A.I.D. Management Review of the International Research Awards Program on Fertility Determinants of The Population Council

June 1983

CONTENTS

Introduction

Purpose

The purpose of this management review of the International Research Awards Program is to assess the progress to date, to identify problems or weaknesses in the program's orientation, and to make recommendations which will be the basis for continuing or modifying the current project and possibly extending the life of the project. (See Appendix A for the letter sent by A.I.D. to the Population Council describing specific questions to be addressed in the management review). The Population Council wrote to A.I.D. in March 1983 proposing an extension of the program and raising the issue of A.I.D. support of fertility determinants beyond the life of the project. (See Appendix B) These issues will be discussed in later sections of the review.

The International Research Awards Program on Fertility Determinants in developing countries was established in October 1980 through a cooperative agreement between the Population Council and A.I.D. The purpose of the program is to sponsor innovative research which examines factors that determine changes in fertility in different cultural settings and under varying socio-economic conditions. Committees of social science scholars and population experts from outside the Council help direct the program and review proposals. Population Council staff provide technical assistance in the development of proposals and monitor funded research projects. Between five and ten research projects are supported each year with first preference given to proposals from developing country institutions and second preference to collaborative (LDC and DC) proposals. The cooperative agreement between the Council and A.I.D. is scheduled to terminate in September 1985. The total budget for the project is $7,340,480. Annual obligations have averaged about $1.1 million per year which represents approximately one-half of one percent of the Agency's annual population budget.

The awards program is the Agency's only on-going research program in fertility determinants. All other population research funded by A.I.D. focuses on operations research of family planning programs, bio-medical research of contraceptives, or "action-oriented" policy research. Through the awards program, the Agency is able to drawn upon the expertise of leading researchers in the field and thus able to ensure the scientific and technical merits of the funded research. The nature of the cooperative agreement between the Population Council and A.I.D. guarantees an independent technical review which was designed to protect the program from the vagaries of political and other non-scientific influences. Two other key aspects of the program include the provision of technical assistance to researchers by Population Council staff in the development of proposals and in the implementation of projects and an emphasis on dissemination of the research results to policy makers.

Background

The program is based on an unsolicited proposal submitted by the Population Council to A.I.D. in March 1980. After rigorous reviews by an inter-bureau review committee and by the Research Advisory Committee

(RAC), the proposal was approved by a close vote with certain modifications. These included: 1) A.I.D. representation and participation on the program committee; 2) assurance that types of research funded would reflect the Agency's research and policy interests; 3) increased emphasis on dissemination of research findings; and 4) evaluation of the program.

RAC approval of the proposal in June 1980 was contingent upon a review of the program before the end of the first year of operation. RAC was particulary interested in reviewing the specific research priorities adopted to guide the program and the composition and expertise of the program committee. As a result of the July 1981 review, RAC unanimously approved continuation of the project for a five-year period. RAC was satisfied that the program priority statement gave sufficient focus to the program, that members of the Program Committee had extensive experience in developing countries, and that LDC institutions would be sites for proposed research.

Establishment of the Program

Program Committee

The cooperative agreement calls for a program committee of approximately 9-11 members to direct the awards program, to develop research priorities, to review proposals and to refer promising proposals to a peer review committee. The committee is also charged with reviewing the results of research projects and commissioning summary reports.

Members of the Program Committee, mutually agreed upon by the Council and A.I.D., were appointed within the first two months of the program. Members represent various disciplines (anthropology, demography, economics and sociology) and considerable research experience in developing countries. Early discussions also focused on the need for members with experience in the social psychology of fertility (subsequently a social psychologist was appointed to the Committee) and in the evaluation of family planning programs (two members have such expertise).

The initial composition of the Committee consisted of eight members (Coale as chairman, Demeny, Lapham, Lieben, Liebenstein, Mauldin, Miro, and Youssef). By August 1982, two members had been replaced (Liebenstein and Mauldin) and three new members had been appointed (Bulatao, Finkle and Freedman) with A.I.D.'s concurrence. By December 1982, Youssef had resigned to due other commmitments and Miro had resigned over events surrounding the CEBRAP/CEDEPLAR proposal (See p. 6). Freedman replaced Coale as chairman as of April 1983. (See Appendix C for a complete list of Program Committee members.)

Currently there are only seven committee members, and Bulatao's term is due to expire in June 1983. None of the Committee members are both from developing countries and currently working in a developing country setting. Only two members have experience in the evaluation of family planning programs. The Population Council is preparing a list of candidates for A.I.D.'s consideration. Assuming agreement on the candidates, several new members should be appointed in time for the August 1983 review of proposals.

Peer Review Committee

The Peer Review Committee is appointed by the Program Committee. Six members were selected in June 1981 based on two criteria that the individuals have some exposure to the developing country context and that they have proper scientific and technical expertise. Membership on the Committee, which has not changed since the beginning of the program, includes Boulier, Bumpass, Namboodiri, Newman, Urzua and Verma. There is general agreement by the Population Council, the Program Committee and A.I.D. that the composition of the Committee is excellent. (See Appendix D for a list of Peer Review Committee members.)

Research Priorities Statement

As required in the cooperative agreement, a research priorities statement was prepared by the Program Committee. Approved by the Committee in April 1981 (and subsequently by RAC), the statement was published in the Population and Development Review, June 1981. The purpose of the priorities statement was to provide a focus for the program and to ensure that the funded research would reflect the Agency's research and policy interests. The eight priority research areas identified are the following:

1) Proximate Determinants of Fertility
   including: lactational infecundability, frequency of intercourse, spouse separation, contraception, etc.

2) Determinants of Marriage Patterns
   socio-cultural factors affecting the age at marriage and marriage decision-making.

3) Fertility Decision-Making
   including: temporal sequence of fertility decisions; segmentation of decisions by male and female; decision hierachies; and jointness of husband and wife decision-making.

4) Perceptions of Fertility Settings
   the socio-cultural-economic environment in which decisions are made.

5) Economics of Children
   not the perceived value of children, but more objective measures of the costs and benefits of children--including such perspectives as investigations of children as forms of risk insurance.

6) Institutional Contexts of Fertility
   examinations of local institutions and socio-cultural structure which generate incentives or disincentives bearing on fertility.

7) Family Planning
   suggesting a focus upon users' perceptions of accessability and availability of family planning; and, case studies of pilot projects or innovative community or development projects affecting prevalence.

8) Fertility Implications of Development Programs and Strategies concentrating on: specific projects or programs which have a likelihood of fertility effects, in which changes at the local level can actually be recorded or observed, and which have an adequate retrospective data base; and, comparative policy analyses of development strategies in terms of fertility settings.

The Program Committee and Council staff should review the Program Priority Statement in light of the program's experience to date and other research developments in the field and make any necessary modifications.

Review Process

The Program Committee and the Population Council staff jointly developed procedures for reviewing proposals. Proposals are reviewed three times during a year (April, August and December). A two-stage review process was initiated involving the submission of preliminary proposals of 10 pages and then for those proposals deemed acceptable, submission of a full proposal. While the two-stage submission process automatically lengthens the review process by a minimum of four months, it was adopted for several reasons: to quickly eliminate poor proposals and thereby to save researchers' and reviewers' time and to help LDC researchers who had limited experience writing proposals.

Each preliminary proposal is assigned to two Program Committee members and one Council staff member for review. A copy of each preliminary proposal is sent to all Program Committee members. Review of preliminary proposals involves consideration of whether the proposal falls within the guidelines of the program, its policy relevance, the institutional affiliation of the researchers as well as conceptual and methodological issues. Written reviews by the assigned reviewers are provided to the entire Committee at the review meeting. Regardless of the specific review assignments, all Committee members participate in a thorough review of all preliminary proposals. Based on the concensus of the Program Committee, a decision is made to invite a full proposal, to encourage resubmission of a preliminary proposal with specific suggestions, to reject, or to make a discretionary award. ($30,000 is budgeted annually for small discretionary awards.) While Council staff do participate in the review and discussion of proposals, they are not members of the Program Committee and do not vote on award decisions. Review comments are summarized by Council staff and sent to those researchers invited to submit full proposals or those encouraged to resubmit a the preliminary proposal. The interval between review of preliminary proposals and submission of full proposals allows time for technical assistance by the Council staff in the development of full proposals.

Full proposals are reviewed by both the Peer Review Committee and the Program Committee. Review of full proposals covers the same considerations as review of preliminary proposals, but specific attention is given to the genuineness of any proposed collaboration, personnel, facilities, budget, and human subjects review. The Peer Review Committee meets prior to the Program Committee meeting. Each proposal is assigned to three members of the Peer Review Committee and one Council staff member. As in the case of Program

Committee meetings, participation in the review of each proposal involves all Committee members. The Peer Review Committee recommends that a proposal be approved, deferred pending further modifications or rejected. Proposals are also ranked in case of insufficient funding available under the program to support all approved proposals. Program Committee members receive copies of the Peer Review Committee's comments, notes of the discussion at the Peer Review meeting and a summary review prepared by the Council staff. While final judgments made by the Program Committee generally concur with those of the Peer Review Committee, this is not always the case. Hence the subsequent review of full proposals at Program Committee meetings is an independent review step.

A.I.D. staff have been extremely impressed with the thoroughness and scholarliness of the review sessions. Members of both the Peer Review and Program Committees as well as Council staff take their roles very seriously, and fulfill A.I.D.'s expectations for high quality scientific review.

AID Participation

In accordance with the cooperative agreement, A.I.D. has been represented at all Program Committee meetings. Both the Program Committee and the Council staff are very receptive to A.I.D. staff suggestions and comments on proposals. A.I.D. has also participated in the most recent Peer Review Committee meeting. While the Council has welcomed A.I.D. participation in all aspects of the program, previous participation in the Peer Review meetings has not been possible due to a shortage of A.I.D. travel funds. A.I.D. staff should participate regularly in both the Peer Review and the Program Committee meetings in order to ensure that the Agency's concerns and interests are well represented at each stage of the review process.

Prior to the review meetings, lists of preliminary and full proposals are circulated within the Office of Population, particularly to PDD staff and to the Office Director for comment. This internal A.I.D. review has been helpful in providing additional information based on A.I.D.'s experience with researchers and institutions and in identifying possible redundancy in funding.

Notification of Award and USAID Mission Review and Clearance

Award letters are sent to proposers shortly after the Program Committee meetings. The text of these letters indicates that the Committee has approved the proposal, but that "informal contact is being made by USAID for clearance for the State Department officials as required by U.S. law for grants made from the donor, USAID. A copy of the documents for the award will also be routed through USAID for formal clearance (by the Mission, AID/W and Contract Office). Once clearance is received,... the award and funding will be forthcoming." As soon as these letters are sent to proposers, AID/W cables appropriate USAID missions announcing the awards and requesting Mission concurrence. At the same time, copies of the full proposals are pouched to missions for review and clearance. Following the CEBRAP/CEDEPLAR clearance problem, (see p. 6) AID/W has made every effort to inform missions that the technical and scientific review of proposals is the responsibility of the Population Council and that mission clearance is sought in order to adhere to the laws and regulations of the foreign assistance legislation. At A.I.D.'s

suggestion, the Council is revising the text of the award letter sent to researchers to indicate that funding is contingent upon availability of funds rather than on A.I.D. clearance.

Generally no notice about proposals is sent to USAID missions prior to the formal notice of award after the Program Committee meetings. This procedure has by and large been satisfactory. Exceptions are those cases where the Council's staff or A.I.D. staff have been in contact with USAID mission staff directly. Through their travels, the Council staff has on occasion informed missions about the awards program and specifically about the proposed research. Such efforts usually facilitate mission clearance. The Brazilian proposal from CEBRAP/CEDEPLAR is an exception because both Council field staff and AID/W staff visited EMBASSY staff in Brazil while the full proposal was being developed. Despite these efforts, the proposal did not receive A.I.D. concurrence and resulted in considerable difficulties for the Council and A.I.D. One other approved project on Nepal from the University of California failed to receive host government clearance and consequently was never funded. In this case, no effort was made by Population Council field staff to contact the USAID mission or relevant host country institution, despite the fact that Council field staff visited Nepal on several occasions while the proposal was being considered.

Progress-to-Date

Solicitation of Proposals

Flyers describing the awards program have been a primary means of announcing the program. Within the first four months of the program, over 14,000 copies had been distributed. The text of the flyer gives examples of appropriate research areas. These areas correspond to those specified by A.I.D. in the review of the original proposal and in the cooperative agreement itself. (See Appendix C for examples of research areas listed in the flyer). The flyer also indicates a first preference for proposals from developing country institutions and second to proposals representing collaboration between developing and developed country institutions. At the request of A.I.D. population officers in West Africa, the announcement of the program was translated into French and distributed. Announcements about the program were also placed in a number of journals and newsletters including Asian and African publications. A second flyer for 1982-83 was prepared in English and French and approximately 12,000 copies were distributed in March 1982. The examples of research areas were revised to better reflect the research priorities statement which had been prepared after the first flyer was written. (See Appendix E).

Judging from the number of inquiries about the program (over 300) and the number of preliminary proposals (254) received by the Council, the effort to publicize the program has been successful. About 60 percent of the inquiries have come from developed countries, 25 percent from Asia, 10 percent from Africa and 5 percent from Latin America. These distributions are reasonable given the variation in the pool of researchers from different geographic regions. The limited number of inquiries from Latin America suggests that the flyer should be translated into Spanish. Copies of a Spanish flyer could be

sent to individuals on the Population Reference Bureau's mailing list for the Spanish version of Intercom. The flow of inquiries by review period has ranged from 32 to 55 and indicates a continuing awareness of the program.

Staff Efforts

The Council's staff participation in generating preliminary proposals has involved work both in New York and in the field. Staff provided names of researchers and institutions in developing countries to whom flyers were sent. Staff travel by Frank, Mundigo and Nag appears to have resulted in several preliminary proposals (Cameroon, Mali, Bolivia-Argentina, Brazil, Peru and India). Staff travel has also been useful in identifying the problems of matching the research needs of researchers and the program's priorities. For example, Frank's report on her January 1982 trip to Africa indicates some of these problems. Researchers' interests in population which include migration and mortality are often broader then the program's priorities. Research interests are often more elementary than research considered by the program (in terms of subject area as well as level of analysis). Given insufficient data in general on Africa, higher priority is often given to the collection of basic data such as census data. Finally, the capacity to conduct research is severely limited in many Africa countries.

Staff travel has usually involved a combination of objectives: to provide assistance to researchers in developing their full proposals as well as more basic efforts to generate interest in submitting proposals. To date, staff travel has been quite productive, and it is recommended that staff look for more opportunities to travel in order to generate proposals. (To be discussed in greater detail on pp. 9-10).

Contacts with the Ford Foundation and other organizations were to be pursued by Council staff in order to identify researchers in developing countries. For example, two other A.I.D. contractors, Battelle Memorial Institute and the Research Triangle Institute, work with researchers in developing countries. These organizations received copies of the program flyers and their staffs are aware of the program. However, contact between the Council staff and staff of these contractors tends to be ad hoc. Since the staff of various A.I.D. contractors travel to developing countries with some frequency, the possibility of disseminating information about the program and of building on each others' projects would be enhanced if more information were shared about the awards program.

In addition to Council staff in New York and the Program Committee members, the Council's field staff were to be a major source for identifying promising applicants from developing country institutions. Multiple copies of flyers were sent to field staff in Asia, the Middle East and Latin America. (The African region has no resident representative whose responsibilities encompass this program. Instead, Council staff based in New York have had primary responsibility for the region.) It is unclear whether any signficant role has been played by Council field staff in Asia or the Middle East in disseminating information about the program or in assisting in the development of proposals. This contrasts with the Latin American region, where the senior representative has not only distributed information about the program, but has also assisted researchers in developing their proposals. It is true that the

Fertility Impacts of Development (F.I.D.) project in Asia* and the Middle East Awards Program (MEA)** have provided support to related research in these regions. However, the F.I.D. project's orientation shifted away from research awards to other emphases fairly soon after the project was initiated.

Preliminary Proposals

As of April 1983, a total of 254 preliminary proposals had been received by the Population Council. Of these 254 proposals, 54 percent were from developing country institutions, 33 percent were based on collaborative arrangements between developing and developed country institutions, and the remaining 13 percent were from developed country institutions. Clearly, the awards program has been successful in generating proposals from developing countries in accordance with the program's objectives. The location of the populations to be studied in the proposed research included 53 percent in Asia, 19 percent in Africa, 17 percent in Latin America, 4 percent in the Middle East and 7 percent for multiple locations. The distribution includes a surprisingly high percentage in Africa, probably the most neglected region in terms of available population data and fertility determinants research. Taking into account the Council's MEA program, the small percentage of proposals on Middle Eastern countries is not unexpected. Since the MEA program is difference in scope and size, it would be desirable and possible to have some funded projects from that region. While it might be desirable to have less emphasis on Asian populations, the number of qualified researchers and the interest in fertility determinants research means by definition that a large proportion will concern that region. On the whole, the geographical distribution of preliminary proposals is satisfactory with some increased empnasis on the Middle East. (See Appendix F for distributions of preliminary

*The purpose of the studies program under the F.I.D. project is "to foster or support ongoing research by Asian scholars and collaborative research by U.S. and Asian scholars on the social, economic and cultural determinants of fertility patterns." During the life of the F.I.D. project (September 1978 - September 1983) nine research awards have been made (India (1), Indonesia (1), Korea (2), Philippines (2), Sri Lanka (1), and Thailand (2)) and two commissioned studies (Bangladesh and Indonesia). The scope and cost of the F.I.D. research projects are considerably more limited than what is possible under the awards program.

**The purpose of the Middle East Awards Program is to contribute to a capacity to conduct valuable policy oriented research on population and development issues in the Middle East and North Africa. The program sponsors study groups, fellowships and a research grant program (which includes a technical assistance component for grantees and applicants). The program began in 1978 and is funded by the Ford Foundation, IDRC and the Council. An advisory committee of scholars from the region selects proposals for awards and provides general guidance for the program. Between 1978 and April 1983, 36 research awards have been made including the following countries: Egypt (8), Jordan (6), Lebanon (5), Occupied West Bank (1), Sudan (6), Tunisia (3), and Turkey (7). The cost of awards is considerably lower than the awards program on fertility determinants, and the range of topics is much broader.

proposals by location of investigator's institution and location of populations to be studied.)

Seven review periods have passed since the awards program was initiated. The number of preliminary proposals submitted in any one period has averaged slightly over 36 with a range from 49 at the first meeting in April 1981 to 13 at the most recent meeting in April 1983. The low number at the most recent meeting could be attributed to several factors: a decline in attention to the program since the last announcement flyer describing the Program was distributed in March 1982 and a reduction in the pool of available researchers over the life of the project due to those receiving awards, those discouraged by having had proposals rejected, and those who may hesitate to submit proposals given the program's rigorous review.

Full Proposals

Of the 254 preliminary proposals reviewed under the program, 36 percent or 89 applicants were invited to submit full proposals and 4 received discretionary awards. Of those invited, 63 full proposals were submitted to the Council and reviewed by the Peer Review and Program Committees. A total of 23 were eventually approved although an additional 5 deferred proposals are still outstanding. (Appendix G provides a flow chart of proposals received and approved since the start of the program.)

The Council staff have played an important role in providing technical assistance to applicants in developing full proposals. The letters of invitation sent to applicants usually provide guidance for strengthening the proposals. On several occasions researchers have visited the Council in New York, and staff have assisted in developing proposals. Staff travel has also been quite productive in providing technical assitance to researchers preparing full proposals. Some of this travel has been carried out in relation to other Council business and therefore at no expense to the program. Trips by Frank, Munoigo and Nag have led to approved projects in Brazil, Bolivia-Argentina, Mali, and Togo and may lead to revised proposals from India. Past and current members of the Program Committee and A.I.D. have encouraged Council staff to travel more. There is some reluctance on the part of the Council staff to do so given the risk of obtaining no useful results. However, given the maturity of the Program, several objectives can be combined (i.e. proposal generation, proposal development, project monitoring) which would ensure reasonably productive travel.

Copies of all full proposals are also sent to the appropriate Council field staff for review. Only field staff for the Latin America region has taken an active role in the development of proposals from the region. Three such full proposals were approved by the Program Committee for funding although one (CEBRAP/CEDEPLAR) never received A.I.D. clearance. Costs of travel by the Council's field staff indicate that in 1981-82, of nearly $20,000, 94 percent was spent for LA staff travel and the remaining 6 percent was spent for Asia and Middle East staff travel. It appears as though only the Latin America region's staff have integrated the Awards Program into the regional activities. While this is probably due in large part to the lack of other sources of funds for such research, field staff from other regions should be encouraged to play a more active role. Field staff should also play an

active role in identifying development project sites which could be the basis for so-called natural experiments.

An issue related to travel concerns the degree of technical assistance which is provided. Program Committee members have cautioned against providing so much assistance in developing proposals that researchers would not be capable of implementing the project. While this advice is well taken, the program to date has probably been too conservative in its of use of such assistance. In addition to New York based and field staff assistance, the program also permits the use of consultants who could assist in proposal development or project implementation. To date no consultants have been involved in the program. Some researchers have incorporated such expert consultation in their budgets. The Council should consider ways that consultants might help with both proposal development and project implementation.

The most recent quarterly report (January-March 1983) specifies various monitoring activities carried out by the Council's staff in New York. While official monitoring of research projects begins once the subordinate agreement between the Population Council and the research institution is signed, considerable staff time is devoted to assistance provided prior to an agreement's execution. One example of staff monitoring indicates that pre-project monitoring covered a 12-month period from November 1981 - October 1982 and involved numerous activities. (See Appendix I for monitoring activities listed in the recent quarterly report and an example of project monitoring activities involving preproject monitoring and official monitoring). Based on a review of project files dealing with monitoring activities, the Council's staff has done a commendable job of monitoring proposals.

Outstanding Invitations on Full Proposals

Of the full proposals invited, there are a total of 31 which are still outstanding in one way or another. (Twenty-six applicants have not submitted proposals after an initial invitation, four have not submitted proposals after the Program Committee's decision to defer, and one has not submitted a proposal after a second deferral.) By subtracting eight proposals invited or deferred at the most recent meetings, 22 proposals could be more meaningfully classified as outstanding. Population Council records indicate that six applicants are planning to submit in the future, three have withdrawn, one project could not be funded because of A.I.D. restrictions on funding research in China, one applicant is seeking funding directly from A.I.D. and eleven applicants need additional follow-up. In terms of these remaining outstanding proposals, the Council has made a reasonable effort to follow-up, although some additional effort is called for.

Approved Proposals

The cooperative agreement calls for 5-10 funded projects a year. Well into the third year, the awards program has approved an appropriate number of proposals, but is somewhat below the anticipated number of funded projects. Nineteen full proposals have been approved by the Program Committee and four discretionary awards have been made. Of these 23 projects, 15 have been

funded, 2 were never funded because of clearance problems, and 6 have yet to be funded for various reasons.* For purposes of the subsequent analysis, 20 projects will be discussed because two projects (one discretionary and one based on a full proposal) are now considered one larger project. Of the 20 remaining projects, 8 focus on Asian populations, 6 on African, 3 on Latin American, none on Middle Eastern populations, and 3 on populations in several regions.

Lead time from receipt of preliminary proposals to an executed subordinate agreement is approximately 15 months. (Appendix H indicates the lead time by specific intervals for all approved proposals.) It would be desirable to shorten this period by several months, although this is not easy to do given the various stages involved and the possibility of unforeseen external events at each stage. The following indicates seven intervals which constitute the lead time:

	Approximate No. of Months
1. Receipt by the Council; review of preliminary proposals	2.0
2. Preparation by researchers of full proposals	2.8
3. Review of full proposals and announcement of awards	2.2
4. Preparation of subordinate agreements by the Council	2.4
5. Approval of subordinate agreements by A.I.D.	2.8
6. Mailing agreements to principal investigators by the Council	.5 (1 day-3 weeks)
7. Executed subordinate agreements	1.5
	15.2

It is virtually impossible to shorten intervals one and three because proposals are submitted at varying times during a review period. Preparation of the subordinate agreement involves waiting for mission concurrence as well as negotiation with researchers concerning workscope and budgets. The budgets of several projects have needed adjusting due to exchange rate problems. Even

*Five of the six proposals were approved at the two most recent review meetings of December 1982 and April 1983. One proposal is awaiting Indian government clearance, one proposal has just received AID Mission clearance after a four-month wait, two proposals are awaiting clarification of the role of the developing country research institutions, one is awaiting clarification on the research methodology, and the subordinate agreement for the final one has just been mailed to A.I.D. for approval.

so this interval could probably be shortened. A.I.D. approval of the subordinate agreement (principally by the Contracts Office) is another interval that could be shortened. Substantial delays were experienced on several subordinate agreements because approval was contingent on the extension of the prime agreement dates between A.I.D. and the Population Council. The technical and contract offices within A.I.D. should review the problems and develop alternative review procedures. Other ways of reducing the lead time might include the following: encourage staff travel to assist in full proposal development as soon as possible after the invitations to submit full proposals have been extended and pouch all materials to overseas researchers.

Developing Country Participation

Participation of developing country researchers and institutions has been impressive. Of these 20 approved projects, 5 were submitted from developing country institutions, 10 involve some collaborative arrangements and 5 are from developed country institutions. The total cost of these projects is $2,735,568. Approximately $1,350,000 or nearly 50 percent will fund developing country researchers or research institutions directly. Three projects involving only developed country institutions are discretionary grants each for less than $12,000 which explains in part the relatively high percentage of funds to developing country researchers and institutions.

The next three subsections review the content of the approved research. A.I.D.'s primary concern with the awards program has consistently been that the types of research supported should reflect the Agency's research and policy interests. To answer this broad issue, several specific questions need to be addressed. Do the research projects adhere to the research priorities established by the program? Are the methodologies employed in the various projects innovative? Finally, do the projects deal with policy-relevant issues and will they yield programmatically useful results?

Adherence to Research Priority Areas

Summaries of the 20 approved projects are attached in Appendices J and K. Appendix J lists all projects by title, contracting institution, location of population to be studied, principal investigators, project dates, project costs and Council staff monitor. Appendix K briefly describes each project, indicates methodological and other innovations, and specifies potential policy and programmatic implications of the research. An examination of the relationship between approved projects and the research priority areas is facilitated by the following table which classifies the projects according to the eight priority areas.

Summary of Approved Proposals by Research Priority Areas

	Proximate Determinants	Determinants of Marriage Patterns	Fertility Decision Making	Perceptions of Fertility Settings	Economics of Children	Institutional Contexts of Fertility	Family Planning	Fertility Implications of Development Programs and Strategies
LeVine			X	X		X		
Hill & Randall	X	X		X	X	X		
Simpson-Hebert	X			X	X	X	X	
Ryan, et. al.					X	X		X
Page & Lesthaeghe	X					X		
Huffman, et. al.	X							
Debavalya, et. al.	X	X	X	X		X	X	
Goldstein			X	X	X		X	
Caldwell	X	X	X	X	X	X	X	
Langsten, et. al.	X							X
Locoh & Assogba	X	X			X	X		
Kreager			X	X		X		
Wolf		X					X	
Kanbargi & Dyson					X			
Hermalin, et. al.	X						X	
Adeokun	X				X			
Ouaidou & van de Walle	X			X	X	X		
Dandler & Balan		X	X			X		
Pebley & Mbugua	X	X						
Gray, et. al.	X							
Total	13	7	6	8	9	11	6	2

Almost all projects deal with several of the research priority areas. All priority areas receive considerable attention in the various projects except the area concerned with fertility implications of development programs and strategies. This area by its very nature is perhaps the most difficult to address because it assumes knowledge about development programs and strategies which could be studied for fertility implications. Since A.I.D., as a development agency, supports development programs and strategies, a greater effort should be made by A.I.D. staff to identify sites for research on this area. Consideration should be given to appointing a development expert to the Program Committee (from the World Bank, for example) who could bring knowledge of development projects to the program. In addition, given A.I.D.'s interest in family planning programs, the program should place more emphasis on this research area in the future. All in all the approved projects satisfy the A.I.D.'s research interests as defined by the Research Priorities Statement.

Methodological Innovations

The approved research projects can be characterized by various methodological innovations. Combining demographic survey work with anthropological data gathering is the most common innovation. Studies of education and fertility, old age security and fertility, migration and fertility, proximate determinants of fertility in tropical Africa, and fertility in Nepal, South India, rural China, and Nigeria all involve the use of combined demographic and anthropological methods of data collection. The program had played an important role in promoting the use of micro data. Two researchers funded under the program (Hill and Caldwell) are working with an IUSSP committee on micro data sets. Another study of fertility in Thailand applies focus group research to provide qualitative information to supplement survey data.

Several studies will yield unique or will utilize unique data sets in the data poor African region (nomads of Mali, follow-up surveys taking advantage of exact date of birth data from earlier surveys to accurately measure birth interval dynamics in Togo and Mali). Other studies will operationalize and measure innovative concepts such as parental investment strategies and child development markers to increase understanding of fertility decision-making and the economic value of children. One study will focus on the actual costs and benefits of children (costs of food consumption, health care, benefits from labor, etc). Another study will attempt to apply rigorous methodological techniques to WFS data from Africa. One study will attempt to integrate 10 different surveys in one comprehensive analysis of fertility change. Several studies will produce guidelines for data collection (participant research for use by population scientists) and for data analysis (assessment of data quality and techniques for comparative analysis of two cross-sectional surveys). In fact, almost all of the approved research will involve some methodological innovation. The exceptions are a few studies which were approved based on their overall scientific merits and the appropriateness of the topics within the research priorities areas, coupled with genuine collaborative efforts.

By and large, the program is approving and supporting innovative research which, however, would probably not be characterized as ground breaking. The one exception is a discretionary award for a study of a cultural theory of fertility which holds great promise of breaking ground theoretically.

Concerning other types of innovative research approaches such as so-called quasi-experimental, the Council has not received any proposals and has not been successful in getting a clear directive from A.I.D. as to what this type of research is involved. (A meeting was held in early 1981 for S&T/POP, PPC and Council staff to discuss the program including the nature of quasi-experimental research, but there were no specific suggestions made at that time by A.I.D.)

Policy and Programmatic Implications

The policy and programmatic implications of the approved projects are difficult to assess at this stage of project implementation, nevertheless the projects appear quite promising. Each project description (Appendix K) includes a brief paragraph on this topic. The following is a sampling of areas that may provide useful insights for policy makers and program planners.

- mechanisms of the education-fertility relationship
- impact of sedentarization of nomads on fertility as well as cultural supports of high fertility in sub-Saharan Africa
- hospital, clinic and public education practices and policies promoting breastfeeding and choice of contraceptive method compatible with breastfeeding
- impact of development policies (change in rural wages, human capital investments) on household structure and fertility
- culturally specific demand for family planning in sub-Saharan Africa
- impact of maternal nutrition and malnutrition on fertility
- impact of lactational amenorrhea and onset of ovulation on contraceptive use and fertility
- comprehensive case study of fertility change and of impact of family planning in Thailand
- data on reproductive and contraceptive decision making as a basis for developing an operations research project in Nepal
- causes of fertility decline and impact of family planning in South India and also in China
- impact of old age security motive on fertility
- need, mode and nature of child health and family planning services in Nigeria
- impact of migration (including circulatory) on marriage and childbearing
- impact of nuptiality patterns (including polygyny) on fertility

One final comment is warranted concerning the nature of research projects which the review committees approve. Given the innovative nature of the program, the Program Committee should perhaps consider taking more risks in inviting full proposals. This is not to suggest lowering the review standards, but rather to suggest applying the concept of venture capital. The review process may tend to give the benefit of doubt to those researchers and research institutions in developing countries with whom committee members have some familiarity. To complement greater risk taking, the committee can recommend, as it has in several cases, staff or consultant technical assistance for proposal development and project implementation.

Dissemination Plans

In preparation for the April 1983 Program Committee meeting, Council staff reviewed each approved proposal's dissemination activities. Articles, books and to a limited extent seminars and conferences are the usual means of dissemination for all projects. Several articles have already been published in Population and Development Review, for example "Demography in situ", June 1982 based on an early chapter of Kreager's work on a cultural theory of fertility and "The Causes of Demographic Change in Rural South India: A Micro Approach", December 1982 based on Caldwell's project.

While the topics addressed in the approved projects cover a broad spectrum and do not necessary relate to one another, the Council staff has suggested several seminars or conferences based on natural groupings of projects. Three such seminars are proximate determinants of fertility in sub-Saharan Africa, the determinants of natural fertility, and determinants of fertility in South Asia. On-going work by Population Council staff could complement a seminar or conference in each of these areas.

Other dissemination activities should be undertaken to make the research results available to policy makers in developing countries. Since several projects are nearing completion, Council staff should prepare a review article each year on the results of completed projects describing significant findings and their policy and program relevance. The review articles could be sent to policy makers in developing countries. Another related activity, patterned after the former Population Policy Analysis project with Battelle, could be carried out in several countries. Council staff and some researchers could prepare policy analyses highlighting the policy relevant findings and recommendations. Policy makers in specific countries could be asked to comment on the reports and the research findings. Seminars for researchers and policy makers could be organized to provide a forum for consideration of the research findings and their relevance to development and population programs. In addition to the above suggestions, Program Committee members should consider how to make the research results available to policy makers.

Management

Staffing

The Council staff devotes 2.8 person years to program administration. Charles Keely has been project manager throughout the life of the project. He has been an extremely effective manager and has always been responsive to A.I.D. concerns. Council staff assignments have remained fairly consistent in the first three years of the Program with some changes as indicated below:

9/80 to 4/82		4/82 to present	
Keely, p.i.	.80		.55
Cain	.50		.50
Frank	.50		.50
Jain	.50		.25
Nag	.25		.50
McNicoll	.25	Hollerbach	.50
	2.80 person years.		2.80 person years

The Council staff has responsibility for generating proposals, reviewing proposals, providing technical assistance in developing proposals, monitoring approved and funded projects, and developing dissemination activities. Each proposal is assigned to a staff person based on expertise in the subject area and methodology, geographic area and work load. Generally these assignments remain constant during the subproject cycle which enables excellent continuity in pre-project and official monitoring activities.

With very few exceptions, Council staff attends all Program and Peer Review Committee meetings. Council staff carries out the review and monitoring responsibilities conscientiously. The staff's input enhances the review process given their familiarity, in many cases, with the developing country researchers and research institutions. The issue of staff travel for proposal generation, proposal development and project monitoring has been discussed in previous sections. Staff travel has been effective for all mentioned purposes, although travel opportunities have not been pursued as much as was anticipated. One of the disincentives for staff travel may be the Council's reward structure. The Council places considerable importance on individual staff research efforts. Staff travel for the program may reduce time available for individual research. A.I.D. encourages the Council to be more supportive of staff travel because it has proven to be effective for program implementation. Given the schedule of the review meetings, additional staff travel should be arranged around the trimester review meetings to enable full staff participation.

One of the indirect benefits to the awards program is the research of the Council staff who work on the program. While A.I.D. funding does not support these individual efforts, they help to further the goals of the program and specifically areas identified as research priorities. Some recent papers include the following: Mead Cain: "On the Relationship Between Landholding and Fertility"; Moni Nag: "Fertility Response to Modernization"; Odile Frank: "Infertility in sub-Saharan Africa: Estimates and Implications";

Anrudh Jain: "The Effect of Female Education on Fertility: A Simple Explanation", "Beyond Family Planning: Its Policy Relevance for India", and "Preliminary Estimates of Fertility Decline in India During the 1970s".

Finances

An amendment to the contract approved in September 1982 extended the life of the project from September 1983 to September 1985 and increased A.I.D.'s share of the total costs from $3,946,480 to $7,340,480. The Council is contributing $1,714,983 to help defray administrative costs and so that the costs of the subordinate agreements represent approximately 59 percent of the total budget. As of March 31, 1983, the percentage of A.I.D.'s contribution to the budget which supports subordinate agreements was 49 percent, somewhat below the planned level. Projecting expenditures through September 1983, the percentage will probably increase to about 53 percent. Based on the figures below, administrative costs are all below budgeted levels, but the primary reason for the lower percentage of monies supporting subordinate agreements is that by September 1983 only 78.5 percent of monies budgeted for subordinate agreements will have been expended. The number of qualified proposals (due in part to the rigorous review process) coupled with the long lead time from receipt of preliminary proposals to execution of subordinate agreements has tended to keep the total amount expended for approved proposals lower than previously anticipated.

	Budget through 9/30/83	Total Actual and Estimated Expenditures and Obligations - through 9/30/83
Salaries	$518,592	$505,397
Fringe	$124,462	$124,312
Consultants	$80,580	$55,275
Travel	$151,300	$88,326
ODC	$15,000	$10,352
Offices Supplies & Services	$40,569	$33,895
Subordinate Agreements	$2,325,000	$1,828,703
Audit Fees	--	$70,000
Total Direct Costs	$3,255,503	$2,710,260
Indirect Costs	$1,518,884	$1,520,567
Total	$4,774,387	$4,230,827
P.C. Contribution	$1,021,727	$803,628
A.I.D. Contribution	$3,752,660	$3,427,199

The Council should make every effort to increase the percentage of program funds that supports research projects to achieve levels anticipated by A.I.D. when the program was established. Reducing lead time as well as increasing risk taking in the review process could improve this percentage.

Future of the Program

In March 1983, the Council sent a letter to A.I.D. requesting an extension to the program for an additional one and a half years to March 30, 1987. The Council also raised the larger issue of A.I.D.'s role in fertility determinants research beyond the life of the awards program. A.I.D. has several options to consider regarding these questions:

1. discontinue social science research on the determinants of fertility,
2. extend the current program with the Population Council, and
3. continue the program but with another contractor.

The program is a unique A.I.D. research and development effort in the area of fertility determinants and should continue to be considered an important component of A.I.D.'s total activity in the population field. The cost of the program is very small (one-half of one percent of the annual A.I.D. population budget) considering the potential contribution of the research. It is recommended that the A.I.D. continue to support research on fertility determinants.

As this management review indicates, the program is meeting the A.I.D.'s expectations for high quality, the kinds of research being supported and the participation of developing country researchers. The Program and Peer Review Committees have done an excellent job of establishing the scientific and technical basis for the program. The Council staff has consistently been responsive to A.I.D.'s interests and needs and has ensured both effective and efficient administration of the program. The composition of the Program Committee and the overall implementation of the program is in no small measure the result of Council staff efforts. It is recommended that the program continue to be administered by the Population Council.

The Council's request for a one and a half year extenion should be considered in the light of what further work is possible under the current life of project. Proposals are already being received which would extend beyond the current date for the end of the program, September 27, 1985. Requiring all projects funded during the last two years of the project to be completed by September 1985 would mean that many projects would be quite limited in scope by virtue of the short implementation time. In addition, the Council suggests that monitoring and dissemination work would also suffer with a large portfolio of small grants. The Council requests that funding of projects be extended through September 1986 with an additional six months to complete activities on existing projects including dissemination of results and end-of project activities by the Council, e.g. preparation of summary reports .

Given the long lead time needed to fund qualified proposals, the request to extend the project for one and a half years, means that projects could be approved for only about two more years. That is, projects would continue to be approved through the April 1985 review meeting or at the very outside through the August 1985 meeting instead of April 1984 under the current life of project. It is recommended that the program be extended for at least one and a half years. The recommendation to extend the awards program, as administered by the Population Council, assumes that the specific recommendations listed below will be taken into account as the program is implemented in the future.

Recommendations:

Program Committee: Several new members should be appointed to the Program Committee. Priority should be given to experts from developing countries and who are currently working in developing country setting as well as those with experience in evaluation of family planning programs. Consideration should also be given to appointing a development expert, for example someone from the World Bank.

Research Priorities Statement: The statement should be reviewed by the Committee and Council staff in light of experience with the program and subsequent research developments (including the NAS project on fertility determinants) to refine the priority areas.

Review Process: Without compromising the quality of the review, the Program Committee and the Population Council should examine the review process looking for ways to reduce the amount of lead time. Ways to increase risk taking in the review process should also be considered.

AID Participation: It is recommended that A.I.D. staff participate regularly in both the Peer Review and the Program Committee meetings in order to ensure that the Agency's concerns and interests are well represented at each stage of the review process.

Program Flyer: It is recommended that another flyer be prepared in English, French and perhaps Spanish and distributed as soon as possible to ensure that researchers are aware that the Program will continue. The text of the flyer should be modified to give increased emphasis to research which has policy and program relevance and to two priority areas family planning and fertility implications of development programs and strategies.

Staff Efforts: Staff should be encouraged to travel more in order to generate proposals, to assist in proposal development and to monitor projects.

Field staff should integrate the program's work into their on-going activities. Field staff could play an important role in identifying development project sites which could be the basis for so-called natural experiments. While the percentage of projects emanating from the Asia region is more than satisfactory, field staff in the Asia region can be involved in project monitoring and dissemination activities in addition to proposal

development. Staff from the Middle East region should also look for opportunities to utilize project resources. More systematic exchange of information between the Council and other A.I.D. contractors about the awards program is recommended. The A.I.D. project monitor should help facilitate this exchange.

Outstanding Invitations: Council staff should make additional efforts to follow-up on all outstanding invitations to submit proposals.

Lead Time: Steps should be taken to reduce the lead time consistent with the high quality review of proposals. Several measures which might be adopted are the following:

- technical assistance through staff travel could be timed to coincide more closely with the proposal development interval immediately following an invitation to submit a full proposal.
- all materials to overseas researchers could be pouched through A.I.D. missions
- preparation by Council staff of subordinate agreements could be shortened
- A.I.D. technical and contract offices should discuss ways to reduce time involved in A.I.D. approval of subordinate agreements.

Orientation of Approved Proposals: The Program Committee and the Council staff should place greater emphasis on the policy and program relevance of the proposals and on two research priority areas: family planning (e.g. use and non-use of contraception) and fertility implications of development.

LDC Participation in Awards: The Program Committee, Peer Review Committee and Council staff should continue to focus and even increase emphasis on the participation of developing country researchers and research institutions in the Program awards.

Dissemination: Council staff should prepare a review article each year on the results of completed projects. The articles should be distributed to policy makers in development countries.

Council staff and researchers on specific projects should prepare policy analyses highlighting the policy and program relevance of the findings. Policy makers from specific developing country could be invited to comment on these analyses, and seminars could be held bringing together both researchers and policy makers to discuss the findings.

Program Committee members should consider how to make the research results available to policy makers in developing countries. Continued emphasis should be placed on the importance of dissemination activities through the review and development of proposals and through project monitoring.

Finances: The Council should make every effort to increase the percentage of program funds that support research projects.

April 15, 1980

Dr. Charles Keely
Principal Investigator
International Research Awards Program
The Population Council
One Dag Hammarskjold Plaza
New York, New York 10017

Dear Charlie:

As I mentioned in our meetings last week, the Office of Population will be carrying out a management review of the International Research Awards Program during the next month. The purpose of this review, which will be conducted by AID staff in consultation with the Awards Program staff, is to assess progress to date, identify problems or weaknesses in the orientation of the program, and make recommendations which will be the basis for continuing or modifying the current project and possibly extending the life of the project.

The Agency's primary concern with the Awards Program has consistently been that the types of research supported should reflect the research and policy interests of AID. Coupled with this concern has been the desire to fund research projects which are innovative (for example applying experimental methodologies as opposed to surveys and other non-experimental designs) and likely to yield results which would be operationally useful to the Agency's work in family planning. The letter from S. Joseph Speidel to George Zeidenstein dated July 3, 1980 (see attached) describes these interests. The Cooperative Agreement between AID and the Council, the Program Priorities Statement, and the brochures announcing the program for 1981 and 1982-83 all reflect these interests. A second major concern has been that developing country researchers and institutions be well represented among the recipients of awards given through the program.

Based on these concerns, the central questions to be addressed by the management review will be whether the research projects funded to date reflect the research and policy interests of the Agency and the extent to which the funded projects are supporting researchers and institutions in developing countries. Other important questions related more to the operation of the project involve the following:

> How effective have efforts (via project staff, field staff, brochures, program committee, etc.) been to solicit research proposals? Are the number and geographic distribution of proposals satisfactory?

How effective is the review process in funding appropriate topics and institutions? Does the composition of the Program Committee and Peer Group meet the interests of the project? What role has the staff played in developing fundable proposals? Is the review of subproject budgets sufficiently rigorous? Is the time involved in the entire review process (initial receipt of a preliminary proposal through the signed subordinate agreement with the researchers) reasonable?

How effective is the subproject monitoring by the Council's staff? How much time and what types of technical assistance are being provided by the staff?

What plans have been made for dissemination of the research results?

Is the proportion of expenditures for subproject research and the Council's administrative costs in line with The Agency's initial expectations?

I look forward to discussing each of these questions with you and your staff over the next few weeks. If you have any questions concerning the management review, please do not hesitate to call.

Sincerely,

Judith R. Seltzer
Policy Development Division
Office of Population

Clearance:

S&T/POP, S. Singing Draft) Date 04/14/83
S&T/POP/PDD, S. Clark (Draft) Date 04/14/83

Drafted by:S&T/POP/PDD, JSeltzer:04/13/83:mang:0464X:58001

The Population Council

One Dag Hammarskjold Plaza
New York, New York 10017
Cable: Popcouncil, New York
Telephone (212) 644-1300
Telex: 234722 POCO UR

SENT VIA EXPRESS MAIL

17 March 1983

Dr. J. Joseph Speidel
Deputy Director
Office of Population
United States International Development
Cooperation Agency
Agency for International Development
Washington, D.C. 20523

Re: Cooperative Agreement
No. AID/DSPE-CA-0093,
Population Policy Research,
International Awards

Dear Joe:

The purpose of this letter is twofold. First, I wish to raise the important issue of the continuity of AID support for research on the socioeconomic determinants of fertility beyond the specific duration of the International Research Awards Program on Determinants of Fertility in Developing Countries, and second, as a means to facilitate such continuity, I wish to propose an extension of the present program.

When the Population Council submitted its unsolicited proposal for the International Research Awards Program on the Determinants of Fertility in Developing Countries, we did so with the conviction that successful policy and program activities depend in large part on solid scientific investigation. Not only is research a component of specific policies, strategies, and programs; it also justifies and validates a population focus in development activities. We believe that support of research on the socioeconomic determinants of fertility, like biomedical research on contraception, are appropriately an integral part of the Agency's population activities. Just as NICHD supports social science research on population in the domestic sphere, it seems to us natural and right that attention to and funding of such research be part of the activities of AID overseas where the challenges are even greater.

The Council's Research Awards Program is a mechanism for generating and evaluating research that will contribute to our understanding of the determinants of fertility and for building the research resources

and personnel in developing countries devoted to this end. Although our agreement is for a specific program, we think of the function as an essential ingredient in AID's total activity in the population field. While there are other possible mechanisms or other organizations that could replace the Council in the future, we believe the activity of funding sound research should be ongoing. We suggest that it is not premature for AID to address the issue of how to carry out this function beyond the life of the Awards Program, and we would welcome the opportunity to contribute to this discussion.

It is within this context--viewing the Awards Program as one reasonable way of carrying out an ongoing function of a large international program to affect fertility levels--that I propose an extension of the present agreement. Specifically, I am requesting an amendment to the cooperative agreement for the International Research Awards Program on the Determinants of Fertility in Developing Countries to permit administration and monitoring of funded research at a reduced staff level for 18 months beyond the current end of the agreement.

The current ending date for projects funded under the program is 9/29/85. We are already receiving proposals that would extend beyond that date. Given that there are still two and a half years in which to make awards, it is desirable that enough time be available for projects of merit to be carried out. We think that requiring all projects funded during years four and five of the project (about $2 million budgeted) to be completed by 9/29/85 would in effect mean funding a large number of projects that would be quite limited in scope by virtue of the short time allowed for their completion. Monitoring and dissemination might also suffer with a large portfolio of small grants of limited scope. Our proposal is to permit funding of projects that would end by 9/29/86. Under the proposed extension, no new projects would be funded after 9/29/85, the current ending date. The additional six months (9/30/86- to 3/30/87) would permit wrap-up activities on outstanding projects, including dissemination of results and end-of-project activities by the Council. Our request includes 1.5 full-time equivalent professional staff, a continuation of the project coordinator for the wide ranging administrative tasks and one full-time secretary for the 18 month period.

I am enclosing a budget for the proposed amendment to the cooperative agreement, along with the five-year budget from amendment four to the cooperative agreement. It should be noted that the proposed budget shows overhead calculated on the basis of the Population Council's current

provisional rate. The Population Council expects the rate to decline given current trends.

Let me conclude by stating that we believe this program, having been built on a solid administrative foundation for proposal review and implementation, is developing as expected. The original proposal called for 5 to 10 grants a year. The 15 large grants and 3 small grants currently funded or in the final processes of clearances put the program on track. We are in the early stages of reaping the fruits of these research efforts and those which will follow. The patient and persistent efforts of the Council's and Office's staffs to date have brought us to this point. We look forward to working closely with our colleagues in the Office of Population to advance our mutual interests as this program moves into its maturing phase.

Sincerely yours,

James J. Bausch
Vice President
and Secretary

Enclosures

Appendix C

PROGRAM COMMITTEE MEMBERSHIP
AS OF MARCH 1983

Ansley J. Coale
Office of Population Research
Princeton University
21 Prospect Avenue
Princeton, New Jersey 08540
(609) 452-4870

Rodolfo A. Bulatao
East-West Population Institute
1777 East-West Road
Honolulu, Hawaii 96848
(808) 944-7440

Paul Demeny
Center for Policy Studies
The Population Council
One Dag Hammarskjold Plaza
New York, New York 10017
(212) 644-1780

Richard Lieben
Department of Anthropology
University of Hawaii
2424 Maile Way
Honolulu, Hawaii 96822
(808) 948-8309

Jason L. Finkle
Center for Population Planning
School of Public Health
University of Michigan
Ann Arbor, Michigan 48109
(313) 764-7516

Ronald Freedman
Population Studies Center
University of Michigan
1225 S. University
Ann Arbor, Michigan 48109
(313) 764-8004

Robert Lapham
National Research Council
Assembly of Behavioral and
2101 Constitution Avenue, N.W.
Washington, D.C. 20418
(202) 389-6768

Appendix D

PEER REVIEW COMMITTEE MEMBERSHIP

Bryan L. Boulier
Department of Econimics
George Washington University
2201 G Street, N.W.
Washington, D.C. 20052
(202) 676-8088

Larry Bumpass
Center for Demography and Ecology
University of Wisconsin
Social Science Building
1180 Observatory Drive
Madison, Wisconsin
(608) 262-2182

Krishnan N. Namboodiri
Department of Sociology
University of North Carolina
Chapel Hill, N.C. 27514

Lucile F. Newman
Division of Biology and Medicine
Brown University
Providence, Rhode Island
(401) 863-2016

Raul Urzua
Area of Population and Development
CELADE
Avenida Dag Hammarskjold
Edifico CEPAL
Santiago, Chile

Vijay K. Verma
Statistical Office
United Nations
New York, New York
(212) 754-7714

Appendix E

RESEARCH AREAS LISTED IN PROGRAM FLYERS

1981

- The social and cultural process underlying observed correlates of fertility or its proximate determinants. The goal of the research should be to explain observed relationships rather than merely to estimate them.
- Accounting for trends and differentials in fertility by its proximate determinants.
- Detailed study in small communities of the material and social value of children and the institutional context of fertility behavior.
- The direct or indirect impact of development programs and policies on fertility behavior, e.g. land reform, government employment schemes, and cooperatives.
- Factors affecting use or nonuse of contraceptives, including the desired number of children or delivery constraints involving availability of contraceptives and access to servies.

1982-1983

- Accounting for trends and differentials in fertility by its proximate determinants.
- Determinants of marriage patterns.
- The process and environment of decision making as it affects fertility.
- Detailed study in small communities of the economic costs and benefits of children.
- The institutional context of fertility behavior.
- Factors affecting use or nonuse of conctraceptives, including the desired number of children or delivery constraints involving availability of contraceptives and access to services, and research focused on family planning programs that have had exceptional success relative to national or regional programs.
- The direct or indirect impact of development programs and policies on fertility behavior, e.g. land reform, guaranteed employment schemes, and new local government arrangements.

Appendix F

Distributions of Preliminary Proposals by Location of Investigator's Institution and Location of Populations to be Studied

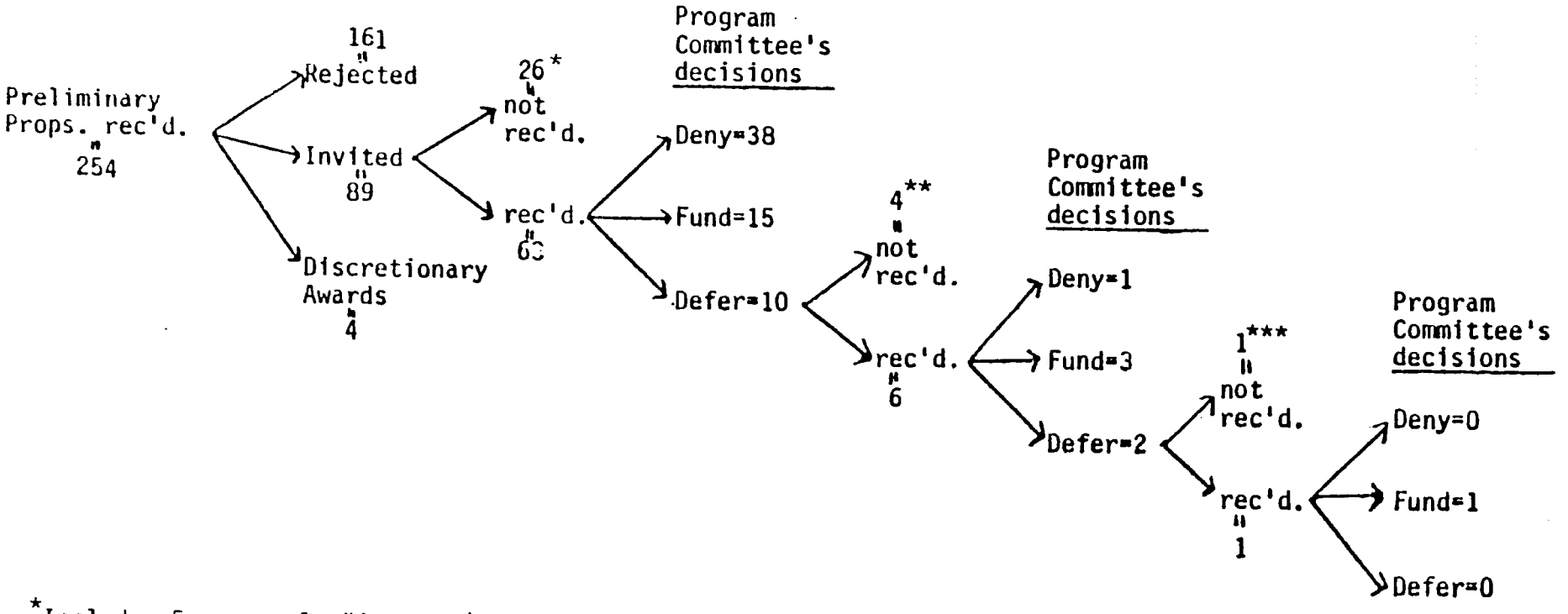
Preliminary Proposals Submitted:
Start of Program - March 1, 1983

Location of Principal Investigator's Institution	Location of Populations to be Studied					
	Asia	Africa	L.A.	M.E.	Multip.	TOTAL
Developing	72	37	20	7	1	137
Collaboration*	48	9	16	2	9	84
Developed	15	2	6	1	9	33
TOTAL	135	48	42	10	19	254

* Collaboration indicates a cooperative effort between a developing and a developed country institution.

Location of Principal Investigator's Institution	Location of Populations to be Studied					
	Asia	Africa	L.A.	M.E.	Multip.	TOTAL
Developing	28.3	14.6	7.9	2.8	0.4	53.9
Collaboration	18.9	3.5	6.3	0.8	3.5	33.1
Developed	5.9	0.8	2.4	0.4	3.5	13.0
TOTAL	53.1	18.9	16.5	3.9	7.5	100.0 (254)

Flow Chart of Preliminary Proposal submitted to the Determinants of Fertility Program
(from the start of the Program through April 8, 1983)



*Includes 5 proposals "invited" during the April 1983 Program Committee meeting. See the attached list for information on the status of proposals "invited" but not yet received.

**Includes 3 full proposals that were "deferred" during the April 1983 Program Committee meeting and full proposal no. 82/049I that was "deferred" in December 1982.

***Full proposal no. 81/049I was "deferred" twice by the Program Committee. The P.I. wrote a letter to the Population Council in January 1982 thanking the Committee for its comments. There has not been any correspondence since that time.

The attached flow chart is a "natural history" of proposals and indicates what happened to a proposal as it was reviewed by the Committee. Of 254 preliminary proposals, 161 were rejected the first time they went to the Program Committee; 89 were invited; and 4 were given discretionary awards. Excluding the discretionary awards, 36 percent (89 ÷ 250) of the preliminary proposals led to an invitation on their first review by the Committee and 64 percent (161 ÷ 250) were rejected.

Of the 89 invitations, 26 have not been received. Attached is a list of those indicating status (withdrawn, indication of intent to submit, subject of a Council visit, no contact). The remaining 63 were submitted for Peer Review and Program Committee action.

Of those 63 full proposals, 39 were denied -- 38 at the first review and one was ultimately denied after a deferral. Nineteen (19) full proposals were approved -- 15 on the first review, 3 after one deferral, and 1 after two deferrals. Five (5) proposals are still pending -- 4 were deferred once and the new submission is expected and 1 was deferred twice and its receipt is expected. If one excludes the 5 deferred proposals still outstanding, then 58 of the 63 full proposals have had a decision. Of these 67 percent (39÷58) were denied and 33 percent (19÷58) were approved by the Committee.

If one substracts the 26 invited proposals not received, and the 5 deferred proposals still pending (a total of 31) from the 254 preliminary proposals, then 223 proposals have received a final resolution by the Committee. In that case, 10 percent (23÷223) have received approval and 90 percent (200÷223) have been rejected at the preliminary or full proposal stage.

Currently 21 projects are underway or in various stages of clearance and subagreement preparation. Four of these are discretionary (small) grants. Two approved projects failed to get government or AID clearance.

INVITED PROPOSALS THAT HAVE NOT BEEN RECEIVED AS OF MAY 11, 1983

– 81/013	PI, Diop left institution, Faye took over. PC letter to Faye;"need new preliminary proposal"
– 81/020	Withdrawn
– 81/023	Withdrawn
– 81/028	Research in China. PC letter to PI "currently can not fund with AID $"
– 81/029	Letter to PC in 1981: "trying to get $ directly from AID"
81/057	PC received letter 6/82 - hopes to submit in future
81/071	No correspondence. A. Jain plans to visit during May 1983 trip.
81/083	PC received letter 12/82 - hopes to submit "soon"
81/088	No correspondence - was invited 8/81
81/129	No correspondence - was invited 12/81
82/001	No correspondence - was invited 4/82
82/002	No correspondence - was invited 4/82
82/014	PC received letter 2/83 - hopes to submit by June 1983
– 82/021	Withdrawn
82/041	Visited PC - saw P. Demeny - 8/82
82/053	No correspondence - was invited 8/82
82/072	PC received letter 12/82 - hopes to submit for April 1983 round
82/082	No correspondence-was invited 12/82
82/085	PC received letter 1/27/83 - hopes to submit "next round"
82/092	No correspondence-was invited 12/82
82/101	PC received letter 1/83 - hopes to submit by 6/83. - A. Jain to visit
83/006	Invited: April 1983 meeting
83/007	" " "
83/009	" " "
83/010	" " "
83/014	" " "

PROJECTS APPROVED BY THE PROGRAM COMMITTEE

Agreement or Proposal No.	Recipient	Receipt of Preliminary Proposal	PC letter of invitation mailed	Receipt of Full Proposal	PC letter of approval mailed	Agreement mailed to AID for concurr.	Rec'd. AID's concurrence in letter	Agreemt.mailed to Recipient for Signature	Council rec'd. signed agreement	First payment sent to Recipient
CP81.61A	Harvard	3/4/81	4/15/81	6/26/81	8/10/81	9/8/81	12/14/81	12/31/81	2/8/82	2/18/82
CP82.2A	LSHTM	4/21/81	5/1/81	6/22/81	8/10/81	10/20/81	12/18/81	1/29/82	4/27/82	5/20/82
CP82.30A	J.Hopkins	3/3/81	4/15/81	6/26/81	8/10/81 c/	12/14/81 2/9/82 (revised)	4/7/82	8/5/82 b/	10/22/82	10/27/82
CP82.37A	ICRISAT	3/2/81	4/15/81	6/25/81	8/13/81	9/22/81 → 6/30/82 8/23/82 → 11/22/82 (revised)		9/15/82 b/	4/14/83	4/26/83
CP82.38A	U. of PENN					9/22/81	6/30/82	9/15/82 b/	9/21/82	10/1/82
CP82.39A	Vrije Univ.	3/17/81	8/13/81	10/26/81	12/7/81	2/26/82 a/	5/24/82	9/9/82 b/ (never rec'd) 10/1/82	11/4/82	11/10/82
CP82.36A	J. Hopkins	7/1/81	8/4/81	10/26/81	12/7/81	3/24/82 a/	6/23/82	9/8/82 b/	9/15/82	11/2/82
CP82.41A	Chulalong-korn Univ.	6/22/81	8/4/81	10/26/81	12/15/81	5/20/82 a/	8/23/82	9/9/82 b/	10/6/82	10/21/82
CP82.40A	Australian National U.	2/17/81	4/15/81	2/17/82	4/16/82	6/17/82 a/	8/23/82	9/9/82 b/	11/1/82	11/10/82
CP82.42A	U.N.C.	10/26/81	12/7/81	2/24/82	4/19/82	6/1/82 a/	8/23/82	9/9/82 b/	10/4/82	10/27/82

PROJECTS APPROVED BY THE PROGRAM COMMITTEE - continued

Agreement or Proposal No.	Recipient	Receipt of Preliminary Proposal	PC letter of invitation mailed	Receipt of Full Proposal	PC letter of approval mailed	Agreement mailed to AID for concurr.	Rec'd. AID's concurrence in letter	Agreemt.mailed to Recipient for Signature	Council rec'd. signed agreement	First payment sent to Recipient
CP82.43A	Univ. of Benin	7/20/81	12/8/81	2/25/82	4/9/82	6/11/82	8/23/82	9/9/82	10/14/82	11/8/82
CP83.3A	Univ. of Michigan	3/2/82	4/15/82	6/24/82	8/16/82	11/22/82	1/20/83	1/21/83	2/28/83	3/16/83
CP82.47A	Harvard			5/7/82	~~letter~~ call in July 1982	8/25/82	10/12/82	10/14/82	10/25/82	10/19/82
Proposal No. 81/072I	ISEC,India	6/12/81	8/6/81	3/18/82	8/16/82					
No. 81/120I	Univ. of Ife	10/27/81	12/8/81	2/23/82, 6/11/82, 9/23/82	12/27/82					
No. 82/050I	Sahel Inst.	6/25/82	8/16/82	10/22/82	12/22/82	3/23/82 d/				
No. 82/022I	CERES,Bolivia	2/1/82	4/6/82	10/27/82	12/27/82					
No. 82/090I	Princeton	10/29/82	12/22/82	2/28/83	4/20/83					
No. 82/093I	J. Hopkins	11/1/82	2/18/83	3/1/83	4/20/83					
No. 81/065I	U. of Calif.	4/28/81	8/4/81	10/22/81, 2/22/82	4/30/82	→ Failed to get Government clearance				
No. 81/097I	CEBRAP/ CEDEPLAR	7/6/81	8/6/81	10/28/81, 2/24/82	4/21/82	→ Failed to get AID clearance				

DISCRETIONARY (SMALL) GRANTS

Agreement or Proposal No.	Recipient	Receipt of Preliminary Proposal	PC letter of invitation mailed	Receipt of Full Proposal	PC letter of approval mailed	Agreement mailed to AID for concurr.	Rec'd. AID's concurrence in letter	Agreemt.mailed to Recipient for Signature	Council rec'd. signed agreement	First payment sent to Recipient
CP81.62A	LSHTM	4/22/81			8/10/81	10/21/81	12/18/81	12/30/81	2/1/82	2/8/82
CP82.7A	Case Western Reserve	10/26/81			12/17/81	2/3/82	3/31/82	4/12/82	4/22/82	5/5/82
CP82.51A	St. John's College,UK	2/26/82			4/21/82	8/2/82	10/18/82	10/26/82	3/7/83	3/16/83
CP82.28A	Stanford	2/4/82			4/20/82	5/11/82	7/6/82	7/13/82	10/6/82	10/13/82

FOOTNOTES

[a]This project had a proposed estimated completion date beyond September 29, 1983. Therefore, the lapse in time between when the Program Committee approved the project and when the agreement was submitted to AID requesting concurrence was partially due to the Council's waiting to hear affirmatively on the amendment submitted (in April 1982) requesting AID to extend the completion date of the AID/Population Council Cooperative Agreement (AID/DSPE-CA-0093) to September 29, 1985. Correspondence with the PIs regarding budgetary questions, was also responsible for delays, in some cases.

[b]There was a considerable delay between the date AID approved the placement of the agreement and the actual mailing of the agreement to the Recipient for signature because AID's approval was contingent on the agreement's completion date falling within the dates of the Prime Agreement. The Council was waiting to receive an extension of the Prime Agreement dates.

[c]Much of the delay was due to the PI trying to confirm institutional sponsorship for the agreement and clarification of budget items and submitting a time table.

[d]Delay due to negotiation of budget for project.

[e]Letter stated that approval was "conditional." The PI made the necessary revisions in the proposed study and sent them to the Council in October 1981 and the Associate monitoring the project and the Program Manager approved the revisions.

Staff Monitoring Activities

January - March 1983 Quarterly Report

Generating New Proposals, Technical Assistance, and Monitoring

During the quarter, Dr. Moni Nag was in India and Bangladesh. During this trip he spent 10 days in Gandhigram and Vellore. He provided technical assistance on the Gandhigram Institute of Rural Health and Family Welfare proposal. The proposal (No.82/098) had been turned down by the committee. However, since there was interest, the staff was directed to encourage and provide help for a resubmission with modifications.

In Vellore, Dr. Nag provided technical assistance in full proposal generation for the Christian Medical College proposal by Sundar Rao and J. Richard (No. 82/084I). A full proposal was received and reviewed in the recent round. A decision was deferred pending further elaboration. In Delhi, Dr. Nag met with Dr. Pai Panandikar of the Centre for Policy Research whose previous preliminary proposal was turned down but who was also encouraged to resubmit. A new preliminary proposal was received in February and a full proposal was invited at the most recent meeting of the Program Committee.

It should be noted that Dr. Nag's trip to India was paid for from other sources. The only cost to the Program was internal travel and maintenance (about $500). A trip report is attached.

In mid-December, Mead Cain was in England on other business. He met with Philip Kreager (CP82.51A) who was approved for a small grant. There had been problems with subagreement signing from his institution, St. John's College, Oxford. The issue has been cleared and an agreement is now signed. This activity required no travel or maintenance cost from this program.

Dr. Cain was in India on other business in February 1983. He spent several days giving technical assistance on the Das Gupta (82/049) proposal which had been deferred in December. A revised proposal is expected for the next review round.

Dr. Cain also visited ICRISAT at Hyderabad to monitor progress of the joint Univ. Penn-ICRISAT project (CP82.37A/.38A). In March, Dr. Cain held lengthy conversations with one of the Univ. Penn investigators (Behrman). He also provided technical assistance to the Penn investigators and their research assistants in the form of data tape and documentation.

Dr. Cain also spoke with T. Dyson (81/072) in Delhi about clearances by the GOI of the approved project with Kanbargi. The Council, from its own funds, has allotted up to $1000 to Dr. Kanbargi for internal travel in India to expedite clearances.

No program travel or maintenance funds were expended by Dr. Cain for his work with Das Gupta, ICRISAT, and Dyson.

In late March, Dr. J. Balan was in New York. Dr. Cain spent two days providing technical assistance to Dr. Balan on his approved project with Dr. Dandler in Bolivia and Argentina (82/022). Dr. P. Hollerbach also met with Dr. Balan. She provided questionnaires on pregnancy histories and contacts at the East-West Population Center who are conducting research on circular migration and nuptiality. Peter Smith will be sending Balan various questionnaires from the Asian nuptiality project and commentary on methodological difficulties and complications of life history analysis. Dr. Hollerbach is gathering copies of migration and fertility articles to send to Balan.

In January 1983, a planned workshop was held in Lome for the "Arrival of the Next Child in Lome" project by Locoh and Assogba (CP82.43A). Two consultants (M. Loriaux and D. Tabutin of the Department of Demography, Louvain) were present and sent a detailed substantive report. Dr. O. Frank monitors the project.

In December 1982, a site visit was made by Dr. Frank to monitor the Malian projects (CP81.62A and CP82.2A) that involve the London School of Hygiene and Tropical Medicine and the Page and Lesthaeghe project in Brussels (CP82.39A). A trip report is attached.

During the quarter an interdisciplinary conference on nomads of the Sahel was held in Bamako (Jan. 1983) under the joint sponsorship of the Sahel Institute and the institutions awarded funding for the Malian work, LSHTM and ILCA. A volume of proceedings in French and English is being prepared. A program of the meetings and book outline are included in the project summaries discussed in another section of this report. This material and a substantive report from the demographic survey project (CP81.62A) were received and reviewed in this quarter.

Dr. Frank also prepared and sent copies of a bibliography on timing in retrospective data collection to L.A. Adeokun for his approved project in Nigeria (agreement pending), "Sub-Ethnic Variations in Breastfeeding, Marital, Sexuality and Fertility in Yorubaland."

Dr. Frank is preparing for an African trip, probably June-July 1983, to monitor the African proposals and provide technical assistance as needed to them, to work on promising proposals as directed by the Program Committee (e.g., in Uganda) and to generate new proposals, as on her last African trip. The trip may also include visits to Francophone countries in North Africa.

The first of the LeVine sub-agreements ("Women's Schooling and Fertility in Developing Countries" - CP81.61A) has required a good deal of monitoring activity in the form of review of substantive reports in the last quarter of 1982 and continuing into this quarter. These are summarized in the project reviews contained elsewhere in this report.

The second subagreement (CP82.47A) for the Mexican field work has required a great deal of work due to the problem of currency uncertainties and Mexican institutional sponsorship. The Program Manager and Axel Mundigo, Council Sr. Representative in Mexico City spent a good deal of time on this. The matter is solved and the work schedule is proceeding. P. Hollerbach is succeeding O. Frank as project manager and has been in contact with Dr. LeVine.

While on other business, Dr. A. Jain discussed the Van de Walle/Ouaidou project (agreement pending) with Ouaidou at the Sahel Institute and the AID mission in Bamako. He also held discussions on a possible Sahel Institute and CBS/Bamako project. No program travel funds were used for this trip.

Dr. Jain has also provided technical assistance for the Hermalin et al. (CP83.3A) project. This included contacts with Council representatives A. Mundigo (LA) and R. Henin (Kenya) for access to data. While in Kenya, he held discussions with L. Werner to help get access to Kenyan tapes. No program travel funds were used for the Kenyan contacts.

The Nibhon, Apichat and Knodel project (CP82.41A) had a substantive report submitted and reviewed by A. Jain. In addition, B. Baron, Council Sr. Representative in SE Asia has been in contact with the researchers regarding dissemination. A. Jain on an upcoming trip to that region plans to pursue this matter with Baron and the researchers for Thailand activities.

Staff continue the routine of providing written reviews of both preliminary and full proppsals which are used by the Committees as part of their reviews. Staff contribute to the discussion at the Committees (but have no vote) and prepare the required correspondence, information sheets, and follow-up that Committees indicate. In addition, all substantive reports are reviewed by the staff monitor for certification by the Program Manager that reports are acceptable for subsequent disbursements. When substantive reports are not acceptable, the staff monitor handles the contacts and works with investigators to improve the report so that it can be certified as acceptable.

In this quarter, 2 subagreements were submitted to USAID for review and 3 subagreements were signed. In addition, two amendments to previous subagreements were submitted to USAID and 4 amendments to subagreements were executed.

Appendix I

Part II

Example of Project Monitoring

One member of the Council's staff, Odile Frank, spend part of a day reviewing project monitoring activities with A.I.D. staff as part of the management review exercise. Although several projects' monitoring activities were reviewed, the following provides a good example of the typical monitoring acitivities. The project which is being conducted by the University of Benin in Togo began officially in October 1982. All project correspondence is in French.

Pre-project monitoring (November 1981 - October 1982)

- Staff review of preliminary proposal in November 1981, and review by Program Committee with staff input in December 1981. Preliminary proposal approved with technical assistance. Invitation to submit full proposal sent to applicant detailing specific recommendations.

- Staff met with researcher at the Population Council to review the Committee's suggestions. (Researcher was visiting New York on other business.)

- Staff visited researcher in Togo for one week in January 1982 for intensive work on preparing the full proposal (reviewed methodology, sample questionnairs, etc.) Staff also introduced USAID Population Officer to researcher and to other demographers at the University of Benin.

- Considerable correspondence between the principal investigator and P.C. staff regarding computer problems. Correspondence with SPSS company regarding leasing and installation of new version of the software at the government's computer center. Discussion with Battelle staff working with Togolese on same issue.

- Staff review of full proposal in March 1982 and staff participation in the review meetings of both the Peer Review and the Program Committees in March and April 1982. Budget was examined and commented on by staff, Peer Review and Program Committees. Letter of approval send to applicant in April 1982.

- Staff reviewed and approved request for change of co-principal investigator.

- Staff reviewed the subordinate agreement. Subordinate agreement was fully executed in October 1982.

Official project monitoring (October 1982 - continuing).

- Staff sent cables to the principal investigator in order to set up bank account to receive payment.

- Staff reviewed amendment to subordinate agreement reflecting change in the cost of leasing SPSS and other computing arrangements.

- Staff provided teaching materials at the request of the principal investigator.

- Staff reviewed the first substantive report from the principal investigator received in April 1983.

INTERNATIONAL RESEARCH AWARDS PROGRAM ON THE DETERMINANTS OF FERTILITY IN DEVELOPING COUNTRIES

Projects Funded Under the Determinants of Fertility Program

4/6/83

Subordinate Agreement No.	Title of Proposal	Contractor (Institution)	Location of Population to be Studied	Principal Investigator(s)	Dates of Project	Total Cost of Subordinate Agreement(US$)	Program Staff Monitor
CP81.61A	Women's Schooling and Fertility in Developing Countries	Harvard Univ.	India and 5 country study (Kenya, Mexico, Italy, Sweden, U.S.)	R. LeVine	9/1/81-8/31/82: 1 yr.	99,998	O. Frank
CP81.62A	An Analysis of Fertility and Childhood Mortality amongst Tamasheq Nomads in Central Mali: An Anthropological Perspective	London School of Hygiene and Tropical Medicine, U.K.	Mali	A. Hill S. Randall	7/1/81-12/31/81: 6 mos.	14,210	O. Frank
CP82.2A					1/1/82-6/30/83: 1 1/2 yrs.	72,777 (of which subcontract to ILCA,Mali : $21,622)	O. Frank
CP82.30A	Infant Feeding Decisions and Contraceptive Choices in the Philippines	Johns Hopkins Univ.	Philippines	M. Simpson-Hebert	3/1/82-2/28/85: 3 yrs.	194,650 (of which subcontract to Inst. of Phil. Culture: $92,292)	O. Frank
CP82.37A	Family Structure and Fertility: Theoretical and Empirical Analysis	ICRISAT, India	India	J. Ryan	6/1/82-5/31/85: 3 yrs (agreement not fully executed)	108,704	M. Cain
CP82.38A		Univ. of Penn.	India	J. Behrman R. Pollak	6/1/82-5/31/85: 3 yrs.	129,117	M. Cain
CP82.39A	The Proximate Determinants of Fertility in Tropical Africa: Demographic and Institutional Charge	Vrije Universiteit, Brussels, Belgium	African researchers will carry out project in Belgium	H. Page R. Lesthaeghe	10/1/82-9/30/85: 3 yrs.	174,723	O. Frank
CP82.36A	Determinants of Natural Fertility in Bangladesh	Johns Hopkins Univ.	Bangladesh	S. Huffman (A. Chowdhury) (J. Menken)	4/1/82-3/31/85: 3 yrs.	242,490 (of which subcontract to Princeton:$36,065; and to ICDDR,Bangladesh:$33,620)	M. Cain
CP82.41A	A Comprehensive Study of Fertility Levels and Change in Thailand	Chulalongkorn Univ., Thailand	Thailand	N. Debavalya (Chula); A. Chamratrithirong (Mahidol Univ.); J. Knodel (sabbatical from Univ. of Michigan)	7/1/82-12/31/83: 1 1/2 yrs.	65,250	A. Jain
CP82.7A	Determinants of Urban Fertility in Kathmandu, Nepal	Case Western Reserve Univ., Ohio	Nepal	M. Goldstein	12/15/81-11/14/82: 11 mos.	9,300	M. Cain

CP82.40A	The Origins of Fertility Decline	The Australian Natl. Univ.	India, L.A., Africa	J.C. Caldwell Pat Caldwell	4/1/82-6/30/84: 2 1/4 yrs.	30,000	M. Cain
CP82.42A	The Impact of Food Crises on Fertility in Bangladesh: An Analysis of Birth Interval Data	Univ. of North Carolina at Chapel Hill	Bangladesh	R. Langsten (A.T.Shafiq, Ahmed Chowdhury)	9/1/82-8/31/84: 2 yrs.	154,596 (of which subcontract to Christian Comm. for Dev. in Bangladesh:$17,998	M. Cain
CP82.43A	The Arrival of the Next Child in Lome (A.P.E.L.)	Univ. of Benin, Lome, Togo	Togo, Africa	Therese Locoh Messan Assogba	10/1/82-9/30/85: 3 yrs.	187,185	O. Frank
CP82.51A	For a Cultural Theory of Fertility	St. John's College, Oxford, England	Multiple pops.	Philip Kreager	7/1/82-4/30/83: 10 mos. (extens. to: 2/29/84 requested of AID)	11,200	M. Cain
CP82.28A	Family and Fertility in Rural China	Stanford Univ.	China: data already collected	Arthur P. Wolf	6/1/82- 11/30/82: 6 mos. (extens. to: 6/30/83)	6,541	M. Nag
Proposal No. 81/072	Support for the Elderly and its Implications for Fertility Behaviour in Southern Karnataka	Institute for Social and Economic Change	India	Ramesh Kanbargi Tim Dyson (London School of Economics)	3/1/83-6/30/85: 2 yrs. 4mos. (subcontract to LS of E)	66,600	M. Nag
CP83.3A	The Suitability of 1960s KAP Surveys for Comparative Analysis	Univ. of Michigan	Multiple countries	Albert Hermalin William Mason Barbara Entwisle (Dartmouth)	1/1/83-8/31/83: 8 mos.	56,836	A. Jain
CP82.47A (continuation of CP81.61A)	Women's Schooling and Fertility in Developing Countries	Harvard Univ.	Mexico	Robert LeVine	9/1/82-8/31/84: 2 yrs.	149,973	P. Hollerbach
Proposal No. 81/120	Sub-ethnic Variations in Breastfeeding, Marital Sexuality and Fertility in Yorubaland (Nigeria)	Univ. of Ife, Ile-Ife, Nigeria	Nigeria	Lawrence Adefemi Adeokun	2 1/2 yrs.	226,600	O. Frank

Proposal No. 82/050	A Longitudinal Study of Postnatal Behavior in Two Sahelian Cities: Bobo-Dioulasso and Bamako	Institut du Sahel, Bamako, Mali	Mali	Nassour Ouaidou Francine van de Walle (Univ. of Penn.)	4/1/83-9/30/85: 2 1/2 yrs.	181,453 (of which subcontract to Univ. of Penn: $84,778)	O. Frank
Proposal No. 82/022	Migration and the Onset of Fertility Decline: A Study in Bolivia and Argentina	CERES, Bolivia	Bolivia, Argentina	Jorge Dandler (CERES) Jorge Balan (CEDES), Argentina	4/1/83-9/30/85: 2 1/2 yrs.	248,490 (subcontract to CEDES)	P. Hollerbach

Appendix K

Descriptions of Twenty Approved Proposals

(LeVine)

Women's Schooling and Fertility in Developing Countries

The project seeks to clarify the means by which schooling of women affects their fertility. First, researchers determine baseline parental investment strategies (concepts of child care, nutrition and development, time budgets, etc). By looking at mother and child interaction in societies at different stages of fertility transition (Kenya, Mexico, U.S., Italy, Sweden), they examine how these investment strategies mediate the relationship between schooling and fertility regulation.

Two surveys will be conducted in an urban area of Mexico of married women and of unmarried school girls and school drop-outs. Survey data will be combined with intensive observation in the home and research of the classroom environment and behavior.

Innovations: The project will operationalize and measure the concept of parental investment strategies at different levels of development and examine their roles as determinants of fertility.

Policy and Programmatic Implications: By studying parental investment strategies as an intervening factor between women's education and fertility, it is anticipated the mechanisms explaining the education-fertility relationship will be made more precise.

(Hill and Randall)

Two-Stage Analysis of Fertility and Childhood Mortality Amongst Tamasheq-Speaking Nomads in Mali

a. A discretionary award was provided to fund the cost of field work for a demographic survey of this nomadic population in Central Mali. The project is part of larger research project with the International Livestock Centre for Africa (ILCA) and The London School of Hegiene and Tropical Medicine (LSHTM). Data are being collected on fertility, mortality, proximate determinants of fertility, nutrition, health, family budget, and economic activity. With these data, researchers will be able to estimate and compare fertility and mortality for three agro-pastoral groups: nomads, semi-nomads and farmers.

b. Using anthropological methods, information will be obtained on attitudes and behavior related to births, deaths and marriage to account for fertility and mortality levels. The anthropological data will help assess the discrepancies between reported attitudes and behavior and to determine the relationship of these to fertility. Bongaarts model as

well as an extension of the model related to mortality and morbidity will be the basis of the analysis coupled with an examination of socio-economic factors affecting proximate variables.

Innovations: The project will provide basic demographic data (based on surveys and ethnographic study) on a difficult to research population of nomads. The project brings together three institutions ICLA, the Sahel Institute and LSHTM, which jointly sponsored a meeting on Demography of Pastoral Communities in West Africa in January 1983 in Bamako.

Policy and Programmatic Implications: Governments in Africa are vitally interested in the relationships between fertility and settlement patterns and trends. Re-settlement policies should be guided by a knowledge of the affects on fertility. Rates of natural increase appear lower for nomadic population's than for sedantary groups. Sedentarization could result in an increase in fertility. The study will provide information on differentials and determinants of fertility and mortality. The project will also help explain the impact of culture on fertility (and the cultural supports of high fertility). Results could also be used to inform officials about nomands, since nomadism is generally regarded as an unproductive way of life.

(Simpson-Hebert)

Infant Feeding Decisions and Contraceptive Choices in the Philippines

The project is an anthropological study of factors influencing low income mothers in Manila to bottle-feed or breastfeed their babies, of the reasons for discontinuation of breastfeeding over time and of the adoption of contraception postpartum. A very small sample is being studied intensively through questionnaires and follow-up visits. A parallel undertaking focuses on identifying institutional influences on breastfeeding behaviors through study of infant formula company marketing practices and of hospital procedures and health personnel attitudes.

Innovations: Methodologically this is a "complete" study, that integrates sources of data rarely found together, i.e. respondents' self-report and diaries, observation of behavior over time, intensive home visits, interviewing and data collection on hospital procedures, views of health personnel and milk-substitute companies. This study will provide a multi-faceted picture of the reasons for initiation and abandonment of breastfeeding in a developing country.

Policy and Programmatic Implications: Because length of breastfeeding is one of the proximate determinants of fertility is very important to have precise measures. The study has direct implications for policies to address the promotion and maintenance of breastfeeding through public education, hospital and clinic practices, and health personnel education. Relevance for family planning programs includes implications for education on the role of lactational amenorrhea on exposure status and for choice of methods compatible

with breastfeeding. The principal investigator recently reported that the Ministry of Health and UNICEF have taken great interest in the project and are in "constant communication" about an infant feeding program.

(Ryan, Behrman and Pollack)

Family Structure and Fertility: Theoretical and Empirical Analysis

This study involves a theoretical and empirical investigation of what determines whether a given nuclear family is in a single - or an extended family household, what determines inter-household transfers, and how household structure and other characteristics affect fertility and other aspects of socio-economic behavior. The theoretical work will extend earlier economic models of household behavior to incorporate the determination of household structure and the effect of that structure on fertility and on various types of inter-households transfers among kin. Incorporated in the models will be social norms as determinants of "tastes", biological factors which influence natural fertility, and the possibility that couples make consumption decisions without awareness of their possible impact on health and nutrition, and in turn, fertility. The empirical work will estimate the theoretical models using rich panel data (which have been collected at regular intervals since 1975 and continue to be collected) for single and extended family households in rural India.

Policy and Programmatic Implications: The most important target groups for family planning programs live in extended-family households, yet not much is known about how their fertility regulation decisions are made. Knowledge about these households will have important implications for understanding determinants of fertility and other socio-economic behavior. Insights will be gained about the impact of inter- and intra-household transfers, roles of women, determinants and implications of human capital investments in health, nutrition and schooling, etc. Policy makers can use this information in examining the possible effects of policies such as those to alter rural wages and human capital investments on household structure and, in turn, fertility. The study will also increase understanding of the specific area of semi-arid tropical India, where millions of people live. The study complements others undertaken by ICRISAT which look at the impact on fertility and other socio-economic behavior in rural villages of the introduction of new agricultrual technologies and various other development policies.

(Page and Lesthaeghe)

The Proximate Determinants of Fertility in Tropical Africa: Demographic and Institutional Change

The project is designed to analyze, interpret and give contextual perspective to the proximate determinants of fertility in sub-Saharan Africa. The major sources of data are WFS African surveys which will provide the material on the proximate determinants. Anthropological, cultural and historical information will serve to interpret the levels and differentials in proximate determinants

from an institutional perspective. Creation of contextual or community-level variables will be undertaken for the third level of analysis. Country fertility surveys sought to be analysed include: Kenya, Lesotho, Ghana, Senegal (refused to release raw data tape), Sudan, Ivory Coast, Cameroon, Mauritania, Nigeria and Benin. Researchers from each of the countries whose data will be studied will participate in the analysis.

To date, three WFS tapes have been released on Ghana, Kenya and Lesotho. In principle, the Sudan has also agreed to make data available, but official clearance has not yet been obtained. For the other countries, standard recode tapes have not yet been completed. Of these, Cameroon is expected to be the first to become available.

Innovations: The study proposes several methodological innovations and refinements in applying: Bayesian discriminant analysis, proportional hazards model and contextual analysis; and in the development of an accelerated failure time model and a standard birth interval schedule, application of which allows for incorporation of interactions with covariates such as age.

This is one of probably few studies that will analyze WFS data from sub-Saharan Africa with great metnodological sophistication. Since much of the study will be carried out in the immediate wake of WFS tape availability and/or publication, it will precede by some time the comparative studies of WFS data from sub-Saharan Africa that will eventually be carried out.

Policy and Programmatic Implications: The study will make major contributions to the definitions and roles of proximate determinants of fertility in sub-Saharan Africa, as modified by specific social and economic contextual changes. As such, it can provide highly valuable background material for policy development. The various analyses of proximate determinants of fertility particularly the contextual analysis should be valuable in determining culture-specific demand for family planning in sub-Saharan Africa, i.e. relevant to starting, spacing and stopping patterns.

(Huffman, Chowdhury and Menken)

Determinants of Natural Fertility in Bangladesh

The objective of this research is to examine biological and behavioral factors affecting fertility in Bangladesh. The investigators will describe and investigate the nutritional, behavioral, and socio-economic correlates of components of the reproductive life span, including onset of menarche, determinants of age at first birth, postpartum amenorrhea, waiting time to conception, fetal wastage, and menopause. Special attention is placed on the role of nutritional status of the woman as it might affect these components of the reproductive cycle and infant's nutritional status as it might affect suckling patterns and thereby influence the period of postpartum amenorrhea. The data to be used in the study consist of three longitudinal data sets gathered by the International Centre for Diarrheal Disease Research (ICDDR-B). The data from the Matlab Thana demographic surveillance system are unique in detail and quality in the developing world.

Policy and Programmatic Implications: The data to be used in this project provide a unique opportunity for studying the determinants of natural fertility and will also provide a baseline against which to compare family planning program efforts. Policy questions to be addressed include: the effect of maternal nutrition and malnutrition on fertility; the relationship between morbidity and fertility; and the relationship between breastfeeding and fertility. The significance of this work extends beyond Bangladesh because it will help clarify biological mechanisms through which various components of natural fertility are affected.

(Debavalya, Chamratrithirong and Knodel)

A Comprehensive Study of the Determinants of Fertility Levels and Change in Thailand

The project will produce a comprehensive and detailed study of the determinants of fertility change during the last decade and a half in Thailand. The study covers a wide variety of determinants ranging from the proximate variables through the social, economic and cultural processes underlying the levels and changes in fertility related behavior. The study builds upon the earlier work completed by the investigators and is based on original analysis of existing data contained in over 10 surveys conducted during the last 15 years in Thailand (including the 1975 Survey of Fertility, the 1979 National Survey of Family Planning Practices, Fertility and Mortality, the 1979 Asian Marriage Survey, and 1979 and 1981 Contraceptive Prevalence Surveys).

Innovations: The methodological innovations in this project would focus more on the ways of integrating information available from various surveys in order to draw valid conclusions about the process of fertility change. One component will test the application of focus group research methodology to collect qualitative data about the process of social change.

Policy and Programmatic Implications: The research proposed under this project is expected to produce one of the most thorough and comprehensive case studies of determinants of fertility levels and change in a less developed country. The results are anticipated to bring out important implications for the formulation and implementation of population-related policies especially oriented to maintaining the tempo of ongoing fertility decline in Thailand. In addition, this study will demonstrate the feasibility and importance of undertaking country-specific comprehensive studies that are primarily based on the existing data sets which usually remain underutilized.

The results are anticipated to demonstrate the important contributions of the family planning program to the fertility decline in Thailand, thus, are expected to enhance the value of the program.

(Goldstein)

Determinants of Urban Fertility in Kathmandu, Nepal

A discretionary grant was awarded to expand a project, funded by NIH, on the socio-cultural and economic factors underlying reproductive and contraceptive decision-making in Kathmandu. The study population was expanded to include low-income, low-caste Hindus in two locations. The research gives particular attention to the economic costs and benefits of children of households at various economic levels and by contraceptive use.

Innovations: Intensive anthropological investigation of households is the method of data collection. A key aspect of the project is focused on actual costs and benefits of children (costs related to consumption of food stuffs, health care, etc, and value related to paid and non-paid labor).

Policy and Programmatic Implications: The project's formal ties to the National Commission on Population of Nepal facilitate the use of the results. By elaborating the processes of reproductive and contraceptive decision-making, the project has potential for use in improving the country's family planning programs. Currently, there is interest on the part of the GON and USAID/Kathmandu staff in setting up an operations research project building on the results of this work. The Project's results could be used to provide baseline data and methods for measuring the efficacy of family planning programs.

(Caldwell and Caldwell)

The Origins of Fertility Decline

This low-budget project involves the analysis, synthesis, and write-up of the results of previous fieldwork, primarily in South India, conducted by the Caldwells and collaborators. Three major outputs are promised: (1) a book and associated papers on the onset of fertility decline in South India; (2) a monograph on the methodology employed in the Indian study; and (3) a book, drawing on still other earlier fieldwork, that would present a comparative analysis of the determinants of fertility in South Asia, Africa, and Latin America.

The objective of the research is to establish why the deliberate control of fertility, particularly marital fertility, commences or vastly increases in societies where previous levels of control were low.

Innovations: An anthropological types of research methodology is developed for use by population scientists in field investigations. The methodology is also used to construct more sopnisticated and more specific survey questionnaires. Careful documentation of the methodology will provide guidelines for intensive participant research both before and during survey work.

Policy and Programmatic Implications: Remarkably little work has been done on the determinants of fertility in South Asia, thus the Caldwell's research helps to fill a major gap in our knowledge. The broad scope of their inquiry and its explicit focus on demographic change should provide numerous insights to demographic processes that will continue to population policy formulation.

The work in South India has also given attention to the circumstance surrounding sterilization decisions, as is demonstrated in an article "The Causes of Demographic Change in Rural South India: A Macro Approach, published in Population and Development Review, December 1982. These findings are of direct relevance to the family planning program in India.

(Langsten, Shafiq and Chowdhury)

The Impact of Food Crises on Fertility in Bangladesh: An Analysis of Birth Interval Data

This research project examines the exact mechanisms by which fertility is reduced in times of food crisis, by studying the fertility decline associated with the 1974-75 food crisis in Bangladesh. Data are based on a study of prospective birth intervals over a four-year period from the Campaniganj Health Project, an experimental integrated health and family planning project in a rural area of South Central Bangladesh. Specific hypotheses include: amenorrnea and waiting times to conception are substantially longer during severe food crises; breastfeeding and supplementary feeding practices change during crises; and prevalence of contraceptive use and durations of spouse separation increase; foetal mortality increases; and effects of food crises on birth intervals are mediated by economic status.

Innovations: The unique data set permits a detailed study of the effects of a food crisis on components of the birth interval. The project should lead to substantial refinement of the methodology for analyzing birth interval dynamics. The research will compare results from two methods: conditional logit and analysis, which combines life table logic with multivariate logit regression, and proportional hazard models.

Policy and Programmatic Implications: The project will advance the understanding of the biological determinants of natural fertility and the relationship between nutrition and fertility. The analysis will be disaggregated by landholding status of households which has special significance for fertility in Bangladesh because it is one of the few consistent socio-economic fertility differentials in that setting. There is a great deal of ambiguity in the interpretation of the relationship, however, and thus its policy significance. This research will help sort out competing interpretations of this relationship. Economic class-specific analysis of contraceptive practice during and after a severe food crisis should also provide considerable insight into motivational and behavioral bases of contraceptive use. The findings will also have direct application for estimating population growth and fertility in other famine stricken areas.

(Locoh and Assogba)

The Arrival of the Next Child in Lome

The project will follow a large sample of women who participated in an earlier Togolese survey of infant and child mortality and who gave birth to their last child between April 1979 and April 1980, to examine the circumstances and characteristics of the next pregnancy and/or birth. The follow-up will provide information on birth-interval behaviors allowing for a proximate determinants analysis, and it will permit diagnosis of what differentiates women with longer spacing from women with shorter spacing.

Innovations: The important methodological innovation involves following mothers who have participated in an earlier infant and child mortality study which they entered at the birth of their last child. The date of the last birth is exactly known and provides for accuracy in the measurement of inter-birth behaviors and the birth interval itself which is generally not possible in such studies of African population.

Policy and Programmatic Implications: The study will provide data on the proximate determinants of a sub-Saharan population. Since Togo may never have a complete WFS survey, the data set would be unique. The project will also give a better understanding of the attitudes of couples with regard to birth control and such information could give valuable indicators of the nature of the demand for family planning services.

(Kreager)

For A Cultural Theory of Fertility

A discretionary grant was awarded to complete a monography entitled, A Cultural Theory of Fertility which applies a social anthropological approach to fertility determinants. The research involves developing a framework for the comparative analysis of institutional determinants of fertility and modeling the decision-making processes related to fertility. The analytical framework will be applied to demographic data from four areas: (1) Mayan and Ladino populations of the Guatemalan and Mexican highlands; (2) Islamic peoples of the Mediterranean; (3) caste groups in South India and Sri Lanka; and (4) rural Chinese and related South East Asian communities.

Innovations: Through rigorous methodology, the study addresses two relatively neglected, yet promising areas of research from the program's research priorities statement: "The comparative analysis of institutional settings relevant to fertility choice, entailing development of typologies of such settings," and research on the "environments of fertility decision-making."

Policy and Programmatic Implications: Most immediately, the research shows promise for its methodological and theoretical implications. However, since good policy depends upon good theory and sound analysis, the project is likely to produce results that are useful for population policy including family planning programs.

(Wolf)

Family and Fertility in Rural China

A discretionary grant was awarded to expedite the analysis and publication of anthropological survey data collected from seven communes in seven provinces in rural China. The initial goal of the research was to re-evaluate the famous 1929-1933 rural surveys conducted by John Lossing Buck. In the absence of a national census prior to 1954, these data have been used to characterize demographic conditions in premodern China. Wolf's work in Taiwan led him to doubt the accuracy of the Buck data. The scope of the data collection covers approximately 50 years of demographic history, including the transitions occasioned by liberation, land reform, the Great Leap Forward, the Cultural Revolution and the birth control program. The fertility histories obtained will be useful for establishing a baseline for the study of demographic trends in contemporary China and will permit partial of examination of population data published by the Chinese government.

Innovations: Assessment of past demographic data through tests of internal consistency is not uncommon, but assessment through interviews of elderly women along with those of their daughters and daughters-in-law is quite innovative.

Policy and Programmatic Implications: China is one of the few developing countries where fertility has declined significantly during the last two decades and, moreover, it has happened without concomitant economic development. Identification of the determinants of this decline is of great policy relevance for all developing countries striving to reduce their fertility levels.

The study will also allow a partial evaluation of China's current birth planning program. Since the communes studied were model units, they represent the best conditions that China has to offer. If the fertility history data show that the birth planning program is successful in these model units, it will not be possible to conclude that it will succeed in the country as a whole. But if evidence of resistance to the program is discovered, it will be legitimate to cast doubt on the announced success of the program.

(Kanbargi and Dyson)

Support for the Elderly and Its Implications for Fertility Behavior in Southern Karnataka

The study will investigate whether old age security, i.e. the pension motive, is an important determinant of fertility in a poor, rural area of India. Questions to be addressed from survey and observational data include: How does the pension motive relate to other stated reasons for having children? How are elderly people supported by surviving children and others, and to what extent do they support themselves? What is the nature of support? How do relevant attitudes of the current "supported" and "supporting" generations differ?

Innovations: This is a systematic study of elderly people in rural India. Repeated retrospective surveys on production, consumption, exchange and interaction for full year of an elderly sample will be supplemented by attitudinal survey data of both elderly and young adults.

Policy and Programmatic Implications: The Indian government has adopted the policy of decreasing fertility as a means of reducing population size and improving family welfare. Although the principal intervention so far has taken the form of family planning programs, the government is interested in the identification of other feasible types of intervention. Whether or not the old-age security value of children is a primary motivating force for large families in contemporary rural India, could provide useful information for the government's population policy and the family welfare program. Also the results should be useful to those concerned with strategies to cope with welfare problems of the rural elderly.

(Hermalin, Mason & Entwisle)

The Suitability of 1960s KAP Surveys for Comparative Analysis

The project is a feasibility study to examine the suitability for comparative analysis of surveys of contraceptive knowledge, attitudes, and practice (KAP) undertaken in third world countries during the 1960s. The goal is to supplement the WFS and other recent surveys with data from the extant KAP surveys from earlier periods. The availability of two cross-sections of survey data will make possible a wide-range of analyses to study the determinants of fertility change. The emphasis of the project will be on data assessment and file construction for comparative analyses for a number of developing countries.

Innovations: The methodological innovations would include guidelines for the assessment of the quality of data and techniques for comparative analysis of fertility change from two cross-sectional surveys in developing countries.

Policy and Programmatic Implications: The project is fairly inexpensive, and if successful in creating pseudo-WFS files, could facilitate examination of the relationship between changing patterns of fertility behavior and changes in the social context.

(Adeokun)

Sub-Ethnic Variations in Breastfeeding, Marital Sexuality and Fertility in Yorubaland

The project will contrast and analyse the differences in breastfeeding and postpartum abstinence behaviors among 5 major ethnic sub-groups of the Yoruba in Nigeria. A survey of the populations will involve collection of data on fertility histories, current status, and child development. In-depth recorded interviews will complement the survey-level work. The guiding hypothesis

focuses on the role of child development in different spacing strategies and the implications for policies to affect fertility.

Innovations: This is an entirely original data set that incorporates the most recent measurement techniques. Methodological innovation involves the introduction of child development markers as determinants of spacing strategies mediating fertility.

Policy and Programmatic Implications: The study will provide information on the need, mode and nature of child health and family planning services. The need for and type of such services may vary according to differing spacing strategies among Yoruba sub-groups.

(Ouaidou and van de Walle)

A Longitudinal Study of Postnatal Behaviors in Two Sahelian Cities: Bobo-Dioulasso and Bamako

The project will follow up samples of women who participated in infant and child mortality surveys in two cities with in-depth interviews to characterize birth interval behaviors and to understand the decision process leading to the next birth. The study will also include an analysis of the longitudinal surveys themselves to derive parameters of the proximate determinants in closed and open intervals and, to examine socio-cultural factors which may account for fertility differences among ethnic groups in an urban environment.

Innovations: Exact date of last birth is available from an earlier prospective survey of infant and child mortality and will enhance accuracy of measures of the duration of birth interval behaviors and of the birth interval itself.

Policy and Programmatic Implications: As a study of inter-birth behaviors in sub-Saharan Africa, this project has potentially great policy relevance inasmuch as it will characterize and elucidate the mechanisms of proximate-determinants behaviors. Measurement of such behaviors which includes the use of contraception will shed light on the demand for family planning in a sub-Saharan African context.

(Dandler and Balan)

Migration and the Onset of Fertility Decline: A Study in Bolivia and Argentina

The study will investigate the impact of migration on fertility in a peasant society. The focus is on the early stages of the fertility career: the marriage process and initial family formation and hence will increase understanding of the role of changes in familial relations on the onset of the fertility decline. Wage labor circulation of young males and circulation of females of all ages (related to regional marketing activities) will be studied to determine the effects on land inheritance and cultural status in peasant settlements and on marriage and early family formation (particularly child

spacing) of migrants living in an agricultural frontier area, the provincial capital and Buenos Aires.

The study in areas of origin and destination combines the use of semi-structured, in-depth interviews with females, spouses, and households, and use of case studies, geneological techniques, direct observation, and other anthropological approaches. Analysis will be supplemented by local marriage records, interviews with community leaders, and data on the local economies and household organization of production and consumption.

Innovations: The study utilizes an anthropological/demographic approach, employing samples which are sufficiently large to permit quantification. The researchers intend to demonstrate that anthropological methods can be used to collect quantifiable data on demographic behavior for the study of family relations and fertility decision-making.

Policy and Programmatic Implications: The study seeks to explore the effects of migration (including circulatory migration) on the maintenance and change of high fertility levels and family relations, especially in the early stages of family formation. These effects operate through their impact upon familial economic and power relations and/or directly through their influence upon marriage and childbearing. Research on the role of family transformation on fertility decline in peasant societies has largely ignored the possible consequences of spatial mobility, especially the influence of local circulation. Data on contraceptive practices and attitudes will also be collected.

(Pebley & Mbugua)

A Comparative Study of Polygyny and Fertility in Africa

The project is a comparative study of the relationship between polygyny and fertility in Kenya, Lesotho, Senegal and Northern Sudan using WFS data. The proportions of married women who reported being in a polygynous union (from WFS data) is 50 percent in Senegal, 30 percent in Kenya, 17 percent in the Sudan, and 9 percent in Lesotho. Variations in marriage patterns (including multiple marriage) will also be examined for each country and for major ethnic groups in Kenya and Senegal. Differences by type of marriage in the proximate determinants of fertility will be explored.

Policy and Programmatic Implications: The study will elucidate the types of fertility changes which may result from changing nuptiality patterns, and it will increase understanding of the determinants of polygyny in various African countries.

(Gray & Apelo)

Study of Predictors of Ovulation in Lactating Women to Develop Programmatic Guidelines for Family Planning

The project will develop guidelines for the use of lactational amenorrhea as a family planning method and the timely introduction of an alternative contraceptive method. Data from a prospective study of lactating post partum women in Manila will be used to test three hypotheses: 1) the combination of ovulation and a luteal phase adequate for implantation will not precede menses in the majority of lactating women; 2) other easily noted events are predictive of fertility return in lactating women, e.g. changes in feeding patterns, especially the substitution of foods instead of breast milk; and 3) prediction of ovulation in lactating women using such markers will be a theoretically efficacous natural method of fertility regulation.

Policy and Programmatic Implications:

The results of this study on the determinants of lactational infertility will provide the theoretical and empirical basis for developing a rational policy for fertility regulation during lactation, so as to avoid unnecessary and possibly harmful use of contraception, to ensure adequate protection against pregnancy, and to promote breastfeeding as a natural form of contraception and an important adjunt to maternal and child health. The results should be of direct benefit to family planning programs particularly in countries where breastfeeding is widely practiced.