

PD-AAS-855

43910

Prepared for:

Office of Population  
Bureau of Science and Technology  
Agency for International Development  
Washington, D.C.  
Under Contract No. DPE-3024-C-00-4063-00  
Project No. 936-3024

EVALUATION OF THE BANGLADESH FEMALE  
SECONDARY EDUCATION SCHOLARSHIP  
PROGRAM AND RELATED FEMALE EDUCATION  
AND EMPLOYMENT INITIATIVES  
TO REDUCE FERTILITY

by

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November 10 - December 1, 1985

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Report No: 85-63-032  
Published March 11, 1986

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GLOSSARY

AUEO	Assistant Upazilla Education Officer
BACE	Bangladesh Association for Community Education
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BRAC	Bangladesh Rural Advancement Committee
CARE	Cooperative for American Relief Everywhere
CMES	Centre for Mass Education in Science
DANIDA	Danish International Development Agency
FREPD	Foundation for Research on Educational Planning and Development
HSC	Higher Secondary Certificate
ICDDRБ	International Center for Diarrhoeal Disease Research/ Bangladesh
IDA	International Development Association
NCTB	National Curriculum and Textbook Board
NGO	Non-governmental organization
SGS	Southern Gonounnayan Samity
SSC	Secondary School Certificate
TAF	The Asia Foundation
T/C	Teacher/catalyst
TFYP	Third Five Year Plan (1985-1990)
UCEP	Underprivileged Children's Education Programs
UEO	Upazilla Education Officer
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNFPA	United Nations Fund for Population Activities

UNICEF United Nations Children's Fund  
UPE Universal Primary Education  
USAID United States Agency for International Development

### ACKNOWLEDGEMENTS

The evaluation team is very grateful to the staff of USAID/Bangladesh for its guidance, advice, and warm hospitality during the team's visit. The team would especially like to recognize the contribution of Mary Lee McIntyre to the personal comfort of the team members both in Dhaka and on the roads and rivers of Bangladesh.

The team is also very appreciative of the time and ideas that were so generously given by the staff members of various governmental agencies, non-governmental organizations, and other donor agencies. A list of persons interviewed by the team can be found in the appendix to this report.

Finally, and most importantly, the team would like to thank Ferdousi Sultana Begum, who assisted the evaluation team while in Bangladesh. Her knowledge of Bangladesh society, programs, and research were invaluable to the team, as were her good spirits and devotion to duty. It should be noted, however, that she is in no way responsible for the content of this report.

## EXECUTIVE SUMMARY

The team's assignment was to evaluate the Bangladesh female secondary education scholarship program funded by USAID and implemented through the Asia Foundation (TAF) by the Bangladesh Association for Community Education (BACE) and by Southern Gonounnayan Samity (SGS), as well as to investigate other female education and employment initiatives to reduce fertility.

After an introductory chapter, a second chapter describes the demographic situation, the education system, and the status of women in Bangladesh. Fertility and the population growth rate in Bangladesh remain high, while the age of marriage and expectation of life, especially for women, are low. Because of the high illiteracy rate and the high dropout rate during the first years of schooling, the government's top priority in education is the universalization of primary education as soon as possible after the turn of the century. At the secondary level, fewer than two percent of the schools are operated by the government, so students must pay tuition fees as well as other expenses of attending school. Only 32 percent of secondary students in 1984 were female, and the status of women, as indicated by their social, financial, and legal position, as well as their educational attainment, remains generally low.

Chapter III reviews the research on the effect of female education and employment on fertility in Bangladesh and elsewhere. Education and employment are hypothesized to affect fertility through age of marriage, contraceptive use, and breastfeeding. In Bangladesh, female education has a clearly positive effect on age of marriage and contraceptive use, while there is some evidence that higher education is associated with less breastfeeding. However, the effect of education on employment and employment's effects on age at marriage, contraceptive use, and breastfeeding are less well-documented; further research on the influence on fertility of employment in the formal sector versus employment in non-formal income-generating activities is called for. Overall, the existing research results argue strongly for attempting to raise the age of marriage to lower fertility and for taking advantage of the positive association between education and age of marriage.

The fourth chapter contains assessments of the administrative arrangements, educational and community response, and demographic effects of the two USAID-funded secondary education scholarship projects. In general, the projects appear to increase female enrollment, raise the age of marriage, lower desired family size, and positively affect knowledge, attitudes, and practice of family planning. The projects are consistent

with USAID's population assistance philosophy that development impact is maximized when programs that increase access to female education and employment are coordinated with provision of family planning services. Female education, by raising the age of marriage, has a clear effect on population growth in addition to creating a more informed population eager to make use of family planning services.

The evaluation team is favorably impressed by the performance of TAF and SGS in implementing the scholarship program, but confirmed previous evaluations of the BACE project that found administrative and management problems. Consequently, it is recommended that TAF and SGS be allowed to continue and expand their roles in USAID's female secondary scholarship program, but that USAID seriously consider terminating funding for the BACE project and reallocating the funds to a similar project through another NGO, if there is not significant improvement in this operation within a year.

Although there is great need for expanding the project on a nationwide basis, the team recognizes the financial and managerial constraints to immediate expansion of such scope. A more gradual expansion over the next 20 years, however, could play an important interim role in the education system of Bangladesh until the government is prepared to take over all secondary schools, and would have the immediate and significant effects of raising the age of marriage and lowering the population growth rate.

Consequently, in considering possible expansion of the scholarship program, as well as other initiatives to reduce fertility through female employment and education (as outlined in Chapter V), the team recommends that at least 50 percent of USAID population funds for female education and employment projects be directed to the scholarship program. If \$4 million were available annually for all such projects, then expansion from two to 15 upazillas could take place in the next year or so.

The team also recognizes the potential for other female education and employment initiatives to raise the age of marriage and lower fertility (although comparisons of cost effectiveness were not possible) and recommends that funds be allocated as specified in Section VI.3 for income-generating activities/training for unmarried secondary dropouts; non-formal primary education; modification and enhancement of the scholarship program; population education for secondary students; scholarships for continuing education for secondary graduates; post-graduate job training for secondary graduates; income-generating activities/training for married women; a bond scheme for primary students; and support and training for secondary teachers.

After evaluating the first two to three years of experience with these initiatives, the team recommends that funds be reallocated to those projects that are most successful in meeting the goals of raising the age of marriage and reducing fertility.

## I. INTRODUCTION

### I.1 Purpose of the Assignment

A three-member team spent three weeks in Bangladesh in November 1985 to carry out the following three tasks:

(1) To evaluate to what extent the two USAID-funded female secondary scholarship projects were achieving their immediate objectives of increasing enrollment and reducing dropout rates and their subsequent goals of delaying marriage, increasing contraceptive use, and reducing fertility of the scholarship recipients;

(2) To investigate other possibly more effective, low-cost female education and employment approaches to fertility reduction; and

(3) Considering the results of (1) and (2), to advise USAID on how it might most effectively achieve fertility reduction through female education and employment activities in Bangladesh.

To accomplish the first purpose, the team was requested to review the findings of a 1985 demographic study of one of the scholarship projects prepared by a local consultant group; to conduct interviews with the Asia Foundation (TAF), the Bangladesh Association for Community Education (BACE), and Southern Gonounayan Samity (SGS), the organizations responsible for implementing the scholarship projects; and to assess administrative arrangements, academic performance, and community perceptions of the projects.

To accomplish the second and third purposes, the team was also asked to review the literature on fertility and female education and employment in Bangladesh and elsewhere, and to meet with personnel of the Government of Bangladesh, non-governmental organizations (NGOs), and donor agencies involved in programs of female education and employment in Bangladesh, and make site visits as appropriate.

### I.2 Team Composition

The team was composed of Donna R. Flanagan, an instructional technologist/consultant with extensive international experience in education and community development; Ana R. Klenicki, specialist in women and development issues/family planning with extensive international experience, particularly in Latin America; and the team leader, Linda G. Martin, an economist/demographer from the East-West Population Institute, Honolulu, Hawaii. The

team was assisted by Mrs. Ferdousi Sultana Begum, an expert on population and women's programs in Bangladesh, on leave for this assignment from her position as Assistant Chief, Population Development and Evaluation Unit, Planning Commission, Government of Bangladesh.

### I.3 Plan of Work

The team members arrived in Dhaka on November 10, 1985, and spent approximately two weeks studying documents, conducting interviews, and making site visits, followed by a week of drafting the report and briefing USAID and TAF staff. A list of organizations and persons contacted can be found in Appendix A. Site visits were made to the BACE project in Shahrasti Upazilla, the SGS project in Gopalganj Upazilla, the International Center for Diarrhoeal Disease Research/Bangladesh (ICDDR) in Matlab Upazilla, and a non-formal primary school and production center run by the Bangladesh Rural Advance Committee (BRAC) in Manikganj Upazilla. Mr. G.R.A. Taylor, Chief Population Consultant for TAF, accompanied team members on field trips to Shahrasti and Gopalganj Upazillas. Because the SGS project has not yet been subject to the careful review that BACE has received in its annual evaluations, the evaluation team took particular care to scrutinize SGS's staffing, training, and record keeping. One member of the team took a three-day trip to Gopalganj, and interviews were held with the SGS Project Director, its accountant, all six field officers, the headmasters and teachers of three schools, and with some students in grades VI to X. In addition, records and the record keeping system were carefully examined.

The three team members divided the work according to their strengths. The final report is a result of their collaboration. The work of the team was greatly facilitated by Mrs. Ferdousi Sultana Begum although she bears no responsibility for the content of this report.

### I.4 Constraints

Constraints included the inaccessibility of project sites and difficulties in transportation. The effectiveness of the visit to the BACE project was limited because it was scheduled for a school holiday and no field officer was available in Shahrasti. Thus it was impossible for the team to determine the amount of readily accessible information in the field office. It was also difficult for the team to evaluate the extent of communication and coordination among those field staff who were present because the day's events had been largely staged. Questions to all staff members were regularly answered by the

director and it seemed unlikely that any staff member would voice an opinion differing from that of the director.

Because of the Thanksgiving holiday on Thursday and the local weekend on Friday and Saturday, the team had to reach its conclusions and present them to USAID staff early in the third week of the evaluation. Thus, perhaps more than usual, time was a serious constraint in addressing the broad scope of work assigned to the team.

## II. BANGLADESH CONTEXT

### II.1 Demographic Situation

As of 1981, Bangladesh had a population of 89.9 million people spread over 55,598 square miles. Population density averaged 1,617 people per square mile, one of the highest in the world. Over half the population was male (51.5 percent), and a very large proportion (84.8 percent) resided in rural areas. Because of its recent history of rapid population growth, Bangladesh's population is young, with 46.6 percent under age 15 years. 1/

Current population growth in Bangladesh is primarily determined by the excess of births over deaths. These vital events are severely underregistered, so estimates of fertility and mortality must be based on censuses and surveys. Best estimates for the 1970s indicate a crude birth rate of about 47 births per 1,000 population and a crude death rate of around 17 per 1,000 2/, implying an annual growth rate of three percent.

At the individual level, the total fertility rate in the 1970s was probably around 7.0 children per woman of childbearing age. 3/ Many of these women began their childbearing very early; based on 1981 census data on age at marriage for females of all ages, the singulate mean age of marriage was 16.8 years, while for males it was 23.9 years. 4/

The expectation of life at birth for males during the 1970s was at most 51.6 years, while for females it was only 49.7 years 5/, a reversal of the usual female superiority in survival found in most parts of the world except South Asia. This reversed sex differential reflects intra-family food distribution and differential parental care and access to medical care. 6/ Infant mortality rates for the mid-1970s have been estimated in

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1/ Rabbani and Associates, 1984, p. xxii.

2/ Committee on Population and Demography, 1981, p.1; Robinson, 1984, p. 45.

3/ Committee on Population and Demography, 1981, p. 1  
Robinson, 1984, p. 37.

4/ Rabbani and Associates, 1984, p. 67.

5/ Committee on Population and Demography, 1981, p. 81.

6/ Chaudhury and Ahmed, no date, p. 107.

the range of 120 to 150 deaths per 1,000 live births. <sup>1/</sup> Rates are lower for females than males in the first year of life, but the differential is reversed thereafter, when environmental (as opposed to genetic) factors play a larger role in survival.

Altogether there is little indication of fertility or mortality decline during the 1970s. <sup>2/</sup> A continuing population growth rate of three percent a year would imply that Bangladesh's population would double in 23 years. One ray of hope can be found in the Final Report of the Contraceptive Prevalence Survey 1983 <sup>3/</sup>, which argues that there has been a decline in fertility from 1975 to 1983 that is at least in part attributable to the increased use of modern family planning methods. Another encouraging sign is the intercensal (1974-1981) increase in the age of marriage of females.

## II.2 Education System

At the beginning of the Second Five Year Plan (1980-1985) the Government of Bangladesh began to give highest priority in the education sector to the development of primary education with the aim of achieving Universal Primary Education (UPE) by the year 2000. Considerable progress in school building construction, provision of school furniture and learning materials, teacher training, and field supervision has been made, but the government now estimates that UPE by the year 2000 may be too optimistic a target.

In 1982, 43,937 primary schools (including 7,271 private schools) provided places for over 8 million children ages 6 to 10 years old in grades I to V. <sup>4/</sup> In 1984, girls represented 41 percent of the total enrollment. <sup>5/</sup> Although reliable figures indicating the number of children who never attend school are not available, S.A. Chowdhury, Chief of Planning, Ministry of Education, estimates that 60 percent of primary-age girls are now outside the formal education system. Estimates of dropout rates between grades I and V vary, but 70 percent is an often-

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1/ Committee on Population and Demography, 1981, p. 72 and p. 90.

2/ Robinson, 1984, p. 44.

3/ Mitra and Kamal, 1985, p. 257.

4/ Foundation for Research on Educational Planning and Development (FREPD), 1983, p. 143.

5/ Ministry of Education, 1985, p. 17.

cited figure. The dropout incidence is particularly high in the case of female students. 1/ Although there are no fees for primary school, families must provide uniforms, supplies, and some books. It should also be noted that these enrollment figures may have been inflated so that individual schools could receive greater funding. Furthermore, there is a group of non-recognized primary schools in Bangladesh. 2/

In 1982, it was estimated that nine percent of government primary level teachers were women of whom 32 percent were trained, as opposed to 57 percent of the male teachers. 3/ Indicative of the maintenance and supplies in primary schools is the fact that over 98 percent of the annual budget for primary education is spent for salary allowances of teachers, leaving approximately Tk. 300 per school per annum for meeting contingency expenses. 4/

In 1984, enrollment in 9,085 secondary schools (grades VI to X) was 2,485,000, which represents approximately 22 percent of the secondary school age group (11 to 15 years old). 5/ Only 32 percent of secondary students in 1984 were female. 6/ Only 175 of the secondary schools, which include junior high schools (grades VI to VIII only), as well as full high schools, are government operated. 7/ However, the curriculum in both the government and private secondary schools is set by the government, which also pays over 50 percent of the private secondary school teachers' salaries. The private schools in rural areas charge tuition ranging from Tk. 12 to 25 per month. These fees, plus other school-related expenses (estimated in personal conversations with scholarship recipients), result in a total annual cost of approximately Tk. 1,400.

The 12-month school year begins in January with classes held six days a week. In addition to the 52 Friday holidays, there are 86 government-sanctioned holidays, and, for secondary

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1/ Khatun, 1984, p. 26.

2/ Sattar, 1982.

3/ FREPD, 1983, pp. 154-155.

4/ Ibid., p. 163.

5/ Ministry of Education, 1985, p. 18.

6/ Bangladesh Bureau of Educational Information and Statistics, 1985, pp. 2-3.

7/ Karim, 1985, p. 11.

students, several weeks are spent at home each term in preparation for exams.

The curriculum and examinations are set by the Ministry of Education. A student completing grade X should have completed the following program:

English	5 years	Geography	3 years
Bengali	5 years	History	3 years
Math	5 years	Social Studies	3 years
Religion	5 years	General Science	3 years

In addition, in some schools, electives such as physics, chemistry, economics, civics, commercial math, business methods, home economics, and Sanskrit are said to be offered. The promise of the curriculum is not necessarily reflected in actual learning, however. (Members of the evaluation team visited six secondary schools and found not only a complete lack of chemistry and physics teaching equipment, but also an absence of students who could speak any but the most rudimentary English phrases.) Furthermore, classroom conditions generally are crowded, noisy, and dirty.

Upon completion of grade X, students sit for the Secondary School Certificate (SSC) exam, success in which allows them to enter grades XI and XII at a college or vocational training institute. (The 32 vocational training institutes have primarily male enrollment and are located in urban areas.) In 1985, only 46.1 percent of 147,465 students taking the exam passed. <sup>1</sup> Passing a second major hurdle after grade XII, the examination for the Higher Secondary Certificate (HSC), is necessary for further education.

The Third Five Year Plan recognizes that with the increased physical and academic facilities for primary schools, enrollment at the secondary level should eventually increase substantially. Consequently, there are plans to introduce a double-shift system into schools when overcrowding makes it necessary. No curriculum revisions are foreseen during the current plan period, but there is to be an increased and continuing emphasis on science.

A mass education scheme was established in 1980 as part of the Second Five Year Plan. The scheme was abandoned in 1982 after a change in government, but reportedly a new mass literacy program is now under consideration by the Ministry of Education. Other non-formal education programs are being operated by NGOs (see Section V.1.3).

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1/ Karim, 1985, p. 26.

Another educational system is that of the Madrasah or religious schools, which offer education at all levels and in which about one-quarter of the students are female. 1/ In 1985, the estimated enrollment in these schools was 618,607, as opposed to 11,900,516 in all other schools. 2/ The government provides support to these schools, and in the Third Five Year Plan, the government hopes to minimize the differences between its schools and the Madrasahs at the primary level, so that transitions between systems can be eased. 3/

### II.3 Status of Women

Bangladesh is a country with a pronounced male dominance in all aspects of society. This dominance has had deleterious effects on the socioeconomic development of women. This deeply rooted male supremacy with accompanying female subservience has been possible because of the religious sanction of Islam, which is practiced by 87 percent of the population, 4/ within a primarily rural, agricultural society. The Koran states: "Men have superiority over women because Allah has made the one superior to the other, and because they spend their wealth to maintain them. Good women are obedient." 5/

A woman's status is determined primarily by that of her father and later her husband. An important determinant of male status is land ownership. Forty-eight percent of all rural households, representing 52 percent of the population, are landless. 6/ Because of the strict division of labor between men and women and restrictions on women's ability to work the land, women are almost completely dependent on men for their survival. Likewise, women are excluded from decision making about land ownership and use. The role of a woman is to support her husband by being a good wife and mother, not to contribute in an economic fashion to the welfare of her family. Women's participation in education and the labor force are especially circumscribed by the practice of purdah or female seclusion, although the reali-

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1/ FREPD, 1983, p. 309.

2/ Ministry of Education, 1985, p. 76.

3/ Ibid., p. 36.

4/ Rabbani and Associates, 1984, p. xxiii.

5/ Sura 4:34.

6/ Scott and Carr, 1985, p. 5.

ties of poverty, especially among women without male family members, are contributing to the relaxation of the practice.

### II.3.1 Education

The Bangladesh Population Census of 1981 indicates that only 13.2 percent of the female population is literate, as opposed to 25.8 percent of the male population. 1/ Another way of looking at the educational status of females is to calculate what proportion of the population over age five has completed different educational levels. In 1981, 17.8 percent of the females had some primary education, 4.7 percent had some secondary education, 1.1 percent had either the secondary or higher school certificate, and 0.2 percent had some higher education. The percentages for males were 24.2, 10.6, 5.1, and 1.2 percent, respectively. 2/

Among the factors besides poverty and observance of purdah that are cited as reasons for the lack of educational attainment of women are the lack of separate facilities for females, distance between home and school, the lack of female teachers, the lack of ayahs, the irrelevance of the curriculum to daily life, the need for females to work at home, early marriage, and the fact that education does not seem economically profitable in rural areas or for girls in particular. An increase in the number of female teachers is expected as a result of the government's policy that 50 percent of all new primary teachers hired be female. 3/

### II.3.2 Employment

According to the Bangladesh Population Census of 1981, only 4.3 percent of females were in the labor force, whereas 74.6 percent were listed as doing household work and 20.8 percent were listed as inactive. 4/ Labor force participation is defined as engaging or being desirous of engaging in the production of economic goods and services. Such a definition emphasizes formal employment, i.e., having a "job," and does not reflect the productive activity of most women in Bangladesh, which is home-based and for the family's own consumption.

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1/ Rabbani and Associates, 1984, p. 79.

2/ Ibid., p. 90.

3/ Salahuddin, 1985, p. 10.

4/ Rabbani and Associates, 1984, p. 112.

Rural women are engaged primarily in post-harvest operations (especially husking, though it has been estimated that the mechanization of husking has displaced two million women, causing them to lose a traditional source of employment), 1/ household maintenance (including cooking), and child care. Although their work is not considered "productive," one micro-level study in Bangladesh has found that on average females work about three hours more per week than men. 2/

Even allowing for unrealistic characterization of female labor force participation, the women of Bangladesh are far behind the women in other less developed countries. 3/ The Constitution of the People's Republic of Bangladesh in its 1975 modification has clear language to the effect that no discrimination in employment on the basis of sex should be made. However, the same article goes on to say that the government can deem a particular class of employment as "unsuitable for the members of the opposite sex." 4/

The Government of Bangladesh currently has a 10 percent female quota reserved for all new recruits to public service (15 percent for non-official posts), as well as the 50 percent target for new hires of primary teachers mentioned above. In its effort to increase female hiring, it has raised the age limit for entry for females to 30 from the 27-year age limit used for males. Most of the government effort is focused on filling social service positions, such as teachers and family welfare visitors, who are under male supervision. Fulfilling the affirmative action targets is complicated by the lack of housing for single women and difficulties in transportation, not to mention women's handicaps in terms of education and training. Furthermore, in the government sector, as throughout Bangladesh, women are seldom involved in decision- and policy-making processes.

### II.3.3 Legal

Although according to the Constitution of Bangladesh (1972),

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1/ See Sattar, 1985, p.70.

2/ Khuda, 1984, p. 23.

3/ United Nations, 1985, p. 16

4/ Chaudhury and Ahmed, n.d., p. 55.

women enjoy impressive rights, 1/ when it comes to enforcement, most of those rights are left on the books. In practice, legal rights are overridden by religious norms and traditional and social customs. Furthermore, female illiteracy and ignorance preclude major enforcement of written law. 2/

Most of the laws affecting women and children are still directed by strict observance of Muslim tradition. In Bangladesh, "Sharia," or the Muslim personal laws, govern the most important events in a woman's life such as marriage, divorce, custody of children, and inheritance. 3/ According to tradition, girls can be married by their fathers upon the onset of puberty. The Child Marriage Restraint Act of 1929 set 14 and 18 as the minimum ages of marriage for girls and boys respectively. These minimums were later raised to 18 and 21, 4/ but the regulations are seldom enforced. It should be pointed out that due to inadequacies of the birth registration system, parents seldom know the age of their children. Furthermore, fewer than half of all marriages are registered, 5/ so enforcement of the age requirement is almost impossible. Most important, the social will to abide by such a limit does not exist, and the effect of legislative change that is not preceded by actual changes in marriage patterns is limited. 6/

Under Muslim law, a woman can demand a bride price, usually payable upon divorce. However, many women do not exercise this right either because of their low socioeconomic status or because their families discourage them from doing so out of fear of criticism. 7/ Paying of dowry by the bride's family to the husband was prohibited in 1980, 8/ but the custom persists among both Hindus and Muslims.

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1/ Articles 28 and 29 speak of no discrimination on grounds of sex, equal rights with men in state and public life, no discrimination for government employment, protection of children and women, etc.

2/ Sattar, 1985, pp. 60-61.

3/ See Sattar, 1985, and Ahmad and Chaudhury, 1979, for summaries.

4/ Sattar, 1985, pp. 61-62.

5/ Ibid., p. 62.

6/ Smith, 1983, p. 512.

7/ Begum, 1985, p. 24.

8/ Sattar, 1985, p. 62.

Because in Islam, marriage is not a sacrament but a contract, a Muslim can legally renounce her marriage if it was contracted without her consent. This, however, is seldom done since most women accept their father's or guardian's decisions without question. The husband has the right to unilateral divorce, but the wife does not, unless she reserves the right in the marriage contract. Since 1939, under the Dissolution of the Muslim Marriage Act, a wife is entitled to a divorce under specific causes, such as the impotence or insanity of the husband, desertion, long imprisonment of the husband, or nonmaintenance. 1/

Islam allows for limited polygamy. According to the Muslim Family Laws ordinance of 1961, the husband has to get permission from the first wife to take another wife. Although the ordinance was amended in 1982, making polygamy more difficult, it is still practiced. 2/ A Muslim male is permitted to marry a non-Muslim woman but if a Muslim woman marries a non-Muslim man, her marriage is considered irregular. 3/

Laws regarding child custody and inheritance have strong biases against women, but there is not room here to discuss them. 4/

Regardless of the Islamic personal and the civil laws discussed above, a woman is often abused by her husband, father, or other male relatives. At the rural level, it is customary for a woman to be abandoned or divorced if she produces only female issue. Moreover, in the case of a divorce, the husband keeps the sons, and the wife is forced to return to her father's home with the daughters. Often, because of the dire economic situation of that home, her father will refuse to welcome her. More and more, one can find female single heads of household with little or no means of support. Traditional practices, such as purdah, are abandoned with the woman's efforts to survive.

Because of the low status of women, the government in recent years has promulgated several laws in an effort to provide greater protection for women's rights. 5/ The Cruelty (Deterrent Punishment) Ordinance of 1983 is supposed to act as a deterrent to cruelty towards women. In an important step, the

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1/ Sattar, 1985, p. 62.

2/ Begum, 1965, p. 26.

3/ Ahmad and Chowdhury, 1979, p. 303.

4/ See Sattar, 1985, and Ahmad and Chowdhury, 1979.

5/ Sattar, 1985, p. 62.

government, as a signatory of the World Plan of Action of the United Nations for Women, recently ratified the United Nations Convention on the Elimination of All Forms of Discrimination Against Women. However, some convention provisions that conflict with existing Muslim laws regarding equal inheritance and divorce rights have been reserved.

In summary, women in Bangladesh are regarded as second-class citizens, an attitude supported by centuries of religious and economic subjugation. In an essentially agricultural society, ruled by the strictures of Islam, women's roles have been those of obedient wives and silent mothers. However, the pressures of a depressed economy, together with the unavoidable proximity to the modern world, are bound to bring changes that should improve the status of women in Bangladesh. Interestingly enough, the changes may be brought about by the poorest of the poor, those women who, in an incredible show of resilience and determination, are venturing into a world that until now was closed to them.

### III. EFFECT OF FEMALE EDUCATION AND EMPLOYMENT ON FERTILITY: REVIEW OF RESEARCH

#### III.1 Overview

The effect of female education on fertility is one of the strongest and most consistently noted relationships in analyses of the determinants of fertility. The relation between female employment and fertility is not nearly so clear, especially because the direction of causation between the two variables is sometimes uncertain. Accordingly, the emphasis of the following review will be on education, though employment will also be discussed. Of course, there have been numerous analyses of fertility in Bangladesh. <sup>1/</sup> The goal of this review is not primarily to be comprehensive but to present research results of relatively high quality within a framework of the determinants of fertility.

#### III.2 How Education Affects Fertility: Conventional Wisdom

What is it about education that leads to changes in fertility? Conventional wisdom offers the following explanations. First, education increases a woman's status both inside and outside her family. She may have a greater sense of self-sufficiency, she may feel that she has some control over her life, and she may play a greater role in her family's decision making either before or after marriage. Second, education may change her attitudes about marriage and about the number of children she wants to have. She may have increased aspirations for her children and thus choose to invest in their quality rather than in their quantity. Third, her exposure to information and new ideas may increase her willingness and ability to obtain and use contraceptives. Fourth, continuing her education may directly compete with getting married and starting her family. Finally, more education may make her time more valuable, so that there is a trade-off between the time she spends raising her children and the time that she can sell in the labor market, i.e., her opportunity cost of raising children increases.

These and other arguments have been offered to explain the effect of education on fertility, but to understand operationally how education affects fertility, one must think in terms of how education affects the more proximate determinants of fertility.

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<sup>1/</sup> Alauddin and Faruquee, 1983, and Khatun, 1984, review many of these studies.

### III.3 The Effect of Female Education on the Proximate Determinants of Fertility

Education can be viewed as affecting fertility through its effects on three proximate determinants of fertility: the age of marriage, contraceptive use, and breastfeeding (see Figure III.3). In general, education is viewed as having a positive effect on contraceptive use, <sup>1/</sup> the age of marriage <sup>2/</sup> and a negative effect on breastfeeding. <sup>3/</sup> In turn, delayed marriage, utilization of contraceptives, and breastfeeding should all have a negative effect on a woman's total fertility in her lifetime. Thus, altogether education operating through the first two factors should have a negative effect on fertility (in each of the first two cases, a positive effect times a negative effect yields a negative overall effect), while education, as it operates through a decline in breastfeeding, has an overall positive effect on fertility (a negative effect times a negative effect yields an overall positive effect). The evidence on these relations for Bangladesh is reviewed below.

#### III.3.1 Effect of Female Education on Age at Marriage in Bangladesh

Marriage is universal in Bangladesh: the 1975 Bangladesh Fertility Survey reported that almost every woman is married by the age of 25. Nevertheless, there are differences in marriage age by woman's educational attainment. Among ever-married women ages 20 to 49, those with no schooling married on average at age 12.8 years, those with some primary schooling at 13.6 years, and those with more than primary at 14.7 years. These differences are even greater for the youngest group of ever-married women, ages 20 to 24. Their average ages at marriage were 13.1, 13.7, and 15.1 years respectively. <sup>4/</sup>

Additional evidence on the relation of educational level and marital status shows that for females 15 to 19, 81.0 percent of those with no schooling were already married, as were 70.5 percent of those with some primary education, while only 36.5 percent of those with some secondary education were married. The

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1/ Cochrane, 1979.

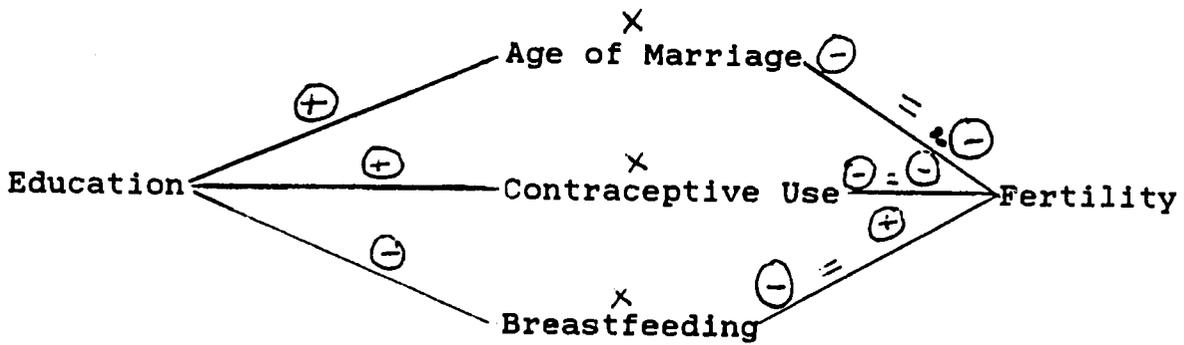
2/ Cochrane, 1979; Smith, 1983.

3/ Ibid.

4/ Ministry of Health and Population Control, 1978, p. 56.

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FIGURE III.3  
Simple Model of Female Education's Effect on  
Proximate Determinants of Fertility



percentages for the 20 to 24 group were 97.7, 97.1 and 79.1 respectively. 1/

### III.3.2 Effect of Female Education on Contraceptive Use in Bangladesh

Both the Bangladesh Fertility Survey 1975 2/ and the Bangladesh Contraceptive Prevalence Survey 1983 3/ indicate a strong positive association between female education and current contraceptive use. In the earlier study, the usage rates were 10.5 percent for those with no schooling, 21.1 percent for those with up to primary, and 37.9 percent for those with above primary education. For the 1983 survey, the rates are 16.0, 21.0, and 42.1 percent respectively. More educated women are more likely to use modern methods, especially modern temporary methods.

Of course, these figures represent only the simple association between education and contraceptive use. Chaudhury (1984), using the Bangladesh Fertility Survey data and controlling for the effects of age, parity, work experience, age at marriage, and family standard of living, also finds a significant positive effect of female education on contraceptive use.

### III.3.3 Effect of Female Education on Breastfeeding in Bangladesh

According to the Bangladesh Fertility Survey of 1975, nearly all children representing the most recent births of each woman interviewed were breastfed. The average length of breastfeeding was 17.1 months, with women with no schooling breastfeeding slightly longer than those with some schooling. Khuda and Chowdhury (1982) found in their study of a rural area of Comilla that there was no difference in the duration of breastfeeding by mothers with no schooling and primary education (both approximately 24 months). However, women with schooling above the primary level on average breastfed two months less. Simi-

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1/ Ahmed and Chaudhury, 1981, from unpublished 1974 census data.

2/ Ministry of Health and Population Control, 1978.

3/ Mitra and Kamal, 1985.

larly, a study of urban and semi-urban mothers revealed a negative relation between breastfeeding and education. 1/

A prospective study from 1975 to 1980 in Matlab, conducted by the International Centre for Diarrhoeal Disease Research/Bangladesh, found that the postpartum amenorrhea of women with above primary education was 8.4 months, compared to 16.4 months for women with no education. 2/ More highly educated women were found to be more likely to give liquid supplements. Given the shorter period of amenorrhea, the authors suggest that more educated women should be encouraged to begin contraception earlier after the birth of a child.

#### III.4 The Effect of Female Employment on the Proximate Determinants of Fertility

The simple model of Figure III.3 is considerably complicated when the possible effect of female employment on fertility is taken into account. Figure III.4 shows a more elaborate model with the employment variable included. Such a model should be viewed with caution, however, since fertility may in fact influence employment, perhaps negatively (because a woman with more children may have less time for employment) or perhaps positively (because a woman with more children may have a greater need to work in order to support her family).

Another complication is that the effect of education on employment is not clear in Bangladesh. For example, in the 1981 census, 78.6 percent of women ages 10 and over with no schooling reported that their main activity was household work, as compared to only 58.5 percent of those with six to nine years of education. 3/ However, 4.6 percent of those with no schooling reported working outside the home, whereas only 2.7 percent of the latter group did. The most frequent response, after household work, for the women with six to nine years of schooling was "continued education," whereas for the uneducated women it was "not working." The education group for whom work outside the home was most prevalent was comprised of those who had completed secondary or higher education. Thus, while some association between education and employment can be seen, a more detailed analysis by age of the unpublished census data would be necessary to get a clearer picture and to verify whether or not the

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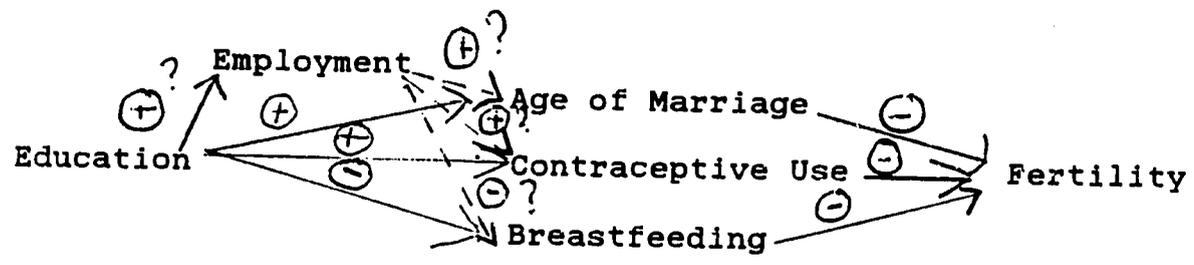
1/ See Khatun, 1984, for discussion of the study by the Institute of Nutrition and Food Science, Dhaka University.

2/ Huffman et al., 1985.

3/ Rabbani and Associates, 1984, p. 236.

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FIGURE III.4  
Model of the Effect of Female Education on Fertility Taking into  
Consideration Female Employment



positive relation between education and employment found in other countries exists in Bangladesh.

Furthermore, Western perceptions equating employment with having a job may be inappropriate when trying to ascertain the effect of employment on fertility in Bangladesh. Any income-generating activity, whether in the home or outside, may have an effect on fertility.

Finally, the effects of employment on the proximate determinants of fertility in Bangladesh are not entirely clear. Although one might expect employment to have effects similar to those of education, this hypothesis has not been substantiated.

#### III.4.1 Effect of Female Employment on Age at Marriage in Bangladesh

Data from the Bangladesh Fertility Survey of 1975 indicate that women who had worked before their marriage married later than women who had not. Shahidullah (1979), however, found that when women are disaggregated by age, the positive relation between work and age at marriage holds only for those ages 35 and older, whereas there is a negative relation for those younger.

#### III.4.2 Effect of Female Employment on Contraceptive Use In Bangladesh

There is little difference in contraceptive use between women who have ever worked and women who never worked, according to data from the Bangladesh Fertility Survey of 1975. <sup>1/</sup> The Contraceptive Prevalence Survey of 1983 also yields rather inconclusive results on this issue, using three categories of the employment variable: paid employment, unpaid employment, and none. <sup>2/</sup> The percentages of these three groups currently using contraceptives are 29.4, 28.5, and 18.2 percent respectively. The percentages using modern permanent methods are 16.4, 18.0, and 6.5 percent, and those using modern temporary methods 8.2, 3.0, and 6.3 percent, leaving a somewhat ambiguous impression.

Chaudhury (1978) also found that work experience had very little effect on contraceptive use in his 1974 study of 1,130 currently married women in Dhaka. Only for illiterate women was working associated with greater contraceptive use. Similarly,

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1/ Chaudhury, 1984, p. 64.

2/ Mitra and Kamal, 1985, p. 183.

Mabud (1985) found that work experience had no effect on contraceptive use in his multivariate analysis of data from almost 1,500 women, some of whom had taken part in the government's vocational training program for women.

The results of a 1985 study of 300 married female garment workers in Dhaka, however, indicate a higher usage of modern methods for each age group than was found in the Contraceptive Prevalence Survey of 1981, not taking into consideration work status or urban residence. 1/ Taking all ages together, half of the workers are using a modern method, in comparison to only 28.9 percent of urban respondents in the Contraceptive Prevalence Survey of 1983. 2/ There are also many reports indicating high contraceptive usage among female participants in mothers' clubs, the swarnivar village development program, vocational training, cooperatives, and other income-generating programs, 3/ but these bivariate relations, which are derived without controlling for other factors, should be interpreted with caution.

#### III.4.3 Effect of Female Employment on Breastfeeding in Bangladesh

Evidence on the effect on female employment on breastfeeding in Bangladesh could be found for only a sample of 100 Dhaka mothers with babies less than 1.5 years old. Of the 45 respondents who were not breastfeeding, 40 gave the reason of being engaged in a job for a major part of the day. This result is a bit puzzling since only 35 of the 100 mothers were either working or in school. 4/

#### III.5 Overall Effects of Female Education and Employment on Fertility in Bangladesh

The model of Figure III.4, of course, does not completely capture the complexity of the relationship between education, employment, and fertility. For example, not taken into consideration is the role of child mortality. There is evidence for many developing countries 5/ that female education has a negative

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1/ Rahman and Ahmed-ul-Ghani, 1985.

2/ Mitra and Kamal, 1985, p. 188.

3/ See Begum, 1985, for an excellent summary.

4/ Halder and Khan, 1985.

5/ See Martin et al., 1983, for example.

effect on child mortality, which is in turn positively associated with fertility (though the strength of the association and the direction of causation is debatable). Thus, one could argue that education has a negative effect on fertility through child mortality.

Also omitted from the model is the role of male education and household income. More educated women are likely to marry more educated men, and more educated men tend to generate higher household income. To the extent that children can be treated as a consumer good, and to the extent that with greater income consumers consume more of a particular good, then one might expect a positive effect of male education and income on fertility. Women in wealthier households are also likely to have better nutrition and to be more fecund, again with a result (all things being equal) of higher fertility.

An ideal analysis of the effects of female education and employment on fertility would include these variables, as well as those in Figure III.4. In reality, analysis is limited by the data and estimation techniques available. Many researchers have done simple bivariate analyses of education and fertility in Bangladesh, but the results can be misleading. Data from the Bangladesh Fertility Survey of 1975 show a negative relation, in fact, between female education and mean number of children ever born, but once duration of marriage is controlled for, the differences become negligible. In fact, women with primary school education have higher fertility than those with no schooling, but those with more than primary have the lowest fertility. 1/

One of the best recent fertility analyses of Bangladesh is that by Chaudhury (1984), who, in his analysis of data from the Bangladesh Fertility Survey of 1975, includes the following explanatory variables: age, age of marriage, education, work experience, and family's possession of consumer durables (a proxy for standard of living). Not surprisingly, age at marriage, as one of the proximate determinants, has the greatest effect on children ever born in this analysis of the whole sample, as well as of the rural and urban subsamples. Female education has no effect in the rural subsample. In the urban subsample, the fertility of women with no schooling is not significantly different from those with primary schooling, although there is a difference between those with primary and secondary and those with secondary and higher. Furthermore, for both the urban and rural subsamples, having ever worked has no effect on fertility.

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1/ Alauddin and Faruquee, 1983, p. 82.

### III.6 Conclusions

The results of the Chaudhury study argue strongly for attempting to raise the age of marriage in order to lower fertility in Bangladesh. Furthermore, since education and the age of marriage are positively associated in Bangladesh (Section III.3.1), investing in female education would appear to be an effective way of lowering fertility. On the other hand, additional research is needed to shed further light on the effect of female employment on fertility in Bangladesh. Of particular interest is whether working outside the home is essential for an effect on fertility. Therefore, multivariate studies of the effect of employment in the formal sector and in non-formal income-generating activities and training should be commissioned.

#### IV. EVALUATION OF CURRENT FEMALE SECONDARY EDUCATION SCHOLARSHIP PROJECTS FUNDED BY USAID

##### IV.1 Background

On April 1, 1982, USAID signed a grant agreement with the Bangladesh Association for Community Education (BACE), the purpose of which was to enable BACE to provide secondary school scholarships to 1,370 girls from January to December 1982, and for 1,650 girls from January to March 1983, in Shahrasti Upazilla, Comilla. The provision of the scholarships was expected to increase enrollment and reduce dropout rates and subsequently to delay marriage, increase contraceptive use, and to reduce fertility of the scholarship recipients. An additional \$100,000 was provided to support a total of 2,350 girls in 1983 and 3,040 girls from January to September 1984.

In the first few years of the scholarship program, however, it became clear that BACE was not able to provide USAID with the required monitoring information and documentation. Consequently, as of October 1, 1984, USAID approved a grant of \$100,000 to the Asia Foundation (TAF), a private non-profit grant-making organization that seeks to strengthen Asian indigenous public and private institutions that contribute to stable national development and constructive social change. BACE continues to administer the program directly, while TAF has assumed the responsibility for both monitoring the project and disbursing the funds.

The grant was to support education for 2,454 girls from October to December 1984 and for 3,234 secondary school girls in 1985, in addition to some matriculate and first-year college girls. (This grant was adjusted in February 1985 to increase the monthly scholarship to each girl from Tk. 40 to Tk. 60 per month beginning January 1985). Three thousand four hundred fifty-six (3,456) girls currently receive stipends in the 23 coeducational high schools and junior high schools of Shahrasti Upazilla, plus two colleges.

Independent evaluations conducted in 1983, 1984 and 1985 <sup>1/</sup> indicate that although there are continuing administrative problems with BACE within the scholarship program area, the secondary school continuation rates have improved, female enrollment is increasing, female dropout rates are decreasing, the recipients' attitudes toward career plans are being positively affected, and there is a significant demographic effect.

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1/ Ather, 1983; Ather, 1984; and Ather, 1985.

In January 1985, a second female scholarship project was begun in Gopalganj Upazilla, Gopalganj District. The Southern Gonounnayan Samity (SGS), a multi-purpose organization engaged in planning programs for all-around development, was selected by TAF from among a group of NGOs to run this program. The selection of SGS was based on its survey of its prospective area operation. All competing NGOs were asked to make a survey of their prospective areas of operation to determine community response and support for a scholarship program in their geographic area, the number of schools and their desire and ability to participate in the program, and the potential number of female students.

Once selected, SGS was advised by TAF on the number and type of staff that would be necessary to operate the project, and an intensive week of training and orientation by TAF followed. Today 36 schools in 20 unions are covered, and 2,600 girls receive stipends of Tk. 60 per month. The budget for this project is \$86,479 for the first year of operation.

Scholarships in both projects are awarded simply on the basis of residence in the project area. The scholarship stipend pays for only about one-half of a girl's costs a year. Parents must pay the rest, approximately Tk. 600 to 800. These costs include textbooks, supplies, uniforms, admission fee, game fee, poor fund, exam fees, transportation during the rainy season, snacks, and sanitary napkins, which might not normally be used at home.

Within TAF in Bangladesh, USAID deals primarily with Mr. G.R.A. Taylor, Chief Population Consultant, who oversees the Secondary School Girls Scholarship Project. Mr. Taylor brings personal skills that enable him to work well at the grassroots level and organizational skills that have contributed to the success of the SGS project and to the attempts at improving the administration of the BACE project.

## IV.2 Administration

### IV.2.1 BACE Administration

IV.2.1.1 Staffing. Within the BACE head office in Dhaka, four positions are funded by USAID for exclusive work on the scholarship project: assistant program officer, assistant accountant, peon/messenger, and driver. Responsibility for directing the program is held jointly by the director of BACE and the assistant program officer.

The assistant program officer, Mrs. Mohsena Khan, was appointed in September 1985. BACE, however, had neglected to

inform TAF of this staffing change as of November 1985. Similarly, TAF was unaware that the USAID-funded assistant accountant post had been vacant since June 1, 1985. For the assistant program officer and the accountant, basic pay plus benefits equals Tk. 1302.50 per month. The peon/messenger and driver positions are filled and pay Tk. 566.95 each per month.

The project office is located at Naora in Shahrasti Upazilla. It is staffed by a project officer, deputy project officer and four field officers. Salaries are considerably lower than at headquarters. The four field officers are paid less per month than the peon/messenger in the head office (Tk. 500 per month plus travel expenses compared with Tk. 566.95) and the deputy project officer is paid not much more (Tk. 635). The project officer's pay is Tk. 935. Despite urging from TAF and a December 1984 agreement that BACE increase salaries by 30 percent (money allocated by TAF), pay has not been raised.

The Shahrasti staff have been trained on the job, mostly through direct contact with TAF staff during their supervisory visits. Any guidance or suggestions from TAF that take the form of written correspondence, however, must be channeled through the Dhaka office of BACE.

An important task of field officers is to report on activities in the schools that participate in the project. It was difficult however, to decipher records or determine data collection strategy. 1/

According to a BACE recommendation at a 1983 workshop, a prime component of field officers' data collection strategy is to rely on the schools to do the work. 2/ Furthermore, it is not clear what percentage of the time the field officers spend either in the field or working for the scholarship program.

IV.2.1.2 Communication and Coordination. The history of BACE involvement with the scholarship program is one of repeated complaints about information management. BACE's failure to advise TAF about staffing changes has already been mentioned (see

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1/ Although the team had asked to meet with the field officers, none was available to the evaluation team during its one-day field trip.

2/ "The headmaster of each school will remain responsible for furnishing reports and returns by date to project office and in his absence, one teacher should be authorized to furnish report and return and also to supply information to project office." (BACE, 1983, p. 2).

Section IV.2.1.1). Likewise, BACE has been slow in submitting its quarterly reports, perhaps because these must emanate from the field and be processed through BACE headquarters before reaching TAF. Virtually all evaluations have stressed the need for improvement. The 1985 evaluation <sup>1/</sup> notes, "The head office of BACE practically could not furnish any information whatsoever on the number of scholarship recipients, year-wise and class-wise dropouts from various classes of secondary schools, transfer cases within the Project Area and outside, marital status of the scholarship recipients, number of scholars appeared in SSC examinations, etc."

It appears, however, that the flow of information may have improved recently. Indeed, the BACE head office was able to supply student records for each of the 23 schools; a list of the performance of students in the SSC exam; disbursement lists; dropout lists; and number of scholarship recipients by class and by school. In addition, though the project had no accountant, the financial records (cash book and ledger book) were kept up to September 1985 and the salary payment register was current.

TAF also has some difficulty in determining exactly who in BACE should be held responsible for implementing recommendations. The problem is again one of communication. TAF deals directly with BACE's director, who relays messages for program action to the assistant program director. This difficulty in pinpointing accountability represents an administrative problem that should be addressed.

IV.2.1.3 Stipend Distribution. Distribution of funds into individual scholarship accounts includes four steps and takes 28 days. First, TAF releases the quarterly stipend amount to the BACE head office at the beginning of each quarter. Second, the head office remits the amount for the entire project area to the project office account, maintained by the Sonali Bank in Shahrasti. Third, the project office remits the amount to its own account maintained with various bank branches attached to the project schools. Fourth, those branches transfer the amount to the individual accounts of the scholarship recipients.

TAF would prefer to release the funds directly to the field project office as is done with SGS. (The SGS project director comes to Dhaka every quarter, delivers the quarterly report, and personally receives the check for deposit in the local Gopalgonj bank.) BACE, however, prefers to channel the funds through its head office.

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1/ Ather, 1985, p. 16.

Each scholarship awardee maintains her own account. Teachers and bank managers in each area have collaborated to teach the students how to use the accounts. Learning to deal with a bank represents a positive by-product of the scholarship program.

IV.2.1.4 Physical Plant/Facilities. BACE office space in Shahrasti is adequate. Files and reports, however, could be better organized and maintained.

IV.2.1.5 Transportation. All field officers have been issued bicycles, and their expenses are covered for boat travel during the rainy season.

IV.2.1.6 Cost. Originally the BACE project budget for the 15-month period October 1984 to December 1985 was Tk. 2,499,994, or \$100,000, given the exchange rate of that time. As of January 1985, when the monthly stipend for each scholarship recipient was raised from Tk. 40 to Tk. 60, the BACE 15-month budget was increased to Tk. 3,364,635. At the same exchange rate, the new 15-month budget is \$134,585, and the estimated annual budget is \$107,668. The addition of \$10,000 in TAF program service costs plus indirect costs of 22.5 percent results in a total program cost per year of \$144,143 or \$41.71 per girl (assuming approximately 3,456 recipients).

#### IV.2.2 SGS Administration

IV.2.2.1 Staffing. The SGS Secondary School Girls Scholarship Project is directed by Mr. Enamul Kabir, an educator, who is also the Secretary of the Executive Committee of SGS. In addition, the project employs six field officers, one accountant, one administrative officer, two peon/messengers, and one guard.

The field officers, five male and one female, have all passed the higher secondary certificate (HSC) exam; all speak some English; and all demonstrate ready knowledge of the schools, students, and teachers in their assigned areas. Their enthusiasm for and loyalty to the project seem genuine. There have been no staffing changes or salary disputes reported.

In addition to the orientation training from TAF, the field officers have been given some formal training by Mr. Kabir, reinforced by on-the-job support. Mr. Kabir's previous experience as a science teacher in Gopalganj has given him good insight into ways to approach and deal with school faculties. His instruction has included ideas on how to deal with teachers,

headmasters, and parents, and his teaching techniques include role-playing.

If the quality of work performed by the field officers can be judged by the easy accessibility and completeness of records, then the quality must be presumed to be high. Their bi-monthly visits to each assigned school are well documented.

IV.2.2.2 Communication and Coordination. A review of the records covering the period from January 1 to September 30, 1985, corroborated by spot-checks in the field, indicates that records are being kept accurately. Each field officer was able quickly to provide information on the number of students enrolled, dropouts, attendance records, midterm grades, disbursements, etc. Information management at this early stage of the project seems well handled. All quarterly reports have been submitted to TAF within two weeks of the quarter's end.

The lines of responsibility are clearly understood, and the relationship between project director and his staff appeared to be genuinely respectful. The relationship of project personnel with TAF is also both professional and cordial. The responsiveness of SGS to TAF's suggestions was illustrated by the project director's quick willingness to initiate a rotation system for field officer assignments. When TAF and USAID suggested that the previous system that assigned the lone female field officer to the most accessible schools might be considered favoritism (this field officer is married to the project director), the new rotation system was immediately devised and implemented. What could have become a problem was easily resolved.

IV.2.2.3 Stipend Distribution. One bank in Gopalgongj where stipends are deposited by SGS handles all 2,600 student accounts. Thus far, there are no reported complaints or problems from either the bank or the recipients. Because of the distance between the bank and most students' homes, however, many girls do not do their banking themselves, but rather allow a friend or guardian to withdraw funds. Consequently, an opportunity to help the girls gain self-confidence in dealing with the commercial world is lost. Whether the convenience of dealing with just one bank is worth this lost opportunity is a question that should be considered.

IV.2.2.4 Physical Plant/Facilities. SGS has recently moved into spacious quarters in which each of the six field officers has ample space to work. There are plans to use one large room as a guest room for overnight visitors from TAF and USAID.

IV.2.2.5 Transportation. Field officers report that transportation to their assigned schools is not a problem. Most can visit two schools a day, often using a combination of bicycle 1/ (furnished by the project), bus, boat, and foot. They now work on a rotation basis (six months per each group of six schools), so that no one of the field officers will be permanently assigned to the most inaccessible schools.

IV.2.2.6 Cost. Combining SGS's annual budget of \$86,479 with TAF program service costs of \$9,000 plus indirect costs of 22.5 percent yields a total program cost of \$116,962 or \$44.99 per student per year.

### IV.3 Educational and Community Response

#### IV.3.1 BACE Educational and Community Response

IV.3.1.1 Attendance. Although individual attendance records should be kept at the project office in Shahrasti, they were not readily available to the evaluation team. Records in the head office show, however, that 167 stipends are presently being withheld because of failure of recipients to meet attendance requirements.

IV.3.1.2 Academic Performance. The evaluation team did not see records of academic performance for the current school year. Previous evaluations, 2/ however, give an indication of the level of the scholarship students' work. For the 1982 school year, the average grade in the annual examination was 43.27 percent. For the 1983 school year, the average annual examination percent was slightly lower at 41.50. Each student's final mark is an average of the marks from all subject areas. An average of 33 percent or above is a passing mark.

IV.3.1.3 Enrollment. In 1981, the year before the BACE project began in Shahrasti, 27.3 percent of secondary students

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1/ Except for the female field officer who does not ride a bicycle, but claims nonetheless to have no difficulty in covering her assigned territory.

2/ Ather, 1983, p. 32; Ather, 1984, p. 38.

in what were to become the scholarship schools were female. 1/ After the implementation of the scholarship program in 1984, the percentage of females rose to 43.5 percent in 1984. Nationwide, the percentage female increased from 28.5 in 1981 to 32.2 in 1984. 2/

Dropout rates also show significant changes in the project area. In 1981, there was a 23.3 percent female dropout rate in the Shahrasti secondary schools. In 1982, upon institution of the scholarship program, the rate decreased to less than 1.0 percent. 3/ By 1984 female dropouts had increased slightly to 3.3 percent, but were considerably less than the 1984 rate in control schools, 11.5 percent. 4/

The primary reason that female students drop out of school appears to be marriage. In the 1985 evaluation 5/ it was found that 39 of the 58 respondents had dropped out of school in order to marry. Only 16 percent had left school for academic reasons. None of the respondents mentioned lack of money.

IV.3.1.4 Aspirations/Interests/Actual Employment of Female Students and Graduates. In the 1984 evaluation report, 6/ it is reported that 142 of a sample of 151 scholarship students expressed a desire to continue their studies after grade X. In this same sample, 136 indicated that they would be willing to accept jobs outside the household. Fifty-four of these hoped to be service holders, 30 physicians, 10 bankers, 36 teachers, three college or university teachers, two engineers, and one a politician. One hundred and thirty students declared they would be willing to move from their community in order to take a job. Eighty-three of the students believed that job opportunities, such as teaching, tailoring, and various cottage industries existed within Shahrasti.

The reality of the employment picture is considerably

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1/ Ather, 1983, p. 19.

2/ BANBEIS, 1985, pp. 2-3.

3/ Ather, 1983, p. 25.

4/ Ather, 1984, p. 58.

5/ Ather, 1985, p. 90.

6/ Ather, 1984, p. 74 and p. 76.

different from the students' aspirations. In the same study, 1/ only eight of 114 married secondary school completers were reported as employed. Four worked as tutors inside the home and four held outside jobs. Similarly, of the sample of 269 unmarried secondary school completers, only 19 were employed: 15 as teachers, two as factory workers, and two in some other capacity.

IV.3.1.5 Community Perceptions and Support. For both the 1983 and 1984 evaluations of the BACE project, local leaders were interviewed in an attempt to determine community reaction to the scholarship program. In 1983, 100 percent of the 44 leaders stated that no social problem of any kind had been created in the project area as a result of the scholarship program. All 44 also believed the socioeconomic impact of the program to be very favorable. 2/ One reason may be that since the girls' scholarship funds are more likely to be paid on time, they may be subsidizing the education of the boys. The two other sources of funds--government payments of 50 percent of teachers' salaries and boys' payments of school fees--tend to be late, whereas the girls' school fees, paid directly by BACE, are more likely to be on schedule. In the 1984 evaluation, 53 out of 55 local leaders indicated that the program had had a positive impact in delaying marriage. 3/

By November 1985 some community support was evident in school improvements. All 23 project schools had employed an ayah, 22 had tube wells, and 19 had a separate common room. Nevertheless, after four years in the program, only 16 schools had a separate toilet for girls and only nine had female teachers.

#### IV.3.2 SGS Educational and Community Response

IV.3.2.1 Attendance. Complete attendance records for the first three quarters of 1985 are available at both TAF and SGS offices. They indicate that on average each girl misses three days per term.

IV.3.2.2 Academic Performance. Midterm examination marks are available, but there is no baseline data with which to compare them. Of the 2,600 scholarship recipients, 13 show marks

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1/ Ather, 1984, p. 59 and p. 61.

2/ Ather, 1983, p. 44.

3/ Ather, 1984, p. 98.

in the 75 to 100 percent category and 24 have marks from 0 to 24 percent. Approximately 70 percent of the rest fall within the 25 to 49 percent category, with 30 percent in the 50 to 74 percent category. It should be noted that a student's midterm mark is an average of test results in all subjects.

In one high school, by comparison, midterm grades of 16 grade VIII boys were slightly lower than those of an equal sample of girls. 1/

IV.3.2.3 Enrollment. Although funds were budgeted for only 2,600 female students for the school year 1985, actual enrollment is approximately 3,100, with scholarships limited to girls residing in the project as opposed to catchment areas. The unexpectedly large response was probably fueled by the prospect of scholarships.

There have been three dropouts from the program thus far: two due to death and one because of ill health.

IV.3.2.4 Aspirations/Interests of Female Students. Although no study has been undertaken to determine the SGS students' aspirations, interests, and future plans, in one class all girls claimed to want only two children, and to marry only after further education had prepared them for careers as doctors, bankers, or teachers.

IV.3.2.5 Community Perceptions and Support. One definite indicator of parent/guardian support for female education in both the SGS and BACE projects is that because the scholarship stipend pays only about one-half of a girl's costs, the parents are using some of their own funds for the education of their daughters.

The project director, based on his background as an educator and a long-time resident of Gopalganj, believes that headmasters, teachers, and community leaders also fully support the project. Tangible effects of that support are more difficult to find. For example, only 13 of 36 schools have hired an ayah (as is strongly recommended by the project); four schools have female teachers; only 22 have a separate toilet for girls; and 21 have a separate common room. All schools have tube wells, but it is not clear which, if any, of these were dug as a result of project pressure.

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1/ This conclusion is based on the evaluator's informal comparison. The project office does not keep records of male students' grades.

#### IV.4 Demographic Effect

##### IV.4.1 BACE Demographic Effect

The analysis of the demographic effect of the BACE scholarship program will rely heavily on data from the independent evaluations of 1984 and 1985. 1/ The 1984 evaluation was based on a six-percent sample (151) of the 2,500 scholarship recipients, as well as interviews with 55 local leaders. For the 1985 evaluation, four groups of girls were surveyed: 383 scholarship recipients who had completed secondary school, 58 recipients who had dropped out, 200 non-recipients who had completed primary school only, and 200 girls with no schooling. Both married and unmarried girls were included. Those interviewed ranged in age from 16 to 20 years, with each educational group matched by age, so that on average the sample was 17.2 years old.

##### IV.4.1.1 Age at Marriage

IV.4.1.1.1. Attitudes. The positive effect of the scholarship program on attitudes about the appropriate or ideal age of marriage is apparent from both the 1984 and 1985 evaluations. Among the 151 scholarship girls (unmarried) surveyed in 1984, 82.8 percent indicated that marriage should take place at age 20 or higher. 2/ Among the unmarried girls in the 1985 survey, 89 percent of the secondary school completers thought the ideal age was 20 or more, followed by 41 percent of the secondary school dropouts, 17 percent of the primary school completers, and 7 percent of those with no schooling. 3/ The reasons given for remaining unmarried differ strikingly among the four groups. The two most popular answers for each group were as follows: secondary school completers: 44 percent "against early marriage" and 44 percent "continuing education"; dropouts: 50 percent "guardian couldn't arrange marriage" and 43 percent "against early marriage"; primary school completers: 72 percent guardian "couldn't arrange marriage" and 22 percent "lack of dowry"; and no schooling: 66 percent guardian "couldn't arrange marriage" and 33 percent "lack of dowry." 4/

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1/ Ather, 1984; Ather, 1985.

2/ Ather, 1984, p. 81.

3/ Ather, 1985, p. 21.

4/ Ather, 1985, p. 23.

IV.4.1.1.2 Behavior. The positive effect of the program on actual age of marriage can be seen by comparing the percentage of each respondent group in the 1985 survey who are already married: secondary school completers, 30 percent; dropouts, 76 percent; primary school completers, 77 percent; and no schooling, 62 percent. 1/ Of those who have married, there are also differences between groups in the average ages of marriage: 16.5, 15.8, 14.6, and 14.7 years respectively.

#### IV.4.1.2 Family Planning and Population Problem

IV.4.1.2.1 Knowledge and Attitudes. Among the scholarship girls surveyed in 1984, 99 percent were aware of the population problem in Bangladesh, and 100 percent had heard about family planning. 2/ Among the 1985 unmarried respondents, 100 percent of the secondary school completers knew about the population problem, compared with only 93 percent of the dropouts, 43 percent of the primary school completers, and 20 percent of those with no schooling. Knowledge about family planning among the groups was as follows: 100, 100, 89, and 80 percent respectively. 3/ In both years and for all groups, TV and radio were the most common sources of knowledge.

There was also among the unmarried 1985 respondents a positive association between education and "belief" in family planning 4/ and between education and likely future adoption of family planning. 5/ The secondary school completers were also generally more knowledgeable about specific methods. 6/

Among the married 1985 respondents, there were similar differentials by educational attainment in knowledge of the population problem, knowledge of family planning in general, knowledge of specific family planning methods, belief in family planning, and intention to use family planning in the future. 7/

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1/ Ather, 1985, p. 19.

2/ Ather, 1984, p. 80.

3/ Ather, 1985, p. 50.

4/ Ibid., p. 52.

5/ Ibid., p. 55.

6/ Ibid., p. 57.

7/ Ather, 1985, pp. 34, 36, 38, 45.

The more educated women were also more likely to indicate that they had motivated their husbands to use family planning. 1/

IV.4.1.2.2 Behavior. Among the married 1985 respondents, 53 percent of the secondary school completers were currently using family planning, as compared to 48 percent of the dropouts, 12 percent of the primary school completers, and 14 percent of those with no schooling. Among users, the oral pill was the most popular method in all groups, followed by the condom. The next most popular method in the top two education groups was vaginal method, whereas it was tubal ligation among the primary school completers and IUDs among those with no schooling. Interestingly, withdrawal was used only by secondary school completers, who probably would have better communication with their husbands and thus be able to use this natural family planning method. 2/

For those not using family planning, the most popular reasons given by secondary school completers and dropouts were the husband's indifference or lack of belief and their own desire for a child in the near future. The two lower education groups mentioned lack of belief or knowledge on their own part, plus religious reasons, as well as desire for a child in the near future. 3/

#### IV.4.1.3. Fertility

IV.4.1.3.1 Attitudes. On average the unmarried scholarship girls interviewed in 1984 wanted to have a total of two children with an almost equal balance between sons and daughters. 4/ The married 1985 respondents indicated a larger desired family size: 2.27 for secondary school completers, 2.43 for dropouts, 3.92 for primary school completers, and 4.47 for those with no schooling. 5/ No matter what the educational

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1/ Ibid., p. 48.

2/ Ibid., p. 41.

3/ Ibid., p. 43.

4/ Ibid., p. 80.

5/ Calculations are based on the assumption that those listed in Table IX (Ather, 1985, p. 32) as desiring more than four children desired on average a total of six children.

level of the woman, however, very little sex preference among children was expressed. 1/

IV.4.1.3.2. Behavior. Table VI of the 1985 evaluation 2/ shows a difference between the number of children born to the two highest educational groups and the number born to the two lowest. Differences in marital duration, however, probably account for the differential. This lack of a true marital fertility differential is substantiated in Table VII of Ather, 1985, 3/ where it is shown that the mean intervals between marriage and first birth and between first and second births are generally shorter for the more educated women.

Of course, these mean interval lengths are based on the experience of only those women who have already married and only those women who have already had a child, so they are not truly representative of the ultimate experience of the different educational groups. The secondary school completers who have given birth already are probably among the most fecund. Only 30 percent of the secondary school completers are married, and only 31 percent of those have had a child. In comparison, 77 percent of primary school completers have married, and 83 percent have given birth.

The average number of children for each respondent group (married and unmarried together) can be calculated by multiplying the mean number of births 4/ times the proportion married 5/. Thus, on average the secondary school completers have .09 children in comparison to .30 for the dropouts, 1.39 for the primary school completers, and .99 for those with no schooling. Given that group is of the same average age (17.2 years) it can be estimated that keeping the girls in school from primary graduation to secondary graduation has resulted up to now in an average of 1.3 births averted.

IV.4.1.4 Cost Effectiveness. The estimated annual total program cost per girl in the BACE project in 1985 is \$41.71 (see Section IV.2.1.6). During the Second Five Year Plan (1980-1985), the government spent an average of Tk. 169,820,000 per year on

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1/ Ather, 1985, p. 31.

2/ Ibid., p. 26.

3/ Ibid., p. 29.

4/ Ibid., 1985, p. 26.

5/ Ibid., p. 19.

secondary education 1/ or Tk. 68 per year for each of the 2,485,000 students, (or \$2.72 using the same exchange rate as in Section IV.2.1.6 [Tk. 25 per U.S. \$1]). Thus, total government and donor expenditure per girl equals an average of \$44.43 per year or \$222.15 for five years of secondary schooling.

Using the estimate of 1.3 births averted per women from the previous section, the estimated cost per birth averted is \$170.88. 2/ This estimate is most likely an overestimate, since there is some hope that additional births would be averted later 3/ (beyond age 17.2 years) in each woman's childbearing experience as a result of her higher education (see Section IV.4.1.2 and IV.4.1.3 for some evidence). It is impossible to quantify such effects at this time, and there is always the possibility that as more educated women extend their marital duration, differences in total family size would become negligible between educational groups.

Even in this worst-case scenario, though, by delaying marriage and childbearing, the scholarship program would have helped slow the population growth rate through an increase in mean generation length. Furthermore, a second-generation effect on education and fertility would also be expected if more educated mothers have greater educational aspirations for their daughters. Moreover, fewer children would be giving birth to children with the consequent decline in child mortality.

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1/ Ministry of Education, 1985, p. 14.

2/ One caveat is that some of the girls would have stayed in school without the scholarship program, but a similar argument could be made for family planning service delivery programs, i.e., that services are delivered to some people who would have contracepted anyway.

The figure of \$170.88 per birth averted could be compared with very rough calculations of cost per birth averted derived from data on the family planning service delivery program in Bangladesh, as indicated in Simmons, Rob, and Bernstein (1985). Table 3 (p. 17d) shows an estimated 822,585 and 911,148 births prevented in 1982 and 1983. Table 5 (p. 17f) indicates estimated total expenditures per calendar year of \$40.85 million for 1982 and \$54.73 million for 1983. The resulting estimates of expenditures per averted birth are \$49.66 for 1982 and \$60.07 for 1983. It should be remembered, however, that in the long run the cost per birth averted by the scholarship program would be reduced if more educated women had even fewer children.

3/ In terms of the timing of costs and benefits, this program is similar to a sterilization program with cost concentrated early in time, but benefits spread over a long period.

#### IV.4.2 SGS Demographic Effects

It is too early to have definitive data on the demographic effect of the scholarship program in the SGS area. Discussions with students in three high schools suggest that the secondary school girls in Gopalgonj have positive attitudes toward delayed marriage and desired number of children.

Most grade IX and X girls with whom discussions were held indicated that they did not wish to marry until age 20 and did not wish to have more than two children. When asked why they wouldn't have more than two children even if they married a rich man or even if both children were female, students responded with clear conviction that two children were enough for every family in Bangladesh.

Despite the girls' rather forceful and reasoned arguments, however, boys in the class would not agree that two children were enough if both were female. One boy voiced the opinion that he would continue trying for a boy even if his wife had given birth to ten girls. His male classmates appeared to share his point of view.

Despite a girl's knowledge and attitudes favorable to family planning, it must be remembered that in Bangladesh, a woman's fertility is also a function of the attitudes of the man she marries.

#### IV.5 Potential for Continuation and Expansion

##### IV.5.1 BACE Potential for Continuation and Expansion

Although BACE's four-year involvement with the scholarship project has been marked by good enrollment and positive demographic effect, it is not yet clear that BACE is able to administer and monitor the project to the satisfaction of USAID and TAF (see Section IV.2.1.2). Other donors such as the Danish International Development Agency (DANIDA) and Save the Children (UK) have experienced similar problems vis-a-vis data collection, communications and reporting. Although there have been some recent improvements in reporting (see Section IV.2.1.2), it appears that either the ability or the willingness to make all the necessary changes may not be present. Consequently, although the increasing number of girls desiring secondary education in the project schools should be accommodated, the number of schools involved in the BACE project should not be increased. Furthermore, if there is no significant improvement in BACE performance within a year, USAID should seriously consider terminating

funding for the BACE project and reallocating the funds to a similar project through another NGO.

Detailed recommendations regarding BACE are as follows:

1. BACE should hire or assign a program officer to be the counterpart of Mr. Taylor in TAF and to carry responsibility for the scholarship program and provide liaison between the Shahrasti project office and TAF (see Section IV.2.2.1). Specifically, the program officer would
  - a. spend a minimum of one week per month in the project area;
  - b. be responsible for implementing all reporting systems at the field level;
  - c. spot check recorded information and supervise all field officers;
  - d. verify all reports submitted by field officers;
  - e. verify the number of bank accounts and the number of students;
  - f. take responsibility for seeing that the correct information is transmitted to the Dhaka office and to TAF.
2. Field project officers should send quarterly reports directly to TAF at the same time as a copy is sent to the BACE head office.
3. The December 1984 agreement with TAF to raise field staff salaries by at least 30 percent should be implemented.

#### IV.5.2 SGS Potential for Continuation and Expansion

The current strong performance of SGS argues persuasively for its continuation as a project contractor. Nevertheless, a thorough evaluation of educational, community, and demographic effects along lines similar to the 1984 and 1985 BACE studies should be carried out after another year of the project. In the meantime a start should be made to collect baseline information.

Certainly the project should be expanded to provide stipends for all girls in the presently-covered schools, including girls from the catchment area who were unable to receive scholarships initially. Expansion of the program to individual schools in adjacent upazillas or, indeed, to entire upazillas should also be considered. It would be preferable to have upazilla-based NGOs implement any expansion into new upazillas. If, however, a

qualified NGO is not available, SGS shows considerable promise and might successfully work in two upazillas at once, assuming that an additional layer of administration is not added.

The current project should be used as a model for replication in other areas.

#### IV.5.3 TAF Potential for Continuation and Expansion

TAF should continue to operate the scholarship projects. Its leadership is strong (see Section IV.1) and its training and support have been commendable. The experience that it has gained with the selection and start-up of SGS could be of considerable use for new projects. In discussions regarding potential expansion, TAF has indicated that it has already identified five other NGOs that it thinks could successfully run a scholarship project.

If the program were expanded, TAF would be prepared to hire an education specialist/manager to oversee the program. In addition, approximately one new program officer would be needed for each eight upazillas to be covered.

TAF would prefer to phase in new projects gradually so that each could be given the same amount of personal time and support as was devoted to initiation of the SGS project. Ten to 12 new projects per year seem optimal to TAF, although more would be possible.

Should the number of projects be expanded significantly, TAF indicates that it would formalize the training process and develop various standard manuals and materials. Furthermore, it suggests the establishment of a voluntary national advisory committee, made up of influential figures in population and education, to provide support and guidance and to intercede with the government when necessary.

With regard to TAF's operation of the scholarship program, TAF should

1. Develop guidelines for accounting procedures and administrative techniques to be used in project offices;
2. Make an effort, should it have both family planning projects and scholarship projects in the same area, to recruit scholarship-recipient graduates as family planning field workers;
3. Initiate and support, through the subgrantees, follow-on monitoring of Grade X graduates;

4. Investigate the possibility of working in conjunction with the government's Upazilla Education Officers to offer in-service training for teachers in all project schools on such topics as population education and participatory-learning techniques;
5. Contract with different consultants for annual evaluations (unlike the BACE project, which has had the same evaluator for the past three years);
6. Arrange meetings between TAF, USAID, and all other donors that have experience funding BACE.

#### IV.5.4 Potential for Expansion Nationwide

Encouragement for girls to continue their education through the secondary level is needed nationwide in Bangladesh, not in just the two (of 462) upazillas currently included in USAID's female secondary scholarship program. The financial and managerial constraints involved in such an expansion, however, would be considerable.

If approximately 3,000 girls could be supported at a USAID cost of \$43.35 per girl <sup>1/</sup> in each of the 462 upazillas, the estimated annual cost for a nationwide scholarship program would be \$60.1 million. Of course, there would most likely be economies of scale in expansion of such scope, but on the other hand, with a continuation of the scholarship program, the number of girls wanting to attend secondary school per upazilla would also probably increase.

With regard to management, multiplying a program by a factor of 230 is clearly not going to be feasible overnight. Although TAF estimates that it would prefer to add no more than 10 to 12 upazillas per year (see Section IV.5.3), additional intermediaries could become involved. Such an arrangement, however, would require more USAID staff time to monitor the project and ensure a continued high quality of training.

If expansion were implemented on less than a nationwide basis, in order to keep administration as simple as possible, expansion should take place upazilla by upazilla, rather than through scholarship awards to individual girls on the basis of need or merit. Among the possible criteria for selecting upazillas are high population growth rate, high fertility, low contraceptive prevalence, low school enrollment for girls, and the availability of a qualified NGO with experience in education, community development, family planning, health, or rural develop-

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1/ The average of the BACE and SGS costs.

ment. Given the overall dismal population and education situation in the country, perhaps the last factor--a qualified NGO--should be given the greatest weight.

What would be the government role in such an expansion and what is the likelihood it would eventually assume full responsibility for the education of these girls? Given the government's current emphasis on primary education (see Section II.2), it is unlikely that it will begin to direct a more significant portion of its limited resources to secondary education until after the turn of the century.

At that later date, if the government were to nationalize the secondary schools (only 175 of 9,085 are currently operated by the government), then the need for scholarships would be substantially reduced, since tuition in government-operated secondary schools is currently about half that in private schools and possibly would be abolished. Also at that later date, given some economic and demographic progress, parents on average should be better able to pay the other costs associated with their daughters' school attendance. Thus, there can be a realistic expectation that at some point the need for these scholarships would be dramatically reduced.

Until that time, the scholarship program will continue to serve as a conduit for government and community funds into the secondary school system and thus into fertility reduction efforts. As enrollments expand, so too will faculties. The government, which pays 50 percent of private school teachers' salaries, over time thus will be providing a larger gross sum for faculty salaries. Similarly communities will be pressed to expand and improve their school facilities; their contributions could be matched by government funds that are available for additional construction.

A significantly expanded scholarship program over the next 20 years could play an important interim role in the educational system of Bangladesh, as well as having immediate and significant effects in raising the age of marriage and slowing the population growth rate. After the year 2000, the government may be prepared to nationalize secondary schools; tuition costs would then drop dramatically. Meanwhile, as discussed above, given some economic and demographic progress, parents on average should be better able to pay other costs associated with their daughters' school attendance. Furthermore, in the near future, it seems possible that the scholarship program could be phased out.

## V. OTHER POSSIBLE FEMALE EDUCATION/INCOME-GENERATING/ EMPLOYMENT INITIATIVES TO REDUCE FERTILITY

This chapter offers for USAID consideration alternative methods of affecting fertility through female education and employment in Bangladesh. They are presented not because the team was opposed to continuation or expansion of the scholarship program but because this issue was included in the scope of work. The options are organized by the educational and marital status of five target groups, specifically: primary school-age girls, secondary school students, unmarried secondary school dropouts, unmarried secondary school graduates, and the married population. For primary school-age girls, four options are suggested, all designed to keep them in school or to get them to return to school. For secondary school students, four options are recommended, including expansion of the scholarship program and three other ways in which the program might be made a more effective mechanism for keeping girls in school and educating them about population issues. For unmarried secondary school dropouts, only income generating activities are recommended. For unmarried secondary school graduates, two options are suggested: continuing education and job training. For the married population, three options are aimed at women (adult literacy, income-generating activities, and education on breastfeeding) and one at men: population education. It is not possible to calculate the cost effectiveness of the various alternatives, but a list of priorities based on demographic effect and project feasibility will be presented in the overall recommendations (Chapter VI). For each of the options presented in this chapter, the following issues are addressed: rationale and purpose, overview of the initiative, past experience, implementation, costs and need for continuing assistance, and expected effects.

### V.1 Primary Students

#### V.1.1 Universal Primary Education

V.1.1.1 Rationale and Purpose. Because of the high illiteracy rate of the population of Bangladesh, the government has called for the universalization of primary education by the year 2000. However, because of the tremendous demands meeting such a goal would place on classroom construction, textbook production and distribution, and teacher hiring and training, the government has had to reduce its target.

V.1.1.2 Overview of Initiative. USAID could contribute to alleviating some of the above constraints and thus help the government in its efforts to provide primary education to as many children as possible.

V.1.1.3 Past Experience. The government has received external assistance, primarily from the International Development Association and the United Nations Children's Fund (UNICEF), and enrollments have increased and dropout rates fallen. For FY 1986-88, a new credit agreement has been negotiated to finance the longer-term strategy of universal primary education.

V.1.1.4 Implementation and Costs. One alternative would be to join the consortium of donors who are providing support to primary education in Bangladesh.

V.1.1.5 Expected Effects. Enrollment rates at the primary levels would increase. The short-term fertility effects would be nil. Although cross-section analysis of fertility differentials by education group indicates that fertility associated with primary education is higher than fertility associated with no schooling, it is likely that, over time, increased primary education would contribute to increased secondary education and subsequent delay of marriage.

#### V.1.2 Upgrading Teacher Skills and Curriculum

V.1.2.1 Rationale and Purpose. According to projections in the Third Five Year Plan (TFYP), 1/ 62 percent (9,466,000) of all 6- to 10-year olds will be in primary school in 1986. With double shifts, crowded classrooms, and a teacher/student ratio of 1:60, however, some 60 percent are expected to drop out before completing grade IV. 2/ A 1977 survey indicates that the second most common reason for dropping out is "lack of interest of the children for schooling." 3/ If primary teachers were given in-service training to help them use participatory teaching techniques with large groups of children, they might be able to create a more appealing learning environment and thus help retain potential dropouts. Likewise, if innovative materials were a part of a relevant curriculum, students might be more likely to stay in school.

V.1.2.2 Overview of Initiative. During the TFYP, the Government of Bangladesh has set as its goal one Assistant Upazilla Education Officer (AUEO) to provide in-service teacher training and effective supervision of schools for every cluster

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1/ Ministry of Education, 1985, p. 29.

2/ FREDP, 1983, p. 156.

3/ Ibid., p. 160.

of 16 to 20 schools. <sup>1/</sup> Among the goals for the primary level of the Curriculum Wing of the National Curriculum and Textbook Board (NCTB) for the TFYP are curriculum improvement and renewal, and the design and development of instructional materials. <sup>2/</sup> USAID could consider joining forces with the Ministry of Education in order to help provide training and support for the AUEOs whose job it is to work with and motivate primary school teachers and/or provide technical assistance to the NCTB.

V.1.2.3 Past Experience. Through the Universal Primary Education project, other bilateral and multilateral donors have worked with the Ministry of Education to support and help implement its plans.

V.1.2.4 Implementation and Costs. Implementation strategy and costs will be determined by the degree of commitment USAID wishes to make. For example, one person-year of technical assistance in the form of a curriculum specialist assigned to work with the NCTB or with the AUEOs would be a minimum and short-term effort. A more committed approach might include three to four years of technical assistance plus considerable participant training.

Because the Government of Bangladesh has selected training of AUEOs and curriculum improvement/materials development as two of its priority efforts for the TFYP, the government's continued interest seems likely. Counterpart training should mean that USAID's input in technical assistance need not be longer than three or four years.

V.1.2.5 Expected Effects. In the short term, in-service training for teachers should improve the quality of teaching. This might in turn have an immediate effect on student exam results. Criteria defining "improved quality" should be determined and a study made linking that variable with exam results and retention rates.

Better trained teachers using creatively designed teaching materials in a relevant curriculum should, in the long term, keep more students in primary school. Long-term, more girls would be eligible for and interested in attending secondary school and would thus delay marriage. Longitudinal studies should accompany the introduction of new curriculum and materials

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1/ Ministry of Education, 1985, p. 30.

2/ Ibid., p. 56.

into the classroom.

### V.1.3 Non-Formal Primary Education

V.1.3.1 Rationale and Purpose. In order to attract those students who have dropped out of the primary level, a non-traditional, shorter, and more practical approach is needed toward primary education, i.e., one that is more sensitive to village reality and to family needs for students to share the home workload. Thus, a shorter, condensed program for older children may be in order, but it should be a program whereby, upon completion, a girl would be qualified to continue on to secondary school, or if not qualified, would require very little supplementary instruction.

V.1.3.2 Overview of Initiative. The content of the usual five years of primary education would be taught in three years with flexible scheduling and shorter school days. Such hours could accommodate the girls' tasks at home. If schooling did not interfere with household routine, parents might be more inclined to keep their girls in school. Moreover, once the parents realize the advantages of the girl's education (better marriage prospects, increased employment possibilities, more skills, etc.), they might cooperate in supporting the program. This shorter, more intensive program could be implemented at both the rural and urban levels.

V.1.3.3 Past Experience. This approach is presently being tried by the Bangladesh Rural Advancement Committee (BRAC), the Underprivileged Children's Education Programs (UCEP), and the Centre for Mass Education in Science (CMES). BRAC's program focuses on village children, whereas UCEP works with children in the urban slum areas of Dhaka, Chittagong, and Khulna. The CMES project works at the grassroots level with emphasis on life-oriented skills and applied technology. The BRAC model is described in detail below, to illustrate the workings of a successful program.

The BRAC program began in 1985 with 280 children from Manikganj Upazilla enrolled in two pre-primary classes and seven first-grade classes. Sixty percent of the total enrollment was female. The ages for pre-primary classes were six to eight years, while the ages for primary were eight to ten. BRAC selected its students two months after the beginning of the regular government school year from those who were not attending school. Selection was made on the basis of age, need, and absence of any educational experience. Classes are two-and-a-half hours long, and there is flexible scheduling, which allows the

girls and boys to do their tasks at home. In order to continue to the secondary level, the students need only a one-year supplementary English course, which BRAC can provide. BRAC hopes to open 50 more schools in the upazilla alone.

Besides the actual education, an additional aspect that makes this program attractive is parental involvement. Parents belong to a school committee, which holds monthly meetings and decides on such matters as which building should be rented by BRAC for the school. All the staff is hired and trained by BRAC. The teachers have tenth-grade educations and are members of the communities where they work. Every three months they receive a one-week refresher course. BRAC also designs its own curriculum, which is a new development for Bangladesh, because all the other curriculum used in the country is designed by the Ministry of Education. BRAC's income-generating program is in 38 upazillas, so it already has a base from which to expand its education program. This is a third-year pilot program, and at the end, BRAC expects to conduct an evaluation.

V.1.3.4 Implementation. Preferably on the basis of the third-year evaluation, the model used by BRAC could be used to replicate the program. BRAC's approach to community involvement and its rental of existing facilities both appear appropriate for other programs. An evaluation of BRAC's curriculum should be conducted, and the curriculum should be strengthened only where deemed necessary, to avoid creating numerous and different teaching materials. BRAC could be one of the NGOs implementing this non-primary education option in those sites where it is already working. If the program were to be tried in other sites, local NGOs or community organizations should be identified. This project could also be tested in the two upazillas where BACE and SGS are operating secondary scholarship programs, with graduates used as teachers to maximize the objectives of the female scholarship program (see Section V.4.2).

V.1.3.5 Costs and Need for Continuing Assistance. USAID would have to fund the project in its entirety, but since it is a shorter (3-year versus 5-year) educational approach with community input, the government might be more inclined to assume costs eventually. These costs would include rental of facilities, teachers' salaries, teacher training, books and materials, administration, and evaluation. The Ministry of Education could provide the English teaching necessary for the transition to secondary school. The economic reality of the country makes it unlikely that the government will assume costs of many programs. However, this form of primary education would assist implementation of the goal of universal primary education.

V.1.3.6 Expected Effects. It is a given that extending primary education and increasing literacy to a larger proportion of the population would have a positive effect on economic and social development in the short term. With regard to fertility, although the effect may take longer to be felt, if more girls finish primary school, the motivation to continue to the secondary level will be greater, thus delaying the age of marriage. Moreover, the girls' self-esteem and confidence would be augmented, and their attitudes towards desired family size should also be affected. Although one would generally expect primary education to have a fertility effect only in the long run, a focus on slightly older children would mean the effect would not be so delayed.

#### V.1.4 Bond Scheme

V.1.4.1 Rationale and Purpose. Because the female dropout rate in primary school is highest between grades I and II, one possible, albeit expensive, way of increasing the continuation of girls in primary school would be through economic incentives to the guardians. Household duties have a clear economic value to the family. Thus, an economic incentive to the guardian for the duration of primary education (five years) might guarantee the attendance of children in school.

V.1.4.2 Overview of Initiative. Each year the program would make a bank deposit that would approximately cover the annual costs of sending the child to school, including books, supplies, uniforms, snacks, etc. The guardian could use the interest from that deposit as he or she sees fit, provided that the child's school attendance was satisfactory. The guardian would not, however, have access to the principal. At the end of the five years, and upon the girl's completion of primary school, the guardian would be able to withdraw 75 percent of the principal, while the other 25 percent would be transferred to an account in the girl's name to be used to defray the costs of her secondary education.

V.1.4.3 Past Experience. There is no precedent for this scheme in Bangladesh. The positive effect on attendance of the female secondary scholarship program, however, indicates that when families are relieved at least in part of economic pressure, girls are allowed to go to school.

V.1.4.4 Implementation. The first step would be to survey communities in order to identify those willing to participate in the program. Without their support, the scheme could easily become simply a grant system to the families. Parents must demonstrate willingness not only to send the girls to school, but also to help improve and maintain school facilities. Class scheduling may have to be adjusted to enable the children to carry out certain household tasks. Bank cooperation would have to be elicited. An NGO would have to be selected to act as the trustee of the fund and to make disbursements and monitor compliance. Because TAF already has experience with the secondary school scholarship program, it could be the implementing agency or at least provide training to another NGO.

To ensure the success of this program, funding would need to be guaranteed for the duration of the five years at the primary level. So too, families would need to be motivated, preferably through community workers, to maintain interest and make sure the child stays in school the five years. The program might be expanded by example, with successful communities being used as motivators for others.

Possible constraints include reluctance of banks to work with small amounts and USAID's practice of precluding aid recipients from establishing interest-bearing accounts. The interest derived in this case, however, would be an essential part of the incentive program.

V.1.4.5 Costs and Need for Continuing Assistance. Although funds would cover the same kinds of costs involved in the school scholarship program, the annual amounts would be smaller, because there are no school fees at the primary level. The commitment of the donor would be necessary for the full five years of the program. In addition, there would be costs associated with sampling and surveying the communities. Because this program in the long run would benefit society as a whole, the government should provide assistance in the improvement and staffing of the schools, as well as in the provision of textbooks. It would be unrealistic to expect the government to assume support for the program, however, despite its goal of universal primary education.

V.1.4.6 Expected Effects. The beneficial effects of increased primary education cited in Sections V.1.1.5 and V.1.3.6 would pertain here. The short-term effects of this program would be an automatic increase in the number of girls attending school, with the desired result of continuing to secondary school and thus delaying marriage. Moreover, the economic benefits parents would derive from keeping their girls in school should provide an

incentive not to marry them off so young. Furthermore, it is widely accepted that an educated, literate population will eventually lower its fertility. This option, however, might prove to be expensive and lengthy since a minimum of nine to ten years would elapse before even one class graduates from secondary school. Besides the delay of marriage, an evaluation of this program should measure attitudinal changes in desired family size, improved health practices, and skill development.

## V.2 Secondary Students

V.2.1 Expansion of Scholarship Project (see Section IV.5)

V.2.2 Modification of the Scholarship Program

V.2.2.1 Rationale and Purpose. Given the traditional secondary school curriculum, textbooks, and teaching methods, it is not surprising that students complete their education without learning many of the skills that might prepare them to lead more productive lives, for instance:

- how to make contact with and take advantage of government services in health, agricultural extension, credit, etc;
- how to develop organizational skills;
- how to develop problem-solving abilities;
- how to create opportunities to use their skills as tutors, as literacy teachers, as family planning volunteers, etc.

V.2.2.2 Overview. These kinds of skills could be taught by the addition of female teacher/catalysts (T/C) to the project staff. T/Cs would not have to be trained teachers. They would be recruited from the project area and would be trained and assigned to two or more schools where they would meet with female students for an hour before school (10 to 11 AM) or an hour after school (4 to 5 PM) one or two days a week.

The T/Cs would be trained (see Section V.4.2 below) to use participatory teaching methods. These methods would be based on teaching materials/modules to be developed by a project materials development committee (see below). Once in service, all T/Cs in each project area would gather monthly with a supervisor/teacher to share their experiences, adapt teaching materials, reinforce teaching methodology, and be introduced to the next module.

Pre-service training of the type envisioned may be available through the DANIDA Training Centres located in Chagalnaiya and Lakshmipur Upazillas in Noakhali. If, however, USAID were to offer technical assistance for developing teaching materials, it is possible that training, materials development, and supervisory follow-up activities could all be a part of that assistance.

The materials should be extremely simple and low-cost, e.g., discussion guides, and posters and charts when suitable. Depending on the subject and the students' interest, a module might be used for one day or for several months. A project materials development committee made up of professional educators and knowledgeable community members would be responsible for ensuring that the materials were not only educationally sound, but also appropriate for the community in which they were to be used. Materials and suggested lesson plans might be developed for such topics as:

- o teaching and tutoring skills (e.g., how to teach literacy)
- o credit/business opportunities in the community
- o contacting and taking advantage of services offered in the community (e.g., health, extension, etc.)
- o population education
- o health (first aid, nutrition, hygiene, water, and sanitation)
- o problem-solving techniques
- o organizational skills (for youth groups, mothers' clubs, etc.)
- o survey skills (re: e.g., health problems prevalent in the community, market opportunities in the area, etc.)
- o careers for women (with guest speakers)
- o debating skills
- o sponsoring contests (posters, cartoons, songs, dramas) around such themes as population education, nutrition, etc.

T/Cs would not be expected to be experts in any of these topics. The project materials development committee would be the research arm of the project and would develop appropriate ways to introduce and expand on each subject. T/Cs would be given a new set of materials at each monthly meeting and would

also be given a chance to practice-teach and adapt the module before taking it to the schools.

If module/materials were ultimately judged useful, it might be appropriate at some time for USAID to share them with the Ministry of Education.

Among the steps that USAID/TAF would need to take are:

1. Survey the schools to determine acceptability. (Note: Headmasters to whom the idea was suggested as a hypothetical case were enthusiastic.)
2. Determine the number of T/Cs needed. If, for example, a T/C worked with one grade per day, she could visit the same school five days/week every morning and another school five days/week every afternoon. If, however, she worked with girls in grades VI to VIII in one group and grades IX and X in another, she could cover five schools in one week.
3. Determine the need for technical assistance regarding training, materials development, and in-field supervisory follow-up work.
4. Make decisions and selections of person(s) to direct training and materials development.
5. Develop strategy for training of T/Cs--time required, place, content, etc.
6. Select and install materials development committee.
7. Determine appropriate content and develop initial modules.
8. Recruit and select
9. Conduct a T/C training course (see V.4.2).
10. Follow up, reinforce, and support T/Cs by
  - a. holding monthly meeting with groups of T/Cs
  - b. introducing new modules
  - c. adjusting strategy as necessary
11. Evaluate project and follow up graduates.

It would be interesting to use these enrichment activities in several non-project schools in order to determine to what

extent the enrichment course (without the stipend) would be enough to keep girls in the secondary school system.

V.2.2.4 Costs and Need for Continuing Assistance. Primary costs would be salaries of the T/Cs; these should be equivalent to pay for the field officers, i.e., approximately Tk. 900 per month. The number of T/Cs per project would vary with the number of schools and their distance from one another. It is unlikely that the government will assume these costs in the near future. It is possible, however, that the schools, which are all private, might be willing to pay a portion of the T/C salary once the T/C concept has proven worthwhile.

V.2.2.5 Expected Effects. Although the scholarship program appears to have a significant effect on the age of marriage through the direct competition of education for the girls' time, it does not yet appear that remaining in school significantly improves employment prospects. One reason may be the generally poor quality of teaching and curriculum to which the girls are exposed. One possible effect of this option would be increased employability of the girls. A second would be even greater self-sufficiency and a sense of control over life and one's environment. Third would be greater knowledge of how to take advantage of available health, family planning, employment, and credit services. All these effects should lead to labor force participation and even lower fertility.

### V.2.3 Population Education

V.2.3.1 Rationale and Purpose. A nine-year Population Education Project funded by the United Nations Fund for Population Activities (UNFPA) with technical assistance from the United Nations Educational, Scientific, and Cultural Organization (UNESCO) ended on September 30, 1985. The summative evaluation of that project <sup>1/</sup> indicates that population education in schools had considerable effect on changes in knowledge and attitudes of students from grades IV to X. Population education is one way of reaching both male and female students and raising their consciousness about family size and family welfare, about population change and resource development, and about responsible parenthood. This option would help to sustain the progress made in the previous project.

V.2.3.2 Overview of Initiative. The evaluation recommended that the National Curriculum and Textbook Board (NCTB) be assisted so that it might assume responsibility for continuing

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<sup>1/</sup> De la Cruz, 1985.

integration of population education in curriculum and textbooks. 1/ USAID might consider providing such assistance to NCTB.

V.2.3.3 Past Experience. The summative evaluation sets forth the accomplishments made under the project: integration of population contents in the textbooks of different subjects from grades IV to X; development of support materials, training manuals, and self-learning modules; and training of key educators, administrators, and teachers from the entire range of educational institutions. The evaluation also found support throughout the educational establishment for continuation of the program and its expansion to the non-formal sector. 2/

V.2.3.4 Implementation and Costs. Implementation strategy and costs would vary depending on AID's level of commitment. Both short- and long-term technical assistance could be valuable, as would be participant training and local workshops/seminars. During the past six years, the UNFPA project's average annual expenditure was \$207,157. 3/

V.2.3.5 Expected Effects. Enhanced awareness of an individual's responsibility regarding population issues is an anticipated benefit to both male and female students and to teacher populations. Such awareness ultimately must have an effect on fertility. In addition, it would be expected that population education expertise within NCTB could be enhanced so that it could assume the full responsibility for the long-term program.

#### V.2.4 Support and Training for Secondary Teachers

V.2.4.1 Rationale and Purpose. It is estimated in the TFYP that only 36 percent of secondary teachers are trained. 4/ The balance, 58,880 teachers, are without the basic minimum of training and yet are delivering education to secondary students. Local-level in-service training for secondary teachers is non-existent in Bangladesh. This option would support teacher-training workshops, whose ultimate beneficiaries would be secondary school students.

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1/ De la Cruz, 1985, p iii.

2/ Ibid., p. 1.

3/ Ibid., p. 37.

4/ Ministry of Education, 1985, p. 50.

V.2.4.2 Overview of Initiative. This intervention would help UEOs provide short workshops for teachers within the upazilla. The first step would be to train UEOs as workshop facilitators and to provide them with necessary materials and funding. The second would be mini-workshops at schools throughout the upazilla. The workshops could be developed on such topics as teaching English; science-teaching techniques; involving students in social studies; mastery learning in math; etc. Initially this initiative would be concentrated only in those upazillas where the scholarship program is located.

V.2.4.3 Implementation. For the UEO workshops, a team consisting of a USAID consultant and a counterpart from the Ministry of Education, plus instructors from the Institute of Education Research, University of Dhaka, or one of the teacher training centers should be formed. This team would design and conduct the workshop(s) and provide regular support and reinforcement to the UEOs as they actually begin to conduct the mini-workshops at secondary schools throughout the upazillas. The effects of the workshops should be evaluated, and if they are positive, thought should be given to expanding coverage to other upazillas.

V.2.4.4 Cost and Need for Continuing Assistance. This option could be implemented for approximately \$40,000 the first year to cover a total of approximately 15 upazillas (assuming that the scholarship program were expanded as suggested in the recommendations [Chapter VI]). Costs include four person-months of technical assistance in the form of an educational consultant; the initial training workshop (materials, transportation, per diem for participants); funding and materials for local level mini-workshops; and expenses for follow-up and reinforcement. Continuing assistance should not be necessary in the long term, because local instructors would already be trained.

V.2.4.5 Expected Effects. Better trained teachers should provide a higher level of education to students. Students should not only learn more (as measured by exam results) but should also tend to remain in school longer (as measured by decreasing dropout rates), and thus delay their age of marriage.

### V.3 Unmarried Secondary Dropouts

#### V.3.1 Income-Generating Activities/Training

V.3.1.1 Rationale and Purpose. Although girls often drop out of school to marry, this is not the only reason. For those who drop out for other reasons, however, the family pressure to marry is usually great. If school dropouts were to become economically active, the pressure might lessen and the girls

might change their attitudes about marriage and family size, have greater input in the decision to marry, and marry later and have fewer children.

Plans for increasing female labor participation should take into consideration the easy danger of adding burdens to an already burdened female population, whose contribution to society is not recognized. The development of cottage industries and subsistence income-generating activities do not necessarily alleviate a woman's load, but rather may add to her regular work of household maintenance and child bearing and rearing. Because of these pressures, it is important that unmarried girls be given realistic, practical, and economically rewarding training. Finally, they should be encouraged to participate in the marketing of their production.

V.3.1.2 Overview of Initiative. School dropouts ranging in age from 11 to 18 should receive training in income-generating activities that have been determined, after careful research, to be economically viable. As in the scholarship program, individual bank accounts could be established with a fixed amount deposited monthly. The amount would not need to be as high as Tk. 60, but it should be sufficient to allow for transportation when needed, for supplies, and for a small residual for savings. Parallel to the skills training, the participants should receive credit and economic responsibility teaching. Overall training should probably last from 12 to 18 months, depending on the skill involved. Upon graduation, the girls would be assisted in starting their own businesses.

One requirement for enrollment would be a letter of intent signed by the guardian stating that the girl would not be married before age 18 (minimum age as set by ordinance, but seldom upheld). The girl would sign a similar agreement. A community advisory committee should be established and trained to help motivate compliance.

V.3.1.3 Past Experience. Currently, there are numerous women's programs throughout the country providing vocational training in such skills as handicrafts, sewing, silk production and weaving, poultry raising, and different food processing and preservation techniques. Most are for married women, not the 11- to 18-year olds under consideration in this report. Few put emphasis on female ownership or marketing.

Both the government and NGOs are involved in income-gener-

ating activities for women. 1/ At the government level, Bangladesh Small and Cottage Industries Corporation (BSCIC) develops small women-owned industries through the granting of small loans, and the Bangladesh Rural Development Board (BRDB) organizes women's cooperatives. Notable among NGO activities are the programs of BRAC and Concerned Women for Family Planning. BRAC functions through production centers and provides skills for different rural activities. Concerned Women is run and staffed completely by women, with great emphasis on economic independence. Both programs teach family planning along with skill training.

The income-generating programs have received some degree of criticism. Charges include failure to conduct systematic market studies to determine the economic viability of their production, failure to survey communities to determine their interest in skills training, and insufficient credit lines. Programs (such as the Grameen Bank) have been criticized for creating dependency on loans, because the amounts loaned are so small that they do not allow the formation of capital. Finally, few of these programs train women in non-traditional skills. A classic example is the response of a director of a BRAC Production Center when asked why all the tailors were male: "It is a man's work. Besides, you have to be literate to be a tailor." Likewise, women most often do not receive training in the marketing or accounting skills that would enable them to participate in the administration and marketing of the program.

An approach worth close examination is that of the Community Schools Project funded by the Asian Development Bank. 2/ The five-year project begun in June 1981 calls for low-cost vocational training to rural out-of-school youth and dropouts from secondary schools (ages 15 to 50) at 400 secondary schools around the country (a boys' school and a girls' school at each of 200 upazilla headquarters). Training lasts from two to six months and is linked with the rural production process.

V.3.1.4 Implementation. Before an employment project is undertaken, thorough multivariate studies should be commissioned to determine the effect on fertility of employment in the formal sector, such as the garment industry, and in non-formal income-generating activities and training (see Chapter III). Of particular interest would be whether or not working outside the home is essential for an effect on fertility. Currently a study

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1/ Begum, 1985, provides a comprehensive review of programs.

2/ Karim and Shamsuddha, 1985.

of rural employment and fertility in Bangladesh is being supported by the International Labour Organization, and the final report should be available in June 1986.

If employment were found to have a significant negative effect on fertility, needs-assessment surveys and market research should be undertaken. A pervasive problem in less developed countries is the emphasis on handicraft production without market studies to determine the viability of the products. Many planners think that by teaching women to weave and sew, they are giving them the tools to become self-sufficient. An integral part of any program for unmarried secondary school dropouts must also be training "in the management and administration of the sectors." <sup>1/</sup>

Once an appropriate mix of skills training is determined, a community advisory committee should be formed and trained on how to explain to the guardian and daughter the letter of intent to delay marriage. The actual disbursement of funds should be done by an NGO, which would also provide the training. Preferably the NGO should be based in the community. The facilities used could be the local school, if available. Otherwise, the possibility of building additional rooms on the school grounds should be explored. Production and marketing technical assistance could be provided by both local and foreign experts.

V.3.1.5 Costs and Need for Continuing Assistance. Initially, the donor might have to pay the cost of the training facility, although eventually the costs might be covered from contributions from participants' earnings. The idea of contributing to a program generally enhances the commitment of the participants. Other costs would include scholarships for the girls, personnel, training, and materials. The donor would also provide regular technical assistance workshops with both local and foreign experts. To evaluate whether the goal of the program (delayed marriage to age 18) had been met, USAID should remain involved for a minimum of five years to allow many of the girls to reach that age.

V.3.1.6 Expected Effects. The short-term effects would be training of young women in income-generating skills and the building of their earning capabilities. The long-term effect would be fewer marriages taking place before the age of 18 and lower fertility. Even if the interval between marriage and the first birth were the same after participation in the program (as

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1/ USAID, "Women in Development," 1982, p. 8.

is the case of the BACE secondary scholarship program, see Section IV.4), the increase in age of marriage would have a significant negative effect on overall fertility.

#### V.4 Unmarried Secondary Graduates

##### V.4.1 Scholarships for Continuing Education

V.4.1.1 Rationale and Purpose. As the scholarship program permits more young women to complete secondary school, the number aspiring to college-level (Grade XI and XII) education should also grow. Since college-educated women may become community leaders and role models, it seems advisable to assist in this effort.

V.4.1.2 Overview of the Initiative. This option would provide scholarships for those secondary scholarship holders who pass the SSC exam and wish to continue their education within the upazilla.

V.4.1.3 Past Experience. At present in the BACE project, approximately 10 percent of the graduating scholarship recipients are enrolled as first- or second-year college students in the area. First-year students are currently given stipends. There has been no follow-up of these women.

V.4.1.4 Implementation. A follow-up study of college girls supported through the BACE project should be conducted. If demographic and educational findings are positive, a continuing scholarship program should be implemented. The scholarships should be seen as a continuation of the Secondary School Scholarship Program and thus administered and monitored by TAF through the involved NGOs. Academic requirements should be imposed, but those girls who meet those requirements should be funded through two or more years of college.

V.4.1.5 Costs and Need for Continuing Assistance. Most colleges are private, and it is unlikely that they will waive tuition. Consequently, tuition stipends (at the same monthly rate as for secondary school girls) would necessarily be a long-range cost.

It is difficult to estimate the number of girls who would require scholarships for college because their numbers will necessarily be determined not only by availability of scholarships but also by academic performance and by the distance

between their homes and the nearest college. It is also impossible at this time to predict which upazillas might be selected for the scholarship program expansion and thus, how many colleges might be involved.

V.4.1.6 Expected Effects. When college becomes an attainable goal for girls in secondary school, it will achieve two things: one, delay marriage for college students and ultimately lower fertility, and two, provide an enlarged pool of better educated women in the rural areas.

#### V.4.2 Post-Graduate Job Training

V.4.2.1 Rationale and Purpose. The purpose of providing training to this target group of unmarried secondary school graduates would be to delay their marriage two to three years past graduation and to improve their prospects for employment.

V.4.2.2 Overview of Initiative. This post-graduate training would be provided to graduates of the secondary scholarship program. These women could be trained to play a leading role in three of the options described herein: teachers for non-formal primary school (Section V.1.3), T/Cs in the secondary scholarship schools (Section V.2.2), or adult literacy tutors (Section V.5.1 below). Because the participants would be graduates of the scholarship program, they might be encouraged to save from their earnings and to contribute, if only minimally, towards this graduate program. For example, charging a nominal fee for materials would reduce the cost of implementation. The training would last for approximately three months with periodic refresher courses (like the BRAC model).

V.4.2.3 Past Experience. Little has been done to absorb these high school graduates into the labor force. The government is lowering the standards (a questionable practice) in an effort to train more female teachers, while some NGOs are beginning to use secondary school graduates in their non-formal education programs (see Section V.1.3).

V.4.2.4 Implementation. Training should build on skills already attained in secondary school. Specifically, training in managerial and administrative skills should be given. Both existing schools and community buildings could be used. Training should be at the upazilla level. Care must be taken that positions are available to girls in their own communities. For those who may want to venture out, studies to ascertain the

location of jobs nationally for secondary graduates should be undertaken.

V.4.2.5 Costs and Need for Continuing Assistance. Costs would include research, hiring and training staff, and materials. Funds for refresher training should also be guaranteed.

V.4.2.6 Expected Effects. The short-term effects of this program would be to increase the number of female teachers, which is a factor in guardians' willingness to send girls to school, and to keep graduates from marrying immediately upon finishing secondary school. Once again, by delaying marriage there would be a negative effect on fertility. The long-term effect, besides lowering fertility, would be the strengthening of the education system.

## V.5 Married Population

### V.5.1 Adult Literacy

V.5.1.1 Rationale and Purpose. The reported existence of 60,845,000 illiterates in Bangladesh in 1984 <sup>1/</sup> suggests an important role that secondary school completers could play in their communities.

V.5.1.2 Overview. These young women (initially from the scholarship project areas) could be trained to organize and teach literacy classes in surrounding communities. USAID's role would be to enlist the support of NGOs engaged in rural development activities and help them develop literacy programs. Materials could be provided by the government or developed by USAID and the NGOs.

V.5.1.3 Past Experience. During the Second Five Year Plan (1980 - 85) a program of mass education was undertaken to make 40 million people, aged 11 to 45, literate by 1985. The program was suspended in 1982. The strategy for national literacy for the TFYP period aims to make 24 million people, aged 10 to 30, literate by 1990. <sup>2/</sup> NGOs are expected to play a major role in implementing the strategy.

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1/ Chowdhury, 1985, p. 4.

2/ Ministry of Education, 1985, p. 34.

DANIDA has been involved in a mass literacy program in Noakhali since 1979 and is now in the process of expanding it. DANIDA's experience has shown that girls who have completed eight to 10 years of school can be trained to be very capable literacy teachers.

V.5.1.4 Implementation. NGOs and USAID should exercise initiative in identifying how the government wishes to use the NGOs in the TFYP. NGO representatives should then select female secondary school completers on the basis of their interest and availability. Training should include both pre-service instruction and regular refresher courses thereafter (see Section V.4.2).

Contacts with illiterates who are interested in learning should be made by the NGOs working with the newly trained teachers. After classes are arranged, NGO supervisors should support the teachers with teaching materials and extra training as necessary. Teachers should be given an honorarium if possible.

V.5.1.5 Costs and Need for Continuing Assistance. As with most training programs, once an initial cadre of workers has been well trained, there is some likelihood that the program will be self-sustaining. Immediate costs are those necessary for NGO administration and perhaps the cost of teaching materials development and distribution.

V.5.1.6 Expected Effects. This option will give many secondary school graduates a role in the community, and perhaps delay their marriage and reduce their fertility, while also contributing to reduction of illiteracy.

## V.5.2 Income-Generating Activities/Training

V.5.2.1 Rationale and Purpose. With girls in Bangladesh marrying as young as 12 or 13, it is highly desirable to delay childbearing and/or increase child spacing. The purpose of developing an income-generating scheme for this target population would be to develop skills that would take the married women out of their homes and thus increase their chances of engaging in non-household-related production.

V.5.2.2 Overview of Initiative. USAID could contribute by increasing the supply of credit to women entrepreneurs, encouraging the development of women's cooperatives, and expanding

existing programs to ensure greater non-traditional vocational training.

V.5.2.3 Past Experience. The CARE program stands out for its work at the grassroots level and for incorporating women's input in decisions about what activities to pursue (see Section V.3.1.3 for other NGO examples). Because the CARE program offers what promises to be a successful and relatively inexpensive approach with community participation and responsibility, it will be examined and proposed as a model.

CARE selects villages where women have especially bad health problems, where the government has a health and family welfare center, but where no other NGOs are operating. The government linkage is for contraceptive distribution. Most of the women are illiterate. They organize in groups of 10 to 20, with an average size of 12 to 13. Each woman contributes Tk. 2 per week to a common fund, and although these women represent the lower strata of society, they somehow manage to make their weekly contribution. The women can borrow against the group fund on two signatures (no need for a male cosignor as in some credit programs). The women themselves decide on interest rates and how they will use the funds. Some groups have made as much as a 33 percent return on their investment in one year. Some grow out-of-season vegetables and sell them in the Gulshan area of Dhaka. One helped a woman set up a poultry-vaccinating business. CARE workers promote formation of the groups, provide needed training, and help keep books; for some groups CARE is considering introducing numeracy training. The only cost is the CARE staff, and, in a few instances, some small loans. The economic success of these women enhances their stature both in their homes and in the village.

The one weakness of this approach is that it may be too home-oriented, thus not encouraging the mobility of women. By organizing and making their own decisions, however, these women are expanding their horizons. As a result, they may eventually venture beyond their usual boundaries.

V.5.2.4 Implementation. USAID input could assist CARE's expansion plans (coverage of 200 villages compared with current operations in 45). CARE would continue to identify and train village motivators. Villages selected should all have family planning delivery services to ensure contraceptive use.

V.5.2.5 Costs and Need for Continuing Assistance. USAID would have to contribute to CARE's staff budget. This support might allow project expansion beyond the 200 villages now

contemplated. Costs would include staffing plus training both for CARE and for participants. Finally, an evaluation should be conducted at the end of a reasonable period (perhaps three years) to measure the effect of the program.

USAID could play a pivotal role in large-scale implementation of this program, an endeavor that the government is unlikely to support beyond providing contraceptives. This type of effort also offers an opportunity to measure what effect some forms of employment have on fertility and child spacing (see Chapter III).

V.5.2.6 Expected Effects. From a fertility perspective, the short-term effect of this program could be increased child spacing and the long-term effect, an overall decrease in children ever born per woman. From a development perspective, this program offers not only economic improvement for women, but it could also teach organizational skills and provide experience in planning and decision making by women for women.

### V.5.3 Male Population Education

V.5.3.1 Rationale and Purpose. Much of the effort of the fertility-reduction program in Bangladesh is focused on the female population. This is a male-dominated society, however, and the male's opinion is critical. From the guardian's decision to marry off daughters at an early age to the decision about contraceptive use by both males and females, the male voice predominates. The present effort in population education conducted by the government as part of the school program, however, is not sufficient to raise male awareness and involvement.

V.5.3.2 Overview of Initiative. Besides using the existing government infrastructure of family planning and health assistants, this project would use male community motivators to conduct discussions regularly in the community. Traditional healers and religious leaders could be particularly effective, as could radio. The following subjects would be emphasized: family responsibility, life planning, and the need to consider the wife as partner and not as servant. Benefits, such as improved family life, better health, and eventual economic advancement, should be stressed.

V.5.3.3 Past Experience. Social marketing programs use films, radio programs, and community activities to convince men that family planning is not "evil." The Bangladesh Family

Planning Association (funded by USAID) conducts male motivation campaigns, and UNFPA has worked with religious leaders. Most of these efforts, however, are directed toward contraceptive use. Although no one would deny the importance of contraceptive acceptance, male motivation should have a broader scope. A greater effort should be put into making males realize the potential economic value of the female if she reduces fertility, helping them accept the premise that the male bears equal responsibility with the female in lowering fertility.

V.5.3.4 Implementation. Training of traditional healers and religious leaders, among others, would be necessary. Where they are already engaged in these programs, their materials should be reviewed to make sure they are sufficiently broad. More extensive use of radio programming might be emphasized. Messages might include the religious precepts against abuse of women, and the demystification of the concepts that only sons are prized children, that it is necessarily the wife's fault if only daughters are born, and that it is the wife's fault if there are no children. Radio would serve to maximize the audience and thus result in considerable savings in materials and training used. Existing curricula on life planning and population education programs for illiterate peasants, which have been used in other less developed countries (e.g., the latter in Honduras), could be considered for adaptation to Bangladesh.

V.5.3.5 Costs and Need for Continuing Assistance. USAID would have to support the initial cost of developing new materials. Likewise, AID should provide the support necessary to develop modern and appropriate radio programming. This might involve bringing in foreign experts. Pretesting and impact testing of the mass media endeavor would constitute other costs of the program. Economic incentives for the traditional healers and religious leaders could be an additional cost, but if that is the case, the expense should be closely monitored to make sure the work is carried out properly.

V.5.3.6 Expected Effects. From a demographic perspective, the effects of this type of program would need to be measured in terms of changed attitudes, a difficult task. Nevertheless, it is recognized that male involvement is an integral part of any effort to lower fertility and thus efforts of this sort are well worth trying.

#### V.5.4 Education on Breastfeeding

V.5.4.1 Rationale and Purpose. Because of the association of reduced breastfeeding with greater educational attainment, it is important to inform women about the positive effect of breastfeeding on postpartum amenorrhea and child spacing, as well as on the health of their children.

V.5.4.2 Overview of Initiative. USAID might want to undertake an informal educational campaign through the mass media and through links with mothers' clubs and women's cooperatives to encourage women to breastfeed.

V.5.4.3 Past Experience. The Consumers' Association of Bangladesh began a campaign to encourage breastfeeding on September 1, 1983, with funding from the Ford Foundation. 1/

V.5.4.4 Implementation. Steps in implementation would involve undertaking research on breastfeeding practices of urban and rural women with different amounts of education. Some research on this subject has been conducted by the ICDDR, 2/ Particular attention should be paid to the deleterious effects on the nutritional status of the mother, if any. On the basis of the proposed research, target groups for the education campaign could be pinpointed. An NGO would then be selected to set up an advisory committee, hire appropriate staff, develop radio, television, and other appropriate materials, and engage in outreach work with mothers' clubs and women's cooperatives.

V.5.4.5 Costs and Need for Continuing Assistance. The types of costs involved would primarily be personnel and materials development and supply. Staff salaries would be a recurrent cost. The government might at some point want to include this initiative in its family planning program.

V.5.4.5 Expected Effects. The demographic effects would be longer birth intervals, lower fertility, and better child health. The impact of the initiative could be evaluated by follow-up surveys of breastfeeding practice and attitudes.

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1/ Halder and Khan, 1985.

2/ See Huffman et al., 1985.

## VI. OVERALL FINDINGS AND RECOMMENDATIONS

### VI.1 Findings

Given the high marital fertility, low age at marriage (Section II.1), and low overall status and educational attainment of women (Section II.3), USAID's female secondary scholarship program in Bangladesh has the very beneficial effects of increasing female enrollment (Sections IV.3.1.3 and IV.3.2.3), raising the age of marriage (Section IV.4.1.1), lowering desired family size (Sections IV.4.1.3 and IV.4.2), and positively affecting knowledge, attitudes, and practice of family planning (Section IV.4.1.2). These effects are consistent with the findings of research on the effect of education on fertility in Bangladesh and elsewhere (Chapter III). Furthermore, this project follows directly from one of the basic premises of U.S. population assistance:

The impact of development resources is maximized through coordination of policies and programs that broaden access to education and employment, especially for women, with the provision of modern family planning services. <sup>1/</sup>

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Female education, by raising the age of marriage, has a clear effect on the population growth rate in addition to creating a more informed population eager to make use of family planning services.

At this time, female employment (in the Western sense) remains low (Section II.3.2), the employment effect of the scholarship project seems minimal (Sections IV.3.1.4 and IV.3.2.4), and the effect of employment on fertility in Bangladesh has not been adequately studied (Chapter III). Nevertheless, the experience of other countries suggests that increased education should be associated with increased employment and lower fertility through the higher opportunity costs of raising children for a working woman.

The performance of SGS (Sections IV.2.2 and IV.5.2) and TAF (Section IV.5.3) in implementing the scholarship program was impressive, but administrative and management problems in the BACE project (Sections IV.2.1 and IV.5.1) confirmed previous evaluations.

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<sup>1/</sup> USAID, "Population Assistance," 1982, p. 5.

Although the scholarship program merits expansion, in light of financial and managerial constraints (Section IV.5.4), a gradual, careful expansion would seem most appropriate. It is unlikely that the Government of Bangladesh would begin to direct a more significant portion of its limited education funds to secondary education until after the turn of the century, since its short-term goal in the education sector is to reduce illiteracy through universalization of primary education, not necessarily to reduce fertility. In the interim, government expenditures on secondary education would be increased as a result of the scholarship programs's effect on demand for classrooms and teachers, which are subsidized by the government in even the private secondary schools. Therefore, a significantly expanded scholarship program over the next 20 years could play an important interim role in the education system of Bangladesh, as well as having the immediate and significant effects of raising the age of marriage and slowing the population growth rate.

There are a variety of alternatives to the scholarship program that through female education and employment could affect the age of marriage and subsequent fertility (Chapter V). Given the limited information available, however, it is not now possible to calculate the cost effectiveness of these options for comparison with the cost effectiveness of the scholarship program (Section IV.4.1.4).

## VI.2 Recommendations for Continuation and Expansion of the Scholarship Program

1. The BACE scholarship project should be continued for an additional year, but if there is not significant progress in meeting the detailed recommendations regarding administration, staffing, communication and coordination, and salaries contained in Section IV.5.1 of this report, USAID should seriously consider terminating funding and reallocating the funds to a similar project through another NGO.

2. The SGS scholarship project should be continued and expanded to an adjacent upazilla, provided that another equally well-qualified NGO is not available to operate the project, and provided that an additional layer of administration between TAF and the project in the new upazilla is not added. After another year of operation, a thorough evaluation of educational, community, and demographic effects should be carried out along lines similar to the 1984 and 1985 reviews of BACE. Collection of current baseline data would facilitate future evaluation.

3. TAF should continue to operate the current scholarship projects and should be allowed to implement any expansion of the program through upazilla-based NGOs. In addition, the detailed

recommendations in Section IV.5.3 regarding formalization of accounting and administrative guidelines for projects, facilitating employment of graduates, post-graduate monitoring, links with UEO's, future evaluations, and arranging meetings among TAF, USAID, and other donors to EACE should be implemented.

4. The scholarship program should be expanded as indicated below.

### VI.3 Recommendations Regarding Alternative Female Education and Employment Initiatives to Reduce Fertility

The cost-effectiveness of the various program options presented in Chapter V cannot be determined until pilot efforts are implemented and evaluated. The recommendations below are therefore based on a team consensus as to the expected effectiveness of the various options in raising the age at marriage and lowering fertility, as well as feasibility considerations. These allocations are suggested for the first two years of a five-year project.

Expansion of Scholarship Program	51.5%
Income-Generating Activities/Training for Unmarried Secondary Dropouts (V.3.1)	10.0
Non-Formal Primary Education (V.1.3)	10.0
Modification of Scholarship Program (V.2.2)	5.0
Population Education for Secondary Students (V.2.3)	5.0
Scholarships for Continuing Education for Graduates (V.4.1)	5.0
Post-Graduate Job Training for Secondary Graduates (V.4.2)	5.0
Income-Generating Activities/Training for Married Women (V.5.2)	5.0
Bond Scheme for Primary Students (V.1.4)	2.5
Support and Training for Secondary Teachers (V.2.4)	1.0

In addition, male population education (V.5.3) and education on breastfeeding (V.5.4) options should be supported through USAID's family planning program.

Should the overall level of funding be \$4 million per year, the above allocations would allow for:

- expansion of the scholarship program to approximately 15 upazillas (\$2,060,000)
- research on the effects of employment on fertility and pilot projects in income-generating activities/training for unmarried secondary dropouts (\$400,000)
- pilot projects in non-formal primary education (\$400,000)
- modification of the scholarship program in 15 upazillas (\$200,000)
- support for population education on a nationwide basis (\$200,000)
- scholarships for continuing education in the 15 upazillas covered by the scholarship program (\$200,000)
- post-graduate job training in selected upazillas covered by the scholarship program (\$200,000)
- pilot projects in income-generating activities/training for married women (\$200,000)
- pilot bond scheme for primary education (\$100,000)
- support and training for secondary teachers in 15 upazillas covered by the scholarship program (\$40,000)

In the last two to three years of a five-year project, funding allocations should be revised to reflect evaluations of the expanded and modified scholarship program and of the pilot projects for the other options. Funds should be reallocated to those projects that are most successful in meeting the goals of raising the age of marriage and reducing fertility.

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**Appendix A**  
**PERSONS INTERVIEWED**

APPENDIX A

PERSONS INTERVIEWED

Ayesha Abed Academy

- Mr. Shahidul Islam

Asian Development Bank (ADB)

- Mr. David Quane, Chief Technical Advisor, Community School project

The Asia Foundation (TAF)

- Dr. Richard Fuller, Representative
- Mr. G.R.A. Taylor, Chief Population Consultant

Bangladesh Association for Community Education (BACE)

- Mr. S.M. Al-Husainy, Chairman, BACE
- Mr. Chaudhury Sanawar Ali, Director, BACE
- others in field

Bangladesh Family Planning Association (BFPA)

- Mr. Mozammel Haque, Executive Director
- Ms. Rowshanara Zaman, Deputy Director, Research and Evaluation
- Ms. Hasan, Deputy Director for USAID Program

Bangladesh Institute for Development Studies (BIDS)

- Dr. M.R. Khan, Senior Research Fellow and Chief, Population Section

Bangladesh Rural Advancement Committee (BRAC)

- Dr. Fazle Hasan Abed, Executive Director
- others in field

Bangladesh Small and Cottage Industries Corporation (BSCIC)

- Mr. Saiyid Musharraf Husain, Director, Planning

Canadian International Development Agency (CIDA)

- Mr. Victor Carvell, Counsellor

Concerned Women for Family Planning (CWFP)

- Ms. Mustari Khan, Director

Cooperative for American Relief Everywhere (CARE)

- Ms. Margaret Tsitouris, Assistant Country Director

Danish International Development Agency (DANIDA)

- Mr. Paul Peterson
- Mr. Ove Elvekjaer

Department of Women's Affairs

- Ms. Gule Afruz Mahbub, Director

Ford Foundation

- Mr. Ken Marshall, Programme Officer

International Center for Diarrhoeal Disease Research/Bangladesh (ICDDR)

- Dr. Michael Koenig
- Mr. Chakraborty
- Mr. Sarder
- Dr. Zaman

International Labour Organisation (ILO)

- Mr. Md. Masihuzzaman

Ministry of Health and Population Control

- Mr. Aminul Islam, Additional Secretary

Ministry of Education

- Dr. Alam Chowdhury, Chief of Planning
- Dr. A.H.M. Karim, Director General, Secondary and Higher Education

Planning Commission

- Dr. W. C. Robinson, Advisor, Population & Development and Evaluation Unit
- Dr. Atiqur Rahman Khan, Joint Chief, Population Planning Wing
- Ms. Salma Khan, Joint Chief, Social Welfare and Women's Affairs
- Mr. Abu Ahmed Arif, Joint Chief, Education Wing

- Dr. M.A. Mabud, Deputy Chief, Population Planning Wing
- Ms. Shirin Jahangir, Assistant Chief, Population Planning Wing

Rural Development and Cooperative Division

- Mr. M.A. Awal, Secretary
- Ms. Selina R. Haider, Assistant Chief
- Ms. Sofia Islam, Joint Director, Women's Programme, BRDB
- Ms. Sehelí Ahmed, Deputy Director, Women's Programme, BRDB

Robert Nathan Associates

- Mr. Forrest Cookson
- Mr. Arthur O'Donnell
- Mr. George Behymer

Save the Children Fund (U.K.)

- Mr. Alex Gray, Director

Southern Gonounnayan Samity (SGS)

- Mr. Enamul Kabir, Project Director
- others in field

Swedish International Development Agency (SIDA)

- Ms. Siv Hermansson, First Secretary
- Ms. Shirin Persson, Assistant Programme Officer

United Nations Educational, Social and Cultural Organisation (UNESCO)

- Dr. J.R. Huntington
- Dr. C.K. Basu

United Nations Children's Fund (UNICEF)

- Mr. Tadenz Palac, Chief Education Section

United Nations Fund for Population Activities (UNFPA)

- Mr. Hasse B. Gaenger, Deputy Representative

United States Agency for International Development (AID)

- Dr. John Westley, Mission Director
- Ms. Bonnie Pounds, Deputy Mission Director

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- Mr. Robert Kramer, Chief, Program Office
- Ms. Turra Bethune, Deputy Chief, Program Office
- Ms. Suzanne Olds, Chief, Population and Health
- Ms. Sharon Epstein, Deputy Chief, Population and Health
- Dr. Sarah F. Harbison, Research and Evaluation Officer, Population and Health
- Ms. Sigrid Anderson, Chief, NGO Section, Population and Health
  
- Ms. Mary Lee McIntyre, Assistant Population and Health Officer Health
- Mr. Quasem Bhuiyan, Personal Services Contractor
- Mr. Mike Calavan, Deputy, Program Design and Evaluation
- Ms. Teresita Schaffer, Personal Services Contractor

Women for Women

- Ms. Jahanara Huq, President

World Bank

- Mr. John Bowlin
- Mr. Peter Whitford
- Mr. Faruqee Ahmed
- Ms. Wahida Huq

