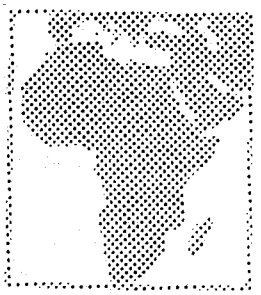

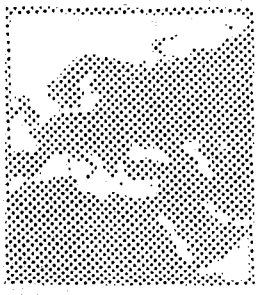

Family Planning Operations Research/ Asia Project

WOMEN'S SAVINGS GROUPS AND CONTRACEPTIVE USE UNDER SAVE PROGRAM

FINAL REPORT

BANGLADESH

APRIL, 1991

URC

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APRIL, 1991

BY

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Preface

The Bangladesh village woman is the most disadvantaged and undervalued member of the society, despite her contribution to the household economy which is rarely acknowledged. Save the Children (USA) has a women's program, which is aimed at improving the status of women, and thereby, giving them greater control over household decision-making. Some of the preliminary results from the SAVE Project Management Information System (PMIS) show that child survival is higher among savings group members than non-members, and contraceptive prevalence is higher and fertility lower among members than non-members.

An operations research study was undertaken to examine and document the impact of women's savings groups on contraceptive use. Several research activities were undertaken as part of this study; and this report presents the key findings from such activities as the baseline survey, comparison of the PMIS with the baseline survey data on selected variables, cost analysis, and the Mini-CPS.

I have received valuable support, assistance, and cooperation from several persons, who have been either directly or indirectly involved with this study. Ms. Sheryl Keller of USAID/Dhaka and Dr. Jack Reynolds of University Research Corporation, Hawaii, offered valuable suggestions on the proposal, and I am grateful to them. Also, Dr. Sidney Schuler, formerly with AID/Washington, offered valuable suggestions on the proposal, and I am grateful to her. Ms. Angela Van Rynbach, Ms. Leslie Harrison and Dr. M. Afzal of Save the Children (USA) deserve my appreciation for their cooperation at all stages of this study, as well as for their comments on an earlier draft of the report.

Program for the Introduction and Adaptation of Contraceptive Technology, Bangladesh (PIACT/B), collected and processed the data, under a subcontract from University Research Corporation (Bangladesh), and I am grateful to them for their help and assistance. I am particularly grateful to Mr. Abu Yusuf Choudhury, Executive Director, PIACT/B for his assistance at various stages of the study. I am grateful to Dr. Saifuddin Ahmed for his help and assistance in data processing and analysis.

I am indebted to all the respondents of this study for their patience and cooperation.

Finally, I appreciate the hard work put in by Mr. A. S. Mondle of University Research Corporation (Bangladesh) in typing this report.

Barkat-e-Khuda, Ph.D.

Executive Summary

INTRODUCTION

Increasing number of women in developing countries are now involving themselves in income-generating activities, although sociocultural restrictions still inhibit many women from accepting formal employment. Women's participation in economic activities does not only benefit themselves but also their earnings can make a significant contribution to the improvement of their families' welfare. Creation of female employment opportunities is, therefore, necessary for economic growth.

Numerous studies have reported that women's involvement in income-generating activities increases their status as well as the economic well-being of the family. Also, there is some evidence of a positive association between female employment and contraceptive behavior. The central hypothesis in this study is that if the rural women are involved in income-generating activities, that would help to raise their level of consciousness and give them a greater role in household decision-making, which eventually would motivate them to contracept, and thereby, limit their fertility.

Save the Children (USA) has a women's program, which is an integral part of its comprehensive integrated rural development program. Women's savings groups were introduced on an experimental basis in 1982 in 13 villages in 3 upazilas, and subsequently, were expanded to another upazila in 1986. Over 4,708 women were members of 505 savings groups in June 1990. Over the years, these indigenous small groups have evolved from simple "savings" groups to dynamic forums to improve the women's economic and social horizons, and enabled them to gain greater control over their lives and those of their children.

Some of the very preliminary results from the SAVE Project Management Information Systems (PMIS) show that the survival of daughters of savings group members is twice as high as their non-savings groups neighbors' daughters; a higher proportion of saving group daughters than non-savings group daughters are adequately nourished; contraceptive prevalence is higher among the members than non-members; and fertility is lower among the members than non-members. All these are, despite the fact that the members and non-members of savings groups have equal access to family planning (FP) motivation and services offered by SAVE; the only difference is their participation or non-participation in the savings groups. The hypothesis is that the savings groups, combined with FP motivation and services, stimulate greater adoption of FP through encouraging women who would not otherwise accept FP to do so.

OBJECTIVES

The overall objective of this operations research (OR) study is to examine and document the impact of Women's Savings Groups on contraceptive use. The specific objectives of the study are to: (i) examine the effects of the program on contraceptive use patterns of members of Saving Groups; (ii) examine the

of new experimental area in the program in 1990, suggesting that there has been an economy of scale on such outputs.

However, there is evidence of declining costs per unit of output of CS, WSG and FP activities, indicating that there are both potentials of expansion of such activities by SAVE in other areas as well as possibilities of replication of such activities by other NGOs. Cost-per-unit output can be minimized if SAVE reduces costs on personnel, other direct costs, and costs on travel, consultants and capital assets. These line items, together, constitute around half of the total costs of SAVE activities in Bangladesh. Also, the share of these items has been increasing over time. Thus, these costs can be minimized, provided the program is expanded horizontally.

CONTENTS

LIST OF TABLES and FIGURES

CHAPTER ONE

BACKGROUND

1.1 Introduction

Increasing numbers of women in developing countries are now involving themselves in income-generating activities, although socio-cultural restrictions still inhibit many women from accepting formal employment (United Nations, 1987). Women's participation in economic activities does not only benefit themselves but also their earnings can make a significant contribution to the improvement of their families' welfare. Creation of female employment opportunities is, therefore, necessary for economic growth. Save The Children (USA) and other organizations in Bangladesh have undertaken various income-generating activities in their programs for the women. The argument is that the involvement of rural women in such activities alongside functional literacy and the use of primary health care facilities would enthuse certain degree of economic and social independence among them that would help raise their consciousness, enhance their ability to think, and thereby, ensure them a greater role in the household decision-making process.

1.2 Conceptual Framework

There is empirical evidence on the relationship between women's participation in income-generating activities and their contraceptive behavior in developing countries. While the literature on such specific issues as women's economic activities through saving groups and its impact on contraceptive behavior is rare, the purpose, here, is to explore a causal link between involvement in income-generating activities and contraceptive behavior.

1.2.1 Profile of the Rural Bangladeshi Women

Traditionally, the women are subordinated and disadvantaged in rural Bangladesh. They are trained to perform the role of a docile daughter, a compliant wife, and a dependent mother. Unlike men, they are treated as non-productive dependent family members, an economic burden to the family and confined within the boundary of their household (Mannan, 1989). According to our socio-cultural beliefs, women are inferior to men. They constitute the largely neglected segment of the population, and have lower status compared to men in every sphere of socioeconomic life (Chaudhury and Ahmed, 1980; Mannan, 1989). In Bangladesh men live, on average, longer (55.6 years) than women (53.8 years). In the 1981 census, literacy rates for women were only 16.0 percent and for men 31.0 percent; and in both the 1975 and 1982 nutrition surveys, the incidence of undernutrition and malnutrition was higher among the women than men. A village woman is much less likely than a village man to receive treatment for illness at hospitals. She gets married in her late teens; bears her first child within a year after her marriage, has as many as 7 or 8 pregnancies resulting in 6 or 7 live births of which 4 or 5 children ultimately survive (Sternin, 1989). The subordinate position of women is due to the absence of their control over the means of production and the prevailing socio-cultural and religious values.

Discrimination toward women begins from the day of their birth. Often, the birth of a girl is the occasion for less rejoicing and more worry than that of a boy (Schaffer, 1986). As the girls grow up, they are taught that virtue lies in sacrifices; submit to the will of their seniors; hold back their desires and needs in favor of male members in the family; eat less than they would like; and work hard within their house (Schaffer, 1986; Cain, 1979). As they grow up to adulthood, they are socialized to accept the preferential treatment given to men in terms of allocation of food, clothing, education, and health facilities (Mannan, 1989). Jahan (1975) found that 70 percent of rural and 80 percent of urban men consider women to be inferior to men, and motherhood is the most desirable role for women. The reason is partly economic. As estimated by Cain (1979), men compared to women produce more than they consume as they enter the productive ages.

In Bangladesh, particularly in rural areas, a woman's mobility outside the village is generally restricted, and when she goes out she is generally veiled in burqa (purdah), and accompanied by an adult male member of the household. Thus, her mobility and economic activities are, largely hindered by the practice of purdah or the tradition of isolation of women. Generally, only such economic activities, which are carried out inside the household, as seed preservation; grain storage; rice processing; poultry raising; livestock care; kitchen gardening; and making of mats, quilt, nets and rope, are carried out by women (Abdullah and Zeidenstein, 1982; Barkat and Chowdhury, 1988; Quddus, Solaiman and Karim, 1985).

In the Bangladesh value system, a women feels an obligation to produce a son. Given the economic realities in the villages, a rational strategy of economic risk aversion dictates that a woman has a number of male children, large enough to assure that at least some of them survive to adulthood (Khuda, 1977, 1980a and 1988; Caldwell, 1977; Caldwell et al., 1980; Cain, 1977, 1979). Nyrop et al. (1976) observed that in rural Bangladesh, "a woman only begins to gain respect and security in her husband's (or his father's) household if she produces boys".

Bangladeshi rural women are vulnerable to changes in their lives should their husbands die and no son is around to take care of her. Also, the divorced women whose marriage ends because of childlessness or failure to produce sons face a similar situation. If they do not re-marry, they are in their desperation to make a respectable living by their own. If they can accumulate some savings, however, they are able to exercise their influence usually through indirect means in households decision-making. However, her importance is less if she does not control wealth and becomes vulnerable if her husband dies (Schaffer, 1986).

Men considerably outweigh women in gaining access to educational opportunities in rural areas. And among those women who are fortunate enough to enter school, a larger proportion compared to men dropout from schools (Nahar, 1977). The reason is quite obvious, since the daily household activities for a rural housewife generally include washing, preparing cow-dung cakes, looking after poultry and live stock, husking, parboiling, drying and storing of the paddy, etc. Formal schooling, most often, is therefore considered useless and unproductive in a traditional agrarian society.

1.2.2 Women and Work

Women's participation in productive activities is determined by the economic structure as well as prevailing social conditions. There has been an upward trend in the participation of women in economic activities in developing countries (Hossain and Afsar, 1989). A large household survey conducted by the Bangladesh Institute of Development Studies (BIDS) in 1979 reported that about 13 percent of the women in working ages participated in income-generating activities; and among them, about three-fifths were engaged in various home-based activities and one-quarter in livestock and other miscellaneous jobs (BIDS, 1981). The Rural Industries Study Project of BIDS (1981) also found that large proportions of rural women were engaged in such activities as rope and cord making, fish net making, mat making, paddy husking, basketary, pottery, oil making by **ghani**, and silk and handloom weaving. Rural women can actively involve themselves in such activities without violating the social norms since they do not have to go out of their homes. While census and surveys report that a low proportion of the women in Bangladesh participate in economic activities, in-depth studies show their widespread involvement in various activities (Khuda, 1978 and 88; Hossain and Afsar, 1989)[1]. The increasing mechanization of agricultural work has, however, considerably reduced female employment opportunities (McCarthy, 1978, 1980; Cain et. al., 1979). Although there are problems of women's involvement in economic activities in a male-dominated society like Bangladesh, the potentials of women's economic contribution in Bangladesh is now well established (Nyrop et al., 1976; Chaudhury and Ahmed, 1980; Hashemi, 1986).

Regarding potentials for income-generating activities for rural women, Dixon (1980) suggested that although various small-scale income-generating activities could be performed within the household, emphasis should be given on centralized work place which would allow "to take advantage of improved technologies, opportunities for literacy and skill training, and the potential interaction and collective decision-making".

The rural Bangladeshi women work extremely long hours, either in traditional household tasks or paid employment (Marum, 1982). However most often, their contributions remain invisible and unrecognized (Jenneke and Beurden, 1977; Khuda, 1980 (b and c); Duza, 1989; Jahan, 1973). Commenting on the system, Papanek (1973) concluded that farming is a "two-person" occupation, where the wife's role is non-paid and non-recognized.

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1 *Also, women's participation in economic activities is often under-reported, because it violates the basic norm of the Bangladesh society which regards women to be in protection and shelter (Hossain and Afsar, 1989). According to the 1984-85 Labor Force Survey conducted by the Bangladesh Bureau of statistics (BBS), about 75 percent of the women interviewed were engaged in domestic work, although many of them could have contributed to income-generating or expenditure-saving activities (Hossain and Afsar, 1989). Further, the reported low female labor force participation rates in traditional, agrarian societies such as Bangladesh is also due to definitional problems (Khuda, 1978 and 82).*

Studies have been conducted to estimate time use by rural women in economic activities (Faruk and Ali, 1977; Khuda, 1982, 1988; Rahman, 1986). Farouk and Ali (1979) estimated that only 30 percent of the housewives were involved in income-generating activities, spending, on average, 1.3 hours a day but nearly 95 percent of the housewives spend approximately 4.7 hours a day for expenditure-saving household work, excluding food preparation. Cain (1977) found that rural women spent, on average, 9.3 hours a day for all activities, including about 1.8 hours a day spent on income-earning activities. Khuda (1982) estimated that rural women spent, on average, 2.5 hours a day in economic activities. Rahman (1986) found that about 91 percent of the rural women participated in economic activities and spent, on average, about 2.1 hours a day. While the duration of involvement in economic activities by village women varies, that women's participation in these activities is widespread is clearly discernible.

Though rural women are generally engaged in income-generating activities on a self-employed basis, they often need both fixed and working capital for their operation (Hossain and Afsar, 1989). Poor women either lack resources for developing such enterprises on a large scale (RISP, 1981; Westergaard, 1983; Rahman, 1986), or most of them do not have control over household resources (Hossain and Afsar, 1989). On the other hand, women's access to institutional credit has so far been very little because of problems of security and collaterals which most women cannot provide (Hossain and Afsar, 1989).

Such organization as the Grameen Bank, the Swanirvar Bangladesh, BRAC and Proshika have, however, been successfully providing credit to rural women for promoting employment and income-generating activities. These organizations primarily help organize landless women through cooperative groups.

Women's access to credit has potential for their socioeconomic upliftment; however, the effect depends on who eventually uses the credit money. It has been found that 12 percent of women borrowers surrendered the whole and 13 percent surrendered up to 50 percent of the amount of loans to their male guardians (Rahman, 1986). Hashmi (1987) noted that 21 percent were not involved in the utilization of credit at all. Also, this type of surrender, whether willful or unwillful, of the borrowed money has been reported by other studies (Bangladesh Bank, 1983 & 1987). But a recent evaluation of women's entrepreneurship development program reported that over three-fifths of the credit provided to rural women are utilized for the purpose for which the credit was issued, although not entirely by the women themselves (Hashemi, 1987).

1.2.3 Save the Children (USA): Women's Program

Save the Children has a women's program operating in a few selected areas of rural Bangladesh as an integral component of its comprehensive, integrated rural development program, which includes health, education, income generation, credit, agriculture, pisciculture, family planning (FP) and maternal-child care. The program began in 1976 by offering family planning services only. The integration of other activities began in 1978, when SAVE field staff became development agents. Through various local committees, SAVE serves roughly 63,000 people in 25 villages in 4 upazilas of the country, namely, Nasirnagar, Mirzapur, Ghior, and Rangunia. In these villages, SAVE workers

help identify community needs, and devise and implement strategies to address them.

Savings groups were introduced on an experimental basis in 1982 in 13 villages of Nasirnagar, Mirzapur and Ghior Upazilas, and in 4 villages of Rangunia Upazila in 1986. In Nasirnagar, such group formation began on an experimental basis in 5 villages in 1982 (hereinafter called the "old experimental villages"), and was expanded to 3 adjacent villages in 1989 (hereinafter called the "new experimental villages"). The FP program in the old experimental villages in Nasirnagar Upazila is generally run by a team of a male and a female community worker, recruited from within the village by the village development committees with financial assistance from SAVE. The starting salary of each female worker is Tk.750 per month. The current lowest salary that a female worker receives is Tk.847 per month, and the current highest is Tk.1044. The male workers receive higher salaries, and their starting salary is Tk.1000 per month. The current lowest is also Tk.1000, while the current highest is Tk. 1371. The team covers approximately 225 families, irrespective of the women's membership status in the groups, and meets with eligible couples on a regular basis, providing services in the areas of health, nutrition and family planning in close collaboration with SAVE field staff.

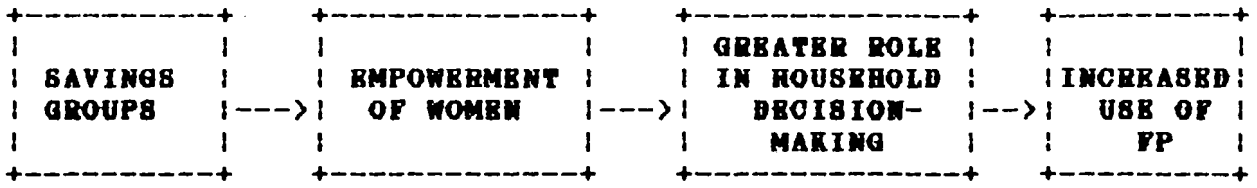
The activities of the village teams are supervised by SAVE staff, who are recruited from outside the village. In the new villages in Nasirnagar Upazila where project activities began in late-1989, there are several short-term volunteers who work on a purely voluntary basis, and their work is supervised by SAVE field staff, recruited from outside the village.

Four thousand seven hundred eight women are now members of 505 savings groups. The membership in the savings groups represents about 29 percent of all women served by the program. Over the years, these indigenous small groups have evolved from simple "savings" groups to dynamic forums to improve the women's economic and social horizons, and enabled them to gain greater control over their lives and those of their children.

Utilizing their own savings and matching funds and grants from SAVE, members of the savings groups undertake such income-generating projects as rice processing, handicrafts, and poultry-raising. A part of the income earned from these projects directly benefits their families by supplementing the household budget, and the balance is reinvested in additional income-generating activities.

SAVE has developed a computerized Project Management Information System (PMIS) that is made up of individual records on each person in the catchment area. The PMIS is based on service statistics on visits, referrals, vital events (births, deaths, etc.), and some other important variables which are entered onto the computer on a regular basis. Some of the very preliminary results from the PMIS show that daughters of women's savings group members between the age of 1 and 5 years survive at a rate twice as high as their non-savings group neighbors' daughters; and 57 percent of savings group daughters are adequately nourished compared to 46 percent of their non-savings group neighbors' daughters. The CPR is higher among the members (46%) than non-members (31%); and the total fertility rate (TFR) is lower among the members (3.3) than non-members (4.5). Thus, the PMIS data show a

measurable increase in the nutritional status of children of mothers belonging to savings groups, a dramatic increase in the survival of their female children, and increased contraceptive use and lower fertility among the members than non-members of such groups. SAVE believes that the process can be diagrammed as shown below:



It should be noted here that both the members and non-members of savings groups have equal access to FP motivation and services offered by SAVE; the only difference is their participation or non-participation in the savings groups. The hypothesis is that the savings groups, combined with FP motivation and services, stimulate greater adoption of FP through encouraging women who would not otherwise accept FP to do so. That is, the savings groups stimulate demand among women who might not be likely to be FP acceptors because of male dominance, religiosity, strong son preference, etc., the degree of which is reduced as a result of women's involvement and participation in savings group activities.

However, in the absence of any outside evaluation to support the above findings a need was felt to undertake an independent study to validate and reinforce the findings based on SAVE PMIS. Also, a need was felt to document the process whereby the savings groups influence the contraceptive behavior of their members.

1.3 Objective of the Study

The overall objective of this operations research (OR) study is to examine and document the impact of Women's Savings Groups on contraceptive use. The specific objectives of the study are to:

1. examine the effects of the program on contraceptive use patterns of members of Saving Groups;

2. examine the causal relationships between Women's Savings Groups and contraceptive use, i.e., the process whereby Savings groups affect members' contraceptive use;

3. assess the accuracy of PMIS data on selected variables; and

4. measure the cost-per-unit of output of three of the major program activities, namely, Women's Savings Groups, Child Survival, and Family Planning.

1.4 Policy Implications

Recent research has shown that supplementary components can sometimes increase the effectiveness of a FP program. FP services offered in conjunction with such other services as MCH services, are utilized more often than stand-alone programs. While this is generally accepted, less is known about the impact of women's savings groups on FP use and the cost of implementing such a program. Also, service providers and donors remain a bit skeptical that there is a causal link between savings groups and contraceptive use. If the impact of savings groups on FP can be clearly demonstrated, SAVE may be encouraged to replicate the intervention in other areas of the countries. Also, other FP providers, especially NGOs, may be encouraged to replicate the intervention. This is more so in the case of those FP NGOs which have been experimenting with various income-generating and development interventions.

1.5 Organization of the Report

The report has two parts. The first addresses the first, third, and fourth specific objectives; and the second deals with the second specific objective.

CHAPTER TWO

METHODOLOGY

2.1 Introduction

A typical OR study consists of three phases: problem analysis, solution development and solution validation. In this study, the first two phases were already completed. The problem is the inferior and subordinate status of women, and the intervention (solution) is Save The Children's Women's Savings Groups, which helps women learn to become planners, investors, and family benefactors. The hypothesis is that this, in turn, leads to adoption of new behaviors, including acceptance and use of family planning. This study emphasizes the third phase in the OR process, i.e., validating the impact on family planning use of SAVE the Children's Women's Saving Groups in 5 old and 3 new experimental villages in Nasirnagar Upazila of Brahmanbaria District in the Chittagong Division.

2.2 Study Design

The study uses a quasi-experimental design to test the effects of women's savings groups in five villages in Nasirnagar Upazila where the program has been operating since 1982 ("old villages"), and three villages in the same upazila where program activities began in 1989 ("new villages"). Two "comparison" villages were also selected at random from among the villages of the same upazila. The experimental and comparison villages are largely similar in terms of household size, age, parity, and total fertility of the married women of reproductive age (MWRAs), etc.

The overall design is shown below, where X_1=intervention in the old villages, X_2=intervention in the new villages, S_1=baseline survey, O=observation (i.e., 2 rounds of in-depth investigations), C=comparison between PMIS and baseline survey on selected variables, and S_2=Mini-CPS. The important parts of the design are: the baseline survey, two rounds of in-depth investigations, comparison between the PMIS data and the baseline survey on selected variables for the old villages, and the Mini-CPS. Also, relevant cost data have been obtained from SAVE/Dhaka Office.

Area	Inter-vention	Base line Survey (BS)	Round 1 In-depth Investi-gation	Comp. bench-mark (PMIS) data with BS data	Round 2 In-depth Investi-gation	Mini-CPSs
Experimental Area[1] (OLD)	X_1	S_1	O_1	C	O_2	S_2
Experimental Area[2] (NEW)	X_2	S_1	O_1		O_2	S_2
Comparison Area		S_1			O_2	S_2

2.3 Selection of Sample

2.3.1 Baseline Survey

It was originally planned that the baseline data for the experimental villages would be extracted from the SAVE PMIS. However, it was subsequently found that variables relevant to this study were not entered onto the PMIS. Also, the socioeconomic data for the old villages were outdated, having been collected in 1986. After several review meetings with SAVE program managers, it was, therefore, decided that the baseline survey would also be conducted in the 5 old and 3 new experimental villages, in addition to the 2 comparison villages, as originally proposed.

The sample of MWRAs for the baseline survey was selected in the following manner:

First, a complete listing of all married women of reproductive age (MWRAs) was prepared for each village. For the eight experimental villages, the listing of MWRAs was provided by SAVE from its PMIS. In the two comparison villages, the listing was done by the field enumerators.

Second, the MWRAs listed for the five old experimental villages were categorized into two groups: savings group members and non-members. The categorization of the MWRAs into savings and non-savings groups for the old experimental villages was considered necessary, because the two groups of women are likely to differ in their behavior and attitude.

Third, a 30 percent sample of the MWRAs was drawn from each of the eight experimental villages, and 150 MWRAs from each of the two comparison villages. For each of the five old experimental villages, the samples were equally distributed between savings group members and non-members. And finally, the required number of respondents was randomly selected.

The distribution of the MWRAs listed and samples selected for the baseline survey is shown in Table 2.1. During data collection, it was found out that the MWRA listing provided by the SAVE PMIS appeared not to be updated. Out of those sampled MWRAs who were shown as savings group members in the old experimental villages, the listing showed that about 30 percent had actually left the group. And, in the new villages, out of the non-member MWRAs who were drawn from the PMIS, about two-fifths had already joined the savings groups. These discrepancies were due mostly to errors in data retrieval, which occurred because the PMIS system is complex and this was the first time data were retrieved in the particular format required by URC. (SAVE has since hired and trained a full-time computer systems manager who retrieved all the remaining data required by URC without errors.) The lesson drawn was that it is better to do an independent listing of households and couples to be able to draw the samples.

TABLE 2.1 : Distribution of Listed and sampled MWRAs by Type of Village and Savings Group Membership Status (Baseline Survey)

VILLAGE	EXPERIMENTAL				COMPARISON		TOTAL	
	Member		Non-Member		Listed	Sampled	Listed	Sampled
	Listed	Sampled	Listed	Sampled				
OLD								
Kunda	351	165	748	165	-	-	1,099	330
Muslendpur	138	53	219	54	-	-	357	107
Gokorno	291	138	637	139	-	-	928	277
Choirkuri	41	23	114	24	-	-	155	47
Nurpur	347	189	913	190	-	-	1,262	379
Sub-Total	1,170	568	2,631	572	-	-	3,801	1,140
NEW								
Brahmanshashon	-	-	326	98	-	-	326	98
Chotipura	-	-	187	56	-	-	187	56
Patanishar	-	-	53	16	-	-	53	16
Sub-Total	-	-	566	170	-	-	566	170
COMPARISON								
Sreeghar	-	-	-	-	300	150	300	150
Burishar	-	-	-	-	300	150	300	150
Sub-Total	-	-	-	-	600	300	600	300
TOTAL	1,170	568	3,197	742	600	300	4,967	1,610

- denotes Not Applicable

2.3.2 Comparison of Selected Variables from the PMIS with the Baseline Survey

Data on selected variables were extracted from the PMIS to be compared with the baseline survey for two reasons: (a) to assess changes in the 5 old villages in terms of the selected variables during the period 1986-90, and (b) to assess the accuracy of PMIS data on selected variables such as age and education.

The methodology for the comparison consisted of the following steps:

(i) A set of demographic, socioeconomic, and health-related variables that were available in both the PMIS and baseline survey data sets were identified;

(ii) The MWRAs for whom relevant data from both the PMIS and baseline survey were identified;

(iii) Two data sets with identified MWRAs and variables were created by extracting data from the 1986 PMIS and the 1990 baseline survey; and

(iv) Selected variables from the PMIS were compared with data from the baseline survey.

2.3.3 Mini-CPS

The sample of MWRAs for the mini-CPS was selected in the following manner:

First, based on the lesson learned at the time of the baseline survey, a complete listing of all MWRAs was prepared for each village by sending listers for the study villages. And, the second and third steps involved were similar to those used in the baseline survey.

The distribution of the MWRAs listed and samples selected for the Mini-CPS is shown in Table 2.2.

Table 2.2 : Distribution of Listed and Sampled MWRAs by Type of Village and Savings Groups Membership Status (Mini-CPS)

VILLAGE	EXPERIMENTAL				COMPARISON		TOTAL	
	Member		Non-Member					
	Listed	Sampled	Listed	Sampled	Listed	Sampled	Listed	Sampled
OLD								
Kunda	410	213	635	133	-	-	1,045	346
Muslendpur	112	58	274	58	-	-	356	116
Gokorno	173	91	786	165	-	-	959	255
Choirkuri	38	20	112	24	-	-	150	44
Nurpur	343	177	966	188	-	-	1,309	365
Sub-Total	1,076	559	2,773	567	-	-	3,849	1,126
NEW								
Brahmanshashon	90	48	221	47	-	-	311	95
Chotipura	82	43	107	22	-	-	189	65
Patanishar	6	4	49	26	-	-	55	30
Sub-Total	178	95	377	95	-	-	555	188
COMPARISON								
Sreeghar	-	-	-	-	357	150	357	150
Burishar	-	-	-	-	375	150	375	150
Sub-Total	-	-	-	-	-	-	732	300
TOTAL	1,254	654	3,160	662	732	300	5,136	1,616

- denotes Not Applicable

2.4 Key Variables

The principal variables considered for the surveys are:

a) Background Characteristics: household size, age, parity, number of living children, level of education, income, ownership of land and household assets, health status, standard of living, etc.; and

b) Contraceptive Use: ever use and current use of contraception, reasons for contracepting, reasons for discontinuation, future intention to contracept, reasons for non-use, and sources of supplies and services.

2.5 Data Collection Instruments

Two sets of questionnaires were developed for the baseline survey (Appendix I). The questionnaire used in the comparison villages included the following: socioeconomic and demographic characteristics, current and past use of contraception, reasons for discontinuation of family planning methods, reasons for non-use of contraception, sources of contraceptive supplies and services, immunization status of a specified cohort of children, sources of water supply, and availability of sanitation facilities, etc. The other questionnaire, administered in the experimental villages, included additional questions related to membership status of the respondents.

The Mini-CPS questionnaire (Appendix II) was a much shorter questionnaire than the baseline survey questionnaire, focussing only on such relevant variables as duration of membership, household size, age, parity, number of living children, level of education, land ownership, household assets, health status, use of contraceptives, reasons for contracepting, reasons for discontinuation, future intention to contracept, reasons for non-use, and source(s) of supplies.

CHAPTER THREE

CHARACTERISTICS OF THE STUDY POPULATION

Since the ultimate objective of this study is to see whether contraceptive use is higher among the members than non-members, it is appropriate to see whether the members and non-members have comparable characteristics; otherwise, some of the differences in contraceptive use between the members and non-members could be also due to differences in their characteristics and cannot be fully accounted for by differences in their membership status. A composite picture of these variables is given in Table 3.1.

TABLE 3.1

Selected Characteristics of the Respondents

VARIABLES	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGE	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non Member		
1. Mean House-hold Size	6.51	6.30	6.64	6.66	6.45	6.26	6.89	6.70	6.44	6.97
2. Mean Age	30.6	28.1	30.6	28.4	28.4	27.3	30.2	29.2	29.3	30.2
3. Mean Number of Children Ever Born	4.8	4.2	4.8	4.0	4.4	4.2	4.6	4.8	4.3	4.42
4. Mean Number of Living Children	3.5	3.1	3.6	2.9	3.3	3.1	3.4	3.1	3.2	3.3
5. % Pregnant	7.8	9.3	10.9	11.5	4.2	9.9	14.7	14.7	12.3	16.1
6. TMFR Σ_{20}^{49}	5.32	6.19	6.20	6.80	6.63	4.70	4.00	6.22	6.57	5.87
7. Mean Schooling	1.11	0.86	1.67	0.84	0.85	1.04	0.57	1.67	1.62	0.51
8. Mean Landholding	1.70	1.66	1.36	1.21	1.48	1.55	1.62	1.43	1.85	2.04
9. Mean Income	10,596	11,293	NC	NC	10,271	9,858	NC	NC	7,003	NC
N	385	753	559	567	71	101	95	95	300	300

Note : ' NC ' indicates that data were not collected.

3.1 Demographic Characteristics

The demographic variables covered are household size, age, number of children ever born, number of living children, pregnancy status, and desire of children.

3.1.1 Household Size

By definition, a household includes all persons who eat and live together in the same dwelling unit. The mean household size was higher among the members than nonmembers in the baseline survey for both the old and new villages, and also in the Mini-CPS for the new villages, although the difference was not pronounced. The mean household size was higher in all comparable groups and areas in the Mini-CPS than baseline survey, although the difference was not pronounced (Table 3.1). Table 3.2 shows that there is a heavy concentration of households with four or more members in the study area. The proportion of households in different size categories differs between the members and non-members, and the difference is statistically significant in the old villages but not in the new villages.

TABLE 3.2

Percentage Distribution of the MWRAs by Household Size

HOUSEHOLD SIZE	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGE	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member		
1 - 3	6.3 (24)	11.1 (84)	8.4 (47)	14.5 (82)	14.1 (10)	10.9 (11)	13.7 (13)	9.5 (9)	9.0 (27)	10.3 (31)
4 - 6	46.6 (180)	42.9 (323)	42.8 (239)	41.8 (237)	32.4 (23)	47.6 (48)	36.8 (35)	47.4 (45)	44.3 (133)	40.0 (120)
7 +	47.1 (181)	46.0 (346)	48.8 (273)	43.7 (248)	53.5 (38)	41.5 (42)	49.5 (47)	43.2 (41)	46.7 (140)	49.7 (149)
Total N	100.0 385	100.0 753	100.0 559	100.0 567	100.0 71	100.0 101	100.0 95	100.0 95	100.0 300	100.0 300
Mean SD	6.51 2.12	6.30 2.21	6.64 2.76	6.66 3.59	6.45 2.54	6.26 2.19	6.89 2.63	6.70 2.44	6.44 2.18	6.97 3.18

Note : The figures in parentheses give the number of MWRAs

$X^2 = 7.42$	$X^2 = 10.65$
$P = .024$	$P = .0049$

Comparable benchmark (PMIS 1986) and baseline (1990) data show that the mean household size has declined in the old villages; however, the decline is discernible only among the nonmembers. (Appendix Table 3.1).

3.1.2 Age

The mean ages ranged between 27.3 and 30.6 (Table 3.1). Members were older than non-members in both the old and new villages, older by over two years in the old villages and one year in the new villages. About half of the MWRAs were between 20 and 29 years of age, while the concentration in the young and old ages was relatively small. The proportion in the different age groups differs between the members and non-members, and the difference is

statistically significant in the old villages, but not in the new villages (Table 3.3). Among the members, the proportion in the younger ages (less than 30 years) was lower in the old than new villages, suggesting that more women from the younger ages in the new than old villages were interested to participate in saving groups.

TABLE 3.3

Percentage Distribution of the MWRAs by Age

AGE	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGE	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non- [a] Member	Member	Non- [a] Member	Member	Non-Member	Member	Non-Member		
> 20	4.7 (18)	12.3 (93)	4.3 (24)	8.6 (49)	15.5 (11)	14.9 (15)	5.3 (5)	7.4 (7)	9.0 (27)	2.0 (6)
20 - 29	43.4 (167)	49.7 (374)	40.4 (226)	50.6 (287)	47.9 (34)	52.4 (53)	49.5 (47)	48.4 (46)	46.0 (138)	42.0 (126)
30 - 39	39.2 (151)	29.1 (219)	42.0 (235)	27.2 (154)	23.9 (17)	22.8 (23)	23.2 (22)	30.5 (29)	32.3 (97)	42.0 (126)
40 - 49	12.7 (49)	8.9 (67)	13.7 (74)	13.6 (77)	12.7 (9)	9.9 (10)	22.1 (21)	13.7 (13)	12.7 (38)	14.0 (42)
TOTAL N	100.0 385	100.0 753	100.0 559	100.0 567	100.0 71	100.0 101	100.0 95	100.0 95	100.0 300	100.0 300
MEAN SD	30.6 7.20	28.1 7.67	30.6 6.99	28.4 7.86	28.4 8.04	27.3 7.29	30.2 8.17	29.2 7.96	29.3 7.48	30.2 6.95

Note : The figures in parentheses give the number of MWRAs

X^2 = 29.2	X^2 = 32.68
P = .000	P = .0000

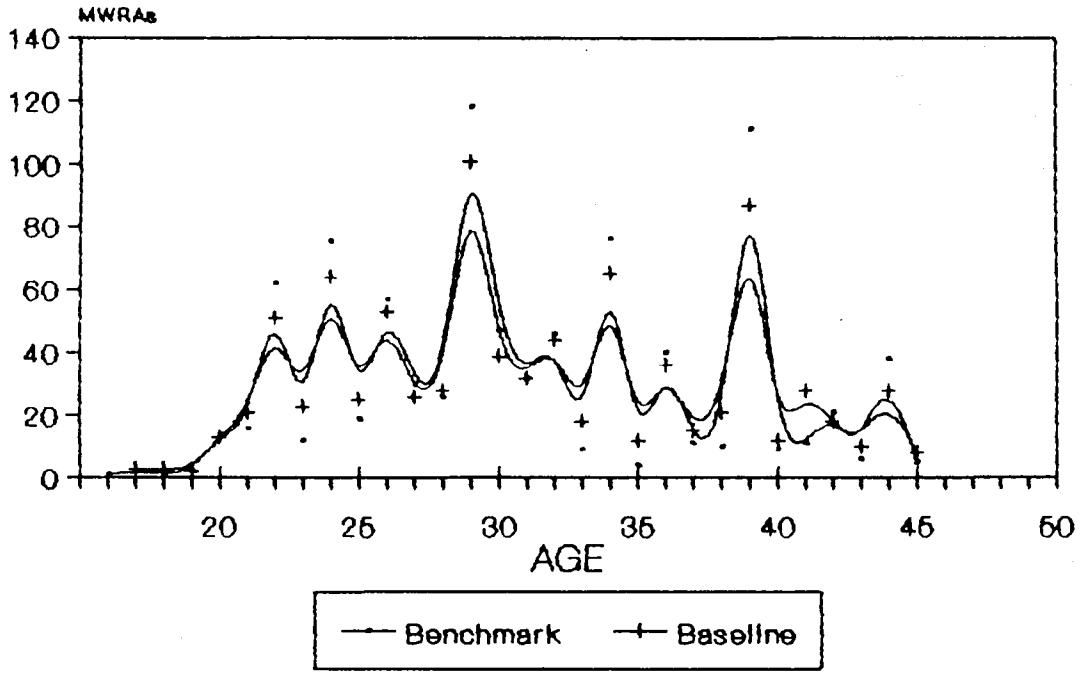
[a] Significant at <.05 level

The difference in the mean ages between comparable samples in the PMIS and baseline data is about 3.5 years, indicating that the quality of age data in both the PMIS and baseline survey is good (Appendix Table 3.1). Further to test the accuracy of PMIS age data, the distribution of MWRAs by age from

both the PMIS[1] (benchmark) and comparable baseline data are shown in Figure 3.1. The two curves overlap, except for a few ages, suggesting that PMIS age data are quite accurate and reliable.

Figure 3.1

Distribution of MWRAs by Age, 1986 and 1990



3.1.3 Children Ever Born

The mean number of children ever born was slightly higher among the members than non-members in both the old and new villages, and this is evident from both the baseline survey and Mini-CPS (Table 3.4). Members had, on average, about 0.7 children more than non-members in the old

[1] *PMIS (1986) age data have been made comparable to the baseline (1990) age data by adding 3.5 years to the age of all MWRAs in the PMIS, since the interval between the PMIS and baseline survey is about 3.5 years.*

villages, and the difference was less pronounced in the new villages. A higher proportion of the members than non-members had four or more children ever born, and the difference is statistically significant in the old but not new villages. Data also show no discernible change in the mean and the proportion in different parity groups between the baseline survey and Mini-CPS, except among those non-members in the new villages with upto 3 children.

TABLE 3.4

Percentage Distribution of the MWRAs by Number of Children Ever Born

CHILDREN EVER BORN	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGE	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-[a] Member	Member	Non-[a] Member		
0	3.4 (13)	9.6 (72)	5.2 (29)	8.6 (49)	5.6 (4)	1.0 (1)	5.3 (5)	8.4 (8)	5.7 (17)	5.7 (17)
1 - 3	32.2 (124)	39.3 (296)	31.5 (176)	44.1 (250)	36.6 (26)	46.5 (47)	32.6 (31)	37.9 (36)	39.3 (118)	36.7 (110)
4 +	64.4 (248)	51.1 (385)	63.3 (354)	47.3 (268)	57.8 (41)	52.5 53)	62.1 (59)	53.7 (51)	55.0 (165)	57.7 (173)
TOTAL N	100.0 385	100.0 753	100.0 559	100.0 567	100.0 71	100.0 101	100.0 95	100.0 95	100.0 300	100.0 300
MEAN	4.8	4.2	4.8	4.0	4.5	4.3	4.6	4.3	4.4	4.4

Note : The figure in parentheses give the number of MWRAs.

$X^2 = 24.6$	$X^2 = 29.82$
$P = .000$	$P = .000$

[a] Significant at <.05 level.

3.1.4 Living Children

The mean number of living children was higher among the members than nonmembers in both the old and new villages, and the difference was more pronounced in the old than new villages (Table 3.5). The difference in the proportion between the members and non-members in different groups is statistically significant in the old but not new villages. A higher proportion of the members than nonmembers in both the old and new villages in both the surveys had four or more living children.

TABLE 3.5

Percentage Distribution of the MWRAs by number of Living Children

LIVING CHILDREN	OLD VILLAGES				NEW VILLLAGES				COMPARISON VILLAGE	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-[a] Member	Member	Non-[a] Member	Member	Non-Member	Member	Non-Member		
0	4.7 (18)	12.4 (93)	6.6 (37)	11.6 (66)	11.3 (8)	10.9 (11)	7.4 (7)	9.5 (9)	8.3 (25)	7.7 (23)
1 - 3	47.8 (184)	48.1 (362)	43.1 (241)	54.5 (309)	43.7 (31)	47.6 (48)	45.8 (43)	52.6 (50)	51.4 (154)	50.0 (150)
4 +	47.5 (183)	39.5 (298)	50.3 (281)	33.9 (192)	45.0 (32)	41.5 (42)	47.4 (45)	37.9 (36)	40.3 (121)	42.3 (127)
TOTAL N	100.0 (385)	100.0 (753)	100.0 (559)	100.0 (567)	100.0 (71)	100.0 (101)	100.0 (95)	100.0 (95)	100.0 (300)	100.0 (300)
MEAN SD	3.5 1.93	3.1 2.25	3.6 2.08	3.0 2.30	3.3 2.46	3.1 2.09	3.4 2.07	3.1 2.35	3.2 2.12	3.3 2.10

Note : The figure in parentheses give the Number of MWRAs

$X^2 = 19.2$	$X^2 = 33.26$
$P = .0001$	$P = .000$

[a] Significant at <0.1 level.

3.1.5 Pregnancy Status

The proportion pregnant was lower among the members than nonmembers in both the old and new villages (Table 3.1). After eight months, the pregnancy rate has risen, and consistently so for all groups and areas, and this is, perhaps, due to seasonal effect on pregnancy in rural Bangladesh.

3.1.6 Marital Fertility Rate

Age specific and total marital fertility rates, given in Table 3.6, were higher in the study villages, both experimental and comparison, than the available figures for rural Bangladesh (the TMFR was 4.41 for rural Bangladesh and 5.51 for Chittagong division: BFS, 1989). However, such findings must be treated with caution because of the relatively small number of respondents covered in this study. Data show that in the old villages the members in each age group had lower fertility than non-members. However, the members in the new villages had higher fertility than non-members at the time of the baseline survey, and the reverse was observed at the time of the Mini-CPS. But the number of MWRAs covered in the new villages being quite low, not much can be said from such data.

TABLE 3.6

Age Specific Marital Fertility Rates and Total Marital Fertility Rates

AGE	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGE	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member		
< 20	.278 (18)	.258 (93)	.208 (24)	.285 (49)	.364 (11)	.267 (15)	0 (5)	.143 (7)	.296 (27)	.167 (6)
20 - 29	.299 (167)	.334 (374)	.364 (226)	.366 (287)	.206 (34)	.283 (53)	.170 (47)	.261 (46)	.326 (138)	.325 (126)
30 - 39	.172 (151)	.210 (219)	.217 (235)	.240 (154)	.235 (17)	.087 (23)	.182 (22)	.207 (29)	.278 (97)	.190 (126)
40 - 49	.061 (49)	.075 (67)	.040 (74)	.065 (77)	.222 (9)	.100 (10)	.048 (21)	.154 (13)	.053 (38)	.071 (42)
TMFR $\sum_{20}^{49}$	5.32	6.19	6.20	6.80	6.63	4.70	4.00	6.22	6.57	5.87
N	385	753	559	567	71	101	95	95	300	300

Note : The figures in parentheses give the number of MWRAs

3.1.7 Desire for Children

The proportion desiring no more children was higher among the members than nonmembers in both the old and new villages (Table 3.7), suggesting that through participation in group meetings and exposure to other activities the desire to limit family size has become more pronounced among the members than non-members. The difference is statistically significant in the old but not new villages. However, the proportion desiring additional children has increased, though less sharply among the members in the old villages, between the baseline survey and Mini-CPS both among the members and non-members in the experimental villages and the MWRAs in the comparison villages, and this is statistically significant. While this is a disturbing finding, it has clearly resulted from a much lower proportion in the "uncertain" category at the time of the Mini-CPS, suggesting either a greater degree of certainty in the response by the Mini-CPS respondents or a real increase in the desire for more children.

TABLE 3.7

Percentage Distribution of the MWRAs by Desire to have More Children

DESIRE FOR CHILDREN	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	[a] Member	Non- [b] Member	[a] Member	Non- [b] Member	[c] Member	Non- [d] Member	[c] Member	Non- [d] Member		
Yes	35.1 (135)	40.8 (307)	41.1 (230)	57.3 (325)	31.0 (22)	36.0 (37)	47.4 (45)	53.7 (51)	42.7 (128)	62.7 (188)
No	53.5 (206)	40.1 (302)	52.6 (294)	37.0 (210)	46.5 (33)	42.6 (43)	45.3 (43)	41.1 (39)	37.0 (111)	23.7 (71)
Not Certain	11.4 (44)	19.1 (144)	6.3 (35)	5.6 (32)	22.5 (16)	20.8 (21)	7.4 (67)	5.3 (5)	20.3 (61)	13.6 (41)
TOTAL N	100.0 385	100.0 753	100.0 559	100.0 567	100.0 71	100.0 101	100.0 95	100.0 95	100.0 300	100.0 300

Note : The figures in parentheses give the number of MWRAs

X^2 = 21.51	X^2 = 31.27
P = .000	P = .0000

[a] Significant at <.01 level.
[b] Significant at <.001 level.
[c] Significant at <.01 level.
[d] Significant at <.01 level.

As women become older and as they near their completed family size, they have less desire for additional children, and this is apparent from Table 3.8 which shows that the proportion not desiring additional children increases with age both among the members and nonmembers in the experimental villages and also among the MWRAs in the comparison villages.

TABLE 3.8

Proportion of the MWRAs Who Do Not Desire Additional Children by Age

AGE	OLD VILLAGES				NEW VILLAGES				COMPARISONE VILLAGE	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member		
15 - 19	(0)	2.1 (2)	8.3 (2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
20 - 29	35.9 (60)	25.9 (97)	27.9 (63)	17.1 (49)	29.4 (10)	41.5 (22)	25.5 (12)	23.9 (11)	23.2 (32)	2.4 (3)
30 - 39	68.9 (104)	67.1 (147)	68.9 (162)	58.4 (90)	82.3 (14)	56.5 (13)	54.5 (12)	51.7 (15)	50.5 (490	30.2 (38)
40 - 49	65.7 (42)	63.6 (56)	90.5 (67)	92.2 (71)	100.0 (9)	80.0 (8)	90.5 (19)	100.0 (13)	78.9 (30)	71.4 (30)
N	206	302	294	210	33	43	43	39	111	71

Note : The figures in parentheses give the number of MWRAs.

Among those not desiring additional children, the proportion contracepting was higher than those not contracepting (Table 3.9). That is, those desiring additional children are less likely to contracept than those not desiring additional children.

Table 3.9

Percentage Distribution of the MWRAs Who Do Not Desire Additional Children by their Contraceptive Use Status

Contraceptive Use Status	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGE	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member		
Yes	78.2 (93)	83.7 (113)	84.4 (114)	84.2 (80)	83.3 (10)	84.6 (11)	90.9 (10)	80.0 (12)	59.1 (13)	84.6 (11)
No	42.5 (113)	30.6 (189)	42.5 (180)	27.5 (130)	39.0 (23)	36.4 (32)	39.3 (33)	33.8 (27)	35.3 (98)	21.0 (60)
N	206	302	294	210	33	43	43	39	111	71

Note : The figures in parentheses gives the number of MWRAs

The foregoing discussion shows that the members and non-members have similar household size; however, there are differences regarding other characteristics. The members are older by one to two years; have 0.2 to 0.7 children more ever born; have 0.2 to 0.5 more living children; have lower pregnancy; have lower current fertility; and have lower desire for additioal children. But, itshould be noted that the magnitude of difference regarding most variables is not quite pronounced; thus, suggesting that the members and non-members are largely similar in their demographic characteristics.

3.2 Socioeconomic Characteristics

The socioeconomic variables covered include schooling of the respondents and their husbands, employment, household landownership, household income, household assets, and standard of living.

3.2.1 Schooling

The mean numbers of years of schooling among both the MWRAs and their husbands were higher in the experimental than comparison villages (Table 3.10). The proportion of MWRAs and their husbands with schooling was higher among the members than non-members in the old villages. Among the MWRAs in the new villages, the reverse was true; the husbands of the members were relatively more educated than that of the non-members.

TABLE 3.10

Percentage Distribution of the MWRAs and their Husbands by Schooling

SCHOOLING	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member		
MWRAs *										
No Schooling	76.1 (293)	80.3 (605)	75.8 (424)	82.0 (465)	80.3 (57)	77.2 (78)	88.4 (84)	68.4 (65)	87.7 (263)	91.7 (275)
Schooling	23.9 (92)	19.7 (148)	24.2 (135)	18.0 (102)	19.7 (14)	22.8 (23)	11.6 (11)	31.6 (30)	12.3 (37)	8.3 (25)
Mean Years of Schooling	1.11	0.86	1.67	0.84	0.85	1.04	0.57	1.67	0.62	0.51
Husbands of MWRAs **										
No Schooling	57.4 (221)	63.9 (481)	61.9 (346)	62.1 (352)	62.0 (44)	64.4 (65)	69.5 (66)	57.9 (55)	70.7 (212)	76.3 (229)
Schooling	42.6 (164)	36.1 (272)	38.1 (213)	37.9 (215)	38.0 (27)	35.6 (36)	30.5 (29)	42.1 (40)	29.3 (88)	23.7 (71)
Mean Years of Schooling	2.67	2.03	2.31	2.11	2.44	2.33	2.62	2.27	1.64	1.45
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	385	753	559	567	71	101	95	95	300	300

Note : The figures in parentheses give the Number of MWRAs

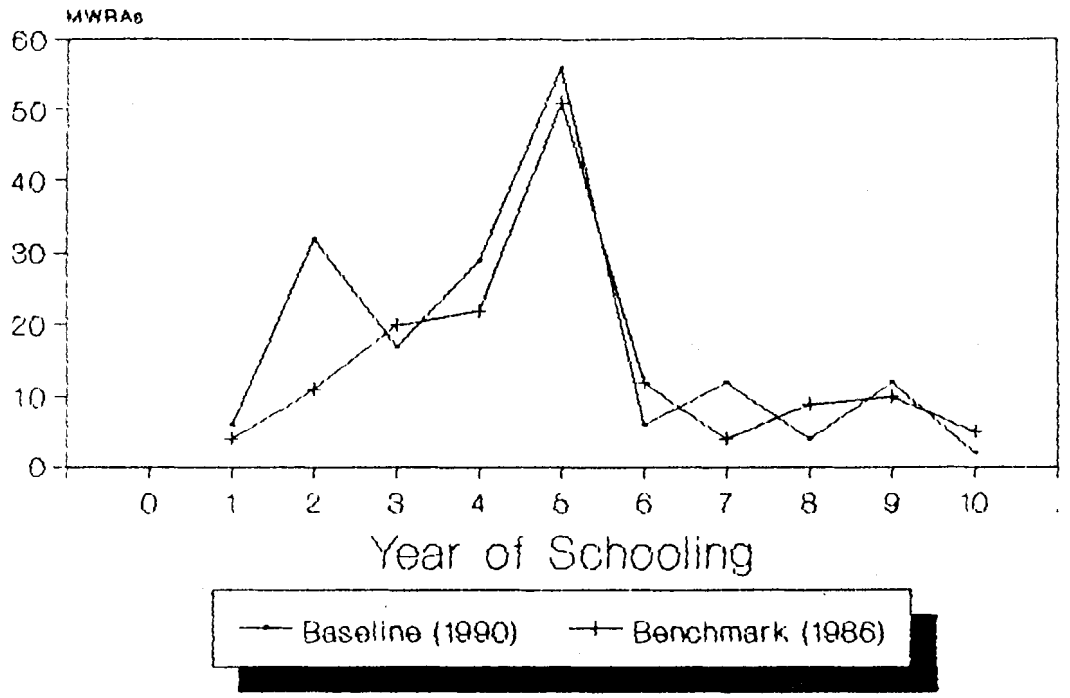
MWRAs : $X^2 = 6.06$, $P = .013$

Husband : $X^2 = 4.52$, $P = .033$

A comparison of the PMIS with the baseline survey shows that the mean number of years of schooling was lower by about 0.3 years in 1990 than 1986 (Appendix Table 3.1). This could be due to inaccurate reporting in either data sets. It should, however, be noted that the proportion in the no schooling category was higher in the PMIS than baseline survey. Also, since the baseline data were collected by trained field interviewers, it is likely that these are more accurate than PMIS service statistics which were collected by SAVE project personnel not properly trained to collect such information. Therefore, higher average years of schooling reported in the PMIS (1986) might be due to overreporting in the number of years of schooling (Figure 3.2).

Figure 3.2

Distribution of MWRAs Who Had Schooling by Years of Schooling, 1986 and 1990



3.2.2 Employment and Types of Labor[2]

Of the 1,610 sampled MWRAs, 1,336 (83%) were not engaged in any formal employment, and the proportion with no formal employment was higher in the new experimental and control villages than the old experimental villages. About 95 percent in the comparison area and 80 percent in the experimental area did not have any formal employment (Table 3.11). The proportion having formal employment, i.e., unskilled and semi-skilled laborers, was higher in the old (21.6%) than new villages (7%). Also, it was higher among the members than non-members in both the old and new villages, and the difference is statistically significant in the old but not new villages. Of the 27 percent formally employed in the old villages, more than 16 percent were unskilled

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2 *Data on employment and types of labor were not available from the PMIS. Assuming that the employment status and types of labor would not change significantly in the period between the baseline survey and Mini-CPS (time-lag is only 8 months), data on this variable were not collected in the Mini-CPS.*

laborers,[3] less than 2 percent were semi-skilled laborers,[4] and about 9 percent were involved in other[5] activities.

TABLE 3.11

Percentage of the MWRAs Employed, and Type of Labor

EMPLOYMENT/ TYPE OF LABOR	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGE	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member		
Employed	27.0 (104)	18.9 (142)	NC	NC	9.9 (7)	5.0 (5)	NC	NC	5.3 (16)	NC
Not Employed	73.0 (281)	81.1 (611)	NC	NC	90.1 (64)	95.0 (96)	NC	NC	94.7 (284)	NC
Unskillled Labor	16.6 (64)	11.8 (89)	NC	NC	7.0 (5)	2.0 (2)	NC	NC	3.3 (10)	NC
Semi-Skilled Labor	1.6 (6)	1.2 (9)	NC	NC	(0)	1.0 (1)	NC	NC	0.7 (2)	NC
Others	8.8 (34)	5.9 (44)	NC	NC	2.9 (2)	2.0 (2)	NC	NC	1.3 (4)	NC
TOTAL N	100.0 385	100.0 753	NC	NC	100.0 71	100.0 101	NC	NC	100.0 300	NC

Note : The figures in parentheses give the number of MWRAs

' NC ' indicates that data are not collected.

$X^2 = 16.2$
$P = .003$

3.2.3 Land Ownership

There was hardly any difference in the mean amount of landholding by membership status, and it was higher in the comparison than experimental

[3] *Unskilled laborer includes those involved in husking paddy, working in the house, poultry farming, etc.*

[4] *Semi-skilled laborer includes those involved in family-based work at home, petty trading, and helping husband in business.*

[5] *Other includes handiwork, birth attendance, carpentry, prepare fishing nets, etc.*

villages. In the baseline survey, more than one-fifth of the MWRAs were landless and the proportion landless was lower among the members than non-members, especially in the old villages. In the Mini-CPS, the proportion landless has increased both among the members and non-members, and in the experimental and comparison villages (Table 3.12) The differences are statistically significant in the old villages. The proportion belonging to households with over 3 acres of landholding was highest among the MWRAs in the comparison villages, followed by the old villages. Also, it was higher among the members than non-members.

TABLE 3.12

Percentage Distribution of the MWRAs According to Ownership of Land

LAND (in acres)	OLD VILLAGES				NEW VILLAGES				COMPARSON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	[a] Member	Non- [b] Member	[a] Member	Non- [b] Member	Member	Non-Member	Member	Non-Member		
Landless	25.5 (98)	32.4 (244)	40.1 (224)	45.7 (259)	22.5 (16)	22.8 (23)	52.6 (50)	34.7 (33)	25.7 (77)	30.7 (92)
0.01 - 1.0	28.3 (109)	26.0 (196)	25.8 (144)	21.9 (124)	26.8 (19)	35.6 (36)	23.2 (22)	27.4 (26)	28.3 (85)	25.3 (76)
1.01 - 2.0	18.7 (72)	18.1 (136)	14.0 (78)	15.3 (87)	23.9 (17)	26.7 (27)	12.6 (12)	23.2 (22)	14.0 (42)	17.0 (51)
2.01 - 3.0	10.1 (39)	10.6 (80)	8.8 (49)	7.2 (41)	14.1 (10)	6.9 (7)	4.2 (4)	8.4 (8)	13.3 (40)	9.0 (27)
3.01 +	17.4 (67)	12.9 (97)	11.4 (64)	9.9 (56)	12.7 (9)	7.9 (8)	7.4 (7)	6.3 (6)	18.7 (56)	18.0 (54)
TOTAL N	100.0 385	100.0 753	100.0 559	100.0 567	100.0 71	100.0 101	100.0 95	100.0 95	100.0 300	100.0 300
MEAN	1.70	1.66	1.36	1.21	1.46	1.55	1.62	1.43	1.85	2.04

Note : The figures in parentheses give the Number of MWRAs

[a] Significant at <.001 level.
b Significant at <.001 level.

A comparison of the PMIS and baseline data shows that the mean amount of landholding was lower in 1990 than 1986, especially among the members (Appendix Table 3.1). The data conform to the overall landholding situation in Bangladesh.

3.2.4 Income[6]

There was hardly any difference in the mean amount of annual household income between members and non-members. About three-fifths, over three-fifths, and over three-quarters of the MWRAs in the old, new, and comparison villages respectively had household income of less than Tk. 12,000 a year (Table 3.13). However, it should be noted that the problems of recall lapses and deliberate under- and overreporting of income by the respondents are often believed to affect the quality of such data. Also, it is often difficult to obtain accurate data on income from the rural women.

TABLE 3.13

Percentage Distribution of the MWRAs According to Annual Household Income

CASH INCOME (in Taka)	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member		
Upto 12,000	73.0 (281)	73.3 (552)	NC	NC	74.6 (53)	80.2 (81)	NC	NC	88.3 (265)	NC
12,001 - 24,000	20.0 (77)	17.9 (135)	NC	NC	16.9 (12)	14.9 (150)	NC	NC	10.0 (30)	NC
24,001 +	7.0 (27)	8.8 (66)	NC	NC	8.5 (6)	5.0 (5)	NC	NC	1.7 (5)	NC
TOTAL N	100.0 385	100.0 753	NC	NC	100.0 71	100.0 101	NC	NC	100.0 300	NC
MEAN SD	10,592 12,303	11,291 18,220	NC	NC	10,271 9,552	9,858 17,790	NC	NC	7,003 5,652	NC

Note : The figures in parentheses give the Number of MWRAs

' NC ' indicates that data are not collected.

A comparison of the PMIS and baseline data shows that the mean household income has declined among the members while it has increased among the non-members (Appendix Table 3.1). However, income distribution is much more skewed among the non-members than members, as reflected by the values of standard deviations.

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[6] *Income data were not collected in the Mini-CPS. Baseline income data were made comparable to PMIS income data by multiplying baseline income data by 0.69. The figure has been computed on the basis of national income deflector provided in the Statistical Pocket Book, Bangladesh (1990). Inflation rate for 1990 for which official statistics are not available was computed as the average of inflation rates for the 3 years preceding 1990.*

3.2.5 Household Assets[7]

A higher proportion of the non-members than members in the old villages, about a similar proportion (about one-third) in the new villages, and half of the MWRAs in the comparison villages were "poor" in terms of ownership of household assets at the time of the baseline survey (Table 3.14). The proportion with "adequate" ownership of household assets has increased in all groups and areas. Assuming that ownership of household assets is an indicator of the overall economic condition of the household, the data suggest that the economic condition of the households has remained largely unchanged between the baseline survey and Mini-CPS.

TABLE 3.14

Percentage Distribution of the MWRAs Having Household Assets

HOUSEHOLD ASSETS	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	[a] Member	Non-Member	[a] Member	Non-Member	[b] Member	Non-Member	[b] Member	Non-Member		
Poor	41.3 (159)	50.6 (381)	44.9 (251)	50.3 (285)	32.4 (23)	32.7 (33)	50.5 (48)	28.4 (27)	49.7 149	49.0 147
Average	36.9 (148)	30.8 (232)	30.9 (172)	29.6 (168)	53.5 (38)	48.5 (49)	34.7 (33)	40.0 (38)	35.3 106	28.0 84
Adequate	21.8 (84)	18.6 (140)	24.2 (136)	20.1 (114)	14.1 (10)	18.8 (19)	14.7 (14)	31.6 (30)	15.0 45	23.0 69
TOTAL N	100.0 385	100.0 753	100.0 559	100.0 567	100.0 71	100.0 101	100.0 95	100.0 95	100.0 300	100.0 300

Note : The figures in parentheses gives the number of MWRAs

χ^2 = 10.32
P = .006

χ^2 = 12.05
P = .0024

[a] Significant at <0.1 level.
[b] Significant at <.05 level.

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7 *Household assets include radio, cassette, bicycle, bedstead, chowki, quilt, thin mattress, blankets, and electric supply. An index was created by giving 1 for each item owned, and 0 if not owned. The total score was categorized into three groups : poor with zero score; average with scores between 1 and 6; and high with scores 7 and above.*

3.2.6 Standard of Living[s]

Standard of living reflects conditions of the dwelling unit and latrine facilities. More than half of the respondents belonged to households with "low" standard of living (Table 3.15). And, the proportion belonging to "low" standard of living category was higher among the non-members than members in the old villages, while the reverse was true in the new villages. The proportions with "average" and "high" standards of living were higher among the members than non-members in the old villages, while the reverse was true in the new villages. Also, the proportion with "average" standard increased, and the proportion with "high" standard declined in the old villages while it increased in the new and comparison villages. The proportion of pucca house was higher in the comparison than experimental villages, and since the type of housing is one of the criteria of living standards considered, it indicates why a higher proportion in the comparison villages had "high" living standards than those in the experimental villages.

A comparison between the PMIS and baseline data shows that the proportion in the "low" standard of living category declined slightly among both the members and non-members in the old villages (Appendix Table 3.2). While none belonged to the "high" standard of living category in 1986, a small proportion belonged to such a category in the baseline survey. Thus, the overall standard of living appears to have improved somewhat among both the members and non-members in the old villages.

TABLE 3.15

Percentage Distribution of the HWRAs by Standard of Living

STANDARD OF LIVING	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	[a] Member	Non- [b] Member	[a] Member	Non- [b] Member	[c] Member	Non- [d] Member	[c] Member	Non- [d] Member		
Low	57.9 (223)	67.2 (506)	56.9 (318)	61.9 (351)	71.8 (51)	61.4 (62)	51.1 (49)	42.1 (40)	56.3 (169)	50.3 (151)
Average	24.9 (96)	17.4 (131)	34.2 (191)	29.6 (168)	19.7 (14)	29.7 (30)	34.0 (32)	48.6 (46)	21.3 (64)	22.3 (67)
High	17.1 (66)	15.4 (116)	8.9 (50)	8.5 (48)	8.5 (6)	8.9 (9)	14.9 (14)	9.5 (9)	22.3 (67)	27.4 (82)
TOTAL N	100.0 385	100.0 753	100.0 559	100.0 567	100.0 71	100.0 101	100.0 95	100.0 95	100.0 300	100.0 300

Note : The figures in parenthese give the number of HWRAs

$X^2 = 11.16$
$P = .004$

[a] Significant at <.001 level.
[b] Significant at <.001 level.
[c] Siginificant at <.05 level.
[d] Siginificant at <.05 level.

s *Standard of living reflects condition of the dwelling unit and latrine facilities. Total scores were divided into low, average, and high.*

3.2.7 Involvement in Outside Activities

Baseline data show that while about three-quarters of the members in the old villages were involved in various village development activities, only 5.6 percent of the non-members in the same villages were involved in such activities, suggesting that SAVE had a major role in involving the women in the old villages in outside activities. That only a small proportion of members in the new villages were involved in such activities is due to the fact that project activities began in the new villages only few months prior to the baseline survey. The proportion involved in such activities was almost negligible in the comparison villages (0.6%), suggesting that in the absence of programs like SAVE's women's groups women are not motivated to come out of their homes and participate in outside activities.

3.2.8 Duration of SAVE Membership

The mean duration of savings group membership was much higher in the old than new villages. and quite understandably so, because while savings groups formation in the old villages started several years ago such activities in the new villages began only during the late-1990 (Table 3.16). Between the baseline survey and Mini-CPS, the proportion with over one year's of membership increased sharply in the old villages.

The foregoing discussion shows that the members and non-members are largely similar regarding such characteristics as mean amount of landholding and income; while the members and their husbands generally are relatively more educated than the non-members and their husbands. Also, the proportion employed was higher among the members than non-members; and the members generally had more household assets and relatively higher standards of living.

TABLE 3.16

Percentage Distribution of the MWRAs by Duration SAVE Membership

DURATION OF MEMBERSHIP (in months)	OLD VILLAGES		NEW VILLAGES	
	Baseline	Mini-CPS	Baseline	Mini-CPS
Upto 6	17.4 (67)	4.8 (27)	97.2 (69)	90.5 (86)
7 - 12	17.7 (68)	5.0 (28)	0 (0)	3.2 (3)
13 +	64.9 (250)	90.1 (504)	2.8 (2)	6.3 (6)
TOTAL N	100.0 (385)	100.0 (559)	100.0 (71)	100.0 (95)
MEAN	21.1	27.6	6.6	7.5

Note : Figures in parentheses give the number of MWRAs.

X2 = 90.25
P = .0000

3.3 Health Characteristics

The health characteristics considered are: family health status, immunization, and child death.

3.3.1 Family Health Status[9]

Overall, family health status was better in the experimental than comparison villages and better in the old than new villages, as is evident from both the baseline survey and Mini-CPS (Table 3.17). While over half in the comparison villages had "low" family health status, between one-fifth and one-third in the old villages and between one-third and half in the new villages belonged to that category. The proportion with "average" family health status was higher among the members than non-members. Between the baseline survey and Mini-CPS, the overall health status has somewhat improved in the old experimental and comparison villages, although it has worsened in the new villages.

TABLE 3.17

Percentage Distribution of the MWRAs by Family Health Status

FAMILY HEALTH STATUS	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGE	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Baseline	Mini-CPS
	Member[a]	Non-member[b]	Member[a]	Non-member[b]	Member	Non-member[c]	Member	Non-member[c]		
Low	24.2 (93)	31.2 (235)	18.8 (105)	22.2 (126)	35.2 (25)	34.7 (35)	41.1 (39)	50.5 (48)	55.3 (166)	50.7 (152)
Average	71.7 (276)	64.3 (484)	71.4 (399)	67.5 (383)	62.0 (44)	60.4 (61)	55.7 (53)	42.1 (40)	44.3 (133)	39.0 (117)
High	4.2 (16)	4.5 (34)	9.8 (55)	10.2 (58)	2.8 (2)	5.0 (5)	3.2 (3)	7.4 (7)	0.3 (1)	10.3 (31)
TOTAL N	100.0 385	100.0 75.3	100.0 559	100.0 567	100.0 71	100.0 101	100.0 95	100.0 95	100.0 300	100.0 300

Note : The figures in parentheses give the number of MWRAs.

$X^2 = 6.57$
$P = .037$

[a] Significant at <.01 level.
[b] Significant at <.001 level.
[c] Significant at <.05 level.

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[9] *Health status reflects the condition of the dwelling unit, source of drinking water, source of washing water, latrine facilities, and vaccination status (numbers of DPT, Polio and Measles vaccines received by children of upto 2 years and TT dozes by mothers). The maximum attainable score was 22: low with 0-7 scores; average with 8-14 scores; and high with 15-22 scores.*

A comparison of the PMIS with the baseline data shows that the family health status has improved (Appendix Table 3.3).

Immunization

Overall, immunization status of young children of upto 2 years of age in the study area, including the comparison villages, is good (Table 3.18). A higher proportion in the experimental than comparison villages had their children immunized, and the proportion of children immunized was higher among the members than nonmembers in both the old and new villages, suggesting that SAVE workers have been more successful in motivating the members to get their children immunized.

However, the proportion having ever immunized their children has declined between the baseline survey and Mini-CPS, especially for DPT and Polio. This is true of both the members and non-members in all areas, indicating that at least some of the children entering the eligible age cohort during this period have not been immunized.

TABLE 3.18

Percentage Distribution of the MWRAs by Vaccination Status of Children during the year preceding the survey

VACCINATION STATUS	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGE	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member		
DPT & POLIO:										
YES	91.0* (132)	86.0 (282)	78.7* (413)	75.9 (384)	84.4 (27)	76.5 (39)	65.6 (59)	50.0 (44)	79.7 (110)	47.3 (134)
NO	9.0 (13)	13.8 (45)	21.3 (112)	24.1 (122)	15.6 (5)	23.5 (12)	34.4 (31)	50.0 (44)	21.3 (29)	52.7 (149)
TOTAL	145	327	525	506	32	51	90	88	138	283
MEASLES:										
YES	79.6 (82)	73.0 (154)	73.1 (384)	71.8 (357)	84.0 (21)	85.3 (29)	52.8 (47)	38.6 (34)	49.5 (51)	44.2 (125)
NO	21.4 (21)	27.0 (57)	26.9 (141)	28.2 (140)	16.0 (4)	14.7 (5)	47.2 (42)	61.4 (54)	50.5 (52)	55.8 (158)
TOTAL	103	211	525	497	25	34	89	88	103	283

Note : The figures in parentheses give the number of MWRAs.

* Significant at <.001 level.

Child Death

There was hardly any variation in the proportion of the respondents whose child died (Table 3.19), suggesting that child mortality is not pronounced in the area. However, the finding should be treated with extreme caution because of the small numbers involved especially in the new villages.

The above discussion suggests that the members are slightly better-off than non-members regarding health status.

TABLE 3.19

Percentage Distribution of the MWRAs by Death of Children during the year preceding the survey

DEATH OF CHILDREN	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGE	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member		
YES	98.2 (378)	98.3 (740)	98.6 (551)	97.4 (552)	95.8 (68)	93.1 (94)	97.9 (93)	100.0 (95)	96.7 (290)	96.7 (290)
NO	1.8 (7)	1.7 (13)	1.4 (8)	2.6 (15)	4.2 (3)	6.9 (7)	2.1 (2)	(0)	3.3 (10)	3.3 (10)
TOTAL N	100.0 385	100.0 753	100.0 559	100.0 567	100.0 71	100.0 101	100.0 95	100.0 95	100.0 300	100.0 300

Note : The figures in parentheses give the number of MWRAs.

CHAPTER FOUR

FAMILY PLANNING

The purpose of this chapter is to assess whether savings groups affect members' contraception. This has been done by looking at family planning use, both ever and current, and looking at the differentials in current use by selecting characteristics of the respondents.

4.1 Use of Contraception

Ever use of family planning methods refers to the use of any method at any time with no distinction made between past and current use, and also regardless of the duration of use. Ever use was higher in the experimental than comparison villages, and higher in the old than new villages (Table 4.1). It was higher among the members than non-members in the old villages. Also, this was true in the new villages at the time of the baseline survey, the pattern was reversed at the time of the Mini-CPS. However, what emerges is that the ever use rate was lower at the time of the Mini-CPS than baseline survey in the old experimental and comparison villages, although the decline was not quite pronounced. However, it was higher in the new experimental villages.

Those using any family planning method, either a modern or traditional, at the time of the interview are termed "current users". Among the married women of reproductive age interviewed, 301 (18.7%) at the time of the baseline survey and 302 (18.7%) at the time of the Mini-CPS were practicing contraception; and the rest were either not practicing or pregnant at the time of interview (Table 4.1 and Figure 4.1). Compared to the 1989 CPR in Nasirnagar Upazila (20.3 %: Rafiquzzaman, 1990), the CPR among the members in the old villages was higher, suggesting that the program has been successful in raising the CPR in the old villages. This becomes all the more clear, if one looks at the incredibly low CPRs in the comparison villages.

The contraceptive prevalence rate (CPR) was higher in the old than new experimental villages, and higher in the experimental than comparison villages. Also, it was considerably higher among the members than non-members in both the old and new villages at the time of the baseline survey and while this was also true for the old villages at the time of the Mini-CPS, the reverse was true for the new villages where the CPR was not only higher among the non-members than members but also it increased quite sharply among the non-members. However, not much can be said about this, although the finding is statistically significant, because of the relatively small number of women covered in the sample from the new villages. A disturbing finding that emerges is that the CPR actually declined among the members in the old villages while it remained almost unchanged among the non-members.

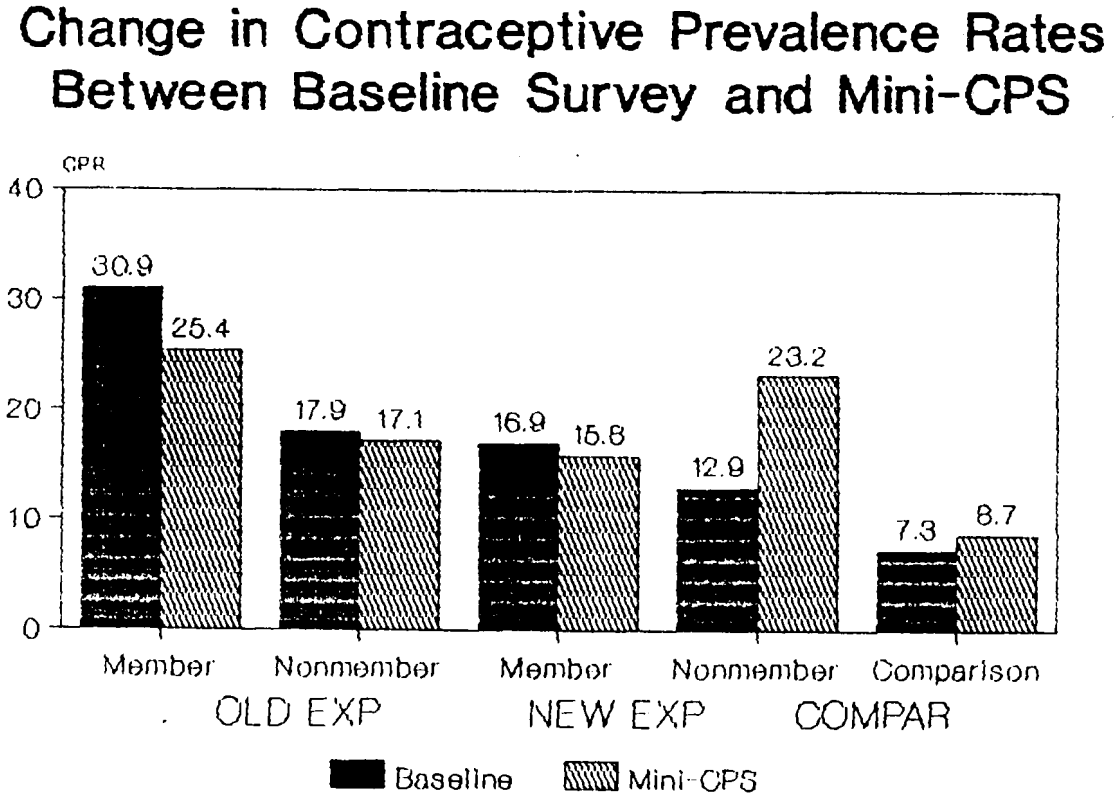
TABLE 4.1

Percentage Distribution of the MWRAs by FP Use Status

USE STATUS	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini CPS
	Member	Non-member	Member	Non-member	Member	Non-member	Member	Non-member		
Current User	30.9 (119)	17.9 (135)	26.4 (142)	17.1 (97)	16.9 (12)	12.9 (13)	15.8 (15)	23.2 (22)	7.3 (22)	8.7 (26)
Ever User (Current Users + Past Users)	42.3 (153)	27.5 (207)	39.2 (219)	24.5 (139)	18.3 (13)	15.8 (16)	24.2 (23)	28.4 (27)	14.3 (43)	10.3 (31)

Note : The figures in parentheses give the number of MWRAs.

Figure 4.1



4.1.1 Current Use by Methods

The use of modern methods was considerably higher among the members than non-members in the old villages, as is evident especially from the baseline survey (Table 4.2). In the new villages, the difference was much less pronounced at the time of the baseline survey and the reverse is discernible from the Mini-CPS. While the use of modern methods declined between the baseline survey and Mini-CPS among both the members and non-members in the old villages, it increased among both the members and non-members in the new villages. Tubectomy is the most widely used method, followed by oral pill; and the use of other methods is quite low, indicating that the method-mix in the study area is quite different from the national average. Such a high prevalence of tubectomy in the project area is due to the fact that the government organized sterilization campaigns in the area with the assistance of SAVE.

TABLE 4.2

Current Use of Contraception Amoung the MWRAs by Method

FP METHODS	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member		
Pill	10.6 (41)	5.3 (40)	8.2 (46)	5.3 (30)	5.6 (4)	1.0 (1)	7.4 (7)	1.1 (1)	1.0 (3)	1.0 (3)
Condom	0.5 (2)	(0)	0.4 (2)	0.7 (4)	(0)	(0)	(0)	(0)	(0)	0.3 (1)
Injection	(0)	0.4 (3)	0.2 (1)	0.2 (1)	(0)	(0)	(0)	(0)	(0)	(0)
IUD	2.6 (10)	0.4 (3)	1.1 (6)	0.5 (3)	(0)	(0)	(0)	3.2 (3)	0.3 (1)	1.3 (4)
Tubectomy	14.8 (57)	9.6 (72)	12.3 (69)	8.1 (46)	7.0 (5)	7.9 (8)	7.4 (7)	11.6 (11)	2.3 (7)	4.0 (12)
Vasectomy	(0)	0.4 (3)	0.5 (3)	0.4 (2)	(0)	1.0 (1)	(0)	(0)	(0)	(0)
All Modern Methods	28.5 (110)	16.1 (121)	22.7 (127)	15.2 (86)	12.6 (11)	9.9 (10)	14.8 (14)	15.9 (15)	3.6 (11)	6.4 (20)
Safe Period	2.3 (9)	1.7 (13)	2.5 (14)	1.6 (9)	4.2 (3)	2.0 (2)	1.1 (1)	6.3 (6)	3.7 (11)	1.7 (5)
Withdrawal	(0)	0.1 (1)	0.2 (1)	0.4 (2)	(0)	0.1 (1)	(0)	1.1 (0)	(0)	0.3 (1)
All Traditio-nal Methods	2.3 (9)	1.8 (14)	2.7 (15)	2.0 (11)	4.2 (3)	2.1 (3)	1.1 (1)	7.4 (7)	3.7 (11)	2.0 (6)
TOTAL	30.9 (119)	17.9 (135)	25.4 (142)	17.1 (97)	16.9 (12)	12.9 (13)	15.8 (15)	23.2 (22)	7.3 (22)	8.7 (26)

Note : The figures in parentheses give the number of MWRAs

A comparison of the PMIS with data from the baseline survey shows that the use of modern methods changed by 3 percentage points between 1986 and 1990 among the members, while it remained almost unchanged among the non-members (Appendix Table 4.1). And, while this was true of temporary methods, the proportion having accepted permanent methods, however, increased, suggesting that sterilization is gaining popularity in the study area. Data also show that a high proportion of those who had accepted IUDs in 1986 did not have the device in situ in 1990, suggesting low continuation rate of the device. This indicates that SAVE, being the single most important provider of FP services in the area, did not emphasize on such temporary methods as oral pills and condom, quite popular in rural Bangladesh.

4.1.2 Sources of Supplies and Services

Clinic/hospital was the most important source of supplies and services, and quite understandably so, because tubectomy was the most important method used, irrespective of membership status and type of villages (Table 4.3). The NGO (SAVE) workers was the next important source and although the proportion depending on SAVE workers was higher among members than non-members in the old villages the difference was not quite so pronounced, suggesting that SAVE workers are also providing supplies to a sizeable proportion of the non-members. The role of government FP workers was quite negligible, though some improvement was observed at the time of the Mini-CPS in the old villages.

TABLE 4.3

Percentage Distribution of Current Users by Reported Source of Supplies/Services

SOURCE	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGE	
	Baseline		Mini-CPS		Baseline		Mini-CPS			
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member	Base-line	Mini-CPS
Government FP Workers	3.4 (4)	3.0 (4)	9.1 (13)	16.5 (16)	(0)	(0)	6.7 (1)	5.0 (1)	4.5 (1)	3.8 (1)
NGO Worker	31.1 (37)	25.2 (34)	30.3 (43)	23.7 (23)	16.7 (2)	(0)	33.3 (5)	(0)	(0)	7.7 (2)
Clinic/Hospital	56.3 (67)	60.7 (82)	47.2 (67)	44.3 (43)	41.7 (5)	76.9 (10)	53.3 (8)	63.6 (14)	41.9 (9)	72.7 (16)
Pharmacy/Shop	1.7 (2)	0.7 (1)	3.5 (5)	4.1 (4)	16.6 (2)	(0)	18.2 (0)	(0)	4.5 (1)	3.8 (1)
Not Applicable *	7.5 (9)	10.4 (14)	9.9 (14)	11.3 (11)	25.0 (3)	23.1 (3)	6.7 (1)	31.8 (7)	50.0 (11)	23.1 (6)
TOTAL N	100.0 119	100.0 135	100.0 142	100.0 97	100.0 12	100.0 13	100.0 15	100.0 22	100.0 22	100.0 26

Note : The figures in parentheses give the number of MWRAs

* Indicates MWRAs practicing traditional methods OR MWRAs refused to disclose.

4.1.3 Reasons for Contraception

Birth spacing, and economic and health considerations were the main reasons for practicing contraception in the baseline survey (Table 4.4). In the Mini-CPS, birth spacing and economic considerations also emerged as the main reasons for contracepting. However, unlike at the time of the baseline survey, the proportion contracepting to limit fertility was considerably higher at the time of the Mini-CPS, and the finding is statistically significant among non-members; indicating the growing consciousness in the project area about the advantages of limiting their family size. In the old villages, the proportion contracepting for health considerations was considerably lower at the time of the Mini-CPS compared to the baseline survey, and the finding is statistically significant. The decline in the proportion giving health considerations as the main reason for contracepting is accompanied with a sharp increase in the proportion saying that they were contracepting primarily to limit their fertility.

Table 4.4

Percentage Distribution of Current Users by Main Reasons for Contracepting

REASONS	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member		
Welfare of Children	7.4 (9)	8.1 (11)	12.1 (17)	12.4 (12)	(0)	15.4 (2)	13.3 (2)	18.2 (4)	(0)	7.7 (2)
Spacing Birth	37.0 (44)	27.4 (37)	29.4 (41)	24.7 (24)	25.0 (3)	23.1 (3)	6.7 (1)	18.2 (4)	68.2 (15)	23.1 (6)
Economic Reasons	24.4 (29)	27.4 (37)	24.1 (34)	28.9 (28)	50.6 (6)	30.8 (4)	26.7 (4)	27.3 (6)	18.2 (4)	19.2 (5)
Health Considerations	27.7[a] (33)	28.1[b] (38)	9.2[a] (13)	9.3[b] (9)	16.7 (2)	23.1 (3)	20.0 (3)	19.1 (2)	4.5 (1)	15.4 (4)
Limiting Fertility	3.4 (4)	8.9[b] (12)	25.5 (36)	24.7[b] (24)	8.3 (1)	7.7 (1)	33.3 (5)	27.3 (6)	9.1 (2)	34.6 (9)
TOTAL N	100.0 119	100.0 135	100.0 141	100.0 97	100.0 12	100.0 13	100.0 15	100.0 22	100.0 22	100.0 26

Note : The figures in parentheses give the number of MWRAs

Health Consideration : [a] P<0.001; [b] P<0.001

Limiting Fertility : [b] P<0.01

4.1.4 Reasons for Discontinuation

Among those past users who had discontinued use, except those who were amenorrheic and pregnant, side-effects was the most important reason for discontinuation of FP use (Table 4.5). Sterility was the next most important reason, followed by the desire to have children. In the Mini-CPS, the relative importance of side-effects as the main reason for discontinuation of FP use was lower than in the baseline survey, suggesting that SAVE workers have been relatively more successful in dealing with side-effects. A disturbing finding is that while only a negligible proportion in the baseline survey said that they had discontinued use because the methods were not available, the proportion was appreciably high at the time of the Mini-CPS. Perhaps, this partly explains why the CPR was lower at the time of the Mini-CPS than baseline survey, especially among the members in the old villages.

TABLE 4.5

Percentage Distribution of the MWRAs Who are Not Currently Using FP but have Used in the Past by Main Reasons for Discontinuation

REASONS FOR DISCONTI-NUATION	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS			
	Member	Non-member	Member	Non-member	Member	Non-member	Member	Non-member	Base-line	Mini-CPS
Side-effect	64.3 (18)	57.0 (25)	53.2 (41)	38.1 (16)	100.0 (1)	100.3 (3)	37.5 (3)	20.0 (1)	25.0 (3)	40.0 (2)
Sterility	7.1 (2)	18.4 (9)	2.6 (2)	2.4 (1)	(0)	(0)	12.5 (1)	(0)	25.0 (3)	(0)
Want More Children	7.1 (2)	4.1 (2)	9.1 (7)	7.2 (3)	(0)	(0)	12.5 (1)	(0)	16.7 (2)	100.0 (0)
Husband's objection	3.6 (1)	2.0 (1)	2.6 (2)	19.0 (8)	(0)	(0)	12.5 (1)	20.0 (1)	16.7 (2)	(0)
Methods Not Available	3.6 (1)	2.0 (1)	18.2 (14)	14.3 (6)	(0)	(0)	25.0 (2)	40.0 (2)	(0)	40.0 (2)
Others	14.3 (4)	14.3 (7)	14.3 (11)	19.1 (8)	(0)	(0)	(0)	20.0 (1)	16.7 (2)	20.0 (1)
TOTAL N	100.0 28	100.0 45	100.0 77	100.0 42	100.0 1	100.0 3	100.0 8	100.0 5	100.0 12	100.0 5

Note : The figures in parentheses give the number of MWRAs.

4.1.6 Future Intention to Contracept

A higher proportion of the members than non-members expressed their future intention to contracept (Table 4.6 and Figure 4.2). This is despite the fact that the CPR among the members is higher than the non-members, suggesting that through participation in savings groups activities the members have become more conscious of the need to practice contraception. The proportion intending to contracept in the future was higher at the time of the Mini-CPS than baseline survey, except among the members in the new villages. The higher proportion intending to contracept at the time of the Mini-CPS than the baseline survey is partly due to the lower CPR in October than January, and suggests that if the FP methods are made available many of those with future intention to contracept may actually start practicing FP methods, thereby, raising the CPR in the area.

TABLE 4.6

Percentage Distribution of Non-Users Who Intend to Contracept in Future

FUTURE INTENTION TO CONTRACEPT	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	* Member	Non- ▷ member	* Member	Non- ▷ member	Member	Non-member	Member	Non-member		
Yes	28.9 (77)	24.6 (152)	42.5 (177)	37.7 (177)	40.7 (24)	26.1 (23)	38.7 (31)	34.2 (25)	33.8 (94)	36.6 (100)
No	47.0 (125)	42.4 (262)	39.5 (165)	41.3 (194)	45.8 (27)	52.3 (46)	42.5 (34)	45.2 (33)	38.8 (108)	39.9 (109)
Can't Say	24.1 (64)	33.0 (204)	18.0 (75)	21.0 (99)	13.5 (8)	21.6 (18)	18.8 (15)	20.6 (15)	27.4 (76)	23.4 (64)
Total N	100.0 266	100.0 618	100.0 417	100.0 470	100.0 59	100.0 89	100.0 80	100.0 73	100.0 278	100.0 273

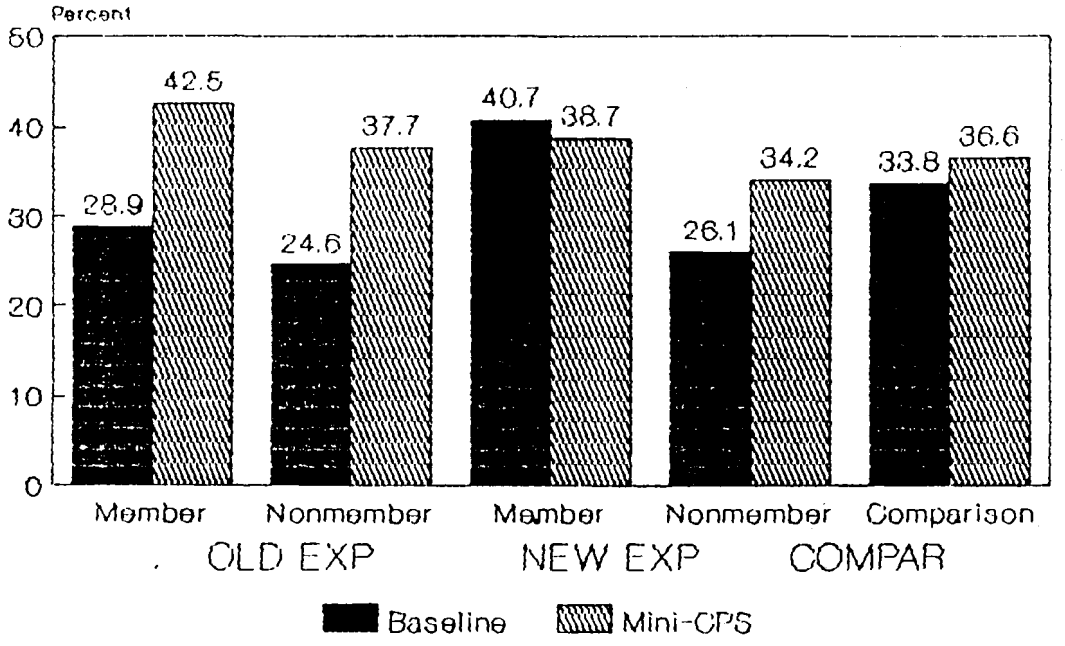
Note : The figure in parenthese give the number of MWRAs.

$X^2 = 7.17$	$X^2 = 10.88$		$X^2 = 7.58$
P = .028	P = .0043		P = .0250

* P<0.01 ▷ P<0.001

Figure 4.2

Change in Future Intention to Contracept Between Baseline Survey and Mini-CPS



4.1.6 Reasons for Non-Use Among Those Who Do Not Intend to Contracept

Religious reasons, husbands' objection and fear of side-effects were the main reasons given at the time of the baseline survey in the old villages for not intending to contracept, while in the new and comparison villages religious reasons and desire for additional children were the two main reasons given (Table 4.7). At the time of the Mini-CPS, desire for additional children gained in relative importance, while religious reasons, husbands' objection, and fear of side-effects declined in relative importance in the old villages, suggesting that SAVE workers have been quite successful in dealing with such barriers to FP adoption as religious reasons, husbands' objection, and fear of side-effects. Also, the proportion giving religious reason as the reason for non-intention to use FP was lower among the members than non-members, suggesting that through participation in group meetings and discussions with SAVE workers the members are beginning to realize that religion does not oppose the use of FP. That is, there is a need for more intensive IEC activities to be able to overcome the cultural resistance (religious reasons, and husbands' objection) to the use of FP.

TABLE 4.7

Percentage Distribution of Non-Users Who Do Not Intend to Use FP by Main Reasons for Non Use

REASONS FOR NON-USE	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member		
Religious Reason	30.8 (24)	41.3 (76)	13.0 (14)	21.2 (29)	55.5 (10)	45.7 (16)	48.0 (12)	22.2 (6)	47.3 (35)	66.2 (53)
Wants More Children	11.5 (9)	10.3 (19)	25.0 (27)	31.4 (43)	27.8 (5)	20.0 (7)	8.0 (2)	48.2 (13)	17.6 (13)	6.3 (5)
Fear of Side-effect	20.5 (16)	21.7 (40)	13.0 (14)	7.3 (10)	11.1 (2)	8.6 (3)	4.0 (1)	11.1 (3)	8.1 (6)	1.3 (1)
Husbands' Objection	28.2 22)	18.5 (34)	21.3 (23)	20.4 (28)	5.6 (1)	17.1 (6)	12.0 (3)	7.4 (2)	10.8 (8)	17.5 (14)
Menstrual Problem	2.6 (2)	0.5 (1)	10.2 (11)	9.5 (13)	(0)	(0)	12.0 (3)	3.7 (1)	(0)	6.2 (5)
Others	6.4 (5)	7.7 (14)	17.5 (19)	10.2 (14)	(0)	8.6 (3)	16.0 (4)	7.4 (2)	16.2 (12)	2.5 (2)
TOTAL N	100.0 78	100.0 184	100.0 108	100.0 137	100.0 18	100.0 35	100.0 25	100.0 27	100.0 74	100.0 80

Note : The figures in parentheses give the number of MWRAs.

4.2 Differentials in Contraceptive Use

4.2.1 Contraceptive Use by Age

Contraceptive prevalence rises with age till 39 years, and then declines especially in the old villages (Table 4.8). It should be noted that the number of current users among both the members and non-members in the new experimental and comparison villages was quite small (ranging between 12 and 26), resulting in few cells in the extreme age groups, and therefore, the

findings for the new experimental and comparison villages must be treated with caution.

By and large, contraceptive prevalence is higher in all age groups among the members than non-members, especially in the old villages, indicating that a member in each age group is more likely to contracept than a non-member.

TABLE 4.8

Proportion of the MWRAs Currently Practicing Contraception by Age

AGE	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS			
	Member	Non-member	Member	Non-member	Member	Non-member	Member	Non-member	Base-line	Mini-CPS
< 20	11.1 (18)	5.4 (93)	(0)	4.1 (49)	0 (11)	6.7 (15)	0 (5)	14.3 (7)	14.8 (27)	0 (6)
20 - 29	25.1 (167)	13.6 (374)	23.9 (226)	18.5 (287)	11.8 (34)	13.2 (53)	8.5 (47)	21.7 (46)	7.2 (138)	4.8 (125)
30 - 39	39.7 (151)	29.7 (219)	32.3 (235)	27.9 (154)	29.4 (17)	17.4 (23)	31.8 (22)	20.7 (29)	4.1 (97)	14.3 (126)
40 - 49	30.6 (49)	20.9 (67)	16.2 (74)	24.7 (77)	33.3 (9)	10.0 (10)	19.0 (21)	38.5 (13)	10.5 (38)	4.8 (42)
N	385	753	559	567	71	101	95	95	300	300
CPR	30.9	17.9	25.4	17.1	16.9	12.9	15.8	23.2	7.3	8.7

Note : The figures in parentheses give the number of MWRAs.

4.2.2 Contraceptive Use and Schooling

Contraceptive use was higher among those who had been to school than those with no schooling, especially in the old villages (Table 4.9 and Figure 4.3). Also, the difference was more pronounced among the members than non-members, especially in the old villages. That is, if a woman had been to school and is a member of savings groups she is more likely to contracept than a woman who had been to school but is not a member of savings groups. This indicates that savings groups are more likely to affect members' contraceptive behavior, if they had been to school than if they had not been to school. Also, the CPR was higher among the members than non-members even in the "no schooling" category, indicating that even if a woman had not been to school she is more likely to contracept if she is a member than if she is not a member.

TABLE 4.9

Proportion of the MWRAs Currently Practicing Contraception by Schooling

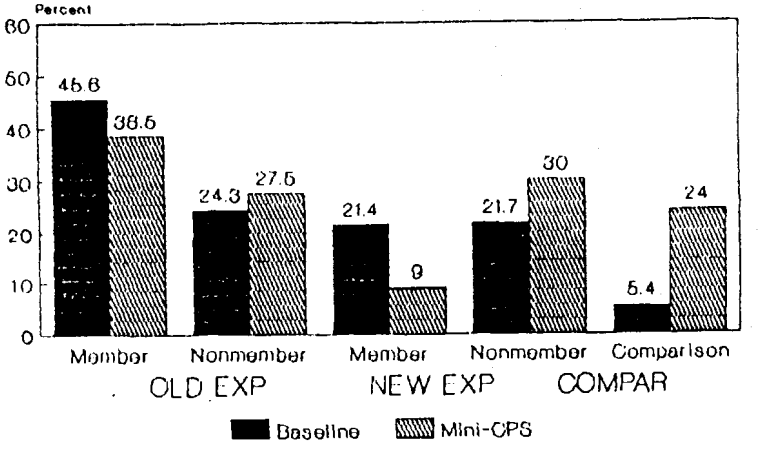
SCHOOLING	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Baseline	Mini-CPS
	Member	Non-member	Member	Non-member	Member	Non-member	Member	Non-member		
No Schooling	26.3* (293)	16.4 (605)	21.2* (424)	14.8 (465)	15.8 (57)	10.3 (78)	16.7 (84)	20.0 (65)	7.6 (263)	7.3 (274)
Schooling	45.6 (92)	24.3 (148)	39.5 (135)	27.5 (102)	21.4 (14)	21.7 (23)	9.0 (11)	30.0 (30)	5.4 (37)	24.0 (25)
N	385	753	559	567	71	101	95	95	300	299

Note : The figures in bold give the number of MWRAs.

* P<0.001

Figure 4.3

Change in CPR by Education Between Baseline Survey and Mini-CPS



4.2.3 Contraceptive Use and Living Son

Contrary to the conventional wisdom that Bangladeshi rural women do not practice family planning until they have a living son, Table 4.10 shows that among the savings group members in the old villages practicing contraception, more than 15 percent during the baseline survey and about 10 percent during the Mini-CPS did not have a living son. The proportion was lower among the non-members in both the surveys. Also, a lower proportion of the non-members with three or more living sons was practicing contraception than the members. Thus, son preference appears to be less pronounced among the members than non-members.

TABLE 4.10

Proportion of the MWRAs Currently Practicing Contraception by the Number of Living Sons

LIVING SON	OLD VILLAGES				NEW VILLAGES				COMPARISON VILLAGES	
	Baseline		Mini-CPS		Baseline		Mini-CPS		Base-line	Mini-CPS
	Member	Non-Member	Member	Non-Member	Member	Non-Member	Member	Non-Member		
0	15.7 (11)	4.3 (9)	9.7 (103)	6.6 (152)	(0)	4.2 (1)	0 (17)	0 (17)	4.4 (3)	4.3 (69)
1 - 2	30.5 (68)	20.7 (75)	27.1 (291)	19.5 (27)	23.7 (9)	19.2 (10)	15.4 (52)	32.2 (59)	10.9 (18)	8.0 (1620
3 +	43.5 (40)	28.3 (51)	32.1 (165)	24.2 (128)	18.8 (3)	8.0 (2)	26.9 (26)	15.8 (19)	1.5 (1)	14.7 (68)
N	119	135	559	567	12	13	95	95	22	299

Note : The figures in bold give the number of MWRAs

CHAPTER FIVE

COST ANALYSIS

5.1 Introduction and Objective of the Analysis:

Nasirnagar, one of the four operational program areas of the SAVE, offers a highly integrated type of program with multidimensional developmental activities and multiple effects aiming at "achieving long-term, sustainable community development" (BFO Program Description, Save the Children USA, p.1). The program in Nasirnagar, as in the other three program areas (Rangunia, Ghior and Mirjapur), concentrates on the following 12 broad categories (areas) of activities, as per the SAVE classification:

I. Child Survival (CS);
II. Credit and Income Generation (CIG);
III. Community and home infrastructure (CHI);
IV. Agriculture (Ag);
V. Education and Human Resource (EHR);
VI. Pisciculture (Pis);
VII. Women's Savings Group (WSG);
VIII. Maternal and Child Health (MCH);
IX. Sponsorship (Spon);
X. Family Planning (FP);
XI. Water and Sanitation (WS);
XII. Resource Conservation (RC).

One of the three specific objectives of the present study is to "examine the cost of the program in the old and new experimental areas to determine how expensive/inexpensive is the package of Savings Groups when combined with FP in the two types of experimental areas, and whether the program in the old and/or new experimental areas is economically feasible to be replicated". However, such a comparison between the old and the new experimental areas is not possible because of at least two reasons: (i) activities in the new experimental areas have started only recently (February 1990); and (ii) SAVE/Dhaka is not in a position to supply the relevant cost and output data for the new experimental areas for the period from February to October, 1990. Moreover, the procedure in which the SAVE/Dhaka and the local field offices preserve the cost data are not suitable for the purpose of retrospective cost-effectiveness analysis (CEA) of such an integrated/multi-objective type of project as the SAVE (difficulties in valuation of inputs are discussed in Section 5.3). Thus, given data problems, the present analysis measures the cost-per-unit of output of the three major program activities -- Child Survival, Women's Savings Groups, and Family Planning; and determines whether these costs have varied over time during the period under study (1986-87 to 1989-90). An important point to note here is that cost analysis of program activities should ideally have been done starting from the period each of the above twelve activities began (for example: for FP from 1975; for SG from 1982; for CS from 1985, etc.). However, cost analysis is confined to the period from 1986-87 to 1989-90, because SAVE/Dhaka could not provide all cost data prior to 1986-87.

5.2 Limiations of the present analysis:

The limitations of cost-analysis presented in this study may be categorized as follows: conceptual; measurement, calculation and data; and comparability limitations.

Conceptual limitations: Because of the absence of comparable alternatives, the cost analysis presented in this report cannot be treated as a cost-effectiveness analysis (CEA). Second, the present cost-analysis is not a single cost and effect (e.g., dollars/immunized child) analysis, rather it deals with many comprehensive activities with multiple effects. Some of the effects are not quantifiable and for the "individual quantifiable effects" cost-apportioning was necessary, which, in turn, because of its subjective judgemental values can be treated as an inherent weakness of the analysis. However, it can be noted here that "analysts have not come up with an entirely satisfactory answer to this problem" of joint-allocation (Reynolds and Gaspari, 1985, p.15).

Measurement, Calculation and Data limitations: Some costs and effects cannot be measured accurately. In a joint-allocation situation, the contribution of individual items is difficult to be measured. This difficulty was further accentuated by data limitations. Required data for this analysis was not available to us. SAVE/Dhaka maintains the accounts of SCF (funded) costs at the head office (Dhaka), and the costs (inputs) in the form of community contribution in cash and kind (land, labor, etc.) are maintained at the local project office (in this case in Nasirnagar). Moreover, the line-items are kept in such a way that it is difficult to reorganize (recalculate) the cost data according to proper accounting classification (fixed and variable costs) or a proper economic classification (capital and recurrent costs; and direct, indirect and infrastructure costs). Also, SAVE/Dhaka accounts section does not maintain most of the information relevant for this study in the books of accounts, but in voucher forms, which makes it a highly time-consuming process to sort out about 16,000 vouchers for four years according to line-items necessary for the cost-analysis and this was not done because of time constraints. Because of the reasons discussed above, the present analysis cannot be treated as an ideal cost-output analysis; rather, it is an attempt to understand the various dimensions of the dynamics of costs and outputs, as well as to identify the problems of cost-output analysis of SAVE/Nasirnagar, and thereby, give an indication about the future necessities of changing the financial record-keeping system of SAVE.

Limiations of Comparison: Cost-per-unit-output of SAVE, in any case, is not comparable with the cost-per-unit-output of other identical programs. This is mainly due to three reasons: (i) the differences in the cost-evaluation methodology of the different studies; (ii) differences in the very objectives of the different studies; and (iii) variations in the "environmental" conditions (demand and supply side variations) of the study areas (details can be found in Sirajeldin et. al., 1982, p.78). So far in Bangladesh, five different cost-per-unit output studies have been undertaken (Altman, & Piotrow, 1980; Clinton, 1976; Hogan, et. al., 1979; Louis, et. al., 1979; and Phillips, et. al., 1981). However, the results of these studies are not comparable with ours, largely, due to differences in the objectives and methodologies employed.

5.3 Methods of Cost (Input Value) Calculation:

Initially, it was decided to undertake an ideal cost-output analysis, whereby all possible costs are covered and measured with the maximum possible accuracy. For this purpose, a set of dummy tables containing all possible line-items of expenses incurred by SAVE/Dhaka, Brahmanbaria Office and Nasirnagar projects and classified into capital and recurrent costs were prepared by us and given to the SAVE/Dhaka Office to provide us the relevant information. However, in reality it was found that the SAVE Accounts Office maintains financial records in such a way which did not enable us to undertake the initially intended ideal cost analysis. Thus, we had to follow a multistep procedure of descending/deducting from the central (total) costs the local (activitywise project) costs, with necessary corrections and apportions.

The steps involved in cost-calculation are as follows:

I. Step 1 - Step 3 = Calculation of the total SCF expenses (at current prices) inBangladesh.
(Cost schedules were supplied by SAVE, and adjustments for "annualized cost" for capital items and other necessary adjustments were done by us).

II. Step 4 - Step 5 = Costing of all the activities (12) of Nasirnagar projects.
(Apportionment of the SAVE expenses and calculation of the value of community contributions was done by us).

III. Step 6 = Costing of CS, WSG and FP activities of Nasirnagar project.
(Apportionment of Nasirnagar expenses into three activities was done by SAVE and calculation of the value of such costs was done by us).

IV. Step 7 = Costing of CS, WSG and FP activities of Nasirnagar projects at constant prices to ensure comparability.

V. Step 8 = Cost modelling of CS, WSG and FP activities of Nasirnagar project, according to a minimum cost model (as a proxy for expansion of SAVE activities) and a maximum cost model (as a proxy for replication of SAVE activities by other agencies).

VI. Step 9 = Costing of immunization (child and women) and growth monitoring components of CS activity.

The logical flow of the steps involved in the intended cost calculation and the procedures of such calculation are discussed below:

Step 1: **Total expenses incurred by SAVE in Bangladesh according to the major line-items for the financial periods under study (1986-87 to 1989-90) were obtained from SAVE/Dhaka Office. This is shown in Table 5.1, and the sub-components constituting the line-items are shown in the footnote of Table 5.1.**

TABLE 5.1 : SAVE Expenses for all four project areas in Bangladesh by major line-items : 1986/87 - 1989/90

(in current US $)

LINE ITEMS (a)	1986-87	1987-88	1988-89	1989-90
Personnel (b)	143,104	181,862	170,630	188,064
Travel (c)	24,887	20,207	25,278	29,385
Other Direct Costs (d)	68,441	50,527	88,475	76,401
Capital Asset (e)	18,666	15,155	18,959	41,139
Project Cost (f)	360,870	232,379	315,981	240,958
Consultants	6,222	5,052	12,639	11,754
Total = 93% of actual	622,190	505,182	631,962	587,701
Actual	669,022	543,196	679,530	631,938

Source: SAVE/Dhaka, Nov. 12, 1990.

NOTE: (a) The costs shown under items b, c, d, and e also include some expenses incurred for the field project offices; however, it is difficult to ascertain the exact amount of such expenses.
(b) Salary; fringe; severance pay; and casual labor.
(c) Travel; per diem; fuel; and vehicle maintenance.
(d) Rent; building maintenance and repair; telecommunications; training and evaluation; insurance; equipment maintenance and repair; photocopy and printing; office utilities - water, sewerage, gas, electricity; postage; office supplies; project support cost - rent and other costs for field, including Brahmanbaria office; legal and audit fees; office furnishing; etc.
(e) Equipment; jeep; microbus; motorbike; computer; refrigerator; and photocopy machines.
(f) Village staff (salary and support); project materials; community and project organizational cost; and local logistics.

Step 2: Expense figures against each line item in Table 5.1 (which was supplied by SAVE) is 93 percent of the actual expenses. Thus, it was necessary to find out how the rest of the 7 percent of the actual costs are spent by SAVE. The 7 percent are spent on the house rents of the expatriate staff, their household utilities, and their house security purposes (night guards), etc. However, it was not possible to assess the actual expenses for each of these items. The components constituting the abovementioned '7 percent' are logically related with the 'other direct costs' (rent) and with 'personnel' (salary). Having a long discussion with knowledgeable project personnel at SAVE/Dhaka Office, it was decided to apportion this '7 percent' between the line items -- "other direct costs" and "personnel" according to the proportions shown in Table 5.1. Thus, after necessary corrections, the actual SAVE expenses in Bangladesh are shown in Table 5.2.

TABLE 5.2 : SAVE Expenses after adjusting 7 percent of the actual expenses by major line-items for the period 1986-87 - 1989-90

(in current US $)

LINE ITEMS	1986-87	1987-88	1988-89	1989-90
Personnel	174,785	211,612	201,963	219,516
Travel	24,887	20,207	25,278	29,385
Other Direct Costs	83,592	58,791	104,710	89,186
Capital Asset	18,666	15,155	18,959	41,139
Project Cost	360,870	232,379	315,981	240,958
Consultants	6,222	5,052	12,639	11,754
Total Cost	669,022	543,196	679,530	631,938

Source: SAVE/Dhaka, Nov. 12, 1990.

Step 3: Capital assets for each year in Table 5.2 (and also in Table 5.1) are shown as the value of new items, i.e., their value has not been depreciated. In cost-analysis, the valuation of capital assets should be annualized. Hence, this was done for all individual capital items and then adjusted, and the figures are shown in

Table 5.3. Annualized costs of the capital items were calculated by using the following formula proposed by Reynolds, and Gaspari (1985, p. A-14):

$$a(r,n) = \frac{[r\ (1+r)^n]}{[(1+r)^n-1]} \times CV$$

where, a = the annual cost;
r = the rate of interest (for the present purpose 10%);
n = the (remaining) life expectancy of the item expressed in years (for the present purpose 'n' equals to 5 years for each of the following items: Microbus, Computer, Photocopier, Motorbike, Refrigerator, and for Jeep it was 7 years);
CV = the current value of the capital item (this value against each item was supplied by SAVE).

TABLE 5.3 : SAVE Expenses after adjusting '7 percent' and 'annualized cost' of capital items by major line-items for the period 1986/87 - 1989/90

(in current US $)

LINE ITEMS	1986-87	1987-88	1988-89	1989-90
Personnel	174,786	211,612	201,963	219,516
Travel	24,887	20,207	25,278	29,386
Other Direct Costs	83,592	58,791	104,710	89,186
Capital Asset	12,669	16,456	17,613	26,791
Project Cost	360,870	232,379	315,981	240,958
Consultants	6,222	5,052	12,639	11,754
Total Cost	663,025	544,496	678,184	617,590

Step 4: Expenses shown in Table 5.3 are the total expenses of SAVE incurred for all the projects in Bangladesh. Since separate cost figures for SAVE-Nasirnagar were not available, it was necessary to apportion the total SAVE expenses by project areas, using apportionment criteria based on the relative weight of the "burden vehicle", i.e., "population served". "Population served" in the project area was treated as the "burden vehicle", since the SAVE activities (12) not only concern about the children and women, but

also aim at long-term sustainable overall development of the population of the catchment area. Since Nasirnagar project serves 44.23 percent of the total population served by the SAVE project, the relative share of SAVE expenses for Nasirnagar project was fixed at 44.23 percent (see Table 5.4) of the total SAVE expenses in Bangladesh. SAVE expenses for Nasirnagar, thus, calculated are presented in Table 5.5.

TABLE 5.4 : Population in the four SAVE project areas

Project Area	POPULATION	
	Number	Percentage of total population served
Nasirnagar	23,000	44.23
Rangunia	13,000	25.00
Ghior	10,000	19.23
Mirjapur	6,000	11.54
TOTAL	52,000	100.00

TABLE 5.5 : SAVE Expenses for the 12 project activities in Nasirnagar by major line-items for the period 1986/87 - 1989/90

(in current US $)

LINE ITEMS	1986-87	1987-88	1988-89	1989-90
Personnel	77,307.4	93,596.0	89,328.2	97,091.9
Travel	11,007.6	8,937.6	11,180.5	12,997.0
Other Direct Costs	36,972.7	26,003.3	46,313.2	39,447.0
Capital Asset	5,603.5	7,278.0	7,790.2	11,849.7
Project Cost	169,612.8	102,781.2	139,758.4	106,575.7
Consultants	2,752.0	2,234.5	5,570.2	5,198.8
Total (SCF source)	293,255.9	240,830.6	299,960.7	273,160.1

Step 5: One of the basic philosophies of the SAVE program is to generate local resources in the form of community contribution (CC), thereby, help pay part of the project costs. Whatever insignificant the amount might be in quantitative terms, the community contribution is qualitatively significant, especially in the present context of extremely low rate of local resource mobilization in rural Bangladesh. Hence, in addition to the SAVE sources of funding, the second source of input considered is community contribution in the form of land, labor, materials and time of the beneficiaries.[1] The latter source should be treated as a cost component of the SAVE projects, and hence, needs to be calculated and added to the SAVE sources of funding to arrive at the total expenses incurred for Nasirnagar project activities. The value of community contributions over time for such items as labor, materials, and time of the community people was calculated by the SAVE personnel; and the value of land donated by the community was calculated by us, using a 10 percent rate of interest on the total value of land donated by the community for the project activities. It is important to note that SAVE has been successful in the task of tapping community resources for sustainable rural development and the relative amount mobilized from the community is not insignificant. This is surely a praiseworthy effort in the context of rural Bangladesh. Between 4.4 percent (US$ 13,363) and 7.1 percent (US$ 18,289) of the total costs in the different years were met through community financing (Table 5.6).

TABLE 5.6 : Total cost of 12 project activities in Nasirnagar by sources of expenditures and major line-items: 1986-87 - 1989-90

(in current US $)

SOURCES/LINE-ITEMS	1986-87	1987-88	1988-89	1989-90
SAVE Source: of which:	293,255.9 (95.6)	240,830.6 (92.9)	299,960.7 (94.0)	273,160.1 (95.2)
Personnel	77,307.4	93,596.0	89,328.2	97,091.9
Travel	11,007.5	8,937.6	11,180.5	12,997.0
Other Direct Costs	36,972.7	26,003.3	46,313.2	39,447.0
Capital Asset	5,603.5	7,278.0	7,790.2	11,849.7
Project Cost	159,612.8	102,781.2	139,758.4	106,575.7
Consultants	2,752.0	2,234.5	5,570.2	5,198.8
Community Source	13,363.1 (4.4)	18,289.1 (7.1)	19,030.1 (6.0)	13,669.1 (4.8)
TOTAL	306,619.0	259,119.7	318,990.8	286,829.2

NOTE: Figures in the parentheses indicate percentages of the total expenditures

[1] *The methods of community financing practiced in SAVE/Nasirnagar in the form of community labor and community donations (land) represents only one-time costs. Details about the strengths and weaknesses of these methods along with other methods of community financing (namely, fee for service, drug sales, personal prepayment, production-based prepayment, etc.) are discussed in detail in Russell and Reynolds, 1985.*

Step 6: Since our objective is to analyze the per-output costs of three out of the twelve project activities, namely, the Child Survival, Women's Savings Groups, and Family Planning, it is necessary to apportion the total expenditure (found in Step 5) incurred on the twelve project activities in Nasirnagar. The apportionment criteria was suggested by the SAVE program managers at Dhaka, and are shown in Table 5.7.

TABLE 5.7: Apportionment of the total costs by activities in SAVE-Nasirnagar

Activities	Share of the total costs (%)
I. Child Survival (CS)	25
II. Credit & Income Generation (CIG)	15
III. Community and Home Infrastructure (CHI)	15
IV. Agriculture (Ag)	10
V. Education and Human Resources (EHR)	8
VI. Pisciculture (Pis)	7
VII. Women's Savings Groups (WSG)	5
VIII. Maternal and Child Health (MCH)	5
IX. Sponsorship (Spon)	5
X. Family Planning (FP)	2
XI. Water and Sanitation (WS)	2
XII. Resource Conservation (RC)	1
Total (12 activities)	100

According to the apportionment criteria suggested by the SAVE program managers, activities related to Child Survival, Women's Savings Groups and Family Planning account for 25 percent, 5 percent, and 2 percent respectively of the total costs, i.e., activities considered under the present cost-output analysis accounts for 32 percent of the total project costs in Nasirnagar.

Costs involved in CS, WSG and FP activities of SAVE Nasirnagar according to the sources -- SCF and CC, and according to the major line-items for the periods under study are shown in Table 5.8.

TABLE 5.8 : Cost of Child Survival (CS), Women's Savings Groups (WSG), and Family Planning (FP) activities of SAVE-Nasirnagar by sources and major line-items for the period under analysis

(at current US $)

Source/Line-items	1986-87			1987-88			1988-89			1989-90		
	CS	WSG	FP	CS	WSG	FP	CS	WSG	FP	CS	WSG	FP
SAVE Source:	73,314.1	14,662.8	5,865.1	60,207.7	12,041.5	4,816.6	74,990.2	14,998.0	5,999.2	68,290.0	13,658.2	5,463.2
Personnel	19,326.9	3,865.4	1,546.1	23,399.0	4,679.8	1,871.9	22,332.1	4,466.4	1,786.6	24,273.0	4,854.6	1,941.8
Travel	2,751.9	550.4	220.2	2,234.4	446.9	178.8	2,795.1	559.0	223.6	3,249.3	649.9	259.9
Other Direct Costs	9,243.2	1,848.6	739.5	6,500.8	1,300.2	520.1	11,578.3	2,315.7	926.3	9,861.8	1,972.4	788.9
Capital Asset	1,400.9	280.2	112.1	1,819.5	363.9	145.6	1,947.6	389.5	155.8	2,962.4	592.5	237.0
Project Cost	39,905.2	7,980.6	3,192.3	25,695.3	5,139.1	2,055.6	34,939.6	6,987.9	2,795.2	26,643.9	5,328.8	2,131.5
Consultants	688.0	137.6	55.0	558.6	111.7	44.7	1,397.6	279.5	111.8	1,299.7	260.0	104.0
Community Source	3,340.8	668.2	267.3	4,572.3	914.5	365.8	4,757.5	951.5	380.6	3,417.3	683.5	273.4
TOTAL	76,654.9	15,331.0	6,132.4	64,780.0	12,956.0	5,182.4	79,747.7	15,949.5	6,379.8	71,707.3	14,341.7	5,736.6

Step 7: To ensure comparability, year-wise costs in current US$ were adjusted for inflation. In order to calculate comparable program costs, the CPI (Consumer Price Index) for "all items" (rather than for consumer goods only) in USA for the year 1986-87 was considered as base-year (constant). CPI values were computed on the basis of Consumer Price Index numbers provided in the UN Monthly Bulletin of Statistics, 1990. (See: UN Monthly Bulletin of Statistics, 1990, p.178-179). The values computed for the periods under study are as follows: 1986-87 = 1.000; 1987-88 = 0.960; 1988-89 = 0.916; and 1989-90 = 0.883. By multiplying the current values in Table 5.8 by the corresponding CPI value, the comparable value at 1986-87 constant US$ (price) was estimated, as shown in Table 5.9.

TABLE 5.9: Cost of Child Survival (CS), Women's Savings Groups (WSG), and Family Planning (FP) activities SAVE-Nasirnagar by sources and major line-items, 1986-87 to 1989-90.

(at constant 1986-87 US $)

Source/Line-items	1986-87			1987-88			1988-89			1989-90		
	CS	WSG	FP	CS	WSG	FP	CS	WSG	FP	CS	WSG	FP
SAVE Source:	73,314.1	14,662.8	5,865.1	57,799.4	11,559.8	4,623.9	68,691.0	13,738.2	5,495.3	60,300.1	12,060.2	4,824.0
Personnel	19,326.9	3,865.4	1,546.1	22,463.1	4,492.6	1,797.0	20,456.2	4,091.2	1,636.5	21,433.1	4,286.6	1,714.6
Travel	2,751.9	550.4	220.2	2,145.0	429.0	171.6	2,560.3	512.0	204.8	2,869.1	573.9	224.5
Other Direct Costs	9,243.2	1,848.6	739.5	6,240.8	1,248.2	499.3	10,605.7	2,121.2	848.5	8,708.0	1,741.6	696.6
Capital Asset	1,400.9	280.2	112.1	1,746.7	349.3	139.8	1,784.0	356.8	142.7	2,615.8	523.2	209.3
Project Cost	39,903.2	7,980.6	3,192.3	24,667.5	4,933.5	1,973.4	32,004.7	6,400.9	2,560.4	23,526.6	4,705.3	1,882.1
Consultants	688.0	137.6	55.0	536.3	107.2	42.9	1,280.2	256.0	102.4	1,147.6	229.6	91.8
Community Source	3,340.8	668.2	267.3	4,389.4	877.9	351.2	4,357.9	871.6	348.6	3,017.5	603.5	241.4
TOTAL	76,654.9	15,331.0	6,132.4	62,188.8	12,437.7	4,975.1	73,048.9	14,609.7	5,843.9	63,317.6	12,663.7	5,065.4

Step 8: In terms of replication of SAVE program by other agencies or expansion of SAVE activities in other areas, a close look at the cost line-items permit us to classify costs according to direct program costs which would be logically necessary for the further expansion of the program by the SAVE, and classify costs which will be necessary to replicate the SAVE program by the other agencies. Thus, two-cost models have been prepared: (1) minimum cost model, indicating 'costs' necessary for the expansion of the program by SAVE in other areas of the country, and (2) maximum cost model, indicating costs necessary to replicate the SAVE program by other agencies (the concept of two-cost model is also applied in Foreit, et. al, 1983). The theoretical contents of the two-cost models are shown in Table 5.10, and the value of inputs according to the two-cost models for the three activities considered, namely, Child Survival, Women's Savings Groups, and Family Planning for different years are presented in Table 5.11.

TABLE 5.10 : Two-cost models

Model	Purpose	Cost Line-items	Source of Expenditure
Minimum-cost model (Min. CM)	Expansion of the program to other areas	1. Project Cost 2. Community Contribution	SAVE Community
Maximum-cost model (Max. CM)	Replication by other agencies	1. Personnel 2. Travel 3. Other Direct Costs 4. Capital Asset 5. Project Cost 6. Consultants 7. Community Contribution	SAVE SAVE SAVE SAVE SAVE SAVE Community

TABLE 5.11 : Cost of CS, WSG and FP activities of SAVE-Nasirnagar according to Min.CM and Max.CM for the period under study (1986-87 - 1989-90) at constant 1986-87 prices (US $)

Cost Models	1986-87			1987-88			1988-89			1989-90		
	CS	WSG	FP	CS	WSG	FP	CS	WSG6	FP	CS	WSG6	FP
Min. CM	43,244.0	8,648.8	3,459.6	29,056.9	5,811.4	2,324.6	36,362.6	7,272.5	2,909.0	26,544.7	5,308.8	2,123.5
Max. CM	76,654.9	15,331.0	6,132.4	62,188.8	12,437.7	4,975.1	73,048.9	14,609.7	5,843.9	63,317.6	12,663.7	5,065.4

NOTE: Calculated based on information contained in Table 5.9.

Step 9: Since Child Survival (CS) activity consists of many components, the total cost on CS should be disaggregated according to the program components. It was done on the basis of "percentage attributions to program functions" filled in by SAVE/Dhaka Office for "USAID Health and Child Survival PVO Project Questionnaire" for the period under study. The summary sheet of percentage attributions to CS program functions is shown in Table 5.12.

TABLE 5.12 : Percentage attributions of the cost of Child Survival activity by program functions (components) in SAVE-Nasirnagar, 1986-87 to 1989-90

Program Functions (Components)	1986-87	1987-88	1988-89	1989-90
1. Immunization/Vaccination	30	25	25	25
of which:				
Children	27	22.5	22.6	22.6
Women	3	7.6	7.6	7.5
2. Growth Monitoring/Nutrition	25	30	30	25
3. Maternal Health & Nutrition	20	20	25	36
4. Diarrhoeal Disease/ Oral Rehydration	15	15	10	6
5. Breast-feeding	-	-	5	6
6. Child Spacing/High Risk Births	5	5	5	5
7. Water and Sanitation	5	5	-	-
TOTAL	100	100	100	100

NOTE: Immunization figures are not provided in the 'Schedule' separately for "children" and "women". But, according to the "best guess" of the program personnel at SAVE/Dhaka Office, immunization costs for children and women were disaggregated at 9:1 ratio.

Since immunization and growth monitoring/nutrition components of CS activity accounts for more than 50 percent of the total costs of CS, these were accepted for computing cost-output relationships of the CS program-activity. The year-wise costs for immunization and growth monitoring functions in SAVE-Nasirnagar are presented in Table 5.13.

TABLE 5.13 : Cost of immunization and growth monitoring components of the CS activity in SAVE-Nasirnagar for the period under study

(at constant 1986-87 US$ value)

CS Components	1986-87	1987-88	1988-89	1989-90
I. Child Immunization (DPT, Measles, OPV, BCG)				
- Minimum Cost Model	11,675.9	6,537.8	8,181.6	5,972.6
- Maximum Cost Model	20,696.8	13,992.5	16,436.0	14,246.5
II. Women Immunization (TT)				
- Minimum Cost Model	1,297.3	2,179.3	2,727.2	1,990.9
- Maximum Cost Model	2,299.6	4,664.2	5,478.7	4,748.8
III. Growth Monitoring				
- Minimum Cost Model	10,811.0	8,717.1	10,908.8	6,636.2
- Maximum Cost Model	19,163.7	18,656.6	21,914.7	15,829.4

NOTE: Computed by apportioning 'CS' data from Table 5.11, according to the attribution criteria given in Table 5.12.

5.4 Outcome Measurement:

It is a well established fact that although outcome measures have been more widely discussed in the literature than input and cost measures, they still constitute a weak link in the analysis.[2] For the purpose of the present analysis, we have followed the basic methodology of the "classification of outcomes on cause-effect chain" proposed by Reynolds, and Gaspari, whereby outcomes have been visualized as falling along a continuum from the immediate to the ultimate. (See Reynolds, and Gaspari, 1985, p.p. 28-31, B11-B13). In this continium, inputs (costs) is an activity (process) immediately resulting in outputs (goods and services provided); outputs then are expected to have effects on the target population (changes in knowledge/skills, attitudes/motivation, and behavior/practices); the effects, in turn, are expected to have an impact on the target population's health, socioeconomic status, and other status (mortality declines, births averted, etc.).

For two reasons, we have measured the immediate service outputs and effects rather than long-range impacts of the three project activities, namely, women's savings groups, FP and child survival. First, the analysis is designed to respond to immediate operational decisions facing the policymakers and program managers. Second, health and family welfare impacts are difficult to measure, often requiring long-term experimental research designs.

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[2] *For a detailed discussion on the outcome issues see Sirajeldin et. al., 1983.*

Outputs and effects of the three different activities for which data are available are shown in Tables 5.14 and 5.15.

TABLE 5.14 : Outcomes of Child Survival, Women's Savings Groups, and Family Planning activities (based on informations from the SAVE PMIS)

Activities of SAVE-Nasirnagar	OUTCOME		
	Outputs (Immediate goods and services provided)	Effects (On knowledge, attitude, and behavior of the target populaion)	Impact (Long-term impact on the target population)
I. Child Survival	1.1 No. of children fully immunized 1.2 No. of women given TT2 1.3 No. of children monitored for growth	N.A.	N.A.
II. Women's Savings Groups	2.1 Total hours devoted by the SAVE workers for organizing and training (formal, informal)	2.2 No. of members recruited: both old and new 2.3 No. of WSGs formed: both old and new 2.4 No. of groups/ members involved in income-generating activities 2.5 Amount of capital (savings) generated	N.A.
III. Family Planning	3.1 Total No. of FP visits to the MWRAs made by the SAVE workers	3.2 No. of total acceptors	N.A.

NOTE: NA = Impact data are not available in the SAVE/PMIS.

TABLE 5.15 : Outcomes of CS, WSG and FP activities in SAVE-Nasirnagar, 1986-87 - 1989-90

Activities/Components	1986-87	1987-88	1988-89	1989-90
I. Child Survival (CS)				
- Number of children (<5 yrs) fully immunized	977	629	993	1085
- Number of women (15-45 yrs) with TT2	1262	1823	722	3256
- Number of children monitored for growth	1114	1749	1889	1845
- Number of CS related contacts with HHs made by the SAVE workers	85872	89568	95472	96360
II. Women's Savings Groups (WSG)				
- Number of members of WSG	932	1330	1808	1784
- Number of WSGs	101	142	202	213
- Number of members of WSGs involved in income-generating activities	587	758	783	766
- Number of WSGs involved in income-generating activities	58	74	79	79
- Training hours of the SAVE workers	2424	3408	4848	5112
- Amount of savings (in Tk.)*	207,619	265,986	311,722	319,206
III. Family Planning (FP)				
- Number of acceptors	529	652	847	1011
- Number of family planning related contacts by the SAVE workers	6348	7824	10124	12131

Source: SAVE/PMIS

* All figures are in current price.

5.5 Cost-outcome Measures:

Costs per unit of outcomes of the different program activities for SAVE-Nasirnagar, as measured in terms of the minimum and maximum cost models, indicating respectively the possibilities of expansion and replication are presented in Table 5.16. For child survival activities, costing was done

separately for each fully immunized child, for each woman with TT2 and for each child monitored for growth during the period. For Womens Savings Groups, costing was related to the formation, training and smooth running of each savings group and also for each member of such group. For FP activities, costing was computed for each FP contact and unit acceptor. In the latter case, acceptors are cumulative, indicating not only individuals who accepted FP supplies and services during the year of analysis, but also those who accepted in previous years and were still using in the year of analysis, i.e., acceptors include both the new acceptors and continuing users of FP. The dynamics of costs per acceptor do not tell us anything about whether the program is growing or not.[3]

TABLE 5.16 : Cost-per-unit-outcome of the three different activities of SAVE-Nasirnagar according to the Minimum and Maximum Cost Models, 1986-87 to 1989-90

(at constant 1986-87 US $ value)

Activity and component-wise outcomes	1986-87		1987-88		1988-89		1989-90	
	Min. CM	Max. CM	Min. CM	Max. CM	Min. CM	Max. CM	Min. CM	Max. CM
I. Child Survival								
1.1 Cost per fully immunized child	11.95	21.18	10.39	22.25	8.24	16.55	5.50	13.13
1.2 Cost per woman with TT2	1.03	1.82	1.20	2.56	3.78	7.59	0.61	1.46
1.3 Cost per child monitored for growth	9.70	17.20	4.98	10.67	5.77	11.60	3.60	8.58
II. Women's Savings Groups								
2.1 Cost per group formation	85.63	151.79	40.92	87.59	36.00	72.33	24.92	59.46
2.2 Cost per member recruited	9.28	16.45	4.37	9.35	4.02	8.08	2.98	7.10
III. Family Planning								
3.1 Cost per FP contact by the SAVE workers	0.64	0.97	0.30	0.64	0.29	0.58	0.18	0.42
3.2 Cost per acceptor	6.54	11.59	3.57	7.63	3.43	6.90	2.10	5.01

[3] *Limiations of this measure are discussed in detail in Gillespie et al., 1983.*

The dynamics (i.e., changes over time) of costs per unit outcome of Child Survival, Womens Savings Groups, and Family Planning activities of SAVE-Nasirnagar program are discussed below:

5.5.1 Child Survival Activity

Costs per immunized child:

Costs per unit of outcome measured in terms of maximum cost model and presented in Table 5.16 is the real cost incurred by the SAVE-Nasirnagar program. According to this cost model, cost per fully immunized child in the initial two years (1986-1988) was much higher than in the subsequent years. Thus, in 1986-87 cost per fully immunized child was $21.18, and this subsequently declined to only $13.13 in 1989-90. Also, as per the minimum cost model (which include only "project costs" and "inputs from community contributions"), the cost per fully immunized child shows a general declining trend. Thus, costs per fully immunized child declined from $11.95 in 1986-87 to $5.50 in 1989-90. The gradual decline in cost per fully immunized child according to both the maximum and minimum cost models in the most recent period can be attributed to the fact that child survival activity is being undertaken in the new experimental areas in early 1990.

Costs per woman with TT2:

In the first three years considered in the analysis, costs per woman with TT2 have increased steadily, according to the maximum cost model. Thus, cost per woman with TT2 was only $1.82 in 1986-87, and this increased to $7.56 in 1989-90; however, it declined dramatically to only $1.46 in 1989-90. A similar trend is discernible according to the minimum cost model. The reason behind such dramatic decrease in the cost per woman with TT2 in 1989-90 is the inclusion of new-experimental area in the program in early 1990.

Costs per child monitored for growth:

The cost per unit output shows more or less, a declining trend, except in 1988-89. Thus, the real expenses for each child under growth monitoring component of CS activity declined from $17.20 in 1986-87 to $8.58 in 1989-90. Similarly, as per the minimum cost model, the corresponding costs were $9.70 and $3.60 respectively.

5.5.2 Women's Savings Groups

Costs per Women's Savings Group and cost per member:

Costs per WSG has shown a declining trend over time. Thus, cost per WSG declined from $151.79 in 1986-87 to $59.45 in 1989-90 according to the maximum cost model, and from US$85.63 in 1986-87 to US$24,92 in 1989-90 according to the minimum cost model. A similar trend is also discernible regarding cost per member recruited. One reason behind such a decline might be the fact that the start-up costs are always on the higher side, and in course of time

women became more aware of the benefits of such groups and voluntarily joined such groups.

5.5.3 Family Planning

As in the case of costs per Women's Savings Group and cost per child monitored for growth, the costs per acceptor of FP and costs per FP contact by the SAVE workers also show a declining trend. Thus, costs per acceptor declined from $11.59 in 1986-87 to $5.01 in 1989-90 according to the maximum cost model, and from $6.54 in 1986-87 to only $2.10 in 1989-90 according to the minimum cost model.

The declining cost over time for the above five categories of activities can be explained by a sharp decline in project and personnel costs between 1986-87 and 1989-90. For example, project and personnel costs for fully immunized child declined from $16.37 in 1986-87 to $9.33 in 1989-90, i.e., a decline of about 44 percent.

It is important to note at this stage that the gap between the maximum (real expenses incurred) and minimum cost is the area where the possible cost-minimising factors of SAVE program lie. The gaps between the maximum and minimum cost models for all the activities considered in this analysis are shown in Figures 5.1-5.7. In all the figures, the upper line indicates the real costs per unit of outcome and the lower line shows the minimum costs (project costs plus value of community contribution). The lower line also shows the costs that are necessary for the expansion of the activities, and the upper line indicates costs required for replication of SAVE programs. The gaps between the upper and lower lines are important from the view point of effective-cost management of the program, since all the cost line items are included in the upper line costs and theoretically lowering the upper line curve is possible, provided cost-minimization factors are adequately taken care of. The cost line-items which can be reduced are: personnel, other direct costs, travel, consultants and capital assets. These line-items constitute between 43 percent and 58 percent of the total costs of SAVE activities in Bangladesh during the reference period (calculated from Table 5.6). In addition, the share of total SAVE expenses falling under these line-items has been increasing over time. Thus, there is a scope for minimizing costs on the above items, provided the program is expanded horizontally.

Figure 5.1

Cost per Fully Immunized Child in SAVE Nasirnagar according to the Minimum and Maximum Cost Models: 1986-87 to 1989-90

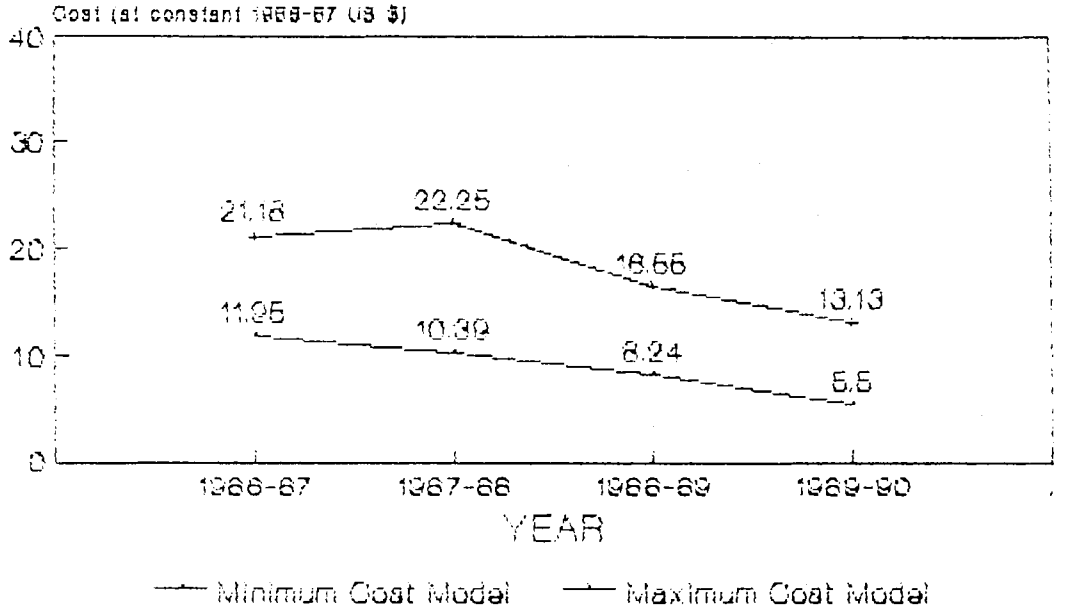


Figure 5.2

Cost per Woman with TT2 in SAVE Nasirnagar according to the Minimum and Maximum Cost Models: 1986-87 to 1989-90

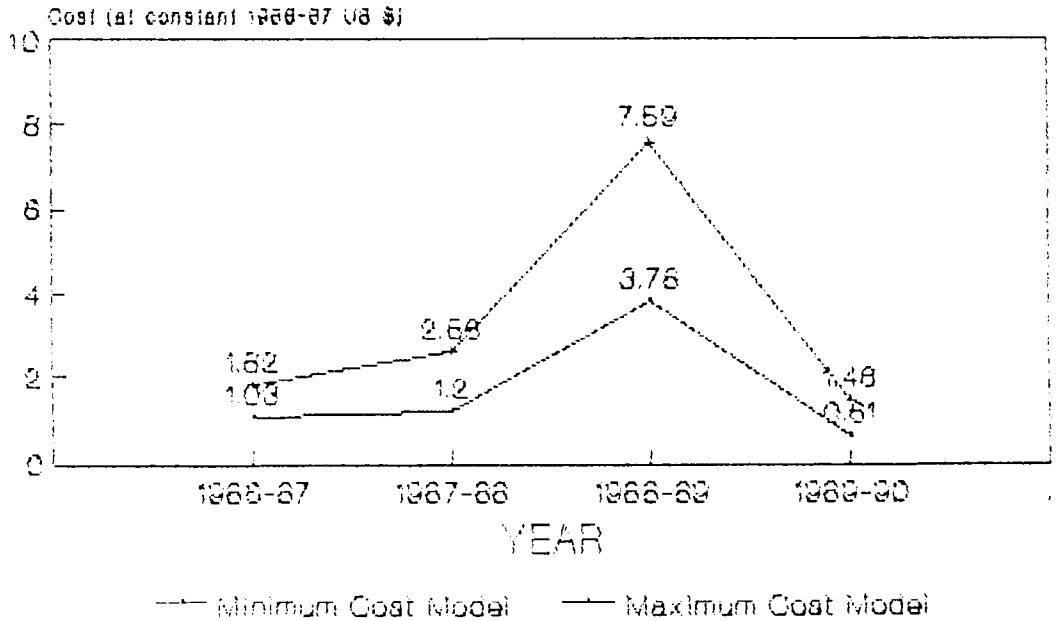


Figure 5.3

Cost per Child Monitored for Growth in Nasirnagar according to the Minimum and Maximum Cost Models: 1986-87 to 1989-90

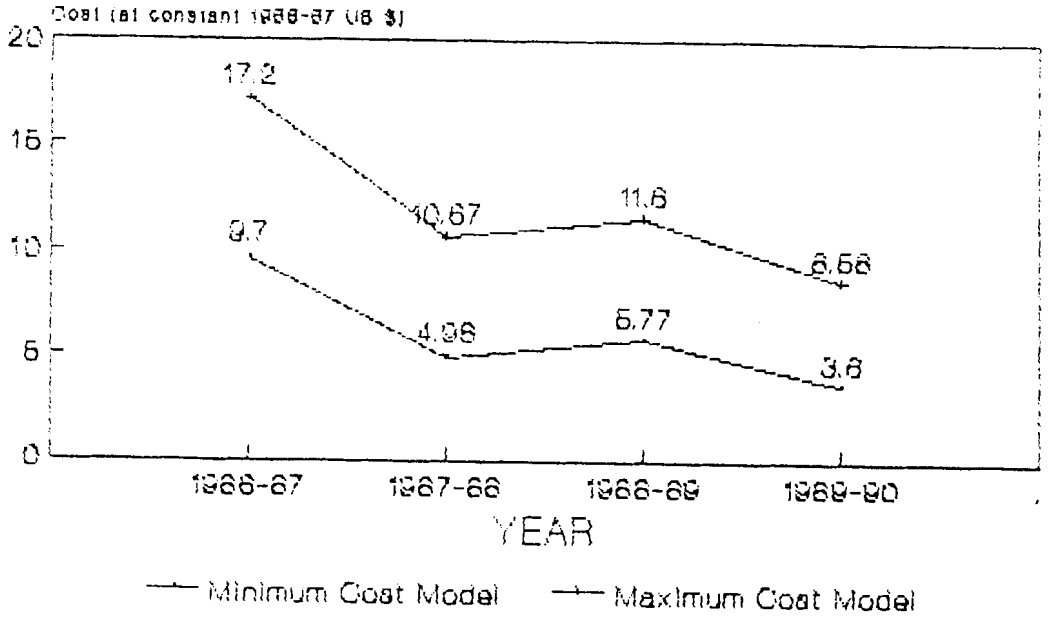


Figure 5.4

Cost per Women's Savings Group in SAVE Nasirnagar according to the Minimum and Maximum Cost Models: 1986-87 to 1989-90

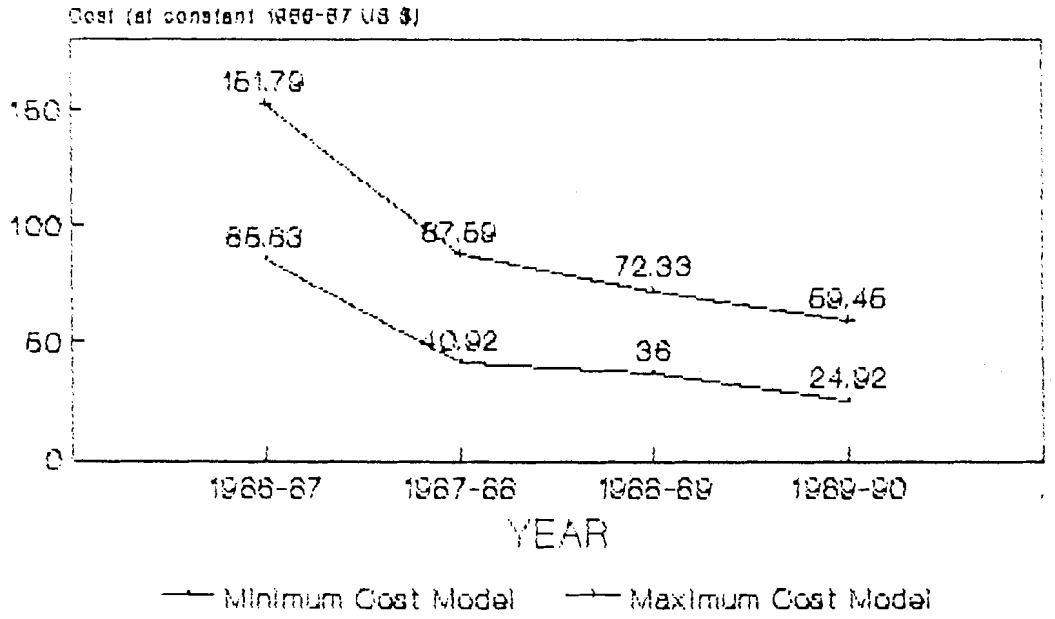


Figure 5.5

Cost per Member of WSG in SAVE Nasirnagar according to the Minimum and Maximum Cost Models: 1986-87 to 1989-90

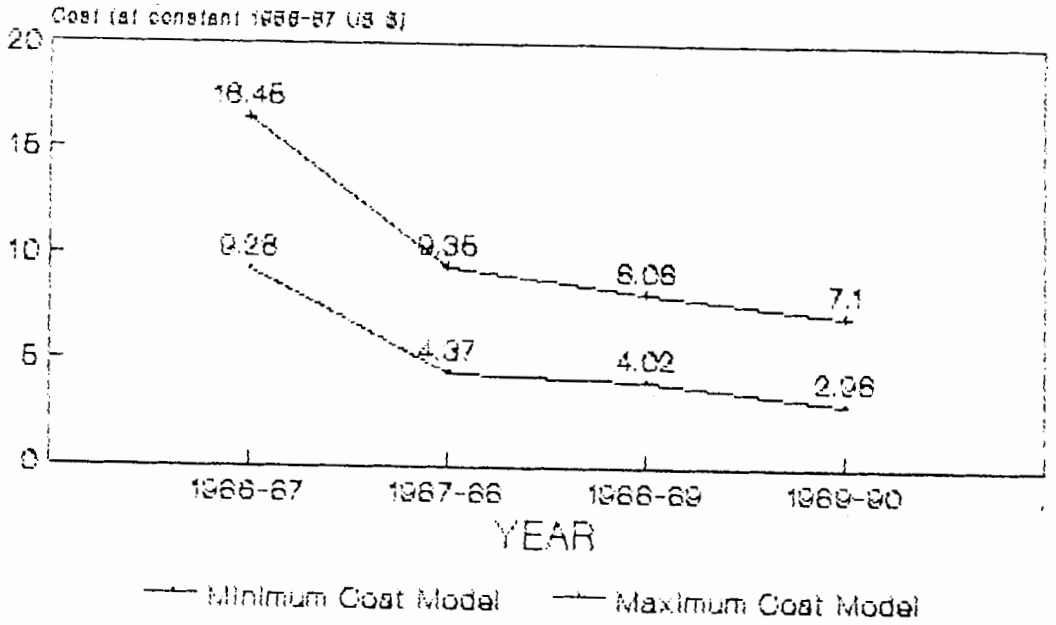


Figure 5.6

Cost per FP contact in SAVE Nasirnagar according to the Minimum and Maximum Cost Models: 1986-87 to 1989-90

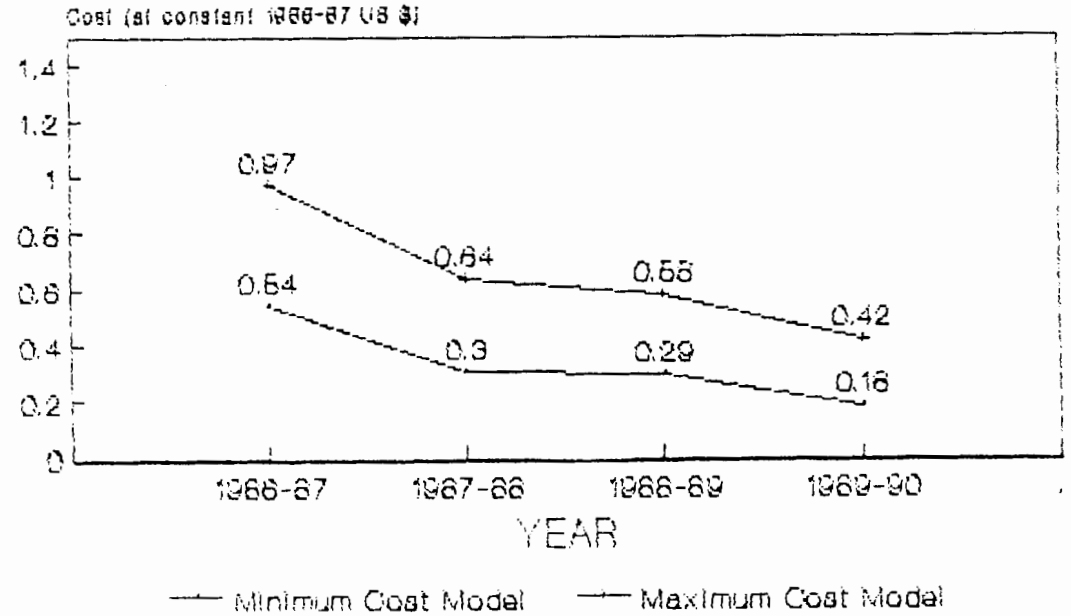
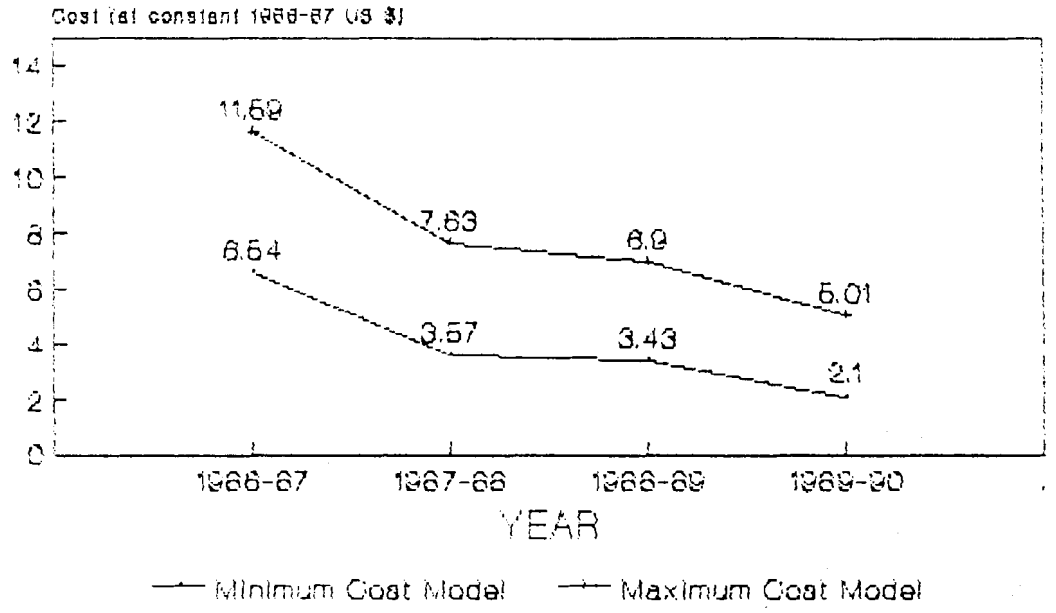


Figure 5.7

Cost per FP Acceptor in SAVE Nasirnagar according to the Minimum and Maximum Cost Models: 1986-87 to 1989-90



CHAPTER SIX

DISCUSSION AND RECOMMENDATIONS

The savings group members and non-members have similar household size. However, there are some differences regarding other demographic characteristics. The members are older than non-members by 1 to 2 years; have 0.2 to 0.7 more children ever born; have 0.2 to 0.5 more living children; and have lower desire for additional children. Thus, it can be said that, by and large, the members and non-members are similar regarding their demographic characteristics, i.e., **there is no special selection bias in respect of demographic characteristics.**

The members and non-members are largely similar regarding such economic characteristics as landholding and income; however, the employed and those with more household assets are higher among the members than non-members. Also, the members and their husbands generally are more educated than the non-members and their husbands. **That is, there appears to be a selection bias toward the more educated and slightly better-off. However, if the program is to make more appreciable contribution in the future, efforts must be made toward recruiting those with less education and the relatively worse-off who constitute the large majority of the population in rural Bangladesh.**

The members and their family members have better health status than non-members, **suggesting that the members have benefitted from their participation in savings group activities.** Also, the proportions of the non-members in the experimental villages who have immunized their children and have themselves received vaccinations are high, **suggesting that the non-members have also benefitted from SAVE program in the experimental villages by not only helping them in raising their consciousness level but by also helping provide such services to them.**

Contraceptive use, both ever and current, is higher in the experimental than comparison villages, and higher in the old than new villages. Also, it is higher among the members than non-members, **suggesting that the SAVE program has not only helped raise contraceptive use among the members but also among the non-members residing in the project villages. That is, women's savings groups, combined with FP motivation and supplies and services, can be an effective strategy of raising contraceptive prevalence in rural Bangladesh.**

Between the baseline survey conducted in January 1990 and the Mini-CPS conducted in October 1990, contraceptive use has declined among the members in the old villages. One of the main reasons reported for discontinuation of FP use is non-availability of FP methods. **Thus, it appears that with improvements in the FP supply delivery system, contraceptive use can be raised. This is all the more needed in view of a sizeable demand for FP supplies and services in the future.**

The cultutral and religious resistance to FP use is less pronounced among the members than non-members, **suggesting that through participation in group meetings and interactions with SAVE workers as well as mutual interaction and**

consultation among the members themselves such resistance to FP use has been at least partly overcome. Since cultural and religious opposition greatly hinder FP use in Bangladesh, especially in rural areas, such opposition can be overcome by organizing the women into groups and encouraging their participation in such groups.

Cost-per-unit of output was estimated for three out of the twelve program activities, namely Child Survival (CS), Women's Savings Groups (WSG), and Family Planning (FP). These three activities were included in the cost-output analysis because of their programmatic significance, and also because these activities account for about one-third of the total project costs of SAVE. Cost per unit of output was calculated, following two methods: (i) maximum cost model, showing the real cost incurred and indicating 'costs' necessary to replicate these three activities by other agencies, and (ii) minimum cost model, indicating 'costs' necessary for the expansion of these three activities by SAVE itself in other areas of the country. The difference between the costs calculated on the basis of the two cost models is important from the view point of effective cost management of the program.

The real costs (measured in terms of the maximum cost model, at 1986-87 US $ value) per unit of outputs of CS, WSG and FP activities have declined over time. The declining costs over time for these program outputs can be explained by a substantial decline in project and personnel costs between 1986-87 and 1989-90. The substantial decline in cost per fully immunized child, per women with TT2, and per child monitored for growth in 1989-90 is due to the inclusion of new experimental area in the program in 1990, suggesting that there has been an economy of scale on such outputs.

Declining costs per unit of output of CS, WSG and FP activities indicate that there are both potentials of expansion of such activities by SAVE in other as well as possibilities of replication of such activities by other NGOs. The analysis of the cost line items indicates that cost-per-unit output can be minimized if SAVE reduces costs on personnel, other direct costs, and costs on travel, consultants and capital assets. These line items, together, constitute around half of the total costs of SAVE activities in Bangladesh. Also, the share of these items has been increasing over time, which is not desirable provided the program is not expanding horizontally. Thus, there is a scope for further reduction in overall costs by minimizing costs on the above items.

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APPENDIX TABLE 3.1

Selected Characteristics of the Sample MWRAs in the Old Experimental Area, FMIS (1986) and Baseline (1990) Survey

VARIABLES	FMIS (1986)			BASELINE (1990)		
	Member	Non-Member	Total	Member	Non-Member	Total
Household Size : MEAN	6.88	7.04	7.01	6.98	6.77	6.85
Age : MEAN	28.1	26.9	27.2	31.5	30.0	30.6
Schooling of MWRAs MEAN	1.28	0.72	1.17	1.10	0.75	0.88
Land : MEAN	2.20	1.65	1.74	1.46	1.47	1.47
SD	4.4	4.6	4.6	2.4	3.4	3.0
Income : MEAN	11,549	9,267	9,652	10,657*	11,346*	11,090*
SD	9,705	9,550	9,606	12,350	19,149	15,729
N	156	756	912	335	569	904

* Income data have been adjusted to make these comparable with FMIS data.

APPENDIX TABLE 3.2

Percentage Distribution of MWRAs by Standard of Living

STANDARD OF LIVING	PMIS (1986)			BASELINE (1990)		
	Member	Non-Member	Total	Member	Non-Member	Total
Low	84.0 (130)	87.7 (657)	87.2 (787)	82.4 (276)	85.8 (488)	84.5 (764)
Average	15.6 (24)	12.3 (92)	12.8 (116)	12.5 (42)	11.1 (63)	11.6 (105)
High	(0)	(0)	(0)	5.1 (17)	3.2 (18)	3.9 (35)
TOTAL N	100.0 (154)	100.0 (749)	100.0 (903)	100.0 (335)	100.0 (569)	100.0 (904)

Note : The figures in parenthes give the number of MWRAs.

APPENDIX TABLE 3.3

Percentage Distribution of the MWRAs by Family Health Status

FAMILY HEALTH STATUS	PMIS (1986)*			BASELINE (1990)		
	Member	Non-Member	Total	Member	Non-Member	Total
Low	13.6 (21)	23.8 (178)	22.0 (199)	0.6 (2)	0.2 (1)	0.3 (3)
Average	78.6 (121)	74.1 (555)	74.9 (676)	91.6 (307)	92.4 (526)	92.1 (833)
High	7.8 (12)	2.1 (16)	3.1 (28)	7.8 (26)	7.4 (42)	7.5 (68)
TOTAL N	100.0 (154)	100.0 (749)	100.0 (903)	100.0 (335)	100.0 (569)	100.0 (904)

Note: The figures in parentheses give the number of MWRAs.

* X^2 = 19.47
P = .0001

APPENDIX TABLE 4.1

Current Use of Contraception Among the MWRAs by Method

FP METHODS	PMIS (1986)			BASELINE (1990) **		
	Member	Non-Member	Total	Member	Non-Member	Total
Pill	10.4 (16)	7.2 (54)	7.7 (70)	10.7 (36)	5.4 (31)	7.4 (67)
Condom	(0)	(0)	(0)	0.6 (2)	(0)	0.2 (2)
IUD	6.5 (10)	5.5 (41)	5.6 (51)	2.4 (8)	0.5 (3)	1.2 (11)
Tubectomy	9.7 (15)	8.5 (64)	8.7 (79)	16.1 (54)	10.7 (61)	12.7 (115)
Vasectomy	(0)	(0)	(0)	(0)	0.5 (3)	0.3 (3)
Other	(0)	(0)	(0)	(0)	0.5 (3)	0.3 (3)
All Modern Methods	26.6 (41)	21.2 (159)	22.1 (200)	29.8 (100)	17.6 (101)	22.2 (201)
Safe Period	(0)	(0)	(0)	2.1 (7)	1.8 (10)	1.9 (17)
Withdrawal	(0)	(0)	(0)	(0)	0.2 (1)	0.1 (1)
All Traditional Methods	(0)	(0)	(0)	2.1 (7)	2.0 (11)	2.0 (18)
Non-User N	73.4 113	78.8 590	77.9 703	68.1 228	80.3 457	75.8 685
TOTAL N	100.0 154	100.0 749	100.0 903	100.0 335	100.0 569	100.0 904

Note: The figures in parentheses give the number of MWRAs

** X^2 = 30.64
P = .0003

APPENDIX I

UNIVERSITY RESEARCH CORPORATION (BANGLADESH)

BASELINE SURVEY QUESTIONNAIRE FOR SAVE STUDY

SAMPLE IDENTIFICATION

Individual Number (For office use only) __/__/__

Area Group:

Savings - 1
Non-savings - 2
Comparison - 3

Name of head of household: _____

Household number: __/__/__/___ Para name: _____ (if any)

Village Name:

Kunda	: - 1	Moslendapur	: - 2
Gokarna	: - 3	Choirkuri	: - 4
Nurpur	: - 5	Brahmanshashan	: - 6
Chotipara	: - 7	Patanisa	: - 8
Buriswar	: - 9	Srighar	: - 10

Interviewer's Name: _____

Date of interview: _____

SECTION ONE

BACKGROUND CHARACTERISTICS

101. How many persons are there in your household (i.e., those who live and eat in this household regularly) ?

____ Male

____ Female

____ Total

102. How many living children do you have?

____ Boys

____ Girls

____ Total

103. How many of your children are now living with you?

____ Boys

____ Girls

____ Total

104. How many of your children do not live with you?

____ Boys

____ Girls

____ Total

105. Did any of your children die? If 'Yes' how many?

____ Boys

____ Girls

____ Total

106. Do you desire to have any (more) children?

(1)____ Yes

(2)____ No

(3)____ Cannot say

(4)____ Depends on God

Other _____
(specify)

107. (if Yes) How many?

____ Male

____ Female

____ Total

108. Are you currently pregnant?

(1)____ Yes

(2)____ No

(3)____ Uncertain

109. According to your opinion, how many children a couple like you should have?

____ Male

____ Female

____ Total

110. How many children aged 3-24 months are staying in your household?

____

111. How many children aged 3-24 months in your household who have received DPT and polio vaccine?

Age	Received 3 doses	Received 2 doses	Received 1 dose	Not received 0

112. How many children aged 9-24 months are staying in your household?

____

113. How many children aged 9-24 months in your household who have received measles vaccine?

____

114. How many women aged 15-45 years are there in your household?

____

115. How many women aged 15-49 years who have received TT in your household?

Individual number	Received 2 doses	Received 1 doses	Not received 0
1			
2			
3			

116. How old are you?

_____

117. Did you ever study in a school?

(1)____ Yes

(2)____ No (Go to 119)

118. What is the highest class you passed?

____ Class

119. Did your husband ever study in a school?

(1)____ Yes

(2)____ No (Go to 121)

120. What is the highest class he passed?

____ Class

121. Apart from household work, did you work for money during the past 12 months?

(1)____ Yes

(2)____ No (Go to 123)

122. (If yes) What was the type of work?

---

123. Are you involved in any village development activities?

(1)____ Yes

(2)____ No

124. (If yes) What type of activities?

SECTION TWO

FAMILY PLANNING

201. Are you (or your husband) currently using any family planning method or doing something to avoid a pregnancy?

(1)____ Yes

(2)____ No (Go to 206)

202. What is that method?

(01)____ Oral pill

(02)____ Condom

(03)____ Vaginal method

(04)____ Injection

(05)____ IUD

(06)____ Male sterilization (vasectomy)

(07)____ Female sterilization (tubectomy)

(08)____ Safe period

(09)____ Withdrawal/Ajal

(10)____ Abstinence

(11)____ Other _____
(specify)

203. When did you begin to use this method?

____ day ____ month ____ year

(Interviewer: If the respondent cannot say the date when she began using the method, ask how long she (or husband) has been using the method?

204. From where did you get the supplies/services?

(01)____ Government field worker

(02)____ SAVE field worker

(03)____ Clinic/hospital:_____
(name)

(04)____ Pharmacy

(05)____ Shop

(06)____ Mobile camp

(07)____ Depot holders

(08)____ Quack

(09)____ Qualified doctor

(10)____ Other source:_____
(specify)

(11)____ Do not know

205. What is the main reason why you are using family planning?

_____
(Go to Section 3)

206. Did you ever use any method of family planning?

____ Yes

____ No

207. What is the main reason that you (or your husband) are not using any family planning method now?

(01)____ Currently pregnant

(02)____ Want additional children

(03)____ Husband objects

(04)____ Health reasons

(05)____ Fear of side-effects

(06)____ Religious reasons

(07)____ Respondent believes that she has become sterile

(08)____ Methods not available

(09)____ Breast-feeding

(10)____ Post-partum amenorrhea

(11)____ Respondent cannot assign any reason

(12)____ Don't know

Others:_____

208. Do you intend to use any family planning method in the future?

____ Yes

____ No

____ Cannot say now

Others:_____

209. If yes, when?

---

210. If no, why not?

SECTION THREE

HOUSEHOLD CONDITION

301. How much cultivable land does your household own?

__/__/__/__ Decimals

302. Do you think that the amount of rice produced during the last one year was enough to feed the household members?

(1)____ Savings

(2)____ Enough

(3)____ Could afford 9-11 months

(4)____ Could afford 6-8 months

(5)____ Could afford 4-5 months

(6)____ Could afford 1-3 months

(7)____ Had to purchase for the whole year.

303. What are the source(s) of cash income for your household and how much did you earn from those sources during the last year?

Source(s)	Amount earned (in taka)
Business	
Cultivation	
Day labor	
Service	
Livestock	
Others (specify)	

304. Would you please tell me whether your household possesses the following assets (Interviewer: ask about all the listed assets serially, and put tick mark)

(1)____ Yes (2)____ No Radio

(1)____ Yes (2)____ No Television

(1)____ Yes (2)____ No Cassetto Player

(1)____ Yes (2)____ No Bicycle

(1)____ Yes (2)____ No Bed

(1)____ Yes (2)____ No Cot (chowki)

(1)____ Yes (2)____ No Quilt

(1)____ Yes (2)____ No Thin mattress

(1)____ Yes (2)____ No Blanket

305. Does your household have electricity?

____ Yes

____ No

306. If yes, when did your household receive electricity connection?

__/__/ years ago

307. What is the condition of the dwelling unit? (Interviewer: ascertain the condition, and put tick mark)

(1)____ Pucca (brick house)

(2)____ Pucca and tin

(3)____ Wood and tin

(4)____ Bamboo and tin

(5)____ Bamboo and straw

308. Does your household own this homestead?

(1)____ Yes

(2)____ No

309. Do you have any separate kitchen?

(1)____ Yes

(2)____ NO

310. Do you have any cowshed?

(1)____ Yes

(2)____ No

311. Do you have any separato cowshed?

(1)____ Yes

(2)____ No

312. What is the source of drinking water?

(1)____ Tubewell

(2)____ Well

(3)____ Pond

(4)____ Canal

(5)____ River

313. (Interviewer: ask for each response to Q. No. 312) do you drink this water throughout the year or part of the year?

(1)____ Thoroughout the year

(2)____ Most of the year

(3)____ Only for part of the year

314. What is the source of washing water?

(1)____ Tubewell

(2)____ Well

(3)____ Pond

(4)____ Canal

315. What type of latrine facility does your household have?

(1)____ Sanitary

(2)____ Cavity latrine

(3)____ Hole latrine

(4)____ Open latrine

(5)____ No latrine

SECTION FOUR

NON-SAVINGS GROUP

401. Have you ever heard about any women's savings group?

____ Yes

____ No

402. Do you know of anyone who is involved in such a group?

____ Yes

____ No

403. Why are you not a member of any group, i.e., please tell us the main reasons for your not joing any group?

_____

_____

_____

404. Do you want to join any group?

____ Yes Why?

_____

_____

_____

____ No Why not?

_____

_____

_____

405. Are you a member of any other group/association?

____ Yes Name of group/association:

_____

_____

406. Is your husband a member of any group/association?

____ Yes

____ No

If yes, Name of group/association:

_____

_____

407. Do your neighbors feel like joining such groups?

_____

_____

_____

408. How do you feel about those who are involved in such groups?

_____

_____

_____

SECTION FIVE

SAVINGS GROUP

501. How long have you been involved with the women's savings group (SAVE)?

_____

502. Why did you join the group?

_____

_____

_____

503. Who encouraged you to join the group?

_____

504. Does everyone in your household appreciate your involvement in such group activities?

____ Yes Why?

_____

_____

_____

____ No Why not?

_____

_____

_____

505. What topics are generally discussed in your group meetings?

_____

_____

506. How do you raise the monthly subscription?

_____

507. Do you think that your involvement in the group has benefitted your household?

____ Yes: What type of benefits?

_____

_____

_____

____ No

508. Have you yourself benefitted through your involvement in the group?

____ Yes: How?

_____

_____

_____

____ No

509. Do you think that your status in your household has increased because of your involvement in the group?

____ Increased: How?

_____

_____

_____

____ Decreased: How?

_____

510. What do your neighbors think about your involvement in such group activities?

_____

_____

_____

511. Are you a member of any group other than the SAVE women's savings group?

____ Yes: Name of group:

_____

_____

APPENDIX II

UNIVERSITY RESEARCH CORPORATION (BANGLADESH)

MINI-CPS QUESTIONNAIRE FOR SAVE STUDY

SAMPLE IDENTIFICATION

COLUMN

Household Number: __/__/__/__ Sample ID Number: __/__/__/__ 1-4
Respondent's Name: _____ Husband's Name: _____

Village Name: 5-6

(01)___ Kunda (02)___ Moslendapur
(03)___ Gokarna (04)___ Choirkuri
(05)___ Nurpur (06)___ Brahmanshashan
(07)___ Chotipara (08)___ Patanisa
(09)___ Buriswar (10)___ Srighar

Para Name: _____

Group: 7

(1)__ Savings (2)__ Non-savings (3)__ Comparison

Interviewer's Name: _____

Date of Interview: _____

SECTION 1: BACKGROUND CHARACTERISTICS

101. How many persons are there in your household, i.e., those who live and eat in this household regularly?

__/__ Persons 8-9

102. How many living children do you have? (If no, enter 0)

____ Boys ____ Girls 10 11

103. Did any of your children die? If 'Yes' how many? (If no, enter 0)

____ Boys ____ Girls 12 13

104. How old are you? (Probe. Enter round figure)

__/__ Years 14-15

105. Did you ever study in a school?

(1)____ Yes (2)____ No (go to 107) 16

106. What is the highest class you passed?

__/__ Class 17-18

107. Did your husband ever study in a school?

(1)____ Yes (2)____ No (go to 109) 19

108. What is the highest class he passed?

__/__ Class 20-21

109. How much cultivable land does your household own? (Probe)

__/__/__/__/__ Decimals 22-26

110. Would you please tell me whether your household possesses the following items (Interviewer: ask about all the listed items serially, and then tick)

(1)____ Yes	(2)____ No	Own Home	27
(1)____ Yes	(2)____ No	Separate Kitchen	28
(1)____ Yes	(2)____ No	Own Latrine	29
(1)____ Yes	(2)____ No	Radio	30
(1)____ Yes	(2)____ No	Cassette	31
(1)____ Yes	(2)____ No	Bicycle	32
(1)____ Yes	(2)____ No	Bedstead	33
(1)____ Yes	(2)____ No	Chowki	34
(1)____ Yes	(2)____ No	Quilt	35
(1)____ Yes	(2)____ No	Thin mattress	36
(1)____ Yes	(2)____ No	Blanket	37

111. What is the condition of the dwelling unit? (Interviewer: ascertain the condition, and put tick mark)

(1)____ Pucca (Brick house)	(2)____ Pucca and tin	38
(3)____ Wood and tin	(4)____ Bamboo and tin	
(5)____ Bamboo and straw	(6)____ Others	

112. What is the main source of drinking water?

(1)____ Tubewell	(2)____ Well	39
(3)____ Pond	(4)____ Canal	

113. What type of latrine facility does your household have?

(1)____ Sanitary	(2)____ Cavity latrine	40
(3)____ Hole latrine	(4)____ Open latrine	
(9)____ No latrine		

114. Did you give birth to a child during the last 12 months?

(1)___ Yes (2)___ No (go to 116) 41

115. Is the child still alive?

(1)___ Yes (2)___ No 42
(9)___ Not applicable (NA)

116. Do you want to have any (more) children in the future?

(1)____ Yes (2)____ No 43
(3)____ Cannot say (4)____ No response (NR)

117. Have you ever received TT vaccine?

(1)____ Yes (2)____ No 44
(3)____ Cannot remember

118. Have any of your children ever received the following vaccines?

(1)__ Yes	(2)__ No	(9)__ NA	DPT	45
(1)__ Yes	(2)__ No	(9)__ NA	Polio	46
(1)__ Yes	(2)__ No	(9)__ NA	Measles	47

SECTION 2: USE OF FAMILY PLANNING METHODS

201. Have you ever used any method of family planning?

(1)____ Yes (2)____ No 48

202. Are you currently pregnant?

(1)____ Yes (Go to 209) (2)____ No 49
(3)____ Uncertain

203. Are you (or your husband) currently using any family planning method or doing something to avoid a pregnancy?

(1)____ Yes (2)____ No (Go to 208) 50
(3)____ NR (Go to 209) (9)___ NA

204. What is that method?

(01)____ Oral pill	(02)____ Condom	51-52
(03)____ Vaginal method	(04)____ Injection	
(05)____ IUD	(06)____ Vasectomy	
(07)____ Tubectomy	(08)____ Safe period	
(09)____ Withdrawal/Ajal	(10)____ Abstinence	
(11)____ Other	(99)____ NA	

205. Since how long have you been using this method?

__/__/__ Months ago (888)__ Can't remember 53-55
(999)___ NA

206. What is the single most important reason you practice family planning?

(1)____ Child Welfare (2)____ Spacing birth 56
(3)____ Economic reason (4)____ Health reason
(5)____ Limiting birth (6)____ Others (specify_____)
(7)____ Don't know (9)____ NA

207. What is the main source of your family planning service or supplies?

(1)____ GOB Worker (2)____ NGO worker 57
(3)____ Clinic/hospital (4)____ Pharmacy/Shop
(5)____ Others (specify_____)(6)____ Don't know
(9)____ NA

208. What is the main reason that you (or your husband) are not using any family planning method now?

(1)____ Method Unavailable (2)____ Want more children 58
(3)____ Husband objects (4)____ Health reasons
(5)____ Fear of side-effects (6)____ Religious reasons
(7)____ Sterility (8)____ Others (specify_____)
(9)____ NA

209. Do you intend to use any family planning method in the future? (INTERVIEWER: Do not ask if the R is a permanent method user.)

(1)____ Yes (go to 301) (2)____ No 59
(3)____ Cannot say now (go to 301) (9)____ NA

210. If no, why not?

(1)____ Method Unavailable (2)____ Want more children 60
(3)____ Husband objects (4)____ Health reasons
(5)____ Fear of side effects (6)____ Religious reasons
(7)____ Sterility (8)____ Others (specify_____)
(9)____ NA

SECTION 3: SAVINGS GROUP MEMBERSHIP

301. Are you a member of any savings group?

(1)____ Yes (2)____ No (End the interview) 61
(3)____ NR (9)____ NA

302. Since how long have you been involved with this group?

__/__/__ Months (999)___ NA 62-64

303. Do you think that your involvement in savings group has benefitted you in any way?

(1)___ Yes (2)___ No (9)___ NA 65

304. If yes, in what ways?

(1)___ Saved money (2)___ Got loan 66
(3)___ Enhanced status in the household (4)___ Learned to prepare ORS
(6)___ Learned about MCH
(5)___ Learned about FP use (9)___ NA
(7)___ Others (specify_____)

THANK YOU