

The Population Council

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TUNISIA NATIONAL FAMILY PLANNING PROGRAM

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Submitted by:

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SUMMARY

In late 1981 the Population Council was awarded a five-year Cooperative Agreement by the United States Agency for International Development (USAID) to act as an intermediary managing its bilateral population assistance funds and providing technical assistance to the Tunisian Family Planning Program. USAID had provided substantial support to the Office Nationale de Planning Familiale et de la Population (ONFP) since 1965, and in 1981 was phasing out its bilateral assistance to the government of Tunisia. As a result the ONFP was embarking upon a five year transition period that aimed to expand its family planning program while at the same time maximizing its cost-effectiveness so that it could ultimately be self-sustaining. In order to assist the ONFP with this mandate, the specific objectives of the Council's program called for intensified rural and peri-urban outreach efforts, training of a wide range of new rural family planning workers, decentralization of management, strengthening of the communications program with special attention to illiterate and semi-literate populations, expanded commercial distribution of contraceptives, development of a management information system to achieve greater cost-effectiveness of program efforts, and strengthening of operations research and evaluation.

The program was managed out of the Population Council's offices in New York by Dr. Margaret McEvoy with Ms. Francine Coeytaux serving as project coordinator and a number of Council consultants providing extensive technical assistance. Specific accomplishments of the program include:

- * Availability of services to the rural areas has greatly expanded. The use of outreach workers and access to services in the remote areas has increased dramatically.
- * The ONFP respected its mandate to progressively take on recurring costs. Government support of the ONFP's activities went from 56 percent in 1982 to 85 percent in 1985.
- * A Management Information System has been institutionalized both centrally and regionally. Sophisticated monthly analyses of program results by the Research and Evaluation Division are utilized for improved program performance.
- * The private sector contraceptive distribution program went from supplying less than five pharmacies in Tunis in 1981 to reaching over 800 pharmacies in Tunisia,

servicing 25 percent of couples practicing
contraception.

- * The ONFP has the capacity to develop and produce their own information-education-communication (IEC) and media materials.

- * There are now 868 locations throughout the country where ONFP family planning and obstetric/gynecologic services are available. Mobile units provide 30 percent of the national program's activities, and in some gouvernorats, 78 percent of the total activities.

Despite many changes in the political, policy, and programmatic directions of both Tunisia and USAID, the program was able to reach its objectives.

I. BACKGROUND

The Tunisian family planning program, initiated in 1964, is one of the most advanced programs in Africa and the Middle East today, with the highest level of contraceptive prevalence and the lowest birth rate in the region.

Tunisia has a population of approximately 7.5 million people, 40 percent of whom live in rural areas. Since the country's independence, mortality and fertility have declined substantially. The crude mortality rate has declined from 20 per 1000 in 1965 to 10 per 1000 in 1983. During the same period, the crude birth rate dropped from 48 to 31 per 1000. Contraceptive prevalence increased from 10 percent in 1975 to 42 percent in 1983. In 1983 an estimated 34 percent of married women of reproductive age (MWRA) were using a modern contraceptive method.¹

Since independence in 1956, former President Bourguiba gave strong support to the development of population policies and family planning activities. The government has placed a priority on the development of family planning services and the improvement of women's status, with attention to the legal status

¹ Tunisia CPS, Westinghouse, 1983.

of women, female education, higher age at marriage, and greater involvement of women in the modern economic sector.

The Tunisian family planning program, which began on a pilot basis in 1964, quickly developed into a national program. In 1973, the Office National du Planning Familial et de la Population (ONPFP) (later changed to the Office National de la Population et la Famille, or ONFP) was created as a semi-autonomous agency under the tutelage of the Ministry of Public Health. Its mandate was to take responsibility for planning, coordinating, implementing, and evaluating family planning activities in Tunisia. Since that time the ONFP has worked to develop a nationwide family planning program that includes service delivery, training, information and education services, and research and evaluation.

The United States Agency for International Development (USAID) has provided assistance to the Tunisian family planning program since its inception. By 1987, this totaled \$38 million. Initially, USAID assistance focused on the development of an infrastructure and the training of personnel. Since the late 1970s, assistance has focused on reinforcing and expanding family planning services, particularly in the rural areas.

In 1980 Tunisia was designated a "graduate" country and bilateral assistance was to be phased out. A final 9 million US

dollars over five years was awarded to the ONFP with the objective that the program would become self-sufficient by 1986.

A remarkable joint effort was made between USAID and the ONFP to assess program performance to date along with its strengths and weaknesses in order to set priorities for the next five years. Among its strengths were: an extraordinary series of laws promoting the equality and development of women, encouraging small family size and permitting free access to all contraceptive methods; open public and media discussion of population/family planning issues; and general acceptance of family planning in all sectors of the government, as well as with religious leaders and the public as a whole.

Program weaknesses included: a plateauing or downward trend in new contraceptive protection provided by the public sector program, particularly decreasing rates of tubal ligation and increasing rates of IUD removal; and large urban/rural and regional disparities in access to family planning services, contraceptive availability and use. This resulted in an unmet family planning need in most target groups.

The Population Council was asked to be the intermediary for \$6 million of this last USAID assistance to the ONFP. The purpose of the grant was to assist the Tunisian government in expanding its program while at the same time helping to maximize

its cost-effectiveness in light of the planned reduction in international assistance. More specifically, the expanded program called for intensified rural and peri-urban outreach efforts, training of a wide range of new rural family planning workers, decentralization of management, strengthening of the communications program with special attention to illiterate and semi-literate populations, expanded commercial distribution of contraceptives, development of a management information system to achieve greater cost-effectiveness of program efforts, and strengthening of operations research and evaluation.

II. PROGRAM COMPONENTS AND ACTIVITIES

A. Expansion of Services

In order to increase contraceptive prevalence and continuation rates in the rural areas, special efforts were to be made to increase male participation in family planning activities, improve mobile unit cost-effectiveness, increase person-to-person IEC services, and increase the effectiveness of regional outreach workers called "animatrices" in the rural areas and in the peri-urban areas. In addition, efforts were made to expand services through commercial distribution of contraceptives to the rural pharmacies.

1. Rural Services

The expansion of rural services had two objectives: (1) to develop strategies to improve services and expand rural outreach in existing family planning programs in the 22 "Gouvernorats" or (states); and, (2) to design and implement a special rural outreach program in 14 target "Delegations" (or countries) in eight Gouvernorats of Central and Southern Tunisia.

a. General Rural Strategy

During the first year of the program, the ONFP created a Rural Coordination Unit at the central level. The unit was staffed with a program coordinator and two supervisors; the Population Council technical advisors worked directly with the unit staff to help improve each gouvernorat's management and supervision capacities in order to increase rural family planning activities.

A primary activity was to strengthen the existing family planning rural IEC and outreach services by increasing the effectiveness of the regional animatrices, and increasing male participation through recruitment and training of male educators for each gouvernorat.

Prior to the program, considerable variation existed between regions in the types of activities being carried out by the regional animatrices. For example, in Bizerte, animatrices conducted home visits in urban and rural areas in an attempt to recruit women for sterilization. In Sfax, emphasis was placed on postpartum and post-abortion follow-ups. In Tunis, social assistants working with the family planning programs conducted educational sessions with groups and individuals within maternal-child health (MCH) centers and dispensaries. Other animatrices were mainly involved with one-to-one educational interviews with

women who came to the regional family planning centers, while a few performed clerical work for the family planning facilities.

By mid-1983, several steps were taken to increase the effectiveness of the regional animatrices. First, it was decided that all animatrices were to follow the same work plan, including the same reporting systems. Second, a new supervisory system was implemented to provide for better supervision of the regional animatrices. A new form was designed to help structure and evaluate the regional animatrice work plans and schedules. This form also helped to delineate the tasks and responsibilities of the animatrices, which in turn improved the implementation as well as the monitoring of activities.

Under the original project agreement, a male health educator was to be hired, trained, and assigned to each of the 22 gouvernorats. These individuals were to provide further support to all IEC activities in the gouvernorats and work with community male leaders and individuals. However, due to labor constraints within the ONFP, the hiring and training of these educators proceeded very slowly. In the interim, the male participation in family planning activities was increased by broadening the role of the "Regional Delegués" to work with the community male leaders, in particular, the Imad. Finally, in 1985 male educators were hired and trained. The ONFP plans to evaluate their effectiveness in 1988.

b. Target Zones

As part of the project proposal, ONFP and the Population Council identified target areas in 14 delegations (located in eight gouvernorats) within Central and Southern Tunisia, to be used as sites for the initiation of an intensive rural outreach program. The areas chosen were targeted because they possessed a number of specific characteristics including: weak health service coverage, an insufficient medical infrastructure, low contraceptive prevalence rates, and in some cases, difficult access. The population for the 14 delegations was estimated at 450,000, which included over 65,000 women of reproductive age.

To reach this population, a systematic program was designed to provide coordinated IEC, family planning, and follow-up services on an outreach basis. The program included two main components: (1) mobile clinics that permitted the delivery of family planning services to areas devoid of a health infrastructure, and (2) a strong IEC outreach program utilizing animatrices.

Mobile Clinics

Since 1968, the ONFP had in place a mobile model of family planning service delivery to provide services to the rural areas that lacked structure and medical personnel. Mobile teams, composed of a midwife, a nurse's assistant, a chauffeur, and in some cases an animatrice, visit rural health centers on a scheduled basis to provide family planning services. The services include: provision of contraceptives to new and returning users, follow-up counseling and services, gynecological care, sterilization referrals to regional family planning centers (CREPFs), ² and pre- and post-natal counseling. Contraceptive methods provided by the mobile units include oral contraceptives, IUDs, condoms, and barrier methods.

Under the national rural program, the ONFP implemented mobile clinics to expand the outreach even further to areas devoid of even the rudimentary infrastructure required by the mobile teams. Eight specially equipped vehicles, in which gynecological exams and IUD insertions could be performed, were purchased to provide services in areas where mobile teams could not operate due to a lack of suitable fixed facilities. The mobile clinics have the same staff and provide the same clinical services as the mobile teams, but also provide educational and follow-up services on an outreach basis. Animatrices travel into

² Centre Regional de Planning Familial (CREPF).

the communities served by the clinics to provide advance IEC and follow-up services to clients.

Animatrices

Thirty-six rural animatrices were hired and trained to work in the nine regions covered by the program. The women were recruited from the communities, given three weeks of training in contraceptive technology, counseling techniques, and record-keeping, and supplied with educational materials including pictorial printed materials specially designed for the rural, mostly non-literate Tunisian population. Two rural supervisors provided ongoing supervision and organized further training as the need arose. Once trained, the animatrices made home visits on a regular basis to inform women of the clinic's schedule, motivate them to attend, answer questions, and follow up on client's previous visits. The animatrices also kept careful records of the women's reproductive histories and visits to the clinics.

The rural program has been successful in increasing the number of new family planning acceptors in Tunisia. In the first year of the program, the number of new acceptors increased by 27 percent and in 1983, the second year, the mobile clinics

contributed 24 percent of the total number of new acceptors in the project zones.³

The IEC outreach component of the program was particularly successful. The animatrices got to know their respective communities well and quickly established effective ways of meeting women and responding to their concerns. The first suggestion of the animatrices' impact on the use of services came from the Gouvernorat of Siliana, a rural region in central Tunisia where, due to delays in purchasing the clinic vehicle, the IEC component of the program began a year before the mobile clinic was launched. In 1982, the year the animatrices began working, the existing service center in Siliana registered a 57 percent increase in the number of family planning visits over the previous year without any change in service delivery. The finding of an operations research study later carried out in Mahdia, another gouvernorat targeted by the program, confirmed the importance of the IEC component. The study showed that adding an IEC outreach component to the existing mobile services was more effective in extending services to new contraceptive users than was the creation of a new service center that had no outreach component. Furthermore, the study demonstrated that the

³ J. Lecomte, A. Bachbaouab, H. Chekir, M. Khiri, R. Lapham, and M. Youzabachi, "GOT/USAID Evaluation," unpublished report (Government of Tunisia and US Agency for International Development, 1 June 1984).

addition of an IEC component to the mobile teams would greatly enhance the output of the teams.

The rural program has shown that the combination of mobile clinics and IEC outreach can greatly increase family planning coverage in rural areas. The program was not, however, without its difficulties. Problems encountered included: poor road conditions, inclement weather, lack of transportation for the animatrices, and lack of coordination between the educational teams (animatrices) and the mobile clinics.

The biggest obstacle proved to be the scarcity of trained personnel. Midwives in particular proved difficult to recruit because of the long hours spent traveling and the difficult working conditions (cramped working quarters, rough drives, and severe temperature changes) and in one gouvernorat (Kasserine) the mobile clinic was never able to begin operations due to the unavailability of a midwife.

Also disruptive was the high turnover of animatrices. Once trained, many of the animatrices moved on to social service jobs within the Ministry of Health, where job security was better. During the first year alone, nearly a third of those recruited left the program for this reason.

Finally, and particularly costly, was the problem of vehicle repair and maintenance. The clinic vehicles have a greater tendency to break down because of their poor design and the above-average stress put on them, and maintenance and repair are problematic because there are no other vehicles to temporarily replace the clinic vehicle while it is being repaired. These maintenance problems resulted in increased cost of operating the clinics and reduced clinic output due to increased days of inactivity.

Starting in 1985, the program emphasis shifted from the expansion of services to the improvement and evaluation of existing activities. Itineraries of the various mobile teams (a team of a doctor, nurse and auxiliary person traveling by car and providing services) and clinics (a team traveling with a vehicle equipped to provide OB/GYN examinations) were re-examined and changes were made to increase productivity. A major cost-effectiveness study was carried out to assess the output of the mobile program and analyze the influence of programmatic variables on the cost-effectiveness of the various mobile units. The study concluded that while a few of the mobile clinics were cost-effective relative to all the other units, the provision of services to more remote and rural populations through mobile clinics costs more than providing services to less dispersed and more literate populations with mobile teams.

2. Peri-Urban Program

Industrialization within Tunisia had greatly increased the migration of rural populations to the larger cities. These emigrants often settle in what are now called the "green belts" or peri-urban areas around the cities. While these peri-urban areas continued to expand, family planning and public health services remained the same. As a result, most of these facilities, which were constructed during the 1960s, were often unable to keep up with the health needs of this ever-increasing population.

In an attempt to help alleviate some of this pressure, ONFP launched a special outreach program to improve the health and family planning services within select peri-urban areas. Two approaches were planned in order to implement this program. As part of the first approach, IEC outreach activities and referrals were to be carried out, using the Ministry of Social Affairs' social workers in the field. It was felt that such a program would increase the acceptability and knowledge of family planning service delivery points. The second approach was to include the recruitment of private physicians and support staff to incorporate family planning consultative services into existing peri-urban health dispensaries.

In 1982, a preliminary socio-demographic study based on secondary data took place in Tunis. In addition, baseline studies were also organized and carried out by a demographer from the Population Division in Sfax and Sousse. These studies explored the demographic and health situations within the peri-urban communities and also provided a comprehensive overview of the existing health services to assess the health-related resources available. The ONFP and Ministry of Health provided the technical assistance and manpower to carry out this research. The study provided an excellent account of the population. Contrary to what was expected, the "green belts" were not inhabited by the most recent migrants to Tunis, but by those who had been living in the center of town and who had migrated out to build more solid dwellings on their own land. Information of this type collected from all three of the studies was used to develop effective strategies to plan a practical program to better serve the peri-urban areas. (See the Research and Evaluation section for further details.)

Beginning in 1982, the peri-urban program got off to a fast start in three major cities. In Tunis, within 25 health facilities participating in the program, either an M.D. or a social worker was recruited to visit these centers several times a week to offer family planning services. A number of the centers also had full time sage-femmes to provide pre- and post-natal care as well as family planning services. The cost of the medical

and para-medical personnel was absorbed by both the Ministry of Health and ONFP. To provide family planning information to other doctors, six of the physicians were paid by ONFP to serve as trainers for MOH doctors in the area.

In Sfax, the population was not peri-urban, but instead had "pockets" of slum areas. As a result, the programming and staffing implications were quite different from Tunis. It was determined that existing facilities could serve women in need of contraception but the real problem was to reach these women and make appropriate referrals. Therefore, in Sfax, emphasis was placed on the use of educational and informational outreach to various private sectors including factory workers, the women's union (UNFT) and various political parties. CREPF animatrices were also used to carry out house-to-house visits in order to provide family planning and general IEC services within the "pockets." In addition to these outreach activities, consultation sites were created to recruit potential family planning acceptors. The first was set up in Cite El Habib (30,000 inhabitants) and a second served the populations of Oued Erremel, Biz Kharroub, and Cite El Bahri (15,000 inhabitants). Lastly, family planning pamphlets especially designed by the Sfax delegation were distributed in the maternities to women who had just delivered and at the municipality upon registration of births or marriages.

In Sousse, cooperation between family planning workers and the Ministry of Social Affairs (MSA) was stressed. Women who enrolled in the famille productive program were targeted by the supervisor midwives. In addition, a permanent consultation site was developed in Cite Ezzouhour and in Ouled Naouar. The Ouled Naouar site served the populations of Taffala, Biz Chobbek, Cite El Aouina, and Kedonet Naled. During 1983, regionally organized training activities were carried out for the midwives and animatrices. The format used for these activities usually included a presentation by an expert followed by a question and answer session.

Following the initial success of this project, in 1983 progress reports indicated that the program was slowing down and even "stagnating" in a number of areas, particularly in Tunis. For example, within the Tunis clinics, it was reported that the cooperation between the physicians and the supporting staff, in particular the sage-femmes, was problematic. Except for one isolated case where the M.D. and the sage-femmes worked well together, the doctors often severely limited the activities of the sage-femmes, by assigning them purely clerical duties. This restricted their number and reduced the quality of the family planning services. It was also discovered that several of the M.D.s and the sage femmes involved in the program knew very little about family planning.

Other obstacles faced by the program in the three project locations included: transport difficulties, which limited the scope of action for the animatrices who traveled with the mobile teams; difficulties in motivating MSA officials to add family planning services to their other activities; a lack of cooperation with some MSA officials who, for example, often did not tell the delegués about a midwife departure, transfer, or leave, which left dispensaries without personnel for family planning services; and lastly, an absence of physician participation in family planning activities due to a lack of time or motivation. As a result, most peri-urban services reverted to coverage by mobile teams.

By 1983, contraceptive prevalence in the peri-urban areas was reported to be high. According to the Contraceptive Prevalence Survey conducted in 1983, 34 percent of the women of reproductive age were using modern contraceptive methods.⁴ Much of the increase in prevalence is attributable to an increased role of the private sector in providing contraceptive services.

3. Distribution of Contraceptives to the Private Sector

Beginning in 1975, the government of Tunisia set up a program whereby all sales of oral contraceptives to private pharmacies were subsidized through the ONFP and administered

⁴ Tunisia CPS, Westinghouse, 1983

through the Central Pharmacy of Tunisia. A review of this program indicated that nearly three times as many oral contraceptives were distributed to the private sector than to the public sector and that the bulk of these sales were in the larger cities. Because of the success of this distribution scheme, the intensified program called for an acceleration of efforts directed at further expanding the contraceptive sales not only in the larger cities, but in smaller towns and rural communities, as well.

As part of the accelerated commercial distribution program, a comprehensive plan was designed to include: an overall marketing strategy, the establishment of bulk and wholesale distribution schemes, the training of pharmacy personnel in the contraindications of pill use, the packaging and displaying of materials, and the development of linkages with other components of the family planning program.

To carry out this program, a part-time pharmacist was hired. Her principal responsibility was to create a workable national distribution strategy. One of the achievements of the first year was the implementation of a new procedure whereby quarterly reports, which included all oral contraceptive sales throughout the country, were completed by the pharmacists and sent to the Central Pharmacy.

In 1982, responsibility for the distribution of the contraceptives to the private pharmacies was transferred to the regional delegués. Each delegué was given the responsibility of canvassing the pharmacies in his/her gouvernorat, resupplying the pharmacies when necessary, and distributing information on follow-up care. This new system served the dual purpose of providing more accurate knowledge of what contraceptives were being sold, and improving client follow-up. By the end of the first year, this system was in place in Sousse, Sfax, Jendouba, Gabes, and Tunis. In 1983, two additional strategies were developed to improve the commercial distribution system: a new color-coded packaging was introduced for oral contraceptives, and a new distribution scheme was implemented that enabled the ONFP to monitor the sales of every pharmacy in every locality. In addition, an informative flier, describing the correct use of the pill and possible side effects, was designed with the assistance of the Communications Division of the ONFP and inserted into each pill package sold.

To further increase the pharmacists' involvement in the program, a workshop for pharmacists was held to train them in the correct disbursement of oral contraceptives and inform them of family planning services. Sixty-eight pharmacists attended, and the workshop was such a success that follow-up sessions were later organized.

During the period of the program, the distribution of contraceptives to the private sector increased enormously. By the end of the year, the program had been fully implemented in all of the regions throughout Tunisia and the number of pharmacies carrying pills had risen from a handful in 1981 to 810 in 1986. According to the 1983 CPS, 68 percent of the women using oral contraceptives resupply themselves through the private sector and 46 percent of the women had first obtained the pill from an ONFP clinic. Similarly, 64 percent of the women using condoms and 80 percent using foam or tablets resupply themselves through the private sector. Forty-nine percent of condom users and 10 percent of foam and tablet users attended public services for their initial visit.

In 1985, USAID decided to inject new funds into the ONFP and introduce a new social marketing scheme. Unfortunately, the Council funded project to the private sector was put on hold and although supplies continued to be delivered to the rural pharmacies, supervision, packaging schemes, and training were stopped.

B. Information, Education, and Communication

Prior to the Population Council's involvement, the Information, Education, and Communication (IEC) activities organized by the ONFP had focused on a program of education and

sensitization directed at educated urban populations, policymakers, and government officials throughout the country. This strategy was implemented primarily through: radio and TV programs, articles in the press, round-tables and seminars for journalists, regional officials, and other groups in various institutions; brief educational programs for health workers; and the dissemination of general family planning information through written pamphlets and brochures.

As part of the 1982-1986 ONFP program, the focus of the IEC efforts was to be expanded and re-directed to reach the rural and peri-urban populations through a variety of approaches. These approaches included: (1) the effective utilization of several categories of rural outreach workers to provide, through person-to-person techniques, information and education appropriate to the needs and concerns of contraceptive users and potential users; (2) the development and dissemination of a series of simple audio-visual and educational materials appropriate for use with illiterate and semi-literate people; and (3) the close coordination of IEC efforts with other program efforts directed at new rural and peri-urban target regions. Although the major emphasis of the new IEC program was to be on the development and implementation of rural activities, the project continued to provide support to the educational and media campaigns conducted within the urban areas.

The first activity implemented as part of this component was a management evaluation of the ONFP's Communication division. This involved reviewing the day-to-day operations of the division, including the activities of the Information and Education Services, and recommending ways to improve the division's administrative and operational methods and procedures. The evaluation resulted in a reorganization of the division.

As part of the new rural and peri-urban IEC activities, priority was given to interpersonal outreach. Through regular visits to homes and health facilities within these areas, the animatrices were trained to work directly with the married women of reproductive age to discuss with them their personal attitudes toward contraception and advise them on the use of family planning methods. Originally, these activities started within the framework of a special project for the targeted areas, but as a result of their success, they were expanded in 1982 to the peri-urban areas and the gouvernorats that were not part of the intensified rural program.

To assist the ONFP Communications Division in the planning, production, and testing of photo-illustrated materials, international and national consultants were contracted to provide technical assistance. The materials covered a variety of family planning topics suitable for the rural and peri-urban populations. For example, simple photo-illustrated brochures for

illiterate and semi-literate populations were developed for oral contraceptives, the IUD, female sterilization, and barrier methods. These materials were all extensively pretested by Population Council consultants and ONFP staff, and were then disseminated to education personnel as well as to potential and actual contraceptive users.

In addition to the brochures, a resource guide covering family planning topics was prepared for the animatrices. The purposes of the guide were: to provide reference materials, to serve as a document on which education could be based, and to provide a resource for newly-recruited animatrices who had not received formal pre-service training. In addition, a five-to-ten-minute cassette tape covering contraceptive methods was also developed and tested. As a result of ONFP's material development activities, the animatrices were provided with a fairly comprehensive collection of visual materials including: the photo-illustrated folders on IUDs, the pill, tubal ligation, and secondary methods; a demonstration case with samples of contraceptive products; and the practical resource guide in the form of a loose-leaf binder. These materials have since become the basic materials for all animatrices working in the ONFP's programs.

Training staff in effective IEC skills was another major component of the IEC program. Throughout the five years

workshops were conducted for staff of the ONFP, the Ministry of Social Affairs, the Ministry of Health, and the regional delegates on the effective use of IEC techniques and materials. Training curricula for sage femmes, animatrices, and management were developed and in-service training was provided to all groups on an ongoing basis. In addition, the three top employees in the management staff of the Communications Divisions attended a three-week training course in health communication techniques, including the use of video equipment, and social marketing principles at Tulane University.

Throughout the five years of the project, the ONFP continued to use radio, television, and newspapers to provide medical advice and information on various family planning methods. Since the radio was considered to be the best way of reaching the rural areas, four weekly programs broadcast by various Tunisian radio channels were re-designed to cater more to this population. One disappointment was that the program was not able to fully utilize television as it would have liked. Because many homes in Tunisia have a television, that mode of communication would be ideal for the dissemination of information to educate the public. However, due to political obstacles in obtaining air time, not much was developed for television.

In addition to working with public media, the ONFP also organized educational campaigns and seminars to create a socio-

political environment favorable to family planning, strengthened cooperative relationships with interested parties, and increased the participation of economic and socio-cultural organizations in family planning programs. Examples of these activities included: meetings accompanied by film shows, small workshops and educational sessions, and group panels and two major colloquia on population issues. The first was a national seminar held in April 1985 entitled Colloque National sur la Fecondité en Tunisie and attended by over 300 people involved in family planning in Tunisia. Thirty papers were presented covering such topics as demographic indicators, bio-medical aspects of contraception, contraceptive use, and socioeconomic and legal issues regarding family planning. As a follow-up to this national conference, an international Congrès Maghrebien sur la Fertilité et la Contraception was held in October 1985. Over 40 participants, including researchers from Morocco, Algeria, France, and Belgium, made presentations to an estimated 300-350 attendees. To help disseminate information of this type, the ONFP has also begun publishing a quarterly review, the first edition of which came out in December 1985.

Some of the difficulties identified by the ONFP regional staff in carrying out the group educational activities included: insufficient backstopping on the part of the central staff in the organization and execution of the program; limited availability of qualified lecturers, panelists, and other trained IEC

personnel at the local level; and inadequate quantity and quality of didactic and audio-visual support material.

During 1985, the main thrust of the IEC activities under the Population Council's program was to have been the development of a new social marketing strategy for Tunisia. In order to design this strategy, a consultant, Richard Manoff, was brought in and a proposal was developed. However, in February, just as this proposal was to be implemented, the Council's social marketing initiatives were put on hold. The delay resulted from USAID's new guidelines to review bilateral aid. The focus of this new assistance included many of the same processes and activities outlined by the Population Council's social marketing program. As a result, the ONFP decided to delay implementation of any social marketing initiatives until the combined content of the bilateral package was determined.

C. Research and Evaluation

The research and evaluation component of the Population Council's program had three objectives: (1) to increase the capacity of the ONFP's Research Division to carry out both demographic and operational research; (2) to implement a number of operational research projects and management evaluation studies (études ponctuelles) in order to measure the

effectiveness of the program's various strategies and interventions; and (3) to continue to support and improve the ONFP's management information system and collection of service statistics.

1. Training

During the first two years of the project, Council consultant Dr. Robert Lapham, a renowned demographer and expert in research methodology, provided extensive technical assistance and training to the Research Division. Over this two-year period he made over eight trips to Tunisia to conduct workshops for the Research and Evaluation Division covering topics such as sampling, calculation of prevalence rates, evaluation, and operations research. In 1983 Dr. Lapham served as team leader on the joint USAID-Government of Tunisia Midterm Evaluation of the bilateral assistance program. After 1983 Dr. Lapham was no longer able to serve on the project, having accepted a full-time position as Director of the Demographic and Health Surveys. From 1983 on, Francine Coeytaux, Staff Associate with the Council and Tunisian Program Coordinator, provided technical assistance to the Research Division. Other consultants who provided technical assistance included Dayl Donaldson, an expert in Health Economics who assisted in the design and implementation of the cost-effectiveness study, and Dr. Scott Moorland from the Research Triangle Institute who provided computer training.

2. Research Studies

Over the five-year period, a number of operations research projects and management evaluation studies were conducted. The purpose of these studies was to provide rapid feedback to management, in order to determine whether the approaches used best satisfied the needs of the different population groups and, at the same time, remained cost-effective. Studies implemented include: (1) a baseline socio-demographic profile of the target delegations in rural areas; (2) a study of needs of peri-urban populations, and socioeconomic and demographic characteristics of recent migrant groups; (3) an operations research study to assess the impact of educational outreach on use of services; and, (4) and a cost-effectiveness evaluation of the mobile program.

Rural Baseline Socio-Demographic Profile - During 1982, a baseline socio-demographic survey was implemented to provide a profile of the populations within the 23 delegations targeted for the expanded rural outreach program. To collect the information for this survey, household questionnaires for both men and women were developed. Women were interviewed about basic demographic information as well as more specific information covering post-pregnancy and family planning topics. Topics included: the contraceptive method presently being used by the women, if any; the date and place of last delivery; the duration of last

breastfeeding; the contraceptive methods used following the last pregnancy; and so forth. The men were asked about their attitudes toward providing schooling for their children, opinions on women working outside the home, and feelings toward family planning.

The data were analyzed to determine the socioeconomic conditions in these areas, the family planning acceptor rates, and the user attitudes and needs. As a result of the study, the extent of family planning information and services was charted for each region and used to design future program activities.

Peri-Urban Study - In 1982, baseline studies were carried out in Sousse and Sfax in order to identify the Family Planning and Maternal and Child Health (FP/MCH) needs within these two peri-urban populations. As part of another peri-urban study implemented in Tunis, an analysis of secondary data was used to identify the target population. In both cases, the research was undertaken to gather essential socioeconomic information on this rapidly growing segment of the population. The results were then used to establish family planning objectives, determine the extent of coverage by existing services, and provide the basis for the design and evaluation of the expanded program.

IEC Studies - Two studies evaluating the IEC efforts of the animatrices in Mahdia and Siliana were carried out in 1985. In

both studies, the secondary data used as part of the analysis indicated that there was a marked increase in service statistics following the introduction of the IEC component. It was also noted that the impact of these activities had a greater effect on service delivery than did increasing the number and/or access of services. The results of the Mahdia study were presented during an American Public Health Association Meeting and have since been published in Studies in Family Planning.⁵

Cost-Effectiveness Evaluation of the Mobile Units - The major undertaking in the research program was the cost-effectiveness evaluation of the 63 mobile units that provide family planning services throughout the rural areas of Tunisia. The objectives of the study were to estimate the cost-effectiveness of the mobile units, analyze the factors that influence cost-effectiveness, and compare the effectiveness of the mobile units with that of the fixed centers.

Using the service statistics collected from every mobile unit for the year 1985, the study measured four components of output: total number of visits, number of new acceptors, number of gynecological visits, and two estimates of couple-years of

⁵ "The Role of Information, Education, and Communication in Family Planning Service Delivery in Tunisia," Francine Coeytaux, Taofik Kilani, and Margaret McEvoy, Studies in Family Planning 18, 4 (1987): 229-234.

protection, or CYP (with and without tubal ligations). Cost-effectiveness was then measured by the cost per visit and cost per CYP.

The study results highlighted the importance of the mobile units within the ONFP's overall program. In 1985 the units produced one-third of the output of the national program, serving 868 service sites dispersed throughout the rural gouvernorats of Tunisia. In some gouvernorats the mobile units contributed as much as 74 percent of program output.

The median cost per visit was US\$4.93 and the median cost per CYP (including tubal ligations) was US\$18.66. Salaries accounted for over half of the operating costs of the program, and vehicle maintenance and fuel accounted for 17 percent of the cost.

The variables found to be significant in explaining the variance in cost-effectiveness between units include: population density, literacy of population, number of centers served by a unit, the frequency with which the centers were served in a month, and the number of days the unit was active during the year. The higher the population density and literacy, the lower was the cost per unit of output. Similarly, the more centers served and the more often they were served in a month, the lower was the cost per output.

The study also compared the cost-effectiveness of the mobile clinics to that of the mobile teams and the mobile units with the fixed centers (see results of study for more detailed information). The results of the study indicate that serving more dispersed and rural populations costs more than serving agglomerated, better educated, and easier-to-reach populations. As long as a primary objective of the rural program is to provide services to under-served populations, and as long as the ONFP continues to depend primarily on clinic-based delivery of family planning services, the mobile teams appear to be the most feasible and cost-effective model to employ. Based on these findings, specific recommendations were made on how to improve the cost-effectiveness of the existing mobile units.

The results of the study were extremely well received both by the ONFP and USAID and have already helped management in determining ways to expand services and cut costs.

The biggest obstacle encountered in implementing the research component was the high turnover of staff. By the end of the five years virtually every one of the original researchers had left, with the best ones leaving first to take better positions in either the private sector or with the Arab League. Much of the exodus was due to a dissatisfaction with the changing

roles, depending on who was the President Director General (PDG), and, as a result, not being able to put their skills to use. This high turnover proved not only to be very disruptive to the ONFP's operations but also represented a severe drain of their capable resources.

3. Management Information Systems

Under the program, the ONFP's management information system was improved. Five IBM ATs and XTs and substantial training in the use of the computers and various software were furnished under the project with assistance from the Research Triangle Institute, a sub-contractor of the project. The finance records and the auto-parks records were computerized and staff from the finance department, management, and the research division were given several weeks of instruction in the operation and maintenance of the hardware and use of the following software: PC DOS, Lotus 123, dBase III, and SPSS/PC. The service statistics were transferred to the new system and, as a result of the cost-effectiveness study, the ONFP now has the capacity to measure the output of the program in terms of couple-years of contraceptive protection.

One way in which the computerized management information system could be improved is to decentralize the operation and

allow each division direct access to the computer terminals. The terminals are presently centralized in one main area and are operated by a specialized staff. Such a configuration does not allow the management staff or the researchers the full flexibility that the computers could provide, and depends heavily on the two programmers who work in the computer unit.

D. International Training

As part of the original project proposal, short-term training, participation in scientific meetings, and observation visits were planned. The objective of these activities was to provide ONFP officials with an opportunity to learn about various family planning programs, and rural outreach and community-based distribution (CBD) programs. In order to assist ONFP in the development and implementation of their own expanded rural strategies, a limited number of trips to international conferences were made to present papers (the rural coordinator attended the American Public Health Association Meeting in Washington in 1986) and to assure an exchange of relevant family planning information.

In 1982, three family planning officials, an ONFP administrator, and the Chief of the Medical Division from the Gas and Electric company attended four weeks of training in the United States on management and implementation techniques for

family planning programs. During this same year, a one-day visit to the Population Council office in New York was arranged for an ONFP medical division staff member who was returning from a Johns Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO) course in Baltimore. In August 1983, three ONFP staff members (the Director of IEC, the Chief of Information Services, and the Head of Audio-Visual Services) attended a three-week training program at Tulane University. The objective was to provide exposure to recent developments in health communication and social marketing techniques. The activity also provided the participants with training in the use of video equipment in order to develop audio-visual presentations.

A visit to various family planning programs in Thailand was organized in 1982 for the Advisor to the PDG, who was enroute to the International Union for the Scientific Study of Population (IUSSP) meeting in Manila. A year later, the Director of IEC was sent to Colombia, South America, to observe the Profamilia project and, in 1984, the director of the Ariana Clinic traveled to Egypt to attend a symposium on Norplant^{R 6} contraceptive implants.

Finally, in 1986, three members of the research division and the head statistician traveled to Research Triangle Institute in

⁶ NORPLANT^R is the registered trademark of the Population Council for subdermal contraceptive implants.

North Carolina for two weeks of intensive training in the use of SPSS for the cost-effectiveness study.

III. PROGRAM MANAGEMENT

The project was managed from the New York Office of the Population Council. George Brown, Vice President and Director of International Programs, who lived several years in Tunisia, assisted in the design of the project. Margaret McEvoy was the Project Director and provided extensive technical assistance and supervision (30 percent of her time was dedicated to this project). Jeanne Stillman and Francine Coeytaux served as Project Coordinators (Ms. Coeytaux replaced Ms. Stillman as Project Coordinator in late 1983) for 80 percent of their time. In addition, a number of Council consultants provided over a year's worth of consultancies in areas such as IEC (Dr. Jose Maria Blanc and Ms. Maria Elena Casanova), social marketing (Mr. Richard Manoff), research and evaluation (Dr. Robert Lapham and Ms. Dayl Donaldson), and computer training (Dr. Scott Moreland). Throughout the program the Council maintained close ties with the Tunisian Ministries involved in family planning activities, and other donor agencies operating in the country. Through informal sharing of information and/or exchange of reports, useful contacts were maintained with the International Planned Parenthood Federation (IPPF), Association for Voluntary Surgical Contraception (AVSC), United Nations Fund for Population Activities (UNFPA), Program for International Training in Health (INTRAH), JHPEIGO, Westinghouse Health Systems, and University Research Corporation. Yearly meetings were held with the major

USAID collaborative agencies, namely, INTRAH, JPEIGO, and AVSC, with the Council playing the leading role in the coordination of these agencies' work in Tunisia. This resulted in very effective collaboration and reduced duplication of efforts and resources.

Management of the project was not always easy. During the five-year period there were two changes in the top management of the ONFP. Each new PDG had his/her own goals, political agendas, and management styles. Each change resulted in turnover of key personnel. In the same five years, the ONFP's tutelage also changed twice; first it went from the MOH to a newly created ministry, the Ministry of the Family and the Promotion of Women, and then it went back to the MOH when the new Ministry folded. Again, each agency's tutelage brought with them their own agenda. The MOH wanted integration with Basic Health Services, the Ministry of the Family and Promotion of Women wanted family planning to be part of a broader development agenda. Both ministries wanted the ONFP's resources.

Changes also occurred within the USAID/Tunis mission. There was virtually a complete turnover in staff including the Mission Directors and two Population Officers. More significant to the project's operation, though, was USAID's change in its policy to fund Tunisia. In the fall of 1985, the US government and the government of Tunisia signed a new bilateral agreement that resulted in a new influx of funds and activities, and changed the

priorities from the expansion of rural programs to social marketing and mass media IEC. USAID's decision to continue funding to Tunisia had a number of implications for the Population Council's program, whose original objectives had been to phase out financial assistance to Tunisia. First, it became more difficult to stress the need for cost-reduction. The need to seek more cost-effective ways of delivering the services was no longer viewed as critical by the ONFP, since they could now expect even greater financial support than previously provided.

Second, given that the main thrust of the bilateral program was to be IEC and social marketing and that there would no longer be funding for the rural program, it was decided that the Council's 1986 budget for IEC activities would best be spent in strengthening the rural activities rather than implementing small-scale IEC projects.

In spite of these political upheavals and a severe slump in the Tunisian economy, which resulted in the freezing of funds to all sectors including the ONFP, the project has successfully carried out its original objectives and the demographic goals of the VI year plan have been surpassed.

IV. PROGRAM ACCOMPLISHMENTS

Specific accomplishments of the Tunisian family planning program during this period include:

1. The contraceptive prevalence rate went from 23 percent in 1980 to 42 percent in 1983 (35 percent of modern contraceptives) and 90 percent of women know about the existence of modern contraception. The national growth rate fell from 2.7 (1979) to 2.3 (1983).⁷
2. The ONFP respected its mandate to progressively take on recurring costs such as personnel, and by year four had assumed responsibility for almost all salaries. Between 1982 and 1985 government support to the ONFP increased from 56 percent to 85 percent.
3. The Research and Evaluation division, although it has seen almost complete turnover of personnel, is computerized and turning out sophisticated monthly analyses of program results, which are received and analyzed regionally. They are then utilized to improve program performance.

⁷ Although neither the Council nor the ONFP can take credit for the rise in contraceptive prevalence, the expansion of services had an impact on the increase of contraceptive use in previously underserved areas.

4. The contraceptive distribution program, which began in 1981 with a few pharmacies in Tunis, now has nearly 810 pharmacies in Tunisia, all administered by the regional delegués (although the program came to a standstill in 1986). Twenty-five percent of couples who practice contraception go to the private sector.
5. The use of animatrices as outreach workers has been highly successful and there are now over 100 working throughout Tunisia, assuming a crucial role in the overall program.
6. Materials for nonliterate, radio and television spots, and promotional materials were developed and widely distributed and the ONFP now has the capacity to develop and produce their own materials.
7. Decentralization and improved management at the regional levels, despite the turnover of delegués, has been achieved.
8. Availability of family planning services to the rural areas has greatly increased. There are now 868 locations throughout the country where ONFP family planning services are available. Mobile units

provide 30 percent of the national program's services, and in some gouvernorats, 78 percent of services.

9. A system of collaboration between USAID and Tunis and the cooperating agencies initiated at the beginning of this contract was unique in developing a united effort in problem identification and design of solutions.

V. FUTURE DIRECTIONS

Tunisia now has a sophisticated system of family planning service delivery to the rural areas. Improvement and expansion of the program no longer depend on the continued expansion of clinical services, but rather requires two new strategies: (1) community-based distribution of contraceptives through the animatrices, and (2) an expansion of the choice of methods available throughout the public program.

The mobile program, with its existing cadre of animatrices working in the communities, is in an ideal position to begin providing community-based services to supplement the clinic services. At present, the animatrices are not allowed to

distribute contraceptives when making home visits.⁸ This means that the animatrices only indirectly affect the output of the program insofar as they motivate women to use the services. Were they trained to supply the women with contraceptives, they would contribute directly to the CYP provided by the program.

Numerous pilot studies conducted by the ONFP in the 1970s tested the use of animatrices to provide oral contraceptives to women in their homes. The studies showed that trained women from the community could safely and effectively distribute oral contraceptives to women in their homes, and that such outreach resulted in a substantial increase in contraceptive use.⁹ Nonetheless, due to pressures from the medical establishment, primarily a result of concerns about the medical side-effects of oral contraceptives, the ONFP has to date been hesitant to move toward this model of service delivery. The ONFP should reconsider the strategy of community-based distribution of contraceptives by animatrices as one that could greatly increase both the cost-effectiveness of the mobile units and the contraceptive coverage of the program as a whole.

⁸ In 1986, the animatrices of the rural program have begun to distribute vaginal foam and condoms on a pilot basis but are not allowed to resupply or distribute oral contraceptives.

⁹ Elizabeth Maguire, A. Way, and M. Ayad, "The Delivery and Use of Contraceptive Services in Rural Tunisia," International Family Planning Perspectives, 8, 3 (1982): 96-101.

A re-evaluation of the health personnel's bias against oral contraceptives could also benefit the program. Under the current policy, most midwives are reluctant to prescribe the pill because they believe it is not as safe as other methods and requires extensive follow-up that is difficult to provide in the rural areas. In addition, the general impression of the providers is that rural, often illiterate women are not capable of using the pill correctly. These perceptions account in part for the low provision of oral contraceptives by the public sector program (only 4 percent of the CYP provided by the mobile units in 1985 was attributed to the distribution of oral contraceptives).

However, increases in pharmacy sales of oral contraceptives and the results of the 1983 CPS contradict the assertion that Tunisian women will not use the pill. The CPS showed that there is a demand for oral contraceptives and that the demand is not being met by the public sector program. While private sector sales of oral contraceptives may, in the long run, be the most efficient way to proceed, there is no doubt that the public program, and more specifically the mobile units, could greatly benefit from the promotion of oral contraceptives as an important method among the choice of methods being provided. To date the Tunisian program has primarily emphasized termination of child-bearing. It is safe to assume that a greater focus on spacing could result in increased contraceptive prevalence.

Finally, reducing the constraints that presently exist to the adoption of a method would result in greater output. Presently, a woman can have an IUD inserted or the pill prescribed only during menstruation.¹⁰ This policy poses enormous problems for women in regions served only once or twice a month by a mobile unit. The scheduled clinic days rarely coincide with the time of the month a woman is eligible for an insertion or a prescription. As a result, women often leave the clinic without a method. A more flexible application of these protocols would reduce the demands placed on women and undoubtedly result in a greater number of contraceptive users.

Despite a number of obstacles and set-backs, the program continues to expand, but much remains to be done in order to serve the needs of Tunisian couples. The Tunisian Family Planning Program, however, continues to be the model for other countries in the region and one that has demonstrated many pioneering and innovative approaches to satisfying the family planning needs of its people.

The ONFP has established a management capacity that should enable it to provide new policy and program approaches.

¹⁰ This policy is to insure that the woman is not currently pregnant and, in the case of the IUD, to make insertion easier.

APPENDIX

LIST OF REPORTS AND PUBLICATIONS

The following documents were generated during the course of the project and are available at the Population Council upon request:

Trip Reports written by Population Council staff and consultants after every visit to Tunisia.

Annual progress reports submitted to USAID by the Population Council on a yearly basis.

Coeytaux, Francine and Dayl Donaldson. 1986. "Evaluation of Mobile Family Planning Services in Tunisia." Paper presented at APHA Conference, 30 September 1986.

Evaluation of Mobile Family Planning Units in Tunisia, Coeytaux, Francine; Donaldson, D.; Aloui, T.; Fourati, H.; Kilani, T. Report presented to USAID, on April 29, 1987. Also published in French as: Evaluation des Unités Mobiles de Planning Familial en Tunisie.

Coeytaux, Francine, Taoufik Kilani, Margaret McEvoy. "Outreach: A Luxury or a Necessity? A Quantitative Look at Mobile Family Planning Services in Tunisia." Paper presented at APHA Conference, 19 November 1985.

Coeytaux, Francine, Taoufik Kilani, and Margaret McEvoy. "The Role of Information, Education, and Communication in Family Planning Service Delivery in Tunisia." Studies in Family Planning, 18, no. 4 (July/August 1987): 229-234.

Coeytaux, Francine and Margaret McEvoy. 1984. "Opportunities for operations research in evaluation innovative strategies: The case of Tunisia." Coeytaux, Francine and Margaret McEvoy. 1984. Paper presented at APHA Conference, 13 November 1984.

Lecomte, J., A. Bachbaouab, H. Chekir, M. Khiri, R. Lapham, and M. Youzabachi. GOT/USAID Evaluation of the Tunisian Family Planning Program, 1984.

McEvoy, Margaret and Francine Coeytaux. 1984. "Increasing contraceptive accessibility in Tunisia: The private sector potential." Talk presented at NCIH Conference, 11 June 1984.