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 81

AGENCY FOR INTERNATIONAL DEVELOPMENT  
**PROJECT PAPER FACESHEET**  
 TO BE COMPLETED BY ORIGINATING OFFICE

1. TRANSACTION CODE (TX APPROPRIATE BOX)  
 ORIGINAL     CHANGE  
 ADD     DELETE

2. COUNTRY/REGIONAL ENTITY/GRAantee  
 Interregional

3. DOCUMENT REVISION NUMBER  
 340

4. PROJECT NUMBER  
 932-0616

5. BUREAU  
 A. SYMBOL PHA    B. CODE 5

6. ESTIMATED FY OF PROJECT COMPLETION  
 FY 79

7. PROJECT TITLE - SHORT (STAY WITHIN BRACKETS)  
 [Determinants/Consequences of Fertility]

8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION  
 A. INITIAL [76]    B. FINAL FY [78]

9. SECONDARY TECHNICAL CODES (MAXIMUM SIX CODES OF THREE POSITIONS EACH)

10. ESTIMATED TOTAL COST (\$000 OR EQUIVALENT, \$1#)

| A. PROGRAM FINANCING    | FIRST YEAR |        |          | ALL YEARS |        |           |
|-------------------------|------------|--------|----------|-----------|--------|-----------|
|                         | B. FX      | C. L/C | D. TOTAL | E. FX     | F. L/C | G. TOTAL  |
| AID APPROPRIATED TOTAL: |            |        | 300      |           |        | 3,000     |
| (GRANT)                 | ( )        | ( )    | ( 300 )  | ( )       | ( )    | ( 3,000 ) |
| (LOAN)                  | ( )        | ( )    | ( )      | ( )       | ( )    | ( )       |
| OTHER 1.                |            |        |          |           |        |           |
| U.S. 2.                 |            |        |          |           |        |           |
| HOST GOVERNMENT         |            |        |          |           |        |           |
| OTHER DONOR(S)          |            |        |          |           |        |           |
| TOTALS                  |            |        | 300      |           |        | 3,000     |

11. ESTIMATED COSTS AND APPROPRIATIONS (\$000)

| A. APPROPRIATION PURPOSE (ALLOY CODE) | B. PRIMARY TECH. CODE | FY 77    |         | FY 78    |         | ALL YEARS |         |
|---------------------------------------|-----------------------|----------|---------|----------|---------|-----------|---------|
|                                       |                       | C. GRANT | D. LOAN | E. GRANT | F. LOAN | G. GRANT  | H. LOAN |
| PH                                    |                       | 300      | 1,200   |          | 1,500   | 3,000     |         |
| TOTALS                                |                       | 300      | 1,200   |          | 1,500   | 3,000     |         |

12. ESTIMATED EXPENDITURES

13. PROJECT PURPOSE(S) (STAY WITHIN BRACKETS)     CHECK IF DIFFERENT FROM PID/PRP

To investigate those consequences of fertility which, when elucidated will help move LDC govts to implement effective population policies and those determinants of fertility which are responsive to lde govt action.

14. WERE CHANGES MADE IN THE PID/PRP FACESHEET DATA NOT INCLUDED ABOVE? IF YES, ATTACH CHANGED PID AND/OR PRP FACESHEET.  
 YES     NO

15. ORIGINATING OFFICE CLEARANCE

SIGNATURE: *RTR*

TITLE: RTRavenholt, Director, Office of Population

DATE SIGNED: MO. 5, DAY 10, YR. 76

16. DATE RECEIVED BY AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

AID 1330-4 (5-75)

PROJECT PAPER (PP)

Determinants and Consequences of Fertility  
No. 932-0616

Clearances:

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PROJECT PAPER "Determinants/Consequences of Fertility." No. 93-0010

ESTIMATED BREAKOUT OF COST (x\$000)

| <u>Illustrative<br/>Sub-Projects</u> | <u>Salaries &amp;<br/>Benefits</u> | <u>Technical<br/>Activities</u> | <u>Other<br/>Direct<br/>Costs</u> | <u>Overhead</u> | <u>Total</u> |
|--------------------------------------|------------------------------------|---------------------------------|-----------------------------------|-----------------|--------------|
| Consequences of High Fertility       | 140                                | 130                             | 15                                | 115             | \$ 400       |
| Impact Analysis                      | 324                                | 240                             | 86                                | 150             | 800          |
| Multivariate Analysis                | 210                                | 200                             | 25                                | 165             | 600          |
| Action Experiments                   | 212                                | 200                             | 20                                | 168             | 600          |
| Comparison of Matched Samples        | 135                                | 120                             | 20                                | 75              | 350          |
| International Review Group           | -                                  | 50                              | -                                 | -               | 50           |
| U.S. Embassy Briefings               | <u>80</u>                          | <u>70</u>                       | <u>10</u>                         | <u>40</u>       | <u>200</u>   |
| TOTAL                                | \$1101                             | \$1010                          | \$126                             | \$713           | \$3000       |

SUB-PROJECT FUNDING BY FISCAL YEARS (x\$000)

|                               | <u>FY76/77</u> | <u>FY77</u> | <u>FY78</u> | <u>Total</u> |
|-------------------------------|----------------|-------------|-------------|--------------|
| Conseq. of High Fertility     | -              | 200         | 200         | 400          |
| Impact Analysis               | -              | 400         | 400         | 800          |
| Multivariate Analysis         | 100            | 200         | 300         | 600          |
| Action Experiments            | 200            | 125         | 275         | 600          |
| Comparison of Matched Samples | -              | 125         | 225         | 350          |
| Internat'l Review Group       | -              | 50          | -           | 50           |
| US Embassy Briefings          | <u>-</u>       | <u>100</u>  | <u>100</u>  | <u>200</u>   |
| TOTAL                         | \$300          | \$1200      | \$1500      | \$3000       |

## PART I

### Summary and Recommendations

#### A. Face Sheet

#### B. Recommendations

| Year                      | <u>76</u> | <u>IQ</u> | <u>77</u> | <u>78</u> | <u>Total</u> |
|---------------------------|-----------|-----------|-----------|-----------|--------------|
| Grant Obligation<br>(000) | \$300     | -         | 1,200     | 1,500     | \$3,000      |

#### C. Description of the Project

1. This project seeks to investigate those consequences of fertility which, when elucidated will help move LDC governments to implement effective population policies and those determinants of fertility which are responsive to LDC government action. With respect to fertility determinants, analysis will respond to the hierarchy of research questions outlined in the Social Science Strategy Paper developed by PHA/POP/PPD in August 1975. An ad hoc committee of PHA/POP and other AID social scientists has approved this general strategy and will review each of the subprojects before they are submitted to AA/PHA for final approval. The list of questions is as follows:

#### A Hierarchy of Research Questions (Listed in descending order of generality)

##### I. Family Planning and Variables Other Than Family Planning

A. All other things equal (i.e., holding all other variables constant), how much of the observed variation in fertility can be directly attributed to family planning program activities and how much can be attributed to variables other than family planning?

1. If programs did not exist at all, by what percentage would fertility decline, if at all?
2. To the extent that the contribution of family planning programs to fertility is different in different countries, what explains the relatively different impact of the programs?

B. Are there patterns of historical development which make the introduction of family planning programs more propitious at some historical moments than at others?

C. To what extent can countries which have committed themselves to fertility decline use their relatively scarce population program funds in more cost-effective ways?

1. Would a diversion of family planning or other development program funds to other uses such as education or employment accelerate fertility decline? If so, which other uses of such funds would have the greatest impact on fertility?

2. With or without a change in the funds applied to family planning programs, what changes in the volume or uses of other funds might result in lower fertility?
- D. To what extent has there been regional variation (e.g., urban vs. rural, large-holding vs. small-holding) in fertility rates?
1. To what factors are such variations attributable?
  2. Are different mixes of inputs appropriate to different socio-economic environments?  
  
-- If so, what kinds of family planning/other-than-family planning mixes are most appropriate to the different environments?
- E. To what extent are the determinants of fertility additive or multi-plicative, or to what extent can they be substituted for one another?

## II. Alternatives Among Variables Other Than Family Planning

### A. Income and Its Distribution

1. How closely are income level, rate of growth, and distribution causally linked to individual decisions regarding the number and spacing of births?
2. Is the distribution of income more or less strongly associated with fertility levels than absolute levels of income?  
  
-- Would fertility rates decline faster if existing income were more equitably distributed, or would they decline faster if the distribution of income remained constant but the level per capita increased?
3. If income itself is associated with more basic variables influencing fertility, what are those other variables?
  - a. Is it possible that those variables which are most closely causally related to fertility decline are also causally related to income?
  - b. Do the same variables that cause low fertility also cause higher income levels, higher rates of growth, and/or improved distribution?
4. To what extent is change in the distribution of income in a society a cause, or to what extent is it a symptom of change in fertility rates?

B. Female Education

1. Why do better educated women have fewer children?
2. Is fertility a result of education itself or does the relationship with fertility disappear when one controls for other variables such as age at marriage, employment, social status, income, access to the means of fertility control, etc.?
3. Is it the educational process that explains the lower fertility of better educated women and men, but especially women, or do persons who will have fewer children select themselves for education?
4. How many girls would require many years of formal education in order to cause fertility to decline by X amount?
5. Are there alternatives to formal schooling for girls that would have more effect on fertility than formal schooling?

C. Female Employment

1. Under what conditions is female employment associated with declining fertility? Under what conditions is it associated in unchanged or increased fertility?
2. Are there some types of out-of-home jobs which cause lower fertility than other types.
3. Is it employment that accounts for lower fertility, or does the relationship disappear when one controls for education, income, social status, access to the means of fertility control, etc.?
4. What is it about employment that causes employed women to bear fewer children?
5. Are there alternatives to out-of-home wage employment that would have as powerful an impact on fertility and that would be no more or even less costly for governments?
6. Besides cost, what are the implications for governments of creating out-of-home wage employment opportunities for women?
  - a. Is the creation of such opportunities in sufficient number to have a major effect on fertility feasible?
  - b. Would it be necessary to replace men in certain jobs if employment opportunities for women were expanded?

D. Infant and Child Mortality

1. Must infant and/or child mortality decline prior to fertility decline?
2. Do people's perceptions of the probability of infant and child survival affect their fertility behavior?
  - a. If so, how long after an increase in the probability of infant survival occurs do people's perceptions of those probabilities change accordingly?
  - b. Can the gap between real change and perceptual change be shortened? How?
3. How much of the change in fertility decline can be accounted for by decline in infant mortality?
4. How much of an investment in attempting to lower infant and child mortality would result in how much of a decline in fertility?
5. Under what circumstances does it make sense for a government to spend resources on lowering infant and child mortality, in part for the purpose of lowering fertility, compared with other uses of the same resources (e.g., for female employment or education programs, for family planning programs, etc.)?

The Smithsonian study of the "Policy Relevance of Recent Social Research on Fertility" (September 1974) concluded that our knowledge of the relationship between these variables and fertility is at most rudimentary. As the following tables indicate much research needs to be done.

**Table 1**  
**A Hierarchy of Research Findings**  
**Addressed to Public Policy**

| TYPE                    | CHARACTERISTIC   | EXAMPLES   |
|-------------------------|--|--|
| 1. Observation          | Awareness of a relationship between fertility and some other variable without specific examination of the nature, direction or strength of the relationship  | Many non-empirical statements exist, none were examined for this review          |
| 2. Simple Correlation   | Findings of relationship between a single ecological variable or a single personal or social characteristic and fertility, suggests a targeting procedure for population policy                            | Goldstein (1972, 73)<br>Harrington in DJ<br>Miz & Mertens (1968)<br>Sweet (1973) |
| 3. Multiple Correlation | Findings of relationship between multiple ecological, personal and social characteristics and fertility which may suggest targeting procedure for population policy  | Adelman (1963)<br>Hec (1966)<br>Repetto (1972)<br>Ben Porath (1973)              |
| 4. Causation            | Demonstration of correlation plus reasoned argument for the direction and scope of causation in such form as to indicate that a given policy act would produce fertility change in a predictable direction | Geidell (1973)<br>Hassan (1973)<br>Mueller (1972)<br>Rosen & Simmons (1973)      |
| 5. Elasticity           | Given correlation and causation, an elasticity offers a specific prediction that a stated percentage change in an independent variable would produce a given percentage change in fertility                | Chan & Weiringer (1973)<br>Williams (1973)<br>Sullivan, S. (1973)                |
| 6. Expenditure          | At this level of analysis, it is not predicted that a stated percentage change in public sector expenditures would produce a predicted fertility reduction   | Not reviewed   |
| 7. Economizing          | Research demonstrating that a given amount of resources between two alternatives could not be replaced by an alternative more cost effective mix of expenditures   | Not reviewed   |

Note: See Works Cited Charts on back of ISSk for further details

Agenda for Research

**Table 2**  
**Summary of Findings on the Correlates of Fertility:**  
**Direction of Relationship, Averages of Elasticities,**  
**and Adequacy of Research**

| INDEPENDENT VARIABLE                      | Nature of the relationship with fertility* | Elasticity (computed) average from studies cited) | Adequacy of research |
|---|--|---|----------------------|
| <b>Income and its Distribution</b>        |  |   |                      |
| Income                                    | ?  | -.24 <sup>a</sup> (6) <sup>b</sup>                | Fair                 |
| Income Distribution                       | -  | -.36 (1)  | Poor                 |
| <b>Socioeconomic Change</b>               |  |   |                      |
| Economic Development                      | ?  | --  | Poor                 |
| Socioeconomic Status                      | -  | --  | Poor                 |
| <b>Education and Literacy</b>             |  |   |                      |
| Female                                    | -  | -.15 (1)  | Fair                 |
| Male                                      | + or 0                                     | --  | Fair                 |
| <b>Employment</b>                         |  |   |                      |
| Male                                      | + or 0                                     | +.00 <sup>c</sup> (1)                             | Fair                 |
| Female                                    | -  | -.10 <sup>d</sup> (2)                             | Fair                 |
| Rural                                     | + or 0                                     |   |                      |
| Urban                                     | -  |   |                      |
| Children                                  | +  |   | Poor                 |
| <b>Value of Children</b>                  |  |   |                      |
| Age at Marriage                           | -  | --  | Poor                 |
| Type of Marriage                          | ?  | --  | Poor                 |
| <b>Costs of Children and childbearing</b> |  |   |                      |
| Son Preference                            | - or 0                                     | --  | Fair                 |
| Infant Mortality                          | +  | +.33 (3)  | Poor                 |
| <b>Other Variables</b>                    |  |   |                      |
| Urban/rural Differentials                 | 0  | -.11 <sup>e</sup> (3)                             | Fair                 |
| Religion                                  | 0  | --  | Poor                 |

**NOTES:**

\* (+) symbol is used if the relationship to fertility is direct. (-) symbol if the relationship fertility is inverse. (0) symbol if there is no relationship to fertility, and (?) symbol if the relationship to fertility is interterminant.

<sup>a</sup>Elasticities for per capita income and income per worker.

<sup>b</sup>Numbers in parentheses indicate number of elasticities found.

<sup>c</sup>Elasticities for male earnings.

<sup>d</sup>Elasticities for female earnings and female labor force participation.

<sup>e</sup>Elasticities for percent of population in urban areas.

Specific research projects might include the following by way of illustration.

- (1) Population impact analysis in key countries to ascertain the probable effect upon fertility of LDC expenditures in the public sector;
- (2) multivariate analysis of household socio-economic data generated by the World Fertility Survey, the Value of Children studies, and other data collection projects;
- (3) action experiments or demonstration projects designed to measure the fertility impact and cost-effectiveness of programs which focus upon raising the age at marriage and first conception, improving the educational and employment status of women, affecting income levels and improving income distribution, lowering infant mortality;
- (4) comparisons of matched samples of family planning acceptors and non-acceptors over time to assess the impact of family planning not only upon fertility but also upon the quality of life of those who adopt it;
- (5) analyses of the cultural, ecological, and social consequences of rapid population growth at both the macro and micro levels.

2. The contractors who will carry out each of the five elements of the program will be chosen through competitive bidding where no strong justification exists for sole source procurement. Special consideration will be given to organizations which have established outstanding records of cost/effective performance in the collection and analysis of social science data in the LDCs.

3. While the study of the consequences and determinants of fertility worldwide is a long-term proposition, there are a growing number of countries for which data are becoming rapidly available. Many of these countries are contributing a substantial percentage each year to the world population increase and have not as yet adopted effective policies to influence fertility rates. For this reason, the project seeks to focus upon a few key countries in which some capability exists for local utilization

of social science research findings in the field of population. Government interest in specific research issues will be a necessary condition for the funding of in country research projects.

4. By the end of the project, research studies in targeted countries will be providing guidance for policy makers in their implementation of family planning programs and in their design of comprehensive population influencing policies.

D. Summary Findings

On the basis of analyses contained in Parts III and IV of this paper, we believe that this project represents an effective and efficient approach to guiding population policy making in key LDCs. All five elements of the research agenda are ready for implementation and meet all applicable statutory criteria.

E. Project Issues

1. Cost-Benefit: Attempts to determine the financial rate of return of lowered fertility are often based on hypothetical models of relationships between births averted and subsequent savings to national economies. The estimation of the benefit flow to individual households is seldom made. For the poor in a market economy, with some expectations of short-term labor or earnings from children and no hopes for government assistance in future crises and old age, there may be powerful utilities in large families operating throughout the life cycle. One of the objectives of this project is to ascertain the cost-benefit differentials which obtain among different socio-economic strata.

2. Cost Effectiveness: The actual utility to decision makers of social science research is dependent upon four factors: (1) the willingness and capability of decision makers to make use of research findings; (2) the reliability of the findings themselves; (3) the degree to which research findings focus upon salient policy issues; and (4) the timeliness with which findings are made available.

The project will seek to optimize research utilization by involving policy makers in the initial work of formulating priority research issues and maintaining contact with them throughout the twelve month research process, the termination of which will occasion a workshop to elucidate policy applications of research findings.

3. Other Donor Activity: Other organizations, such as the World Bank, the International Development Research Centre of Canada, the Rockefeller Foundation, the Ford Foundation, the United Nations Fund for Population Activities are sponsoring social science research with respect to population. A general conference on the subject was convened by these groups at Bellagio in February 1974. Other donors can be expected to concentrate upon the long range development of research institutions, methodological advances, and theory building. AID support should concentrate upon action research initiatives which give promise of providing solutions to policy problems within a one to five year time period.

## PART II

### Project Background and Detailed Description

#### A. Background

Organized programs to reduce birth rates are attempts at massive interventions into complex socio-biological reproductive systems which are not very well understood. Fortunately, with common sense and relatively little research, it is possible to start family planning programs in most countries and achieve some success. This is possible, because almost everywhere there is a significant group of couples ready to try birth control if it is offered in a medically safe and culturally inoffensive way. However, after the initial success, social research or at least simple measurements of what the program is doing becomes important. In the so-called 'successes' (e.g., Taiwan, Korea, Indonesia) there has been a regular interaction between research and program almost from the beginning. Research has no doubt contributed to the success. Where research and even routine measurements have been grossly lacking (e.g., in India) it is probable that the periodic abrupt declines in program success result partly from the absence of information for policy decisions.

In short, action need not wait for research, and the complete social-demographic research model will never be achieved. However, research and information can help the programs in ways which can be specified.

As a minimum we should know the character of planned program intervention, who is affected, and in what ways. But, we must know as much as possible also about the much broader setting for the program--the complex system which determines reproduction. Otherwise, we are unlikely to know whether the intervention makes a difference or how to revise policies which fail to meet changing objectives.

The research and evaluation effort in most population limitation programs is grossly deficient in at least three important ways:

1. For most countries we do not have regular measurement of either fertility or birth control practice to indicate broad trends, either with or without a population program. Providing support for these

measurements is the objective of Goal One and the Project Paper on the Measurement of Demographic Change is directed to this purpose.

2. We are doing relatively little to learn what social and economic factors affect actual fertility, norms about family size, and the practice of birth control. This knowledge of basic relationships is important now to guide allocation of effort and to judge the validity of arguments that family planning programs fail because the necessary social conditions are not present. They may be even more important later in the event that it is necessary to go 'beyond family planning' to move to later objectives.

3. In many programs research and evaluation is either not done or is grossly deficient on crucial issues. Some countries do not know the important characteristics of the program clients. Some record these characteristics initially but fail to follow-up acceptors to see what happens to their birth control practice, fertility, and well-being, especially after they leave the program. Very few programs do what is most meaningful: follow-up adequate samples of acceptors and comparable non-acceptors through the crucial stages of family life.

#### What we need to know

What follows is a gross classification of the variables which affect and are affected by fertility. We begin with fertility, our primary interest, and work back through the system of variables affecting it:

A. Fertility. To measure fertility we must know:

1. The crude birth rate (births per 1000) measured over time for the major strata and areas of the country.
2. The components which determine the birth rate. Analytic decomposition into these elements is crucial, because the birth rate may rise or fall while the underlying fertility movement is in an opposite direction. Components include at least:
  - a. The age-sex composition of the population
  - b. The proportions married at each age.
  - c. The birth rates for married women at each reproductive age.
  - d. The intervals from marriage to successive births.

B. The intermediate variables are a limited set of factors which immediately determine fertility levels. Anything else--social values, institutions, or environment--can only affect fertility through these. Any theory linking anything else to fertility should specify through which combination of these variables it operates:

1. Exposure variables: the proportions married (or in sexual unions) at each age; periods 'lost to reproduction' by death or divorce or separation.
2. Intercourse variables: the frequency and timing of coitus.
3. Conception variables: the 'fecundability' of the couples, the use of contraception (including sterilization and abstinence) as these affect the probability of conception.
4. Gestation variables: the incidence of spontaneous or induced abortion as affecting the probability that a pregnancy ends in a live birth.

What is the level and effects of these variables at each age and for major strata and areas of the population. Goal One is responsible for supporting measurement of variables under A and B.

C. Social norms about family size and about the intermediate variables:

1. How many children do married couples want; how many do they think others expect them to have; how many do they expect other couples to have? How strong are fertility norms as compared with competing norms (i.e., why don't couples act to achieve the desired fertility when the means are available).
2. What are the social norms about the intermediate variables and how much do they control behavior (e.g., what are the beliefs about abortion and how does it affect behavior).

D. The Global Question: out of the complex of social and economic institutions, which elements affect elements of the reproductive institutions--values, intermediate variables, fertility?

The classical sociological proposition is that high fertility and large family values are the result of a society in which family and kinship are so central to all institutions that most of what people want in life depends on family and especially children. Therefore, the relation of the family to other institutions under changing social conditions is a key element in the research agenda. As more and more of life depends on specialized nonfamilial institutions how does this affect the desire for children and fertility?

E. How does declining mortality affect all the preceding relations?

Will declining mortality provide enough additional living children so that parents will move to birth control even with only minimal development on other fronts?

The above outlines the major elements of all reproductive systems since the beginning of human society. The new and unique element being added to the structures of societies are the planned interventions to change norms, birth control practices, and fertility. Therefore,

F. The 'family planning program' must be observed for information:

1. About birth control (sterilization, contraception, abortion)
  - a. How many couples accept each method offered.
  - b. For how many is the program-method a substitution for a method previously practiced independently? In the case of substitution, is there any change in effectiveness?
  - c. At successive time periods after acceptance (until menopause), now many are practicing
    - (1) the original method accepted.
    - (2) another program method.
    - (3) another method outside of the program.
  - d. What are the important characteristics of the acceptors and especially
    - (1) What is their age, number of children, and the period since they last bore a child.
    - (2) How do acceptance rates relate to some key indicators of modernization, e.g., education, or modern employment status?

2. About fertility:

- a. prior to acceptance, how does fertility of the acceptors compare with that of other married women of their own age group?
- b. At specific time periods after acceptance, how does the fertility of acceptors (whether still in the program or not) compare with their own prior fertility or with that of non-acceptors).

3. About both birth control and fertility:

The real object of interest is the couple, not the method or the program. Therefore, the key question is: what is the birth control practice and the fertility of all the couples X years after they enter the program, regardless of whether they are still using a program method? The more usual question is: how many gave up the pill or the IUD or how many births did those devices avert? This means the omission of what happens to the large number of couples who leave the program but may have been affected by it.

4. About the birth control and fertility of significant strata and areas--do they change in such a way as to indicate whether the program makes a difference, (e.g., do illiterates or farmers or particular castes who practice little contraception take it up readily and reduce their fertility in some relation to program effort).

5. About local area data to be used as a check on whether the program or the trend of the times make the difference:

Use local area data (e.g., India's 350 plus Districts or Taiwan's 361 local administrative units).

- a. Do program inputs have results on acceptance which transcend the expected effects of demographic, social, and economic trends in the local area?
- b. Do program acceptances result in fertility reductions greater than could be expected without the program from the other characteristics of the areas?

B. Detailed Description

The purpose of this project is to focus social science research on: (1) the consequences of high fertility for nation, community and household; and (2) the determinants of high fertility, so that effective population policies may be designed and implemented.

1. Consequences of high fertility

Analyses will focus upon problems created by population pressure in a wide range of LDCs. Rapid population growth will be related to the following:

- the undermining of food production systems
- deforestation
- encroaching deserts
- deteriorating mountain environments
- scarcity of firewood
- salting and silting of irrigation systems
- depletion of world fisheries

Such LDC policies as colonization of frontier areas will be examined to assess their effectiveness in coping with population pressures. (E.g., the related problems of increasing demographic pressures and scarcity of arable land in the highlands of Bolivia have led to a series of attempts to redistribute the population of this Andean nation. However, each organized thrust to the east in the form of a planned settlement program has been plagued with adversities and doomed to almost certain failure. Brazilian attempts to colonize the Amazon are also highly problematic).

Studies similar to that currently funded in Colombia by the Research Institute for the Study of Man would be feasible. Specifically, the Colombian study ('Demographic Pressure and Land Tenure within Indian and Peasant Communities in Highland Cauca') examines competition and conflict brought on by rapid population growth and related scarcity of land. (In Guabia, for example the number of inhabitants has increased by over 500% in this century). Traditional

patterns of authority within the family and community related to land holdings have been affected and conflicts over this scarce resource have increased in frequency and severity. Bloodshed has become commonplace with several deaths reported in clashes this past year. The Colombian study is conducted over an 18 month period by local researchers at a cost of \$50,000. Three additional studies of this type (Haiti, Bolivia, Mexico) could be funded. Total project cost, including overhead, \$400,000.

## 2. Determinants of Fertility

The major part of the funding requested in this PP would be for studies of fertility determinants, specifically:

- a. Population Impact Analysis in key countries to ascertain the probable effect upon fertility of LDC expenditures in the public sector.

An example of this type of research is the project carried out by Dr. McGreevey at request of USAID Pakistan. The results of this experience can be stated as follows:

- At their invitation and working directly with the Planning Commission of the Government of Pakistan, it was possible to develop a rational basis upon which the Commission could project significant increase in the funds allocated for direct programs affecting fertility over the 1975-80 period of the five-year plan. The Planning Commission decided to introduce into the published version of the Plan a chapter devoted specifically to population and population policy.
- Specific programs of family planning, education (particularly of women), nutrition, health improvements, water supply and sanitation were examined in some detail and estimates made of their likely impact on population growth over the plan period and into the future to the year 1990; these estimates spurred interest in exploring and considering measures which could reduce fertility at least as fast as mortality is likely to decline.
- Analysis of an unpublished evaluation of the Pakistan Population Planning Council's expanded program and continuous motivation system led to a request by Planning Commission officials and the Director of the Pakistan Institute of Development Economics (PIDE) for advice on how to structure an evaluation of the family planning program with a view to improving program performance.



1. Other things being the same, couples have fewer children where the woman's time has a comparatively high value in alternative uses, i.e., uses other than child care (opportunity cost).
2. Other things being the same, couples have more children where children contribute relatively more to household production and household income, both as children and as adults; that is, where the economic value of children is high.
3. Where the woman's time has a relatively high value in alternative uses or the economic value of children is relatively low, usage rates of contraceptives are higher, other things being equal.
4. Couples who have recently lost a child will tend to have a subsequent closed birth interval shorter than their average interval or than that of other couples in otherwise similar circumstances but without a recent child death. Curtailed lactation may be partly responsible, but the period between the onset of ovulation and the next conception is also shorter, as couples seek to replace the lost child.
5. Other things being the same, women whose time has a relatively high value in alternative uses will tend to space the births of their children closer together so as to decrease the time spent out of the labor market caring for children.
6. Other things being the same, women whose time has a relatively high value in alternative uses will tend to stop breastfeeding their children earlier.
7. Mothers breastfeed less where alternative, nutritious infant foods are more available and where their prices are lower, other things being the same.

In this type of study, hypotheses are formulated as equations whose coefficients can be estimated by regression techniques. Since many of the relationships that characterize family socio-economic, demographic and biomedical phenomena are time-dependent, aggregation of data over either families or time may severely limit the amount of information in the resulting sample. Therefore, it is desirable to have retrospective or longitudinal survey data on individual families if the relationships are to be disentangled. Additional data are required to link the socio-economic and biomedical relationships with factors that reflect the influence of public policies and other environmental factors on individuals' purposeful behavior. Various modules of the World Fertility Survey provide some of these data. Surveys currently underway in Malaysia under RAND auspices provide perhaps the most complete household longitudinal data relating to fertility.

A relatively modest amount of money per country will help to ensure that data which has been generated will be exhaustively analyzed for policy implications. Therefore, this project will provide \$600,000 for multivariate analysis of data from 10 LDCs.

c. Action Experiments or demonstration projects designed to measure the fertility impact and cost-effectiveness of programs which focus upon raising the age at marriage and first conception, improving the educational and employment status of women, affecting income levels and improving income distribution, and lowering infant mortality.

As opposed to the projects previously outlined, these experiments constitute actual interventions into the socio-cultural context which surrounds fertility.

There is no debate over the premise that delay of legal marriage, in societies where legal marriage is prevalent, contributes significantly to the lowering of fertility. The fundamental issue is to define the policy variables that affect the age of marriage. What in fact can governments do to encourage and support delays in marriage. Does legal change in the absence of changes in the underlying socio-economic institutions have any effect upon mass behavior?

The project will first identify specific attempts by governments to influence age at marriage and evaluate the results. Small pilot projects (e.g., in India and Pakistan) which have focused upon the encouragement of later age at marriage either by providing employment, education, or bonuses to unmarried females will be assessed. The final stage of the project will be to collaborate with LDC governments in the design and testing of new organizational forms which will provide new economic options for adolescent females. These might include the organization of work forces composed exclusively of females (with mature women in supervisory positions), production/marketing cooperatives with connections to one or more ministries, female labor brigades of a semi-militarist type, work/study programs.

For any of these pilot projects to work, some research is necessary. First, the local economic base, including distribution of activities by sex and age as well as distribution of ownership of the means of production, must be ascertained. Second, there must be an identification and evaluation of the sorts of viable economic opportunities that can be put in under the existing situation. Third, there should be periodic assessments of the local educational threshold level and employment demand picture for each sex. Most importantly, there must be an assessment of changes in fertility of participants throughout the treatment period and comparison with a matched control group.

Budget implications would depend upon the type of activity chosen as treatment as well as the level of community participation. The measurement costs alone would be modest--at most, one social scientist and his assistant half time. Including travel and per diem for an American consultant, measurement would total less than \$30,000 per country. Six countries could be done during the three year period.

Ergo, \$180,000 total for country projects, plus \$420,000 for contractor and core support. Total = \$600,000.

d. Comparisons of Matched Samples of Family Planning Acceptors and Non-Acceptors over time to assess the impact of family planning not only upon fertility but also upon the quality of life of those who adopt it.

The critical assumption upon which population programs rest is that reduced fertility is advantageous not only to the community at large but also to the individual household. Critics of population and family planning maintain on the contrary that, for the poor in a market economy, with some expectations of short-term labor or earnings from children and no hopes for governmental assistance in future crises and old age, there are powerful utilities in large families operating throughout the life cycle. The project would follow matched samples of family planning acceptors and non-acceptors over a five year period, using retrospective data on fertility, socio-economic status and subjective measures of satisfaction with quality of life. Budget requirements would be on a par with those of projects supported by the Smithsonian Institution. @ \$20,000. Six countries total \$350,000.

e. International Review Group

Meetings subsequent to the Bellagio Conference on Social Science Research and Development in February 1974 have emphasized the need for a broad review of social science research activities in population with particular reference to their utility for development policy.

It was agreed that analysis and advice from a small group of widely respected international experts would best fill these needs. A group of international agencies (the UNFPA, IBRD, Rockefeller, Ford) have signified their willingness to contribute to the financing of the establishment and operation of the IRG and its related activities for a period of 18 months, which could be extended to 24, depending on progress achieved at end of the first year. No commitment for further work is made at time of setting up the IRG, although consideration would be given later on, in the light of the results obtained, to possible follow-up activities.

Specifically, the IRG will:

1. Review the present state of social science knowledge which is important for understanding the relationship of population and development and will identify critical gaps in our knowledge that impedes effective population policy.
2. Make a general appraisal of present utilization of social science research findings in policy making on population and development and suggest positive ways of improving the situation.
3. Make a general inventory of the current institutional capacities of social science research in population and development in major nations, sub-regions and regions of the developing world and propose constructive actions to strengthen them where this is deemed advisable.

The IRG will deal with population matters of a general nature and is not intended to be utilized by AID as an advisory committee; it will not review specific proposals submitted for AID funding. Contribution to IRG will only be made after AA/PHA of an Action Memorandum which will detail funding approval

arrangement, logistical support and scope of activities and duties.

The International Review Group would be an ad hoc body of six members asked to serve in their personal capacities, for an 18 month period beginning July 1976. The Group would include a chairperson (who would spend approximately 50% of her or his time to the endeavor), plus five members who would commit about nine weeks of their time over that period. The Group would have an appropriate geographic balance. Members would be chosen on the basis of internationally recognized expertise in social demography, population economics, or other social science fields related to population. At least one would be a development planner rather than a student of population as such.

The Group would be an independent, autonomous body with no formal affiliation to existing institutions although for logistics purposes its Secretariat could be located in a recognized institution in the population field.

PROPOSED BUDGET FOR THE INTERNATIONAL REVIEW GROUP

|                                     | 1-6/76       | 7-12/76        | 1-6/77         | 7-12/77        | TOTAL          |
|-------------------------------------|--------------|----------------|----------------|----------------|----------------|
| <b>1. Salaries &amp; Honoraria</b>  |              |                |                |                |                |
| Chairperson (1/2 time)#             | -            | 14,333         | 14,333         | 14,334         | 43,000         |
| Members (5: 2 mm each)              | -            | 10,000         | 10,000         | 10,000         | 30,000         |
| Staff: Exec. Asst. (1)              | 6,000        | 9,000          | 9,000          | 9,000          | 33,000         |
| Res. Assts (2)                      | -            | 10,000         | 10,000         | 10,000         | 30,000         |
| Secretaries (2)                     | 1,000        | 6,000          | 6,000          | 6,000          | 19,000         |
| SUBTOTAL:                           | 7,000        | 49,333         | 49,333         | 49,334         | 155,000        |
| <b>2. Travel: IRG mtgs-45,000</b>   |              |                |                |                |                |
| misc IRG- 5,000                     | -            | 30,000         | 30,000         | 30,000         | 90,000         |
| reg. wkshps (4)                     |              |                |                |                | 40,000         |
| <b>3. Commissioned papers:</b>      |              |                |                |                |                |
| (10-20)                             | -            | 20,000         | 20,000         | 20,000         | 60,000         |
| <b>4. Equipment &amp; Communic.</b> |              |                |                |                |                |
|                                     | -            | 3,000          | 3,000          | 3,000          | 9,000          |
| <b>5. Contingencies</b>             |              |                |                |                |                |
|                                     | -            | 3,333          | 3,333          | 3,334          | 10,000         |
| <b>6. Supporting Services</b>       |              |                |                |                |                |
| (incl. rent)                        | -            | 3,333          | 3,333          | 3,334          | 10,000         |
| <b>GRAND TOTAL</b>                  | <b>7,000</b> | <b>108,999</b> | <b>108,999</b> | <b>109,002</b> | <b>334,000</b> |

#Chairperson's salary is set at current U.N. salary equivalent, and it includes fringe benefits and estimated Mexican income tax.

The AID contribution would be \$50,000.

f. Briefings for U.S. Embassy Personnel in Pro-Natalist Countries

The contractor would prepare with PHA/POP detailed analyses of the policy making process with respect to population in a few key LDCs (Brazil, Burma, Nigeria for example) which have not yet adequately considered the population problems which confront them. Based on the results of this exercise, a thorough presentation of the determinants and consequences of rapid population growth will be made to U.S. Embassy and perhaps LDC government officials. Suggestions will be made for an expanded U.S. or multilateral role in population assistance. This project will fuse the social science expertise of policy specialists (political scientists, experts in public administration and development economics) with that of demographers in attempting to inform the effective performance of diplomats. Work carried out by PHA/POP and the Smithsonian Institution in El Salvador, Bahrain and Pakistan will provide guidelines for this effort. Estimated cost for eight countries is \$200,000.

C. Social Analysis

This project focuses upon population policy change. Unlike many earlier efforts, it does not concentrate on social science research as an end in itself, but as a means to achieving policy change. The components of this project are primarily concerned with involving key LDC policy makers and influential LDC researchers in a dialogue on perceived population issues. LDC sensitivity to consideration of the population problem can be muted by beginning with LDC perceptions and appraisals of the demographic and developmental situation. All in country research will be carried out by LDC scholars, although with the assistance of U.S. consultants. Policy makers will be engaged at the outset of the research process to aid in the formulation of research objectives and will be kept informed throughout the relatively brief (one year) research period of progress toward solution of key problems. Follow-up activities in each country will emphasize practical applications of research findings. As in all projects of this type, confidentiality of data, protection of respondents' privacy, and other ethical safeguards will be maintained.

D. Economic Analysis

The economic analysis of this project has to be quite simple at this stage of development. It is impossible to develop a cost benefit analysis because such a procedure entails computations for which no data exist or for which substantial and complex computations would be required. More specifically, a cost benefit analysis requires estimates of births averted. Births averted estimates are, in turn, based on estimates of couple years of protection (CYP). Both of these measurements are constructs; they are measures of non-events. They involve formulas which make a number of assumptions that have been questioned by numerous experts. To relate social science research to specific changes in population policy is difficult enough. To further extrapolate research findings to decreases in fertility is beyond the current state of our methodology. Nevertheless, there is good reason to

assume that more accurate knowledge of the consequences of population growth will lead decision makers to act and that better knowledge of the determinants of fertility will lead them to act more effectively.

#### Part IV. IMPLEMENTATION ARRANGEMENTS

##### A. Analysis of the Recipient's and AID's Administrative Arrangements

1. Recipients. The project activities shall be implemented on the basis of contract awards or through supplementary inputs into country projects. The contractor's role shall be that of intermediaries between AID and the host countries and shall be to oversee research activities, ensure their adequate conduct and progress. With respect to country projects, the US Missions shall serve as administrative monitors (while PHA/POP shall remain the technical supervisor of the activities).

Whenever practical, contracts shall be awarded based on competitive bidding. However, in special instances a contractor may be selected on predominant capability and in such cases appropriate justifications shall be made. In either case, the selection of a contractor shall weigh heavily on demonstrated capabilities and resources, past experiences in social science research in the population field, past efforts/successes in assisting foreign governments and indigenous research institutions and on any other criteria considered relevant to the particular activity.

The selection of foreign subcontractors shall be made and confirmed in accordance with AID contract provisions and after review/clearance by AID/W, the appropriate US Mission and AID Regional Bureaus.

2. A.I.D. The project and its activities shall be monitored by the Policy Division, Office of Population. Additionally, as may be appropriate, the selection of host countries, the development of the scope of activities shall be made in coordination and consultation with other PHA/POP Divisions, appropriate US Missions, AID Regional Bureaus and other AID/W offices.

##### B. Implementation Plan

1. Implication of Project Paper Approval. An approval of this PP shall be an approval of the concept of a social science research program, but would not be construed as a blanket authorization to initiate and fund any or all activities described in this Paper. It is in essence to authorize PHA/POP to implement a programming mechanism and to provide a funding resource to respond in a timely manner to exigencies for short-term social science research studies which may be proposed during the course of the fiscal years. It is to permit PHA/POP to respond to Mission requests for social science research support, contractor-submitted proposals or AID/W-designed social research initiatives.

2. Intra-AID Coordination. As noted previously but nevertheless reiterated for emphasis, selection of host countries and the design of research activities shall be made in direct coordination and consultation with other PHA/POP Divisions, appropriate US Mission, AID Regional Bureaus and other appropriate AID/W offices.

During the past years when this project was being considered and then designed, the Research Advisory Committee agreed that the individual research activities would not need prior RAC approval but that an annual activity progress report would suffice.

3. Authorization of Individual Research Activities. Each proposal shall be reviewed as it is received by PHA/POP and shall be approved based on technical feasibility, complementarity with existing efforts, PHA/POP priorities and requirements at that point in time. An Ad Hoc committee of PHA/POP and other AID social scientists will review each proposal. Assuming that PHA/POP approves the proposed research, an Action Memorandum to the AA/PHA shall then be submitted, briefly providing an overall status report of this project and in some detail outlining the particular research activity's purpose, rationale, output, proposed AID input, as well as evaluation and implementation plans. Attached to this Memorandum shall be the PIO/T authorizing the implementation of the research activity and the obligation of funds; an authorization of this activity by the AA/PHA shall be manifested by the signing of the PIO/T. To be included in this package, where applicable, shall be a geographic source waiver and/or the predominant capability justification; an authorization of this social science research activity shall be likewise indicated by the signing of the document(s).

4. Plan for the Obligation of Funds. The commitment of funds will be made as the individual activities are authorized. As a target, the overall obligation of the total authorized funding for each fiscal year shall be made at a rate roughly one-third per quarter, that is, by the end of the third quarter the entire project funds authorized for the fiscal year shall or should be obligated. (The one exception will be the initial fiscal year, FY1976, since at this late point in time approval of this Paper, the processing of the required PIO/Ts and the negotiation/signing of contracts will necessarily take place during this fiscal year's fourth quarter.)

#### C. Evaluation and Implementation Plans

In a project with diverse activities such as this, it would be unfeasible to draw up a detailed evaluation plan. It can be assured, however, that for each proposed research activity a plan will be detailed to define the baseline from which the activity can be measured or to identify milestones which can be employed to gauge progress. Moreover, it can be expected that an evaluation schedule for each activity shall be developed and coordinated with POP/DIR and PHA/PRS.

D. Length of Subproject Activity

Subprojects will average 18 months from date of obligation to date of final report. Total contract will be for a maximum of two years to permit dissemination of findings and subproject evaluation. If a subproject activity is to proceed beyond the two year period, then it must do so as a separate, new activity requiring all of the prescribed approval procedures.

E. Subproject Project Performance Network (PPT)

When a subproject is submitted for AA/PHA approval, a PPT on the subproject will be attached in order that the subproject can be properly reviewed.

PPT FORM

|   |                         |  |                  |                                 |           |
|---|-------------------------|--|------------------|---------------------------------|-----------|
| Country:<br>Worldwide   | Project No:<br>932-0616 | Project Title:<br>Determinants and Consequences of Fertility   | Date:<br>5/11/76 | /x / Original<br>/ / Revision # | Approved: |
| <p><b><u>CPI DESCRIPTION</u></b> (overall project)</p> <ol style="list-style-type: none"> <li>1. 5/30/76 Reviews of proposals</li> <li>2. 6/30/76 Obligations for Subprojects 1-3</li> <li>3. RFP's, review of new unsolicited proposals<br/>9/1/76</li> <li>4. 10/1/76 Obligations for Subprojects 4-9</li> <li>5. 4/1/77, Evaluations for Subprojects 1-3 (midterm)</li> <li>6. 8/1/76, Obligations for Subprojects 10-15</li> <li>7. 10/1/76, Final Reports Subprojects 1-3<br/>Dissemination of Findings<br/>Evaluation of Subprojects 4-9</li> <li>8. 1/15/77, Final Reports Subprojects 4-9<br/>Dissemination of Findings</li> <li>9. 4/1/77, Evaluation of Subprojects 10-15</li> <li>10. 1/15/78, Final Reports Subprojects 10-15<br/>Dissemination of Findings</li> <li>11. 4/1/78, Evaluation of entire project</li> </ol> <p>*Subprojects will average<br/>18 months from date of obligation<br/>to date of final report.<br/><u>Contract will be for two years</u><br/>to permit dissemination of findings,<br/>project evaluation.</p> |                         | <p>(sample subproject)</p> <ol style="list-style-type: none"> <li>1. 5/5/76, Review of unsolicited proposals, RFP's<br/>consultation with bureaus, USAIDS</li> <li>2. 6/30/76, Contract signed (1-2 years)</li> <li>3. 7/1/76, Travel to initiate country specific research<br/>consult with USAIDS, LDC policy makers</li> <li>4. 8/1/76, Subcontracts with LDC research institutions</li> <li>5. 10/1/76, Training of interviewers, other researchers</li> <li>6. 11/1/76, Data Collection</li> <li>7. 1/15/77, Data Analysis</li> <li>8. 4/1/77, Project Evaluation (mid term)</li> <li>9. 9/1/77, Final Report</li> <li>10. 10/1/77, Workshop, Dissemination of Findings</li> <li>11. 12/1/77, Final Project Evaluation</li> </ol> |                  |                                 |           |



SAMPLE SUBPROJECT

( ) PPI DRM  
 (May be Expanded as Appropriate)

|                       |                         |  |                  |                                  |          |
|-----------------------|-------------------------|--|------------------|----------------------------------|----------|
| Country:<br>Worldwide | Project No:<br>932-0616 | Project Title:<br>Determinants and Consequences of Fertility | Date:<br>5/11/76 | / x / Original<br>/ / Revision # | PPT appd |
|-----------------------|-------------------------|--|------------------|----------------------------------|----------|

| or FY:<br>CY<br>Month: | July   | Oct | Jan 77 | April | July | Oct | Jan 78 | April | July | Jan 79 | June |             |
|------------------------|--|-----|--------|-------|------|-----|--------|-------|------|--------|------|-------------|
|                        | 0  |     |        |       | 12   |     |        |       | 24   |        | 36   |             |
| Prior Actions          | 1. 5/15/76 RFP's, review & unsolicited proposals<br>2. Contract signed<br>3. Travel to initiate country specific research<br>4. Subcontracts with ldc research institutions<br>5. Training of interviewers<br>6. Data collection<br>7. Data analysis<br>8. Project Evaluation (midterm)<br>9. Final Report<br>10. Workshop and other activities to disseminate findings.<br>11. Final Project Evaluation |     |        |       |      |     |        |       |      |        |      | Post Action |
| Financial Plan:        |  |     |        |       |      |     |        |       |      |        |      |             |
| Evaluation Plan:       |  |     |        |       |      |     |        |       |      |        |      |             |

HB 3, App 36, Part I

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

Life of Project:  
From FY 77 to FY 79  
Total U. S. Funding \$3,700,000  
Date Prepared: March 1976

Project Title & Number: "Determinants and Consequences of Fertility"

| NARRATIVE SUMMARY  | OBJECTIVELY VERIFIABLE INDICATORS  | MEANS OF VERIFICATION   | IMPORTANT ASSUMPTIONS   |            |  |  |     |      |    |    |       |        |     |   |     |     |      |     |   |     |     |     |    |   |    |    |     |    |   |     |     |             |            |          |            |            |  |  |
|--|--|---|---|------------|--|--|-----|------|----|----|-------|--------|-----|---|-----|-----|------|-----|---|-----|-----|-----|----|---|----|----|-----|----|---|-----|-----|-------------|------------|----------|------------|------------|--|--|
| <p><b>Program or Sector Goal:</b> The broader objective to which this project contributes:</p> <p>To assist LDCs to consider the impact of pop dynamics on their own development and to implement pop policies which will contribute to development goals.</p> | <p>Measures of Goal Achievement:</p> <ul style="list-style-type: none"> <li>=commitment of national resources</li> <li>=control of excessive growth</li> <li>=self-sustaining policies and institutional bases</li> </ul>  | <ul style="list-style-type: none"> <li>=LDC national budgets</li> <li>Demographic studies of LDC</li> <li>=On-site evaluations</li> </ul> | <p>Assumptions for achieving goal targets:</p> <ul style="list-style-type: none"> <li>+LDC opted for development</li> <li>=Better understanding leads to more rational population policies/programs</li> <li>=Need for pop policies and programs recognized by LDC</li> </ul>   |            |  |  |     |      |    |    |       |        |     |   |     |     |      |     |   |     |     |     |    |   |    |    |     |    |   |     |     |             |            |          |            |            |  |  |
| <p><b>Project Purpose:</b></p> <p>to investigate those consequences of fertility which, when elucidated, will help move ldc govts to implement effective pop policies and those determinants of fertility which are responsive to ldc govt action.</p>         | <p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ul style="list-style-type: none"> <li>= relevant/acceptable research findings available to LDCs</li> <li>= LDC possesses policy designs to implement research findings</li> </ul>  | <p>on site evaluations</p>  | <p>Assumptions for achieving purpose:</p> <ul style="list-style-type: none"> <li>=LDC analysts available</li> <li>=present research efforts and level of knowledge remain inadequate</li> <li>=demand exists for better understanding by LDC administrators</li> </ul>  |            |  |  |     |      |    |    |       |        |     |   |     |     |      |     |   |     |     |     |    |   |    |    |     |    |   |     |     |             |            |          |            |            |  |  |
| <p><b>Outputs:</b></p> <p>1.1 Research findings<br/>1.2 Technical Meetings and Data Presentations</p>  | <p>Magnitude of Outputs</p> <p>1.1 Thirty major findings corresponding to the major research questions listed Part I of text.<br/>1.2 Total 17</p>   | <p>=Contractor's monthly and annual reports on activities and expenditures</p>  | <p>Assumptions for achieving outputs:</p> <ul style="list-style-type: none"> <li>=Studies will produce useful and relevant information</li> <li>=Developed information disseminated results in change of policy, program</li> <li>=Demand continues for these studies, for dialogue between investigators and decision makers</li> <li>=LDC analysts available</li> </ul> |            |  |  |     |      |    |    |       |        |     |   |     |     |      |     |   |     |     |     |    |   |    |    |     |    |   |     |     |             |            |          |            |            |  |  |
| <p><b>Inputs:</b></p> <p>Salaries/Fringe Benefits<br/>Technical Activities<br/>Other Direct Costs<br/>Overhead</p> <p style="text-align: right;">TOTAL</p>   | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5">Implementation Target (Type and Quantity)</th> </tr> <tr> <th>SUM</th> <th>FY77</th> <th>78</th> <th>79</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>\$1191</td> <td>100</td> <td>-</td> <td>100</td> <td>200</td> </tr> <tr> <td>1010</td> <td>100</td> <td>-</td> <td>100</td> <td>200</td> </tr> <tr> <td>176</td> <td>11</td> <td>-</td> <td>10</td> <td>21</td> </tr> <tr> <td>210</td> <td>83</td> <td>-</td> <td>100</td> <td>183</td> </tr> <tr> <td><b>3587</b></td> <td><b>300</b></td> <td><b>-</b></td> <td><b>300</b></td> <td><b>600</b></td> </tr> </tbody> </table> | Implementation Target (Type and Quantity)   |   |            |  |  | SUM | FY77 | 78 | 79 | TOTAL | \$1191 | 100 | - | 100 | 200 | 1010 | 100 | - | 100 | 200 | 176 | 11 | - | 10 | 21 | 210 | 83 | - | 100 | 183 | <b>3587</b> | <b>300</b> | <b>-</b> | <b>300</b> | <b>600</b> |  | <p>Assumptions for providing inputs:</p> <ul style="list-style-type: none"> <li>=Satisfactory contractor management of project</li> <li>=Active, close working relations between AID and contractor</li> <li>=Qualified social scientists available/able to provide aid effectively to LDCs</li> </ul> |
| Implementation Target (Type and Quantity)  |  |   |   |            |  |  |     |      |    |    |       |        |     |   |     |     |      |     |   |     |     |     |    |   |    |    |     |    |   |     |     |             |            |          |            |            |  |  |
| SUM  | FY77   | 78  | 79  | TOTAL      |  |  |     |      |    |    |       |        |     |   |     |     |      |     |   |     |     |     |    |   |    |    |     |    |   |     |     |             |            |          |            |            |  |  |
| \$1191   | 100  | -   | 100   | 200        |  |  |     |      |    |    |       |        |     |   |     |     |      |     |   |     |     |     |    |   |    |    |     |    |   |     |     |             |            |          |            |            |  |  |
| 1010   | 100  | -   | 100   | 200        |  |  |     |      |    |    |       |        |     |   |     |     |      |     |   |     |     |     |    |   |    |    |     |    |   |     |     |             |            |          |            |            |  |  |
| 176  | 11   | -   | 10  | 21         |  |  |     |      |    |    |       |        |     |   |     |     |      |     |   |     |     |     |    |   |    |    |     |    |   |     |     |             |            |          |            |            |  |  |
| 210  | 83   | -   | 100   | 183        |  |  |     |      |    |    |       |        |     |   |     |     |      |     |   |     |     |     |    |   |    |    |     |    |   |     |     |             |            |          |            |            |  |  |
| <b>3587</b>  | <b>300</b>   | <b>-</b>  | <b>300</b>  | <b>600</b> |  |  |     |      |    |    |       |        |     |   |     |     |      |     |   |     |     |     |    |   |    |    |     |    |   |     |     |             |            |          |            |            |  |  |

~~301-32072~~  
~~A2656~~

Noted. 1/8/76 CLG

932-0616

May 5, 1976

MEMORANDUM TO: Mr. Charles L. Gladson  
FROM: GC/TFHA, A. R. Richstein *ARR/ML*  
SUBJECT: PROP on Social Determinants of Fertility  
*932-0616*

The PROP at page 18 proposes a contribution of \$50,000 to an International Review Group (IRG), a small group of experts to furnish advice and analysis on social science research activities in population.

Since it is not yet clear whom the IRG is to advise, we were concerned with advisory committee implications of AID support and utilization of such a group. In addition, the organizational framework, logistical support and funding arrangements are not yet definite.

Accordingly, we have amended the PROP (with POP/PPD concurrence) to provide that AID's contribution to the IRG will only be made after AA/PHA approval of an Action Memorandum providing more detail on the IRG. The PROP was also amended to provide that the IRG is not intended to be utilized by AID as an advisory committee. However, if at some future time it becomes evident that the IRG will be utilized as an advisory committee, it will be necessary to charter it as an advisory committee under the Federal Advisory Committee Act.

cc: PHA/PRS:DMcMakin  
PHA/POP/PPD:CHemmer

MAY 26 1976

ACTION MEMORANDUM FOR THE ADMINISTRATOR

MAY 26 4 07 PM '76  
SECRETARY

THRU: EXSEC  
FROM: AA/PPG, Philip Birnbaum

Subject: Social Science Research on the Determinants and Consequences of Fertility (Project No. 932-0616)

Problem: Because the attached Project Paper proposes an AID input exceeding \$2 million <sup>(\$3 million)</sup>, your approval is required.

Discussion: More systematic efforts are required to examine the relationships between fertility and a broad range of variables which may be susceptible to government action. Education and employment of women, improved income distribution, lower infant and child mortality: all have been shown to correlate inversely with fertility under some conditions. This project would enable the Office of Population to initiate experimental studies as well as to respond to mission requests for assistance. Overseas research will be carried out by LDC institutions often with the help of U.S. consultants. An International Review Group funded by the major donor agencies will receive assistance through this project so that it may review the current state of the art with respect to fertility and make recommendations for the future course of support for social science research in this area.

Specific subprojects to be approved under the terms of this project will be reviewed by an ad hoc committee of PHA/POP and other AID social scientists prior to submission to AA/PHA. Overseas research and technical assistance will be cleared in advance by the regional bureaus and USAIDs whose countries are involved. This project appears on page 111 FY 1976 IPDB.

Recommendation: That you approve the proposed activities and AID input.

Attachment: a/s

Approved: John E. Murphy

Disapproved: \_\_\_\_\_

Date: 6/5/76

Clearances:

AA/PHA: F.O. Pinkham FP Dated: 5-21-76  
GC: C.L. Gladson CG Dated: 5-6-76

*[Handwritten signature]*

UNITED STATES GOVERNMENT

# Memorandum

TO : PHA/POP, Dr. R. T. Ravenholt

DATE: April 14, 1976

FROM : PHA/PRS, C. D. McMakin

*FILE*  
↓

SUBJECT: PP Review for Determinants/Consequences of Fertility (New)

We met on April 5th with Carl Hemmer, Dave Mutchler, Arlen Jee and representatives of PPC, WID, NE and PRS to discuss this project. While general satisfaction was expressed with the desirability of undertaking a broad range of social science research, several concerns were expressed which must be clarified before this project can be recommended for approval by AA/PHA and DA/AID.

First, the scope of the project is virtually universal. I recognize that this is the potential nature of this particular kind of research -- and that the proposed project is designed as an enabling mechanism. These are valid points. However, I feel some better focus is desirable as a guide to selecting subprojects.

Second, something should be added regarding the mechanism for subproject selection. This should be expressed in two stages: a) a device for reaching Agency consensus on the array of subprojects to be developed -- array of the competing candidates -- should be specified, with the expectation that periodic validation or modification is likely and desirable; and b) a procedure for obtaining specific subproject scope of work clearance by interested parties should be stated. My purpose here is not to burden a limited staff with extra procedure. Rather, I feel strongly that if we are to succeed in selecting subprojects which address concerns felt by our Agency and development professional peers, then we must engage them in the process of issue selection.

Third, the duration of subprojects should be clearly limited. Further, it should be clear that if activity is to proceed beyond this scope, then it must do so as a separate new activity. In this sense, this project can be viewed as a "project development" activity and not geared to long range efforts on many fronts.



5010-110

**Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan**

Finally, I think this project should include a simple performance tracking diagram -- one which I would expect would have to be changed or updated as experience was gained. Further, each sub-project -- as anticipated in the new operations research project -- should be supported with a PPT network at the time of approval to facilitate clear understanding of scope, purpose and progress.

Attached are additional concerns expressed by AFR/DP, not inconsistent with those expressed above.

Attachment: a/s

cc: LA/DP: MBrackett  
ASIA/DP: WLeves  
NE/DP: BLangmaid  
AFR/DP: EDonoghue  
WID: GVaratti  
PPC/PDA: BHerz  
PPC/DPRE: JWelty ✓  
DAA/PIA: AFurman  
AA/PIA: FPinkham

UNITED STATES GOVERNMENT

# Memorandum

TO : PHA/PRS, Mr. C.D. McMakin

DATE: APR 2 1976

FROM : AFR/DP, Edward Donoghue

SUBJECT: PHA Project Review Meeting

REF : Your memo of 3/26/76

The Africa Bureau commends PHA/POP for broadening its research to include an analysis of the social and cultural determinants of fertility. The Agency definitely needs a better understanding of all the variables that influence a couple's decision to limit family size in order to allocate population, and other categories of funding, in a manner that will have the greatest impact in reducing fertility rates in the LDC's.

*1/16/76*  
However, we question whether AID knows enough about this new field to authorize a \$3.7 million project at this time. The Project Paper really encompasses seven separate activities which is a rather ambitious undertaking. These seven projects, in turn, apparently may involve as many as 46 separate country studies or action programs over the next 2 1/2 years at the same time as the major donors are establishing a new International Review Group (IRG) to advise on the most positive ways to go about this type of research. Wouldn't it be more realistic to just plan on setting up the IRG and doing a handful of serious country studies rather than spreading AID's resources as thinly as this Paper proposes? The ultimate objective of the research is to select a few key variables, other than family planning programs, which are susceptible to policy makers' modification. It shouldn't require \$3.7 million to learn that much and to subsequently devise well-designed pilot action programs in selected countries.

Generally, the socio-cultural determinants AID is trying to identify through this process are apt to be highly country-specific. The research, therefore, should be done locally under the daily management of country missions and/or indigenous institutions. Much of it will be so sensitive as to raise the spectre of another Camelot episode if not handled carefully. This indicates again, the wisdom of a cautious approach in collaboration with interested LDC policy makers rather than a "wholesale" approach trying to stir up action all over the world. In addition, the funds would be much more safely channelled through the new IRG or some international group rather than through AID/W-funded contractors.



5010-110

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

*Handwritten initials*

Specifically, we can see the wisdom of establishing the IRG (\$234,000), conducting multivariate analysis of available data in a few countries (not ten for \$400,000), matching acceptors versus non-acceptors in a few places (up to \$350,000 although that seems unnecessarily expensive) and then pulling the results together before moving into a Phase II with more in depth Population Impact Analyses (the Pakistan pilot was too superficial), action experiments, specialized anthropological studies, and/or environmental/ecological assessments (the \$516,000 Brazil study is definitely premature at this time).

Finally, the Africa Bureau would like to consult with PHA/POP once the parameters of this research is defined to assist in selecting where and if such country studies are to be undertaken in Africa.

cc:  
PHA/POP/DEA, DMutchler  
PPC/DPRE, JWelty

ISSUES PAPER  
ON  
PROJECT PAPER: DETERMINANTS/CONSEQUENCES OF FERTILITY  
Review 4/5/76

1. This PP contains most of the social science questions related to the population problem. Most of the questions posed need to be studied, however, should a "basket project" like this be the vehicle for undertaking this complex task?
2. The project purpose is very general and it would be most difficult to determine if and when the purpose of this project has been achieved. It appears to be difficult to prepare a purpose statement for a project which is, in fact, a listing of proposed social science research topics. How do we put a program management handle on this?
3. In order to more clearly define the goals, purposes, inputs and outputs, would it be appropriate to divide this project into four separate but complimentary projects as follows:
  - A. Determinants of fertility
  - B. Consequences of rapid population growth in poor LDCs
  - C. Anthropological studies of the cultural consequences of population growth
  - D. Ecological effects of populating the Amazon Basin.
4. Or - do we really want to attack all of these areas? Shouldn't we concentrate on determinants as initially specified?
5. Past experience in social science research indicates that research projects of the type proposed tend to be time-consuming and very expensive. Is \$3.7 million adequate funding to answer 30 major social science questions? Is the time period of three years adequate to do credible work on questions of such complexity as - "Analyses of the cultural, ecological and social consequences of rapid population growth at both the macro and micro levels"?
6. Given the wide interest and agency-wide concern for the questions posed - what mechanisms are contemplated to: a) benefit from related experience elsewhere in AID in project design? b) selection of specific study questions and locale? c) application of findings?
7. Given the basket character of this project, are the general AID rules of project design appropriate? Shouldn't we list assumptions? Shouldn't we list evaluation criteria to be able to measure success? Shouldn't we network critical events to be able to monitor progress?
8. Discussion of contractor selection procedures is not appropriate in the PP and should be dealt with in the PIO/T.

SUBJECT: Project Paper - "Research on the Determinants and Consequences of Fertility," Project Number 932-17-570-616

(The attached is a revision to the subject Project Paper submitted on/about March 15 to PHA for review. This revision is necessarily made to more clearly define the intended implementation arrangements (ref. Part IV, pp. 26-28) and to more explicitly enumerate those procedures which will be followed to implement this project.)

PART IV. IMPLEMENTATION ARRANGEMENTS

A. Analysis of the Recipient's and AID's Administrative Arrangements

1. Recipients. The project activities shall be implemented on the basis of contract awards or through supplementary inputs into country projects. The contractors' role shall be that of intermediaries between AID and the host countries and shall be to oversee research activities, ensure their adequate conduct and progress. With respect to country projects, the US Missions shall serve as administrative monitors (while PHA/POP shall remain the technical supervisor of the activities).

Whenever practical, contracts shall be awarded based on competitive bidding. However, in special instances a contractor may be selected on predominant capability and in such cases appropriate justifications shall be made. In either case, the selection of a contractor shall weigh heavily on demonstrated capabilities and resources, past experiences in social science research in the population field, past efforts/successes in assisting foreign governments and indigenous research institutions and on any other criteria considered relevant to the particular activity.

The selection of foreign subcontractors shall be made and confirmed in accordance with AID contract provisions and after review/clearance by AID/W, the appropriate US Mission and AID Regional Bureaus.

2. A.I.D. The project and its activities shall be monitored by the Policy Division, Office of Population. Additionally, as may be appropriate, the selection of host countries, the development of the scope of activities shall be made in coordination and consultation with other PHA/POP Divisions, appropriate US Missions, AID Regional Bureaus and other AID/W offices.

B. Implementation Plan

1. Implication of Project Paper Approval. An approval of this PP shall be an approval of the concept of a social science research program, but would not be construed as a blanket authorization to initiate and fund

any or all activities described in this Paper. It is in essence to authorize PHA/POP to implement a programming mechanism and to provide a funding resource to respond in a timely manner to exigencies for short-term social science research studies which may be proposed during the course of the fiscal years. It is to permit PHA/POP to respond to Mission requests for social science research support, contractor-submitted proposals or AID/W-designed social research initiatives.

2. Intra-AID Coordination. As noted previously but nevertheless reiterated for emphasis, selection of host countries and the design of research activities shall be made in direct coordination and consultation with other PHA/POP Divisions, appropriate US Mission, AID Regional Bureaus and other appropriate AID/W offices.

During the past years when this project was being considered and then designed, the Research Advisory Committee agreed that the individual research activities would not need prior PAC approval but that an annual activity progress report would suffice.

3. Authorization of Individual Research Activities. Each proposal shall be reviewed as it is received by PHA/POP and shall be approved based on technical feasibility, complementarity with existing efforts, PHA/POP priorities and requirements at that point in time. Assuming that PHA/POP approves the proposed research, an Action Memorandum to the AA/PHA shall then be submitted, briefly providing an overall status report of this project and in some detail outlining the particular research activity's purpose, rationale, output, proposed AID input, as well as evaluation and implementation plans. Attached to this Memorandum shall be the PIO/T authorizing the implementation of the research activity and the obligation of funds; an authorization of this activity by the AA/BHA shall be manifested by the signing of the PIO/T. To be included in this package, where applicable, shall be a geographic source waiver and/or the predominant capability justification; an authorization of this social science research activity shall be likewise indicated by the signing of the document(s).

4. Plan for the Obligation of Funds. The commitment of funds will be made as the individual activities are authorized. As a target, the overall obligation of the total authorized funding for each fiscal year shall be made at a rate roughly one-third per quarter, that is, by the end of the third quarter the entire project funds authorized for the fiscal year shall or should be obligated. (The one exception will be the initial fiscal year, FY1976, since at this late point in time approval of this Paper, the processing of the required PIO/Ts and the negotiation/signing of contracts will necessarily take place during this fiscal year's fourth quarter.)

C. Evaluation and Implementation Plans

In a project with diverse activities such as this, it would be unfeasible to draw up a detailed evaluation plan. It can be assured, however, that for each proposed research activity a plan will be detailed to define the baseline from which the activity can be measured or to identify milestones which can be employed to gauge progress. Moreover, it can be expected that an evaluation schedule for each activity shall be developed and coordinated with POP/DIR and PHA/PRS.

A PPT network or a reasonable facsimile will be developed to chart the implementation plan for each research activity.

CLEARANCES: PHA/POP/PPD: CJHesser (draft)  
PHA/POP/PPD: DEMatchler (draft)

PHA/POP/PPD:AWJee:lcr  
March 29, 1976