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**Credit Programme, women's autonomy and reproductive behaviour:
Evidence from BRAC villages, Bangladesh**

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Abstract

This paper investigates the role of women's autonomy on their acceptance of contraceptive method in 87 BRAC villages in Manikganj district of Bangladesh. Data for this study were obtained from 1995 sample survey of married women of reproductive age in these villages. Findings reveal that women's autonomy, as measured by the extent to which she believes that the wife should have a decision-making role in five different areas of family life, is positively associated with contraceptive use. While socioeconomic differentials in the acceptance of contraceptive are noticeable in terms of age, number of children ever born, years of schooling, exposure to mass media, land size and occupation of husband, the contraceptive practice among women involved in credit programme is found significantly higher than those not similarly involved. The multivariate analysis reveals that participation in credit programmes is positively associated with women's empowerment when socioeconomic differentials are taken into account. On the other hand, women having high autonomy score are nearly 36 percent more likely to use contraceptives ($p < .05$) than those having low autonomy score, controlling for age and number of children ever born of the women. When other factors such as involvement in credit programme, years of schooling, household ownership of land, occupation of husband and exposure to mass media are systematically added to the regression equation, the influence of women's autonomy on contraceptive use remains high with the same level of significance. The paper concludes that credit-based income generating programme has the potential to bring a significant change in reproductive behaviour of women through increased autonomy.

Introduction

Empowering poor rural women through credit-based income generating projects in many regions of the developing world in accelerating or sustaining contraceptive use have drawn much attention (Mahmud 1991; Pitt et al. 1995; Amin et al. 1993; Schuler and Hashemi 1994). Although the net contribution of such projects in changing reproductive behaviour is subject to debate and varies from one context to another by providing such social development inputs as population-education and promotion of primary health care intended to influence the behaviour of poor women, these programmes have reported successful in bringing down poverty and modifying fertility and contraceptive behaviour (Hossain 1984, 1988; Korten 1991; Khondker and Latif 1994). As a result, credit-based income generating projects have now been considered instrumental for many organizations seeking to curb rapid population growth. Such projects believed to contribute in changing demographic behaviour by modifying women's status and autonomy in household decision-making, changing women's perception of their own well-being, self-efficacy, and gender inequality. Therefore, a better understanding about the social forces that accompanying the projects in propelling these changes is important for policy processes. While numerous studies have estimated the impact of poor women's participation in group-based credit-programmes on fertility and contraceptive behaviour viz. programme beneficiaries are more likely to use contraceptive and better educated than non-beneficiaries (Mahmud 1991; Amin et al. 1993; Schuler and Hashemi 1994), it has also been shown that such relationship was due to the self-selection of women into credit-programmes who were either better-off before entering the programme or a special group of women (Pitt et al. 1995).

An extensive literature on the social, economic, and cultural determinants of contraceptive use in developing countries is now available (Koenig and Simmons 1992; Lapham and Simmons 1987), although the evidence of specific mechanisms and pathways through which development factors influence reproductive behaviour is very limited (Koenig and Simmons 1992). While focusing on the role of education on reproduction, Caldwell (1982) suggests that education helps women to understand the options available to them, re-think traditional cultural values, and challenge the authority and domination of men over women. Le Vine et al. (1991) found that education influenced reproductive outcome by reducing desired family size by stimulating aspirations for higher standard of living and exposing women to new knowledge and practices regarding contraceptive use, and by increasing husband-wife communication and knowledge and access to birth control (Cochrane, Leslie and O'Hara 1982). Mahmud and Johnstone (1994) conducted a review of recent research that assessed the role of women's autonomy, the role of gender-based power relationships in influencing the decision-making process in underdeveloped settings. Nevertheless, studies remain inadequate to clearly demonstrate how women's empowerment, which depends on many factors and has multiple dimensions, affects reproductive behaviour.

Education, Work and Reproductive Behaviour

Since the children, especially male children, are expected to provide them security at older ages, the reduced economic and psycho-social dependency through institutional support for self-reliance among women has strong incentive to contracept (Cain 1981; Dyson and Moore 1983; Chowdhury 1982). As poor rural women have increasingly been involving in income earning outside home activities, a higher proportion of married women have been practicing contraception in rural Bangladesh (Marum 1982; Rahman 1986). It could be argued, therefore, that the scope of gainful employment, if assured, would modify reproductive behaviour by changing the traditional sources of financial support to them.

The role of education in modifying reproductive behaviour has been extensively studied in recent years (Caldwell 1979; Cleland and Phillips 1993). Poor female education found to be an important impediment to contraceptive use (Koenig and Simmons 1992). Female education operates through value changes of the community, increases husband-wife communication and knowledge, modifies attitude to contraception and reproductive decision making (Cochrane, Leslie and O'Hara 1982), encourages rejection of traditional values which enhances low status of women. Thus, education helps women to gain more control over contraceptive decisions. The school attendance itself forces girls to modify their individual attitudes and be more liberated in their movement (Lindenbaum 1983; Cochrane, Leslie and O'Hara 1982). Thus, the effect of education would enhance self employment or self reliance to change in orientation that permits less compliance with traditional norms of behaviour. The change in reproductive behaviour also depends on the cultural context and attitude and knowledge of women regarding contraceptive use regardless of the year of schooling (Mahmud and Johnstone 1994).

Like fertility impact of education, status-fertility linkage has also attracted a number of social scientists (Cain 1981; Amin and Pebley 1990). This approach suggests that involvement in household decision-making and greater physical mobility as a result of the participation in credit-based employment programmes raises the status of rural women in a traditional society (Amin and Pebley 1990; Mahmud 1991). Similar views are also reflected in a study conducted in Pakistan which reveals that female labor-force participation modifies reproductive behaviour through enhancing status of women (Sathar et al. 1988).

The underlying messages of these views suggest a clear linkage of reproductive behaviour of women with education, exposure, and the process of empowerment and enhancement of status within household as a result of participation in income-generation activity. Responding primarily to these views, a growing number of development organizations along with the government of Bangladesh, have emphasized integrating family planning programme with such services as credit-based employment programmes and primary health care (Maloney and Ahmed 1988; Amin et al. 1993; Chowdhury 1990; Mabud 1992). The basic premise of such effort is that participation of poor women in income generating activities leads to empower them and increased decision making role and status within household aside from relieving them of a condition of extreme social and psychological dependence from their physical and social isolation (Amin et al. 1993; Dixon

1976). The newly acquired status along with their better access to family planning services and informed choice reinforced by group support will lead a higher contraceptive use than those not involved in any income generation activities. Involvement in such activities enables them to gain social legitimacy of her own choice and exposes women to wider options to regulate her fertility aspirations.

Credit Programme and Women's Autonomy

Women's gainful employment provides opportunity to modify their reproductive choices (Dixon 1976; Chowdhury 1983; Cleland and Phillips 1993) although this relationship depends on such host factors as type of occupation, control over income, place of work, etc. (Mahmud and Johnstone 1994). Employment and earning help women reduce their dependency on husbands. This affects traditional gender relations within the household, creates opportunity to exercise some degree of autonomy, and enhances their participation in household decision-making including limiting or spacing birth (Amin and Pebley 1990; Mahmud 1993; Mahmud and Johnstone 1994; Dixon-Mueller 1978; Safilios-Rothschild 1982). No significant association between female employment and contraception, however, is found when women are below subsistence level, forced to take employment for their survival and suffer from gender-based inequities in the households (Bruce and Dwyer 1988; Mahmud and Johnstone 1994).

Recent studies show that independent earning, greater control over their own income and ability to provide financial assistance to the household promote their autonomy and household decision-making if the women are involved in credit-based income generating schemes in Bangladesh (Amin and Pebley 1990; Mahmud 1993; Schular and Hashemi 1994). Women's autonomy or decision-making ability on personal affairs is determined by both social customs and traditions (Dyson and Moore 1983; Armstrong et al. 1993). A clear understanding of the power relations between women and men within the household is, therefore, needed to understand the role of women's increased autonomy on reproductive decision-making (Mahmud and Johnstone 1994). Employment and control over resources help create their self-respect and perception of self-worth that subsequently enhance a sense of identity and reduces their dependence on men. Such an environment in turn helps reduce gender inequalities and raising decision making role.

Women's Autonomy, Empowerment and Reproductive Behaviour

The inter-relationships among women's autonomy and reproductive behaviour are well documented (Mason 1984; Schular and Hashemi 1994). By forcing women to play an almost complete dependence of women upon men for protection and economic support and a subordinate role in familial decision making within a patriarchal societal form, the society limits change of women to change in such innovative behaviour as adopting contraceptive (Cain 1984; Mason 1984; Dyson and Moore 1983; Koenig and Foo 1985). Such a subordinate status and dependency upon men severely limits women's mobility and autonomy, and forces adult women to spend most of their time within their household

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since cultural values discourage interaction between women and men (Koenig and Simmons 1992).

This report attempts to compliment existing knowledge with a micro analysis of the demographic impact of credit-based development project on rural women who were neither involved in any credit-based programme nor were using any contraceptive till 1986 but then exposed to both between 1986 through 1994. This permits a more careful analysis of the linkages between women's involvement in credit-based income generating programmes and women's decision-making ability, and the effects on their acceptance of contraceptive by reducing the problems of self selection and other conceptual limitations. As the role of women's labor force participation on contraceptive use is well documented, we devote primarily to understand how the credit-based income generating project and women's autonomy modify the reproductive behaviour of women.

Methods and Materials

The data used in this paper were extracted from *Watch*, the demographic registration system covering 87 villages in Manikganj District of Bangladesh, where private voluntary development agencies such as BRAC, Grameen Bank, Proshika, and others have been operating intensive credit-based income generating programmes since the mid-1970s. The *Watch* was introduced to document the demographic changes that might have happened as a result of development intervention in income generating activities and women's programmes in the area. In the 1986 benchmark survey, 11,011 married women aged between 15 and 49 were interviewed about their participation in income generating activities, and their reproductive and contraceptive history. A follow-up survey was conducted after eight years in 1994 when 1,535 married women having same age range were randomly selected. The two samples of 1986 and 1994 were comparable in the sense that the sample women were residing in the same villages with nearly similar demographic characteristic but different in terms of literacy rate, land ownership and level of exposure of development programme. The two samples were compared to estimate the difference in contraceptive use among women at the aggregate level between 1986 and 1994.

In our analysis, women who were non-users of contraceptive method in 1986 were followed till 1994 survey. Of the 1,535 randomly selected women interviewed in 1994, 707 women were identified who were also in 1986 sample. The reason of dropping out of so many cases was that a significant proportion of women of age 42 years or more in 1986 was no longer eligible to be in the sample in 1994 because of their age. For the same reason, women of age 23 years or less were excluded from the sample because they were not eligible (< 15 years old) in 1986. Thus, the sample forms a cohort of women aged between 23 and 49 in 1994 who were non-users of any contraceptive till 1986. This approach i) help establish causal link between credit-based income generating activity and its subsequent impact on autonomy and contraceptive use, and ii) largely reduces the probability of selection bias (Pitt et al 1995).

The study focuses primarily on contraceptive use and women's autonomy as a result of credit-based income generating programmes in rural Bangladesh. This has been done by modeling a dichotomous dependent variable, *contraceptive use* coded one if a women has accepted any method after 1986 and zero if otherwise. The main independent variables are credit acceptance by women during the study period and the level of women's autonomy¹. A number of socioeconomic and demographic variables of study women are estimated and used as confounding variables to assess the impact of credit and autonomy on contraceptive use. The confounding variables are age of women in 1994, number of living children, years of schooling, occupation of husband and amount of land owned by the household. Such other variables as number of children everborn, ownership of assets or religion, although available in the data, were excluded from the analysis because of their insignificant relationship with contraceptive use. The measurement of the variables are shown in Table 1. The models employed are of the following form:

$$\ln \frac{(p)}{(1-p)} = \alpha + \sum_{i=1}^k (\beta_i * x_i)$$

where p is the probability that a woman has accepted contraceptive, α , β_i are estimated regression coefficients; and x_i are the explanatory variables. In our multivariate analysis, log odds ratios of explanatory variables in the models are estimated to predict the acceptance of contraceptive among the sample women. This helps to understand the percentage change in the odds associated with each unit change in the explanatory variable.

The basic assumption to be examined in this study is that participation of poor rural women in organized credit-based income generating programmes improves women's household decision making roles including their reproductive choices that subsequently modifies the relationship with their husbands and increase contraceptive use. In addition, there are other variables in our analytical framework such as age of women, years of attendance in school, number of living children, husband's occupation, and amount of land owned by the household that assume to modify the magnitude of impact of our main hypothesis of credit -- autonomy -- contraception linkage.

The analysis begins with a description of the comparison of background variables of sample women between 1986 and 1994. Then an examination of simple bivariate relationships between the independent sociodemographic variables and contraceptive use by the involvement with credit programme is performed for 1994 to understand the effect of credit contraceptive use among socioeconomic sub-groups. To assess the relative influence of credit-based income generating activities, women's autonomy and socio-demographic characteristics, and to estimate the effects of socio-demographic confounders, we undertook a multivariate analysis. The logit model is considered appropriate here because the dependent variable, women's autonomy or contraceptive use, is dichotomous (Aldrich and Nelson 1984; Hanushek and Jackson 1977).

Results

The background characteristics of the study women and their changes between the 1986 and 1994, shown in Table 2, indicate that the differences in mean age and parity of study women are minor although significant changes in years of schooling, literacy rate, land ownership and husband's occupation are quite evident. The increase in literacy may reflect the general increase of female education in the country and the effect of NGO efforts to raise female literacy. Finally, the size of land holding is decreasing and both the landlessness and manual labor sale are in the rise as also found elsewhere (Cleland and Phillips 1993).

Table 3 shows the differentials in contraceptive use by the involvement in credit programme and sociodemographic variables among randomly selected married women of reproductive age. Like other studies, women's autonomy appears to have positive association with contraceptive use (Mason 1984; Schular and Hashemi 1994). Although statistically significant variations in contraceptive use by socio-demographic characteristics exist, a positive credit-contraception linkage has been found in each category.

The impact of women's autonomy, sociodemographic characteristics and involvement with credit-based programme variables on the contraceptive use is examined by using logit regression analysis (Table 4). Four models were estimated to test the impact of women's autonomy on contraceptive use. We first examine the effects of autonomy on contraceptive use after controlling for age and living children, then with systematically adding credit programme involvement and years of schooling, and, finally, husband's occupation and the amount of land owned by the household. This allows us to identify which factors are the best predictors of contraception among the rural women. The analysis suggests that both women's autonomy and the involvement with credit based income generating programme had positive and statistically significant effects on contraceptive use regardless of the demographic and socioeconomic differences among women in the villages.

The effects of credit-based income generating programme on women's autonomy among women in 1994 who never borrowed any credit and never use contraceptives till 1986 are shown in Table 5. Of the three models estimated to predict women's autonomy, Model I indicates that accessibility to credit sources increases their autonomy to 28 percent ($p < .05$) when the years of schooling is controlled. When age and socioeconomic variables are added in Models II and III, the effects of the involvement in credit programme on women's autonomy diminishes.

Table 6 also shows that the contraceptive acceptance has statistically significant relationships with the sociodemographic characteristics of women regardless of their involvement with credit-based income generating activities. The pattern of relationship with contraceptive use between the two groups of women (received credit vs. does not received credit) is similar. Involvement with credit programme significantly raises the chances of accepting contraceptives across the sub-groups of each characteristics of

women. Like other studies, women who went to school were significantly less likely to accept contraceptives than those not attended school (Caldwell et al 1982). Land ownership is associated with less likelihood of contraceptive use. Other variables such as age, living children and occupational status, etc. do not show any consistent pattern with contraceptive use.

Multivariate analysis of contraceptive acceptance provides a richer and more complex picture of the linkages between credit programme, women's autonomy and reproductive behaviour (Table 7). It also shows the influence of other factors on contraceptive use. The models indicate that both women's autonomy and the participation of women in the credit-based income generating programme had strong and statistically significant positive effect on contraceptive use regardless of the role of demographic and socioeconomic position of the women. Model I indicates that the probability to use contraceptives rises to 89 percent if the women have more autonomy or decision making authority than others when age and the number of children are controlled. Model II shows that non-users of any contraceptive method involved in the credit programme after 1986 were 62 percent more likely to willingly accept any method of contraceptives than women who did not receive any credit controlling for autonomy, age and number of living children.

Model III indicates that adding schooling in the Model II slightly weakens the positive effects of income generating activities on contraceptive use but the effects of other factors remained strong. This suggests that variation in the years of schooling of women also explain the change in reproductive behaviour. Model IV shows that the positive impact of credit programme reduces further when the socioeconomic variables are controlled. This weaker relationship between contraceptive use and socioeconomic variables, after controlling for age and parity of women, could be explained by the existence of differential acceptability of contraception among the socioeconomic groups as we have found earlier. The effects of autonomy on contraceptive use has consistently remained strong in all the three models indicating that sociodemographic variability by women's autonomy in our study population was minimum.

Discussion

The study findings reveals that the participation of rural women in credit-based income generating activities increases women's autonomy and both the credit programme involvement and autonomy are associated with a greater likelihood of contraceptive use. These findings are consistent with other recently conducted studies (Armin et. al. 1993; Schuler and Hashemi 1994). Thus, the strategy to provide poor women access to earn by themselves will lead to their increased autonomy and decision-making power, that eventually will help them deciding their reproductive goal.

During the last two decades, Bangladesh has witnessed the proliferation of private voluntary development organizations. They have introduced not only the collateral-free credit for the rural poor women, but a package of support services such as group formation, skill training, non-formal primary education, reproductive health services, and legal awareness. As a result, the process of transformation among the landless and poor communities has begun that together have enabled and empower them to gain collective power and prestige. The most remarkable and visible change of this kind has been the process of bringing the rural poor women into a strict discipline by integrating them into a financial network through establishing and successfully implementing savings and loan repayment schemes (Hossain 1984; Amin et al 1993). Along with credit support, group formation among the poor women creates solidarity among group members that reduces physical and social isolation in the home, provides scope for wider and modern exposures, provides opportunity to earn and financially contribute to the family. These together help alter women's traditional role in the household decision-making process (Schuler and Hashemi 1994), and to gain necessary strength and means to modify their reproductive behaviour.

However, women's employment behaviour and control over resources that largely determine marital relations in rural Bangladesh depends on the social context where they live and interact (Mizan 1994). The social context also determines women's access to opportunities to work for themselves which is considered the source of and essential to create or develop a power base for them. Involvement in credit-based employment requires or increases outside contacts that helps widen their knowledge and skills. Our data also suggest that participation of women in credit-based development programme provide opportunities for such contact and increasing their skills and motivation for decision-making probably because employment or activities that forces women to be outside home provide the scope to break away from their traditional roles of a housewife to enter the provider role.

The apparent success of self-employed women to gain more autonomy in our study villages should also be viewed from the structural context. Given the cultural context, the expected role of husbands as provider faces a dilemma with their wives while wives employ themselves in economic activities and financially contributes to the households. Through the process, women's power in decision-making is increased because they performed both the domestic and productive roles compared to men if the men do not play additional role except the culturally assigned productive activities (Mizan 1994). The evidence from this study supports, therefore, that participation in credit-based income generating activities provided opportunity to regulate their fertility by choosing the desired method of contraception. This happens, in part at least, by strengthening their decision-making role either as a result of their ability to financially contribute to their family, or by getting out of their traditional values and confinement within the households and resist the tight strictures of the traditional family. The participation also increases women's mobility, exposes to new ideas, ability to interact in the public sphere (Schuler and Hashemi 1994) and ability to demand and receive services available at the public sectors.

The paper concludes that by creating a system of organizing poor rural women into strongly bonded social groups and the process of learning from experience, ensuring participation in group meetings and savings, providing a set up capable of generating self-reliant economic activities to begin the process of alleviating poverty - the credit-based self employment and income generating programmes have created high hope and enthusiasm among the policy planners and development managers in Bangladesh. The apparent increase of demand for fertility regulation and increased acceptance of contraception among women involved in development activities provide a clear message of the need of strengthening the integration of family planning programme with development efforts.

Notes

1. Women's autonomy was measured in this research on such variables as mobility, ability to make small purchase, decision making capacity and ability to manage or convince husband in household affairs. Autonomy scores on all variables were added together and classified arbitrarily onto *autonomy* and *no autonomy*.

Table 1. Definition and measurement of variables

Variable	Category
Contraception	Acceptance of any family planning method (Not accepted=0, Accepted=1)
Autonomy	Women's autonomy (No=0, Yes=1)
Age	Age of eligible married women (in years) (15 - 29=1, 30 - 39=2, 40 - 49=3)
Living Children	Number of living children (2 or less=1, 3 - 4=2, 5 or more=3)
Education	Year of schooling completed by a woman (No schooling=1, Up to primary=2, Above primary=3)
Occupation	Occupation of husband of a woman (Labor=1, Agriculture=2, Business=3, Service=4)
Land	Household ownership of land (in decimals) (Landless=1, 1- 199=2, 200 or more=3)
Credit	Taken institutional credit (Never taken=1, Taken at least once=2)

Table 2. Background characteristics of sample women, 1986 and 1994

Background Characteristics	Married Women Aged (15-49)	
	1986	1994
Mean age (in years)	29.8	31.1
Mean living children	2.6	2.5
Mean years of schooling	0.8	1.7
Percent literate	11.5	30.2
Percent of husband as labor	39.9	47.7
Percent landless	38.7	47.7
Mean land (in decimal)	142	126
N	11,011	1,535

Table 3. Estimated contraceptive acceptance rates among women in 1994 by socio-demographic characteristics and involvement in the credit programme (N=1,535)

Socio-demographic Characteristics	Credit Programme	
	Never Received	Received
All	45.4	61.6
Autonomy		
No	33.3	59.4
Yes	47.6	62.1
<i>Significance</i>	<i>p < .01</i>	<i>ns</i>
Age		
15 - 29	39.7	49.6
30 - 39	54.4	66.1
40 - 49	19.0	62.6
<i>Significance</i>	<i>p < .01</i>	<i>p < .01</i>
Living Children		
2 or less	42.3	48.1
3 - 4	47.8	70.0
5 or more	46.8	61.3
<i>Significance</i>	<i>ns</i>	<i>p < .01</i>
Year of Schooling		
No school	46.2	62.9
I - V	43.2	54.0
VI +	43.0	61.9
<i>Significance</i>	<i>ns</i>	<i>ns</i>
Occupation of Husband		
Labor	47.4	64.1
Agriculture	41.3	56.5
Business	52.5	59.4
Service	37.5	55.0
<i>Significance</i>	<i>ns</i>	<i>ns</i>
Land Ownership		
Landless	48.4	64.1
1 - 199 dec	45.4	59.3
200 + dec	40.8	52.5
<i>Significance</i>	<i>ns</i>	<i>ns</i>
N	904	631

Table 4. Log odds ratios of selected explanatory variables to predict contraceptive use among women in 1994 (N=1,535)

Explanatory Variable	Model			
	I	II	III	IV
Autonomy				
No	1.0	1.0	1.0	1.0
Yes	1.36**	1.39***	1.38**	1.36**
Age				
< 30	1.0	1.0	1.0	1.0
30 - 39	1.64***	1.53***	1.53***	1.57***
40 +	1.08	1.03	1.03	1.09
Living Children				
2 or less	1.0	1.0	1.0	1.0
3 - 4	1.48***	1.39**	1.37**	1.41**
5 or more	1.34*	1.27	1.25	1.29
Credit				
Never taken		1.0	1.0	1.0
Taken after 1986		1.80***	1.78***	1.63***
Year of Schooling				
No school			1.0	1.0
I - V			0.87	0.94
VI +			0.91	1.07
Occupation of Husband				
Labor				1.0
Agriculture				0.79*
Business				1.00
Service				0.64*
Land Ownership				
Landless				1.0
1 - 199 dec				0.88
200 + dec				0.82

* p < .10, two-tailed test
 ** p < .05, two-tailed test
 *** p < .01, two-tailed test

Table 5. Log odds ratios of selected explanatory variables to predict women's autonomy among sample women in 1994 who never borrowed any credit and never contracept till 1986 (N=707)

Explanatory Variable	Model		
	I	II	III
Credit			
Never taken	1.0	1.0	1.0
Taken after 1986	1.28**	1.19	1.09
Year of Schooling			
No school	1.0	1.0	1.0
I - V	1.21	1.32*	1.39**
VI +	1.20	1.28	1.42
Age			
< 30		1.0	1.0
30 - 39		1.85****	1.85****
40 - 49		1.86****	1.92****
Occupation of Husband			
Labor			1.0
Agriculture			0.81
Business			1.11
Service			1.03
Land Ownership			
Landless			1.0
1 - 199 dec			1.15
200 + dec			0.64**

* p < .10, two-tailed test
 ** p < .05, two-tailed test
 *** p < .01, two-tailed test

Table 6. Estimated contraceptive acceptance rates among women in 1994 who never borrowed any credit and never contracept till 1986 by socio-demographic characteristics and involvement in the credit programme (N=707)

Socio-demographic Characteristics	Credit Programme	
	Never Received	Received
All	44.1	56.1
Autonomy		
No	26.6	45.8
Yes	47.4	58.6
<i>Significance</i>	<i>p<.01</i>	<i>ns</i>
Age		
15 - 29	58.8	53.8
30 - 39	49.0	64.9
40 - 49	27.0	35.5
<i>Significance</i>	<i>p<.01</i>	<i>p<.01</i>
Living Children		
2 or less	58.1	44.7
3 - 4	43.1	65.5
5 or more	34.5	48.6
<i>Significance</i>	<i>p<.01</i>	<i>p<.10</i>
Year of Schooling		
No school	42.8	58.5
I - V	50.8	38.5
VI +	44.1	66.7
<i>Significance</i>	<i>ns</i>	<i>p<.10</i>
Occupation of Husband		
Labor	46.1	62.9
Agriculture	38.9	41.3
Business	53.6	53.2
Service	34.6	28.6
<i>Significance</i>	<i>ns</i>	<i>p<.01</i>
Land Ownership		
Landless	48.1	62.8
1 - 199 dec	45.1	49.6
200 + dec	36.7	38.9
<i>Significance</i>	<i>ns</i>	<i>p<.05</i>
N	404	303

Table 7. Log odds ratios of selected explanatory variables to predict contraceptive use among sample women in 1994 who never borrowed any credit and never contracepted till 1986 (N=707)

Explanatory Variable	Model			
	I	II	III	IV
Autonomy				
No	1.0	1.0	1.0	1.0
Yes	1.89****	1.96****	1.97****	1.95****
Age				
< 30	1.0	1.0	1.0	1.0
30 - 39	0.97	0.92	0.93	0.94
40 +	0.34****	0.34***	0.34****	0.35****
Living Children				
2 or less	1.0	1.0	1.0	1.0
3 - 4	1.13	1.05	1.02	1.03
5 or more	0.95	0.88	0.86	0.88
Credit				
Never taken		1.0	1.0	1.0
Taken after 1986		1.62****	1.60****	1.40**
Year of Schooling				
No school			1.0	1.0
I - V			0.83	0.95
VI +			0.79	1.04
Occupation of Husband				
Labor				1.0
Agriculture				0.69*
Business				0.93
Service				0.49
Land Ownership				
Landless				1.0
1 - 199 dec				0.81
200 + dec				0.72

* p < .10, two-tailed test
 ** p < .05, two-tailed test
 *** p < .01, two-tailed test

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