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**CLOSE-OUT REPORT**  
**OF**  
**PAKISTAN BUY-IN**

**TO THE**  
**OPERATIONS RESEARCH AND TECHNICAL ASSISTANCE**  
**STRATEGIES FOR IMPROVING FAMILY PLANNING SERVICES**  
**IN ASIA AND THE NEAR EAST PROJECT**

**USAID Contract Numbers:**  
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**Period of Buy-in:**  
**September 1991 - June 1993**

**THE POPULATION COUNCIL**

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## LIST OF ACRONYMS

<b>ANE OR/TA</b>	Asia Near East Operations Research/ Technical Assistance
<b>AVSC</b>	Association for Voluntary Surgical Contraception
<b>CPR</b>	Contraceptive Prevalence Rate
<b>FP</b>	Family Planning
<b>FWC</b>	Family Welfare Centre
<b>FWW</b>	Family Welfare Worker
<b>GOP</b>	Government of Pakistan
<b>IEC</b>	Information, Education, and Communication
<b>IUD</b>	Intrauterine Device
<b>MIS</b>	Management Information System
<b>MPW</b>	Ministry of Population Welfare
<b>MSU</b>	Mobile Service Unit
<b>NGO</b>	Nongovernmental Organization
<b>NGOCC</b>	Nongovernmental Organizations Coordinating Council for Population Welfare
<b>OR</b>	Operations Research
<b>PW</b>	Population Welfare
<b>PWD</b>	Population Welfare Department
<b>TA</b>	Technical Assistance
<b>UNFPA</b>	United Nations Fund for Population Activities
<b>USAID</b>	United States Agency for International Development
<b>VBFPW</b>	Village-based Family Planning Worker

## **EXECUTIVE SUMMARY**

### **PROJECT OBJECTIVES**

The Population Council's five-year Asia and the Near East Operations Research and Technical Assistance Project (ANE OR/TA), funded through the U.S. Agency for International Development (USAID), began in July 1990; partially due to USAID/W restriction on travel during the Gulf War, the project did not get underway in Pakistan until 1991. The ANE OR/TA Project primarily seeks to improve national family planning (FP) programs through the use of operations research (OR) as a tool for managers.

In line with the Government of Pakistan's (GOP) Eighth Five-Year Plan (1993-1998) for Population Welfare, the Buy-In Project in Pakistan aims to:

- (1) increase the accessibility, quality, and cost-effectiveness of public- and private-sector family planning activities;
- (2) improve the ability of program managers to make decisions regarding service delivery and program administration, based on careful review and assessment;
- (3) widely disseminate results of such reviews to help achieve needed changes in program implementation; and
- (4) enhance the institutionalization of an OR orientation and the development of specific OR skills in government and NGO family planning organizations.

### **INSTITUTIONALIZATION OF OR**

The Population Council, working in close collaboration with the Ministry of Population Welfare (MPW), has been successful during the less than two-year period of USAID/W funding of family planning OR in institutionalizing the concept and implementation of OR in the ongoing and expanding FP service program. Work on increasing institutionalization has continued through the last half of 1993 with the Council's own core funds and UNFPA funding. It will continue in 1994 with additional multilateral and bilateral donor agency support.

### **PROJECT ACTIVITIES**

With the support of two Buy-Ins from USAID/Pakistan (1 September 1991 - 30 June 1992 and 1 July 1992 - 30 June 1993), the Population Council implemented four major OR activities and five OR Workshops in concert with the Ministry of Population Welfare and selected NGOs, as follows:

- (1) Hired a full-time Resident OR Advisor to the MPW.

- (2) Launched three large-scale operations research subprojects:
  - i) National Situation Analysis of Family Welfare Centres;
  - ii) National IUD Follow-up Study; and
  - iii) Evaluation of Contraceptive Service Delivery through Mobile Service Units (MSUs) in Pakistan.
  
- (3) Conducted five national operations research workshops:
  - i) Introduction to OR in FP (Lahore);
  - ii) Operations Research Workshop (Peshawar);
  - iii) Data Analysis Workshop (Bhurban);
  - iv) OR and Evaluation of Training and Supervision of Family Planning Service Delivery Personnel (Islamabad); and
  - v) Male Participation in Family Planning Workshop (with AVSC, Lahore).

In addition, in close concert with the above Buy-In activities, the Council provided the following through the centrally-funded ANE OR/TA Project:

- (1) Resident advisory services (which took up approximately one quarter of the time of the ANE OR/TA Project Director);
  
- (2) Technical assistance (TA) and funding for three OR subprojects:
  - i) Study Visit of Village Workers in Bangladesh for High-Level Pakistani MPW Officials;
  - ii) Diagnostic Study of Strengths and Weaknesses of Major NGOs Working in the FP Service Delivery System; and
  - iii) Male Attitude and Involvement in Family Planning Study.
  
- (3) Two smaller workshops for NGO and GOP staff to discuss project activities of FP mobile service units.

In addition to the above, a substantive and concerted TA advisory input was directed toward creating awareness in the GOP (federal and provincial levels), NGOs, and the international donor community of (i) the existing unmet need for FP services (as per the DHS survey) and ways to meet it; (ii) the lack of rural outreach of the existing FWCs (as per the Population Council's (PC) situation analysis); (iii) the unrealistic over-reporting of contraceptive acceptors (as per PC's IUD study); and (iv) the potential for using, as in Bangladesh, village-based workers who are married, have children, are educated, and living in the village in which they work. These efforts, combined with the strong encouragement of MPW and provincial PWD directors, USAID, as well as the availability of part-time advisory services of the ANE OR/TA regional project director, enabled the Council to provide considerable on-site TA on designing, implementing, and monitoring the emerging village-based FP worker program which could expand services markedly over the next five years. The immediate outputs and the MPW's rapid responses to correct problems have been considered an example of effective use of OR by the international donor community.

## WHAT WAS LEARNED/ HOW IT WAS USED

Selected major findings of Buy-In supported subprojects and remedial actions taken based on these findings include the following:

### (1) National Family Welfare Centre Situation Analysis

At the request of the MPW, the Population Council carried out a situation analysis on 100 FWCs, chosen to represent all 1,288 FWCs in Pakistan. The study was designed to assess the availability, functioning, and quality of services.

To gather this information, three teams were trained. These teams traveled 30,000 km. during 10 weeks, to the 100 FWCs. Each team spent a full working day at each FWC--arriving unannounced before the centers opened and leaving after closing. They checked contraceptive supplies and equipment, inspected facilities, observed client counseling sessions, and interviewed both staff and clients. Quality was assessed by considering method choice, provider-client information exchange, provider competence, client-provider relations, follow-up mechanisms, and the range of services.

For the first time, information was obtained on a truly representative set of FP service points, by independent observers. In summary, the study found that the FWCs are underperforming. Findings included: a low caseload, inadequacies of facilities, some stockouts, lack of educational materials, insufficient outreach, unnecessary medical and social barriers to providing contraception, as well as, in some cases, insufficient information to clients about contraindications to contraceptive use and possible side-effects.

These findings have been reviewed by the MPW. To date they have been used in a variety of ways, including an in-house MPW seminar to review findings and discuss remedial actions; validation of the findings through a five-day observation of nine FWCs; specific orders to provincial and district-level officers regarding removal of unneeded constraints to contraceptive prescription; discussion at regional training institutes and planning in-service training; and modifications of the village-based FP worker training curriculum. A follow-up national workshop on quality of care based on the findings of this and other OR subprojects conducted by the Council was held for federal/provincial/district PW staff and NGOs on November 21-24, 1993 with Council core funding.

### (2) National IUD Follow-up Sample Survey

The Council carried out this survey at the request of the MPW. The nationally representative random sample used was drawn from acceptor lists at 90 clinics (70 GOP, 20 NGO) located in rural and urban areas throughout Pakistan. Field work was begun in October 1992 and completed in March 1993.

Overall, 68 percent of the IUD acceptors interviewed reported continuing use of the IUD. One-year retention rates were 72 percent for Copper T users and 64 percent for Lippes Loop users.

Findings of the considerable discrepancy between IUD service statistics and field verification (4:1) were instrumental in the Federal Ministry's decision to suspend the IUD target system and review other appropriate methods of evaluating performance.

Findings also recently have made for more realistic calculations on contraceptive supply needs from donors.

(3) Advisory Evaluation TA to Village-Based FP Workers Pilot Project

The Council's contribution has included:

- (1) technical assistance in the selection, training, and supervision of the first cadre of 766 village-based family planning workers (VBFPWs) and 45 supervisors in Punjab;
- (2) pre- and post-training surveys in Punjab and the Northwest Frontier Province (NWFP) of the workers' sociodemographic background; knowledge, attitudes, and practice of family planning; utilization of Family Welfare Centres; contraceptive record-keeping skills; and their knowledge about contraceptive technology;
- (3) (a) in-depth monitoring of home visiting procedures, counseling, and record keeping of workers in 22 villages in three tehsils of Rawalpindi district (Rawalpindi, Kahuta, Gujar Khan). A similar monitoring exercise in two other Punjab districts, Gujranwala and Faisalabad, is now underway; (b) a survey of 426 eligible women living in the 22 workers' villages to collect data on their socio-economic backgrounds, knowledge and practice of family planning, frequency, content, and their assessment of the worker's interaction with them; and
- (4) a ten-day national workshop on evaluation of training and supervision, through which key master trainers were orientated to field problems experienced by newly recruited VBFPWs (and FWWs) and ways in-service training could help.

These interventions have led to several program actions, including expediting VBFPW salary payments and contraceptive supply shipments, as well as reviewing recruitment, training, and supervision procedures. As indicated in the aide memoire of the World Bank Population pre-appraisal mission (8 November 1993) regarding progress in the VBFPW program:

[the careful monitoring which the Ministry, in conjunction with the Population Council, is undertaking is proving to be most valuable. (p. 12)]

Some larger lessons about how to conduct effective TA in OR are summarized under the "Lessons Learned" section of the report (pages 28-32).

## **CONCLUSION**

In the past year, the GOP has made a significant policy change in openly and vehemently advocating population control efforts through its public statements and in the mass media. Its enlargement of its FP service activities to trained workers at 1,500 villages with a population of 3,000 or more in 1993 and planned expansion to 12,000 villages by 1998 is evidence of its intent to move from its estimated coverage of 5-10 percent of the rural population to 70 percent by 1998, as part of the Eighth Five-Year Plan. Findings of OR studies carried out by the Population Council in close collaboration with the Ministry of Population Welfare and USAID have been valuable in providing needed empirical data and creating awareness for this expanded effort.

Unfortunately, the ANE OR/TA Project was suspended in Pakistan on June 30, 1993 due to the withdrawal of USAID funds from the country. The Population Council has, however, continued its ongoing OR/TA activities at the request of the Government of Pakistan, with its own core and also UNFPA funding.

# **I. INTRODUCTION**

## **COUNTRY BACKGROUND**

Despite nearly thirty years of family planning programs, high fertility and rapid population growth remain serious barriers to economic development and better health in Pakistan, particularly for women and children. Population growth continues at an annual rate of 3 percent, and the 1990-91 DHS national sample survey indicated that only 12 percent of married women of reproductive age were currently using a family planning method.

## **PROJECT OBJECTIVES**

The Population Council's five-year Asia and Near East Operations Research and Technical Assistance Project (ANE OR/TA), funded through the U.S. Agency for International Development (USAID), began in 1990 in the region and in late 1991 in Pakistan. The ANE OR/TA Project primarily seeks to improve national family planning (FP) programs through the use of operations research (OR) as a tool for managers. In Pakistan, in line with the Government of Pakistan's (GOP) Eighth Five-Year Plan for Population Welfare (1993-1998), the Project aims to:

- (1) increase the accessibility, quality, and cost-effectiveness of public- and private-sector family planning activities;
- (2) improve the ability of program managers to make decisions regarding service delivery and program administration, based on careful review and assessment;
- (3) widely disseminate results of such reviews to help achieve needed changes in program implementation; and
- (4) enhance the institutionalization of an OR orientation and the development of specific OR skills in Government and NGO family planning organizations.

## **PROJECT ACTIVITIES**

With the support of two Buy-Ins from USAID/Pakistan (1 September 1991 - 30 June 1992 and 1 July 1992 - 30 June 1993), the Population Council implemented four major OR activities and five OR Workshops in concert with the Ministry of Population Welfare (MPW) and selected NGOs, as follows:

- (1) Hired a full-time Resident OR Advisor to the MPW.
- (2) Launched three large-scale operations research subprojects,
  - i) National Situation Analysis of Family Welfare Centres;
  - ii) National IUD Follow-up Study; and
  - iii) Evaluation of Contraceptive Service Delivery through Mobile Service Units (MSUs) in Pakistan.

- (3) Conducted five national operations research workshops, including,
  - i) Introduction to OR in FP, Lahore;
  - ii) Operations Research Workshop, Peshawar;
  - iii) Data Analysis Workshop, Bhurban;
  - iv) OR and Evaluation of Training and Supervision of Family Planning Service Delivery Personnel, Islamabad; and
  - v) Male Participation in Family Planning Workshop (with AVSC).

In close concert with the above Buy-In activities, the Council also provided the following through the centrally-funded ANE OR/TA Project:

- (1) Resident advisory services (which take up approximately one quarter of the time of the ANE OR/TA Project Director);
- (2) Technical assistance (TA) and funding for three OR subprojects:
  - i) Study Visit of Village Workers to Bangladesh for High-Level MPW Officials;
  - ii) Diagnostic Study of Strengths and Weaknesses of Major NGOs Working in the FP Service Delivery System; and
  - iii) Male Attitude and Involvement in Family Planning Study.
- (3) Two smaller workshops for NGO and GOP staff to discuss Project Activities of FP MSUs.

In addition to the above, a substantive and concerted TA advisory input was undertaken on creating awareness in the GOP (federal and provincial levels), NGOs, and the international donor community of (i) the existing unmet need for FP services (as per the DHS survey); (ii) the lack of rural outreach of the existing FWCs (as per the Population Council's (PC) situation analysis); (iii) the unrealistic over-reporting of contraceptive acceptors (as per PC's IUD study); and (iv) the potential for using, village-based workers who are married, have children, and are educated and living in the village in which they would work, as in Bangladesh. These efforts, combined with the strong encouragement of MPW and provincial PWD directors, USAID, and the availability of part-time advisory services of the ANE OR/TA regional project director, have enabled the Council to provide considerable on-site TA on designing, implementing, and monitoring the emerging village-based FP worker program. The immediate outputs and MPW adjustments to correct problems have been considered an example of effective use of OR by the international donor community.

Unfortunately, the OR/TA Project was suspended in Pakistan on June 30, 1993 due to the withdrawal of USAID funds from the country. The Population Council has, however, continued its ongoing OR/TA activities at the request of the Government of Pakistan, with its own core funds and UNFPA funding.

## II. SUBPROJECT DESCRIPTION

A description of the specific subprojects follows.

### A. Operations Research Studies

#### Buy-In Funding

#### (1) **Situation Analysis of Family Welfare Centers (FWCs), 1 June 1992 - 31 December 1992.**

**Project Goal:** To increase access to and improve the quality of FP services in Pakistan.

**Project Purpose:** To assess the availability, functioning, and quality of FP services offered at a nationally representative sample of FWCs.

**Design and Implementation:** At the request of the MPW, the Population Council carried out a situation analysis on 100 FWCs, chosen to represent all 1,288 FWCs in Pakistan. The study was designed to assess the availability, functioning, and quality of services.

To gather this information, three teams were trained. These teams traveled 30,000 km. during 10 weeks, to the 100 FWCs. Each team spent a full working day at each FWC--arriving unannounced before the centers opened and leaving after closing. They checked contraceptive supplies and equipment, inspected facilities, observed client counseling sessions, and interviewed both staff and clients. Quality was assessed by considering method choice, provider-client information exchange, provider competence, client-provider relations, follow-up mechanisms, and the range of services.

**Project Outputs:** For the first time, information was obtained on a truly representative set of FP service points, by independent observers. In summary, the study found that the FWCs are underperforming. Findings included: a low caseload, inadequacies of facilities, some stockouts, lack of educational materials, insufficient outreach, unnecessary medical and social barriers to providing contraception, as well as, in some cases, insufficient information to clients about contraindications to contraceptive use and possible side-effects.

These findings have been reviewed by the MPW. To date they have been used in a variety of ways, including an in-house MPW seminar to review the findings and discuss remedial actions; validation of the findings through a five-day observation of nine FWCs; specific orders to provincial and district-level officers regarding removal of unneeded constraints to contraceptive prescription; discussion at regional training institutes and planning in-service training; and modifications of the village-based FP worker training curriculum. A follow-up national workshop on quality of care based on the findings of this and other OR subprojects conducted by the Council was held for

federal/provincial/district PW staff and NGOs on November 21-24, 1993 with Council core funding.

**(2) IUD Follow-up Study, 1 September 1992 - 30 April 1993.**

**Project Goal:** To provide appropriate information to the MPW to monitor IUD use in the national program and improve the quality of FP services offered.

**Project Purpose:** The IUD has played an important role in the family planning program in Pakistan since the mid-1960s. Findings from the 1991 Pakistan Demographic Health Survey (PDHS), however, suggested that despite the large number of insertions reported in recent years, there was no corresponding rise in the IUD prevalence rate among married women of reproductive age. Among the possible explanations for this discrepancy were over-reporting of insertions, under-reporting of the prevalence rate, and a low retention rate.

The objectives of the study, implemented by the Council at the request of the MPW, were to: (1) estimate the actual number of IUD insertions performed from 1 July 1991 to 30 June 1992 at a sample of GOP and NGO clinics; (2) assess the pre- and post-insertion services provided to IUD acceptors, and the acceptors' experience of side-effects, IUD use status, and satisfaction with services; and (3) collect data on the sociodemographic profile and FP knowledge and practice of IUD acceptors.

**Design and Implementation:** The Council carried out this survey at the request of the MPW. The nationally representative random sample used was drawn from acceptor lists at 90 clinics (70 GOP, 20 NGO) located in rural and urban areas throughout Pakistan. Field work was begun in October 1992 and completed in March 1993. Two data collection instruments were used--a list of IUD acceptors and a questionnaire for IUD clients.

Clinic records were verified by tracing and interviewing all selected women who were recorded as IUD acceptors. At the outset, a large variation in reported and actual IUD clients was found. Of the 33,196 IUD cases on the client registers at the clinics, FWC workers identified only 7,824 (or 23.6 percent) as actual IUD acceptors. This proportion varied from 20 percent at MPW clinics to 65 percent at NGO clinics. Accordingly, after some field validation, the list of IUD acceptors as identified by FWC staff, rather than clinic records, formed the basis for the selection of the survey sample of 2,553 IUD acceptors (i.e., "real" cases).

A questionnaire was used to gather data on the pre- and post-insertion IUD services provided to acceptors, and on the acceptors' experience of side-effects, IUD use status, and satisfaction with services. Data were also collected on the sociodemographic profile and FP knowledge and practice of IUD acceptors.

**Project Outputs:** Study findings indicate that 43 percent of the sample of 2,553 women were found to be current IUD users; 20 percent were former users who either had the

IUD removed or the device had been spontaneously expelled, and 4 percent denied ever having had an IUD. The remaining 33 percent consisted of those who could not be interviewed for a variety of reasons.

Overall, 68 percent of the IUD acceptors interviewed reported continuing use of the IUD. One-year retention rates were 72 percent for Copper T users and 64 percent for Lippes Loop users. Quality of care recommendations are being reviewed.

Findings of the discrepancy between IUD service statistics and field verification (4:1) were instrumental in the Federal Ministry's decision to suspend the IUD target system and review other appropriate methods of evaluating performance. Findings also recently have made for realistic calculations on contraceptive supply needs from donors.

**(3) Evaluation of Contraceptive Service Delivery through Mobile Service Units in Pakistan: Diagnostic study, 1 September 1991 - 30 June 1993.**

**Project Goal:** Under the Seventh Five-Year Plan (1988-93), the GOP developed plans to introduce 30 mobile service units (MSUs) into the national FP program. The Population Council, in collaboration with the MPW and NGOs, designed a research OR study to determine whether MSUs are effective in addressing three perceived problems in the service delivery system: coverage, supervision, and quality of care.

**Project Purpose:** To evaluate the quality and quantity of services provided by four NGOs and six GOP MSUs in ten rural pilot areas before implementation on a wider scale.

**Design and Implementation:** Evaluation of the subproject was carried out by the Council. It was initially designed as a quasi-experimental study including six GOP and four NGO MSUs. The NGOs fielding the MSUs were the Pakistan Voluntary Health and Nutrition Organization (Karachi), Behbud Association of Pakistan (Rawalpindi), Mother and Child Health Association (Faisalabad), and the Family Planning Association of Pakistan (Mardan).

According to the study design, the MSUs were to serve areas with a population base of at least 30,000 located more than one mile away from a FWC. The MPW and the Population Council together identified ten project areas for the introduction of MSUs, and a baseline study of these areas was conducted in the autumn of 1992.

The field implementation of the GOP MSU program start was postponed for about a year due to delays in releasing USAID vehicles until the GOP agreed to appropriate logistical support, and until a GOP ban on recruiting drivers was lifted. The GOP component finally had to be suspended when USAID withdrew funds in June 1993. The four NGO MSUs began operations following the baseline survey, operations were briefly suspended until Council funds became available, and then began again. The Council is currently conducting an evaluation of the MSU program in the pilot areas with support from UNFPA.

**Project Outputs:** The baseline Household Enumeration Survey was carried out in 87 villages covered by the pilot project. In all, 33,063 households were enumerated and 28,260 couples were identified as potential acceptors of contraceptive services. The overall contraceptive prevalence rate (CPR) in the survey area was 6 percent, with a range of 3 to 10 percent in the villages.

Budgetary and related problems (such as GOP restrictions against recruiting drivers) constrained the GOP MSUs from getting started. These circumstances continue to exist, suggesting that changes need to be made if GOP MSUs are to be successful. The NGO MSUs are functioning in the four areas again. Monitoring and a field evaluation are currently being carried out with the Council's core funds and with UNFPA support. Results will be available in February 1994.

### **Central and Buy-In Funding**

#### **(4) Village-Based FP Workers (VBFPWs) Pilot Project**

The Council's contribution has included:

- (1) technical assistance in the selection, training, and supervision of the first cadre of 766 village-based workers and 45 supervisors in Punjab;
- (2) pre- and post-training surveys in Punjab and Northwest Frontier Province of the workers' sociodemographic background; knowledge, attitudes, and practice of family planning; utilization of Family Welfare Centres; contraceptive record-keeping skills; and knowledge about contraceptive technology;
- (3) (a) in-depth monitoring of home visiting procedures, counseling, and record keeping of workers in 22 villages in three tehsils of Rawalpindi district (Rawalpindi, Kahuta, Gujar Khan). A similar monitoring exercise in two other Punjab districts, Gujranwala and Faisalabad, is now underway; (b) a survey of 426 eligible women living in the 22 workers' villages to collect data on their socioeconomic backgrounds, knowledge and practice of family planning, and their assessment of the worker's interaction with them and the frequency and content of the worker's visits;
- (4) a ten-day national workshop on evaluation of training and supervision, through which key master trainers were orientated to the field problems experienced by newly recruited VBFPWs (and family welfare workers) and the ways in-service training could help.

These interventions have led to several program actions, including expediting VBFPW salary payments and contraceptive supply shipments, as well as reviewing recruitment, training, and supervision procedures. As indicated in the Aide Memoire of the World Bank Population pre-appraisal Mission (8 November 1993) regarding progress in the

VBFPW program:

]the careful monitoring which the Ministry, in conjunction with the Population Council, is undertaking is proving to be most valuable. (p. 12)[

### **Central Funding**

**(5) Diagnostic Study of Strengths and Weaknesses of Major NGOs Working in FP Service Delivery System, 15 February - 15 July 1992.**

**Project Goal:** To facilitate the increased involvement of NGOs in FP delivery in Pakistan.

**Project Purpose:** To gain an in-depth understanding of how five leading NGOs work in order to identify the factors contributing to improved or poor performance in the delivery of FP services.

**Design and Implementation:** The study was carried out by the Nongovernmental Organizations Coordinating Council for Population Welfare (NGOCC) with TA from the Council. The NGOs studied were: (1) Orangi Pilot Project, Karachi; (2) Behbud Association, Rawalpindi; (3) Pakistan Voluntary Health and Nutrition Association, Karachi; (4) Memorial Christian Hospital, Sialkot; and (5) Maternity and Child Welfare Association of Pakistan, Lahore. The Family Planning Association of Pakistan, unfortunately, could not participate due to program commitments.

The methodology involved an in-depth study of the NGOs' working systems, including spending a week with each agency, having an open-ended interview schedule, using observational approaches, and engaging in discussions with participants. The study focused on identifying the NGOs' strengths and weaknesses in the following areas: (1) planning and design of service delivery systems, including logistics, supplies, and staff attitudes; (2) delivery of services in actual field conditions; (3) planning and implementation of staff training programs, including curricula, contents, methodology, and follow-up; (4) the design and use of IEC materials; (5) management information systems; (6) cooperation and coordination with other NGOs and public organizations; and (7) interaction with community groups.

**Project Outputs:** Based on the findings, a number of recommendations were developed for the NGO community in Pakistan aimed at strengthening NGOs' involvement in the delivery of FP services. The report has been widely circulated to disseminate the lessons learned. It also has been used as a resource for donor agencies, such as the ECC and the Overseas Development Agency which have reviewed it in terms of broadening their financial support to the NGO family planning sector.

**6) Male Attitude and Involvement in Family Planning, 14 December 1992 - 30 June 1993.**

**Project Goal:** To determine the sociopsychological, demographic, cultural, and program factors that motivate men to accept vasectomy and, secondarily, other family planning methods.

**Project Purpose:** To compare samples of sterilized and nonsterilized men with respect to demographic and socioeconomic characteristics, attitudes, understanding about the procedure, and the motivational aspects of the family planning program.

**Design and Implementation:** This is a three phase study. In the first phase, focus-group discussions and a sample survey were conducted to determine male attitudes toward vasectomy and to identify the factors responsible for use or nonuse of family planning methods in general, and vasectomy in particular. In Phase II, the findings from Phase I will be utilized in designing IEC strategies and materials. Phase III will utilize research findings for in-service training and action demonstration.

The implementing agency of the study was the Behbud Association of Pakistan. The Population Council provided technical assistance to Behbud in the design and implementation of the operations research study.

**Output:** Under USAID funding, a review of literature pertaining to male attitudes and acceptance of family planning was carried out, and interviews with a sample of 57 FP clinical service providers were conducted. A report of the findings is now being prepared. A workshop on male attitudes was held at the national level, in cooperation with AVSC. However, due to the withdrawal of USAID funds (1 July 93), the project was temporarily suspended.

With its own core funds and the support of UNFPA, the Council reactivated the study in October 1993. As of December, the literature synthesis and a review of the content of existing FP educational materials were completed, a series of focus- group sessions on male attitudes and involvement was completed, and a sample survey of males was completed in the field.

**(7) Study Visit to Bangladesh for Officials of the Ministry of Population Welfare, April 1992.**

**Project Goal:** To enhance FP program accessibility by developing strategies for an effective community-based family planning program.

**Project Purpose:** To visit Bangladesh service delivery sites and discuss mechanisms of delivery, particularly that of rural village worker outreach.

**Design and Implementation:** Eight of the country's highest ranking population program officials including the Secretary of the Ministry of Population Welfare travelled to

Bangladesh April 9-17, 1992. The main focus of the rural field-based visit was to study how to recruit and train literate married women with children who would be effective in delivering FP services to villagers.

**Project Outputs:** Findings from the study visit were used in the development of the GOP's Eighth Five-Year Plan and the design of a pilot village-based family planning worker project that had expanded to 1,500 villages by the end of 1993, with some 8,000-12,000 more planned for in 1994-96. This will greatly increase the potential for raising

the contraceptive prevalence rate to 24 percent by 1998, because family planning services will extend to 70 percent of the rural population by then.

## **B. Operations Research Workshops**

### **Overall**

**Project Goal:** To introduce OR as a management tool to family planning programs in Pakistan and review ongoing OR findings to help implement the Eighth Five-Year Plan.

**Project Purpose:** To transfer key OR skills, such as proposal development, OR methodologies, and data analysis to family planning program managers and researchers.

**Design and Implementation:** Four types of OR workshops were conducted by the Population Council in close collaboration with the MPW and under MPW sponsorship through the project: (a) an introduction to OR as a management tool; (b) OR subproject proposal development; (c) OR methodologies; and (d) specific topics and issues.

**Workshop Outputs:** Six workshops were conducted for a total of some 200 NGO and GOP family planning professionals. The workshops were held in a variety of cities in three provinces (two were conducted in Lahore, one in Faisalabad, one in Peshawar, one in Bhurban, and one in Islamabad); they received considerable media attention as documented in individual final workshop reports. Several had high-level keynote speakers at the Federal Secretary and Provincial Chief Minister and Governor levels.

Among the outputs, key FP program managers and researchers were trained in OR methodologies; data analysis skills for FP program researchers and managers were upgraded; project proposals for further OR studies were developed; training and supervision of family planning workers were improved; recommendations for increasing male participation in family planning were disseminated; and specific objectives for OR in the Eighth Five-Year Plan and in the Asian Development Bank, the World Bank (IBRD), and the Overseas Development Agency donor agreements were identified. Details of each workshop follow.

## **Buy-In Funding**

### **(1) Introduction to OR in FP, Lahore, January 20-22, 1992.**

This three-day workshop, "Introduction to Operations Research in Family Planning," was sponsored jointly by the MPW and the Population Council. There were 45 participants, including key staff from provincial and federal FP agencies and a number of NGOs. Also attending were three USAID staff and seven faculty from the Population Council and the NGOCC.

**Program Output:** The workshop introduced the concept and application of operations research in FP to key program managers and researchers as a way for them to collaborate to improve the delivery and proper utilization of family planning services. A number of these participants were selected for and received training at additional OR workshops. A secondary outcome was awareness of the Council's resources to provide TA on OR in Pakistan.

### **(2) OR Research Workshop, Peshawar, August 17-24, 1992.**

Sixteen participants, including researchers and program evaluators from eight Pakistani FP governmental and nongovernmental agencies, attended. The objective of this participation-oriented workshop was to help FP program managers and researchers learn how to design and implement OR studies, with particular attention to the Government's family planning objectives in the Eighth Five-Year Plan.

The major focus was on how to identify a problem researchable by OR, define it, justify implementing it, select an appropriate strategy and study design, and have the results applied in a program. Case studies and group discussion supplemented lectures. Emphasis was on learning by doing.

**Program Output:** All participants developed either full-blown proposals, mini-proposals, or concept papers. Two proposals developed during the workshop were selected for Council funding and several others have found their way to GOP and NGO funding requests to donor agencies. More specific objectives for OR were included in the Eighth Five-Year Plan and also in FP international donor agency agreements with the GOP.

### **(3) Data Analysis Workshop, Bhurban, April 19-29, 1993.**

Nineteen participants representing the MPW, the Pakistan Institute of Development Economics, the National Institute of Population Studies, the Population Council, and four NGOs attended. The workshop was cosponsored by the MPW and the Population Council. The workshop was a follow-up activity to two previous workshops on operations research in family planning (Lahore and Peshawar). The objective was to assist family planning program staff, particularly those identified in earlier workshops, to select appropriate data analysis techniques for operations research and apply them to improve management of the FP program.

The course content focused on quantitative as well as qualitative ways to analyze research data on family planning. The curriculum covered all aspects from data collection to analysis, including coding, data entry, generating tables, using cross tabulations, and employing appropriate statistical techniques. Actual data on family planning operations research and survey instruments from the recent Population Council-sponsored "Situation Analysis Study of Family Welfare Centers in Pakistan" were used for analysis. The emphasis was on hands-on learning with computers.

**Program Output:** Participants learned skills to develop hypotheses and to use models for FP data analysis using SPSS and various other techniques. These skills were reinforced by group discussions and information-sharing sessions on their application to FP OR in Pakistan.

**(4) Workshop on OR and Evaluation of Fieldworker Training and Supervision, Islamabad, May 17-27, 1993.**

Nineteen participants attended this 11-day workshop: fifteen participants were from MPW agencies (including faculty from regional training institutes and population welfare training institutes) and four participants were from NGOs.

Previous OR workshops and subprojects had identified training and supervision of fieldworkers as areas where OR and evaluation were needed. The goal was to help FP program staff and training institute faculty increase their skills in evaluating the training and supervision of FP service delivery personnel at the village, family welfare centre, district, and provincial levels. This training program effort was undertaken in order to assist implementation of the Eighth Five-Year plan.

The major focus was on how to use OR as a framework for the evaluation of training and supervision of family planning service delivery personnel, such as village-based family planning workers, family welfare centre workers, and district population welfare officers. OR was discussed as a tool for managers to improve programs. Emphasis was on using scientific but relatively simple methods to solve training and supervisory problems. The workshop curriculum was developed with the assistance of the International Health Programs, Western Consortium for Public Health.

The implementation strategy for the workshop consisted of information-sharing sessions and mini-lectures, reinforced by group discussion, case studies, and a variety of experiential learning techniques.

**Program Output:** All participants, as members of different workshop groups, developed evaluation proposals and analyzed various training curricula for subsequent revision. They also developed guidelines, checklists, questionnaires, and schedules for use in staff supervision and evaluation of training. A prototype set of posters for use of FWC staff was produced.

**(5) Male Attitude in Family Planning Workshop, with AVSC, Lahore, June 7-9, 1993.**

The Association for Voluntary Surgical Contraception, the Population Council, and the Population Welfare Department, Punjab, organized this three-day workshop. The workshop was attended by 97 representatives of the Ministry of Population Welfare, the Health Department, NGOs, and international agencies. The participants included medical superintendents, district health officers, district population welfare officers, and officials from divisional directorates of Punjab province and the Ministry of Population Welfare and Health Department. The workshop consisted of presentations by experts, information-sharing sessions, and group discussions. Resource persons from Indonesia and Bangladesh presented papers on the experience of their countries.

**Program Output:** The workshop informed policy makers, program managers, medical superintendents, and gynecologist/obstetrics specialists at the Population Welfare and Health Departments of the Government of Punjab about male participation in family planning activities. The following issues were addressed: the need for male involvement in family planning programs; the importance of reliable information at all administrative levels; the offer of incentives for service providers to change male attitudes toward vasectomy and other male methods; and the need to increase availability of vasectomy services in government and nongovernmental organization facilities. In addition, the Ministry of Population Welfare took the opportunity to share plans and to formulate future action based on the recommendations of the workshop.

**Central Funding**

**(6) Workshop for NGO and GOP Staff on Project Activities of Mobile Service Units, Islamabad, April 29 and August 12, 1992.**

To improve the outreach component of the FP program, USAID and the Government of Pakistan initiated a scheme to introduce 30 MSUs. The Population Council assisted the MPW and four NGOs in designing an operations research project to study 10 of the MSUs before the program was implemented on a wide scale.

Two one-day workshops (April 29 and August 12, 1992) were organized for NGO and MPW project managers to brief them on the objectives of the MSU project, formulate guidelines for project activities, and develop uniform strategies for implementation.

The April 29th workshop was attended by representatives of the four NGOs selected to participate in the MSU program, as well as officials from USAID and the NGOCC. Ways by which an operations research component could be incorporated into their respective MSU projects were discussed. The August 12th workshop was organized for ten MPW and PWD staff to share information on the status of the MSUs in their respective districts.

**Program Output:** Suggestions from the two workshops were used to strengthen the MSU programs of the MPW and NGOs.

### **III. END OF PROJECT STATUS**

All six OR workshops and two of the three main subprojects to be implemented in the Buy-In were completed as contracted. The third, the MSU subproject, was ongoing when USAID funding terminated. The NGO component of the MSU subproject is being completed with UNFPA funds.

The Population Council's OR/TA project supported policy and decisionmaking in the MPW and important NGOs in Pakistan. Efforts to increase access to family planning services, improve the quality of care for users, and encourage greater efficiency in the program include diagnostic work, evaluation, training, and policy efforts. Examples of these efforts include:

- **Diagnostic Work**

The national situation analysis of a sample of 100 FWCs has provided empirical information on the present state of FP services at the main delivery sites. Results of this study have been the subject of several presentations and working group meetings in Pakistan, and the MPW is using the data to develop strategies to improve in-service training and supervision. Documentation of the weaknesses has also been instrumental in expediting the shift toward emphasis on delivery of services at the village level, i.e., recruiting some 12,000 VBFPW's.

- **Evaluation**

Results from the national IUD Follow-up Survey have helped bring about the MPW's suspension and review of the IUD target system. This evaluation suggests that the considerable discrepancy between the IUD service statistics and the DHS contraceptive method prevalence rates as well as the Council's on-site field follow-up are due to over-reporting of insertions likely encouraged by targets.

- **Training**

Six training workshops brought together some 200 researchers and managers from the public and private sectors, not only to learn the value of OR as a management tool and develop specific OR skills, but also to review ongoing OR studies to better help implement the Eighth Five-Year Plan. OR is now a specific component in the Plan and in all GOP/donor agency agreements/contracts, e.g., ODA, UNFPA, ADB and IBRD.

- **Policy**

Council staff accompanied eight top-level Population Welfare executives, including the Federal Secretary and four provincial secretaries, on a one-week visit to Bangladesh to examine firsthand community family planning delivery strategies. The policy makers

spoke with local leaders and family planning workers and learned how to recruit and train literate married women with children who are effective in delivering family planning services to villagers. Some 1,500 villages in Pakistan now have similar workers, the VBFPW, providing FP services. The Council has taken the major role in monitoring and evaluation of this new cadre. Findings of field surveys, intensive observations, and follow-ups have been used by the MPW to improve supplies, salaries and training.

The activities begun in Pakistan under the ANE OR/TA project have been continued by the Council since July 1993 at the request of the MPW. The sustainability of these initiatives (post-USAID funding) indicates the value of the projects to Pakistan. This type of comprehensive strategy (combining workshops, diagnostic and large-scale OR studies) for improving national programs is also being reviewed as a model for other ANE OR/TA countries with resident Council OR advisors.

Two OR research reports (the FWC situation analysis and the IUD follow-up) were produced and disseminated internationally to some 400 key governmental, NGO, and international agency FP program administrators, managers, and researchers in Asia, the Near East, and the United States. These are also among the five studies in the OR Working Paper Series published by the Council as part of the ANE OR/TA Project.

In addition, two final OR subproject reports (the FWC situation analysis and the IUD follow-up) and five final reports on OR workshops were prepared and distributed to the GOP, NGOs, and related agencies. End-of-project sessions were held at the MPW for both subprojects, and findings were reviewed again at a quality of services workshop held in December 1993 by the Council at the request of the MPW. Four articles were also published in international journals, the Journal of Family Welfare and the International Quarterly of Community Health Education. Two others are forthcoming in a special journal issue on the use of OR diagnostic studies in Asia. Another is being submitted to Studies in Family Planning. A bibliographic listing of available references is attached.

All OR subproject and workshop final reports were submitted to USAID/Pakistan and USAID/W. Resident OR staff consulted frequently with the HPN Office of USAID/Islamabad, with which they had a close working relationship.

Regular quarterly program progress and financial reports were submitted to USAID, along with short-term consultant reports. Semi-annual reports on overall ANE OR/TA program progress data, submitted regularly to USAID/W, included relevant Pakistan subproject reporting.

#### **IV. LESSONS LEARNED**

Overall, the provision of technical assistance on operations research to the Ministry of Population Welfare (MPW) has demonstrated that even in a relatively brief period (less than 2 years), carefully planned and collaborative operations research/program evaluation can help FP

program staff provide empirical data to program managers that can directly affect program decisions. The overall lesson learned is that not only can operations research technical assistance be developed to provide empirical data about what works and what does not, but it also can be used effectively in the ongoing family planning program--both to improve existing services and to develop new approaches.

As the Secretary of the MPW stated at the Operations Research Workshop on Data Analysis:

"The Council's role has been one of providing the Ministry and NGOs with empirical data that have enabled us to make judgements based on hard facts rather than just intuition or gut feelings. Many of the data provided by field-oriented research carried out by the Council have been helpful to planning future activities and instrumental in making policy decisions, e.g., the village-based workers and review of the IUD target system." (Bhurban, April 19, 1993)

Specific lessons learned include:

1. Program change and action require empirical data. Although many government, NGO, and donor agency staff have stated that the family planning program was not sufficient to meet unmet demand, most were not aware of the dimensions of the inadequate services. The combination of OR subproject studies done during 1991-93, particularly the IUD and FWC studies, for the first time quantified the extent of the lack of services. Coming after the 1990-91 DHS Survey, they reinforced the notion that unmet needs were not being met. Having concrete and nationally validated empirical evidence has made it easier to press for change, for example, undertaking training and improving supervision, and the introducing of a new cadre of 12,000 service providers, village-based family planning workers.
2. OR research results can be used rapidly to improve the FP program. For example, (a) immediate actions were taken by the Ministry to stop the IUD target system, based on OR subproject findings and the utilization of the findings to project realistic donor contraceptive supply needs; (b) the workshop held on quality of services to help the provincial district-level staff focus on quality dimensions suggested by the findings from the two OR subprojects (IUD Follow-up Survey, FWC situation analysis) and the village-worker follow-up.
3. Results of several OR studies combined have a Synergistic effect when disseminated appropriately. The IUD Follow-up Survey, the FWC situation analysis, the Mobile Service Unit evaluation subprojects and the village-based worker technical assistance project combine to produce a synergistic effect in calling attention to the necessity of changing field programs to meet needs. Having concrete recommendations from three different subproject studies for training and supervision that were all related to removing inappropriate social and medical barriers to recommending contraceptives to clients made changes in training and supervision more feasible.
4. Resident OR advisory services can be instrumental both in institutional development and in bringing about concrete program action. To be effective, however, the advisory

services first need to be accepted as part of ongoing program operations. Time is required for interaction to build up a level of trust and recognition of OR expertise among federal and provincial managers. Donor agencies need to recognize that it takes time to develop a workable relationship to achieve long-term goals.

5. The workshop is a valuable format for introducing the concept of OR as a management tool for FP program researchers and managers and for transferring specific OR skills such as analyzing data, defining feasible OR/evaluation subprojects, figuring ways to evaluate training and supervision and to measure male attitudes, for example.
6. The interplay between workshops and ongoing OR subprojects increases the specific impact of each one. For example, the male attitude study and the male attitude workshop, the OR in- training and supervision workshop, and disseminating results of the FWC and IUD subproject studies.
7. The HPN office of the Pakistan USAID Mission has demonstrated that in conducting effective and relevant OR it helps to be flexible. In a program undergoing change from one of relative inaction and lack of service coverage for nearly a decade to one which is beginning village-level programs, the OR contract has to be able to meet needs as they occur, particularly to encourage resident advisory services to focus on introducing a needed but unplanned for OR activity, such as new workers (VBFPWs), in a scientific and carefully monitored fashion.
8. A CA needs to work closely with all donor agencies. It is critical for a CA to cooperate closely with other donor agencies, not only to provide more effective technical assistance but also to increase opportunities to have research results utilized. For the Council, virtue turned out to be its own reward when it developed a rapport and trust that greatly facilitated other donor agency support of Council OR activities after the abrupt withdrawal of USAID funding as of July 1993. Two full-time Council OR advisors are still resident in Pakistan.
9. CA and donor agency cooperation is important. Although there were few CAs resident in Pakistan, the Council worked closely with AVSC, not only in cosponsoring and conducting one national workshop (on male involvement in FP) but also in providing continuing back-up TA as requested by the AVSC regional staff for ongoing projects. The Council also worked with Family Health International (FHI) to bring TA in to help with conducting one PC-sponsored OR methods workshop and the IHP Western Consortium for Public Health to help conduct another. In addition, it provided limited consultation to Pathfinder, Asia Foundation, and CEDPA on ongoing concerns, including feedback on a proposed mini-survey, assessment of NGO strengths, and management development.

The Council OR advisory staff were also able to integrate recent OR findings into consultations on negotiations and content of bilateral and multilateral agreements and contracts being developed by the MPW with ODA, The World Bank, UNFPA, and the Asian Development Bank.

## **V. POST PROJECT ASSISTANCE COMPLETION ACTION**

As a result of the United States Government's decision to discontinue official aid to Pakistan and the withdrawal of USAID funds for population activities, the ANE OR/TA project support was suspended in Pakistan on 30 June 1993. The Population Council is continuing its OR/TA activities in Pakistan with its own limited core funding and support from UNFPA, which will continue up to 31 December 1993. Specifics were described earlier in this report.

## **VI. RECOMMENDATIONS AND FOLLOW-UP ACTIONS**

It is unfortunate that USAID funding for Pakistan population activities was terminated on 30 June 1993, particularly for FP operations research. The Population Council's 1993-94 workplan to strengthen the NGO capacity to carry out and evaluate FP activities with USAID funds has had to be cut back. The flexibility to rapidly respond with appropriate advisory technical assistance under USAID funding also will not be easily developed with largely multilateral funding.

Thanks, however, to timely intervention by the Council through its own funds on 1 July 1993, and by UNFPA in late 1993, several ongoing FP OR projects and resident technical advisory assistance will be continued, including work on previously USAID-funded studies on male attitudes toward family planning, the use of mobile service units, the newly introduced village-based family planning field worker, and continued analysis of quality of family planning field services.

Our major recommendations are that:

1. USAID find a way to continue its valuable OR support to a national family planning program that after a decade of inactivity has begun to take off in terms of public policy commitment to lowering the population growth rate and expanding its services to the village level through the new cadre of VBFPWs;
2. USAID/Islamabad allow existing nonexpendable USAID-provided equipment to stay with the Council office in Islamabad while it continues to use its own limited core funds to carry on these USAID funded and initiated OR projects. Without this equipment, these projects could be terminated;
3. Ongoing OR activities in Pakistan continue to be reviewed in USAID's assessment and monitoring of its global OR activities. The Council's resident Pakistan OR staff would be happy to continue to help the larger ANE OR/TA Project, as requested, including participating in the ANE OR/TA semi-annual meetings when feasible, and helping to disseminate findings to ANE OR/TA countries outside Pakistan;
4. USAID Washington document the close working relationship the Council had with USAID Islamabad. Its dimensions might be applied to other missions that could profitably increase their understanding of how to use skilled, experienced advisors.

## VII. PROJECT REPORTS AND PUBLICATIONS

### 1. OR Study Reports (Buy-In):

- Situation Analysis of Family Welfare Centres
- IUD Follow-up Survey
- MSU Evaluation

### 2. Workshop Final Reports (Buy-In):

- Introduction to OR in Family Planning, Lahore
- OR Workshop, Peshawar
- Workshop on Data Analysis in OR for Family Planning
- Workshop on Male Participation in Family Planning
- Workshop on OR and the Evaluation of Training and Supervision of Family Planning Service Delivery Personnel

### 3. Related Publications

- "A Situation Analysis of Family Welfare Centres in Pakistan," Operations Research Working Papers, The Population Council, No. 4, 1993
- "Pakistan IUD Follow-up Study, 1992-93," Operations Research Working Papers, The Population Council, No. 5, 1993.
- "Pakistan Fertility and Family Planning: Future Directions," Journal of Family Welfare, 38:3, 1992, pp. 49-56.
- "Information, Education and Communication Needs in Family Planning: The Case of Pakistan," International Quarterly of Community Health Education, 13:2, 1992-93, pp. 97-106.