleagues.

**Figure 16: Cost per Acceptor visit per Couple-Months-of-Protection**



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### III. DISCUSSION AND CONCLUSION

The successful implementation of the two 18-month interventions, with the realization of valid and useful results despite the constraints encountered in the process, is indicative of the fact that expansion of GFPA services through employment sites is a feasible idea. The information obtained from the surveys clearly indicate that overall contraceptive prevalence increased as a result of introducing employment-based family planning services. The increase was more significant in the Mobile Approach sites which were served by GFPA Fieldworkers, despite the fact that the current use rate was higher in the Stationary Approach group at the time of the follow-up survey.

A large proportion of current users were within the 20-29 age bracket and had attained at least Secondary School education. More than half the men interviewed during the follow-up in both groups were using a method of contraception. Because of the limited range of male contraceptive methods, the condom was the obvious preferred method. The pill was the most preferred among female users, followed by the injectable.

More than three quarters of the respondents in the follow-up survey approved of employment-based family planning services, and more than half of those in the mobile group were aware of the services. The number that made use of the services in the Mobile sites nearly doubled the service users in the Stationary group. This can be attributed to the approach to service provision used by the qualified and respectful (as testified by 99% of the Mobile group respondents) GFPA Fieldworkers.

Because of the high level of confidentiality required in the provision of family planning services, it is highly probable that workers in the Mobile sites found it easier to confide in the GFPA Fieldworkers than Stationary site employees in their respective distributors. The validity of this assertion cannot be assessed based on available information, but its acceptance will further boost the efficiency of the Mobile Approach.

Increases in knowledge of AIDS, Gonorrhoea and Syphilis were observed in both groups, but were more significant in the Mobile Approach group. These increases can only be attributed to the educational sessions on STDs/AIDs held at employment sites by the fieldworkers.

In terms of cost-effectiveness, the cost analysis showed that both cost per Acceptor visit and cost per CMP were lower for the Mobile Approach than for the Stationary Approach. These costs were US\$ 4.58 and US\$ 4.63 respectively for the Mobile Approach, compared with US\$ 5.93 and US\$ 5.48 for the Stationary Approach.

As the results of the cost analysis show, coupled with the above proven efficiency of the Mobile Approach in increasing both contraceptive prevalence and knowledge of STDs/AIDs, it is clearly evident that it is more cost-effective for GFPA to expand its services through employment sites by sending fieldworkers fortnightly to provide family planning services, rather than training selected Employee Distributors to provide the services to their colleagues.

#### IV. RECOMMENDATIONS

The following recommendations are suggested for expansion and institutionalization of the project:

Based on the results of the study, both approaches were deemed effective. The Mobile Approach resulted in higher contraceptive KAP and was less expensive, but at the same time, was not managed by the institutions as in the case of the Stationary Approach.

1. In the interest of establishing family planning services at employment sites in the long run, the Mobile Approach should be continued for a period of time BUT costs be covered by the local establishments. Eventually, with the help of policy and internal changes, these organizations will be able to manage FP activities on their own. This will allow local ownership and thus institutionalization of project activities.

For this program to be successful, policy needs to be changed both within the local institutions and at the higher level.

2. At the government level, intensive IEC efforts should be directed at policy makers to sensitize them about the issues and to instigate changes in labor policies.
3. At the local level, management should allocate funds for family planning and health, create time for their employees to become involved in activities, and provide space for services.

Though there are not as many large employment establishments outside the GBA, most of the population of The Gambia is located in the rural areas. More research is needed to explore ways to expand this project to the rest of the country, specifically within the informal sector.

4. Replication should be considered at rural divisional headquarters (decentralized government administration).
5. The project can be extended to farmers who are loosely organized into cooperatives.