

Factors Contributing to Change in the occupation of BRAC Household Heads

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Abstract

This paper aims to explore the underlying reasons of BRAC household heads getting involved in farm and non-farm sectors, the nature and extent of change in their occupation between 1993 and 1996 and contribution of BRAC inputs in this change. Secondary analysis of IAS-I and IAS-II data collected in 1993 and 1996 respectively has been done for this paper.

There had been only a marginal shift of occupation to the farm sector (3%) between 1993 and 1996. But actually there was a large inter group redistribution in occupational status as 33% of those engaged in farm activities in 1993 shifted to other sectors and 27% of those from non-farm sector switched to other sectors. Heads of the households with large family size and smaller amount of landholding switched to non-farm activities and so did those from villages with good infrastructure and marketing facilities. Household heads from villages with poor infrastructure and marketing facilities and with larger amount of landholding and receiving loan over Taka 5,000 were mainly engaged in farm activities. Such household heads who were previously engaged in the non-farm sector also switched to the farm sector.

Introduction

The rural economy of Bangladesh has experienced a rapid transformation. Rural poverty has also decreased since the country's independence in 1971 (Osmani 1990). The most popular interpretation of this transformation claims that the dynamism of the overall economy since independence has created—in keeping with Engel's law—substantial scope for employment in the non-farm sector. Hossain (1980) claims that the Green Revolution in agriculture has paved the way for non-farm employment through 'consumption linkages'. Higher income in agriculture sector has increased demand for non-farm goods and services which in turn has opened up employment opportunities in the non-farm sector. Even those who were previously employed as agricultural wage labourers have now the opportunity to move to non-farm sector within the rural economy. This raises income in both farm and non-farm sectors and helps mitigate poverty. Rahman and Sen's (1994) study also supports the view of poverty reduction through the transformation of non-farm sector.

Osmani (1990) refuted the above argument on the ground that introduction of HYV unaccompanied by mechanisation raises demand for labour in agriculture sector and this is what has happened in rural Bangladesh. Moreover, a large exodus to the non-farm sector, since independence, has resulted in a high degree of work-sharing which caused precipitous fall in productivity and consequently a lower wage in this sector. This along with increased demand for labour in the agriculture sector has led to a reverse trend of switching back to farm sector.

BRAC has undertaken a rural development programme for poverty alleviation and empowerment of the rural poor. One of the objectives of this programme is to help members of the BRAC organized groups through creating opportunities for employment and higher income. Some of the group members get involved in different income-generating activities after joining BRAC. These members are mostly poorer women and very often there is no adult male income-earner in these households. It has also been found that many women members hand over the money borrowed from BRAC to the adult male income-earners of their households. The household head who is generally a male utilizes BRAC loan for different income-generating activities (Husain 1998). Findings also show that economic performance, or alternatively the poverty reduction performance of BRAC households depends, among other factors, largely on the occupational status of the household head (Ibid.). Therefore, it is of great interest to determine whether BRAC has any contribution to changing the occupation of the household head.

This paper tries to explore the underlying reasons of BRAC household heads' getting involved in farm and non-farm sectors, the nature and extent of change in their occupation between 1993 and 1996 and contribution of BRAC inputs in this change.

Methodology:

The first impact assessment study of BRAC's rural development programme (IAS-I) was conducted in 1993 and the second one (IAS-II) in 1996. There were 322 BRAC households which were common in both 1993 and 1996 surveys and some variables were observed in both periods which constituted the source of panel data. These panel data have been used for this paper (Husain 1998)

Changes in the Occupational Status of the Household Head

A person may be engaged in several activities in a year. But the time spent on and income earned from each activity are not the same. Occupation of a person has, therefore, been defined as the activity in which a person is involved for most of the time in a year and which provides him/her the major share of his/her income. Only primary occupation has been considered in this analysis since IAS-I did not collect any data on secondary occupation. Occupation has been classified in two broad categories—farm and non-farm. Those who were engaged in agricultural activities, in a broader sense of the term, including crop production, poultry and livestock, fisheries, etc., are said to be employed in farm activities. On the other hand, those who were engaged in all other activities except farm ones are said to be employed in non-farm activities. But these exclude household services which have been considered as a third category¹.

In 1993 about 33% of BRAC household heads were found to be employed in the farm sector which increased to about 36% in 1996 and nearly 53% in the non-farm sector which decreased to nearly 52% in the same period (Table-1). During this period there had been a net shift of occupation to the farm sector though it was marginal.

¹ For simplicity here we call household service only *service*

Table 1. Occupational status of the household head in 1993 and 1996

Membership category ²	1993			1996		
	Farm	Non-farm (excluding service)	Service	Farm	Non-farm (excluding service)	Service
Panel (1-11)	50 (35.5)	74 (52.5)	17 (12.1)	59 (41.8)	67 (47.5)	15 (10.6)
Panel (12-29)	9 (24.3)	26 (70.3)	2 (5.4)	11 (29.7)	20 (54.1)	6 (16.2)
Panel (30-47)	26 (32.5)	45 (56.3)	9 (11.3)	27 (33.8)	46 (57.5)	7 (8.8)
Panel (48+)	22 (34.4)	26 (40.6)	16 (25.0)	19 (29.7)	35 (54.7)	10 (15.6)
All BRAC	107 (33.2)	171 (53.1)	44 (13.1)	116 (36.0)	168 (52.2)	38 (11.8)

(Figures in the parentheses indicate percentage)

Although there seems to have been a very little change in the occupational status of BRAC household heads, a close examination reveals that there was a large inter group redistribution in occupational status in the three years (Table 2). About 33% of those who were employed in the farm sector in 1993 changed their occupation as 26% and 7% switched to the non-farm and service sectors respectively. Similarly, about 27% of those who were engaged in non-farm activities in 1993 switched to the farm (16%) and service sectors (11%). In the aggregate level the same number of household heads inter-changed their occupation between farm and non-farm sectors. The change in the final composition was due to the displacement in the service sector.

Table 2. Changes in sectoral composition of the occupational status of household head

Occupational Status in 1993		Retained in the same sector	Shifted to				Shifted in	Net sectoral change	Occupational Status in 1996
Sector	Number		Farm	Non-farm	Service	Total			
Farm	107 (33.2)	72 (67.3)	NA	28 (26.2)	7 (6.5)	35 (32.7)	44	+9	116 (36.0)
Non-farm	171 (53.1)	124 (72.5)	28 (16.4)	NA	19 (11.1)	47 (27.5)	44	-3	168 (52.2)
Service	44 (13.1)	12 (27.2)	16 (36.4)	16 (36.4)	NA	32 (72.8)	26	-6	38 (11.8)
Total	322	208 (64.6)							322

(Figures in the parentheses indicate percentage)

² For categorization of BRAC households in terms of membership length, please see Husain 1998.

Membership length and occupational status: Pattern of change in the occupational status of the household head has been found to be related to membership length of the BRAC member of the household. Increase in employment in the farm sector did not occur for all types of BRAC household heads. Comparatively heads of the newly joined member households switched their occupation to the farm sector (Tables A.1-A.4). The highest increase had been among both the Panel 1-11 and Panel 12-29 category (5% for each). Increased employment in the service sector has been observed only among the Panel 12-29 category. While for the newly joined member households there had been an increase in the farm than non-farm sector employment of their heads, the trend was opposite for heads of those households who had been with BRAC for longer periods. Higher percentage of such household heads switched to the non-farm sector compared to the farm sector. For the oldest membership category a large increase in the non-farm sector employment had been found (14%).

BRAC loan and occupational status: The impact of BRAC loan on switching occupation of BRAC household heads is mixed. Looking at change in the occupational status in terms of cumulative amount of BRAC loan received till 1993, one can see that for all loan-receiving categories higher percentage of household heads from the non-farm than the farm sector maintained their previous occupation (Table A.5). But higher percentage of household heads among those who did not receive any loan till 1993 switched their occupation, from other sectors, to farm than non-farm sector. The trend reversed for those who received different cumulative amount of loan but less than Taka 5,000. When the amount exceeded Taka 5,000 the tendency to switch occupation to farm sector increased again.

Relationship similar to the above was not found between change in occupational status and cumulative amount of loan received till 1996 (Table A.6). But there was an evidence that higher percentage of household heads switched their occupation to the farm sector as cumulative amount of loan exceeded Taka 20,000. It would be important to indicate here that households of each category, irrespective of the occupational status of their heads, received on average almost the same amount of (cumulative) BRAC loan both in 1993 and 1996 (Table A.7).

BRAC training and occupational status: Only the BRAC members are eligible to receive BRAC training. But usually they are not the household heads. About only 11% BRAC households were headed by female members in 1996 (Husain 1998). Since we were interested in occupational change of the household heads, it is of concern to investigate whether a BRAC member's receiving training had any impact on switching her household head's occupation.

Till 1993 only 32% members received training from BRAC (Husain 1998). Table A.8 shows that a slightly higher percentage of heads of such households retained their occupation in the non-farm than farm sector (20% and 17% respectively). Higher percentage of this type of heads also switched to the non-farm sector (14%) compared to the farm sector (12%). But these differences are not large enough to explain impact of training.

Education level of the household head and occupational status: Economic theory states that every economic agent is guided by one's own self-interest and maximizes profit if (s)he possesses perfect and complete information. Education level does not matter for his/her profit maximizing

behaviour. But higher education level can help acquire information correctly and timely as cost of acquiring information might be less for people with higher level of education.

About 83% of those who retained themselves in the farm sector were illiterate while it was 73% for those who retained in the non-farm sector. For the service sector this rate was 80%. Again, percentage of household heads with higher level of education who did not change occupation were found at a higher level among those employed in the non-farm sector rather than the farm and service sectors (Table A.9).

But comparison of the household heads who changed their occupation between 1993 and 1996 in different sectors shows that those switching to the farm sector had more literate household heads and also with higher level of education³.

Household landholding and occupational status: BRAC selects its members from among those, with few exceptions, who possess less than 50 decimals of land and sell manual labour for at least 100 days in a year for their subsistence. Therefore, BRAC members are very poor, possess little or no amount of land and usually work as wage labourers. There were 18% households who did not own any land during their joining at BRAC. About 61% of the heads of such households were, in 1993, engaged in non-farm activities of which nearly two-thirds were self-employed and only 31% of the household heads in the farm sector of which about four-fifths were wage-employed. Percentage of household heads, employed in the farm sector and also self-employment in this sector increased for those possessing larger amount of land. Interestingly, employment in the service sector also increased with larger amount of landholding. As a result, employment in general and wage-employment in particular in the non-farm sector decreased as amount of landholding increased. The similar trend was found by comparing landholding before joining BRAC and the occupational status in 1996 (Tables A.10 and A.11).

Table 3. Changes in the occupational status by landholding before joining BRAC

Landholding category	No change in			Changed to			Total
	Farm	Non-farm	Service	Farm	Non-farm	Service	
No land	10 (17.2)	20 (34.5)	1 (1.7)	8 (13.8)	10 (17.2)	9 (15.5)	58
1-25 decimal	30 (17.6)	76 (44.7)	7 (4.1)	18 (10.6)	23 (13.5)	16 (9.4)	170
26-50 decimal	11 (25.6)	15 (34.9)	4 (9.3)	9 (20.9)	4 (9.3)	—	43
51-100 decimal	6 (24.0)	8 (32.0)	—	4 (16.0)	6 (24.0)	1 (4.0)	25
101+ decimal	15 (57.7)	5 (19.2)	—	5 (19.2)	1 (3.8)	—	26

(Figures in the parentheses indicate percentage)

³ Education level have been measured by years of schooling (Husain 1998).

For landless category higher percentage of household heads retained their occupation in the non-farm than farm sector (36% and 17% respectively). On the other hand, 17% and 16% household heads of landless category switched to the non-farm and service sectors while 14% of such household heads switched to the farm sector from other sectors. Those who switched to the farm sector were mainly agricultural wage labourers. But for the larger amount of landholding category higher percentage of household heads remained in the farm sector and lower percentage remained in the non-farm sector. This trend was also observed for those who switched their occupation to the farm and non-farm sectors (Table 3).

Rural infrastructure and occupational status: A composite variable 'economic vibrancy'⁴ has been used to explain rural infrastructure. High vibrant area indicates villages with good infrastructure and marketing facilities while low vibrant area indicates poor infrastructure and marketing facilities. It is evident from Table 4 that in the low vibrant areas a higher percentage of household heads (36%) did not have the opportunity to change their occupation from the farm sector. These percentages decreased for villages with good infrastructure and marketing facilities (22% for medium and 7% for high vibrant areas). In a similar fashion, lower percentage of household heads remained in the non-farm sector in the low vibrant areas and this increased with developed infrastructure and marketing facilities. On the other hand, in the high vibrant areas smaller percentage of household heads switched to the farm sector (13%) and higher percentage switched to the non-farm sector (17%).

Table 4. Infrastructure and change in the occupational status

Economic vibrancy	No change in			Changed to			Total
	Farm	Non-farm	Service	Farm	Non-farm	Service	
Low	15 (35.7)	8 (19.0)	3 (7.1)	7 (16.7)	6 (14.3)	3 (7.1)	42 (13.0)
Medium	55 (22.0)	101 (40.4)	6 (2.4)	33 (13.2)	33 (13.2)	22 (8.8)	250 (77.6)
High	2 (6.7)	15 (50.0)	3 (10.0)	4 (13.3)	5 (16.7)	1 (3.3)	30 (9.3)

(Figures in the parentheses indicate percentage)

Multivariate analysis: Three logistic regressions have been estimated to determine the factors responsible for switching occupation of the BRAC household heads. The independent variables included in all the three equations are: length of BRAC membership, different cumulative amount of BRAC loan category for 1993 (no loan, Taka 1-1000, Taka 1001-2500, Taka 2501-5000, and Taka 5001+), BRAC training, amount of non-institutional cash loan, pre-BRAC landholding, family size, total savings and total value of non-land productive assets, education level of the household head, BRAC members' involvement in IGA, rural infrastructure and marketing facilities.

⁴ This variable was created using village level information for 1996 and analyzed in IAS-II report. The variables used to calculate the composite variable include distance from all weather road, distance from nearest bus stop, distance from nearest *hat*, *bazaar* and bank, number of shops per households in the village and ratio of households using electricity to total households in the village. For details please see Husain 1998.

Equation-1 estimates the factors responsible for switching occupation to the farm sector (Table A.13). Three variables have been found to have significant impact in this respect—length of membership, BRAC loan more than Taka 5,000, and total value of non-land productive assets. The lower the length of membership of a BRAC member household the higher the likelihood of switching occupation to the farm sector for its head. BRAC loan more than Taka 5,000 and value of total non-land productive assets contribute positively to change occupation of the household head to farm sector.

Equation 2 estimates the factors responsible for switching occupation to the non-farm sector (Table A.14). Only size of the household was found to be significant in this respect. One reason might be that if there were more members in a household only way to rid of unemployment or underemployment in the absence of larger amount of landholding was to draw labour force from the farm to non-farm sector.

Factors responsible for determining occupational status in 1996 have been tested in equation 3 (Table A.15). The most important determining factor found responsible for getting the household heads engaged in non-farm activities was economic vibrancy or village level infrastructure and marketing facilities. In their absence BRAC household heads tends to be employed in the farm sector. No impact of BRAC loan or training have been found in this regard. Among other variables that contribute significantly for engaging them in the non-farm sector are their family size and length of BRAC membership and in the farm sector is the total value of non-land productive assets.

Limitations of the Study

Occupational status only indicates the activity in which a person gets him/herself engaged in for most of the time in a year. This is not enough to show whether (s)he gets the opportunity to work in that particular activity throughout the year. (S)he might be underemployed in the sense that either (s)he does not have the opportunity to work throughout the year or even if (s)he has, (s)he works few hours in a day (usually less than eight hours), or (s)he shares a job with other family members that can be done with less workers. In absence of employment data this type of underemployment was not possible to analyze. Only major occupation of the household head has been considered here due to limitation of available data.

Moreover, any information on their occupational status before joining BRAC was not collected in either round of the two IASs. Some BRAC household heads might have changed their occupation before 1993 which has not been reported. Average yearly income in different sectors was not possible to calculate for lack of income data.

Conclusion

A redistribution of occupational status of BRAC household heads took place between 1993 and 1996. Some of the household heads switched their occupation from the farm to non-farm sector. On the other hand, some of them switched from the non-farm to farm sector. Finally there was a marginal increase in the farm sector and a decrease in the non-farm employment. The village level infrastructure and marketing facilities to a large extent determined the inter-sectoral redistribution

of occupation of BRAC household heads. Those from villages with good infrastructure and marketing facilities switched to the non-farm sector. Those who were previously engaged in the non-farm sector did not switch to other sectors. It has also been found that heads of the households with large number of members and smaller amount of landholding switched to non-farm activities. Household heads from villages with poor infrastructure and marketing facilities and with larger amount of landholding and receiving loan over Taka 5,000 were mainly engaged in farm activities. Such household heads who were previously engaged in the non-farm sector also switched to the farm sector. Contribution of BRAC training on occupational status of household heads has not been found significant.

Occupational status of the household heads largely determines the economic well-being of the households (Husain 1998). If it happened that poverty level of the country in general and rural poverty in particular has declined for the transformation of the non-farm sector through employment of large number of incremental labour force, special emphasis needs to be given for the development of this sector. BRAC may attempt to create employment in this sector. But the main hindrance for the development of the non-farm sector is the lack of well developed rural infrastructure. The micro-credit programme will function more effectively if rural infrastructure and marketing facilities can be developed.

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ANNEX

Table A.1. Changes in sectoral composition of occupational status of household head for Panel 1-11

Occupational Status in 1993		Retained in the same sector	Shifted to				Shifted in	Net sectoral change	Occupational Status in 1996
Sector	Number		Farm	Non-farm	Service	Total			
Farm	50 (35.5)	37 (74.0)	NA	12 (24.0)	1 (2.0)	13 (26.0)	22	+9	59 (41.8)
Non-farm	74 (52.5)	52 (70.3)	14 (18.9)	NA	8 (10.8)	22 (29.7)	15	-7	67 (47.5)
Service	17 (12.1)	6 (35.3)	8 (47.1)	3 (17.6)	NA	11 (64.7)	9	-2	15 (10.6)
Total	141	95 (67.4)							141

(Figures in the parentheses indicate percentage)

Table A.2. Changes in sectoral composition of occupational status of household head for Panel 12-29

Occupational Status in 1993		Retained in the same sector	Shifted to				Shifted in	Net sectoral change	Occupational Status in 1996
Sector	Number		Farm	Non-farm	Service	Total			
Farm	9 (24.3)	4 (44.4)	NA	4 (44.4)	1 (11.1)	5 (55.5)	7	+2	11 (29.7)
Non-farm	26 (70.3)	15 (57.7)	6 (23.1)	NA	5 (19.2)	11 (42.3)	5	-6	20 (54.1)
Service	2 (5.4)	—	1 (50.0)	1 (50.0)	NA	2 (100.0)	6	+4	6 (16.2)
Total	37	19 (51.4)							37

(Figures in the parentheses indicate percentage)

Table A.3. Changes in sectoral composition of occupational status of household head for Panel 30-47

Occupational Status in 1993		Retained in the same sector	Shifted to				Shifted in	Net sectoral change	Occupational Status in 1996
Sector	Number		Farm	Non-farm	Service	Total			
Farm	26 (32.5)	17 (65.4)	NA	8 (30.8)	1 (3.8)	9 (34.6)	10	+1	27 (33.8)
Non-farm	45 (56.3)	36 (80.0)	5 (11.1)	NA	4 (8.9)	9 (20.0)	10	+1	46 (57.5)
Service	9 (11.3)	2 (22.2)	5 (55.6)	2 (22.2)	NA	7 (77.8)	5	-2	7 (8.8)
Total	80	55 (68.8)							80

(Figures in the parentheses indicate percentage)

Table A.4. Changes in sectoral composition of occupational status of household head For Panel 48+

Occupational Status in 1993		Retained in the same sector	Shifted to				Shifted in	Net sectoral change	Occupational Status in 1996
Sector	Number		Farm	Non-farm	Service	Total			
Farm	22 (34.4)	14 (63.6)	NA	4 (18.2)	4 (18.2)	8 (36.4)	5	-3	19 (29.7)
Non-farm	26 (40.6)	21 (80.8)	3 (11.5)	NA	2 (7.7)	5 (19.2)	14	+9	35 (54.7)
Service	16 (25.0)	4 (25.0)	2 (12.5)	10 (62.5)	NA	12 (75.0)	6	-6	10 (15.6)
Total	64	39 (60.9)							64

(Figures in the parentheses indicate percentage)

Table A.5. Occupational status by BRAC loan received till 1993

Loan size	No change in			Changed to			Total
	Farm	Non-farm	Service	Farm	Non-farm	Service	
No loan	23 (25.0)	34 (37.0)	6 (6.5)	13 (14.1)	10 (10.9)	6 (6.5)	92
1-1000	2 (11.1)	5 (27.8)	—	4 (22.2)	5 (27.8)	2 (11.1)	18
1001-2500	16 (29.1)	17 (30.9)	1 (1.8)	7 (12.7)	7 (12.7)	7 (21.7)	55
2501-5000	9 (20.9)	17 (39.5)	2 (4.7)	3 (7.0)	8 (18.6)	4 (9.3)	43
5001-7500	5 (13.9)	18 (50.0)	—	8 (22.2)	4 (11.1)	1 (3.8)	36
7501+	17 (21.8)	23 (42.3)	3 (3.80)	9 (11.5)	10 (12.8)	6 (2.8)	78

(Figures in the parentheses indicate percentage)

Table A.6. Occupational status by cumulative amount of BRAC loan received till 1966

Loan size	No change in			Changed to			Total
	Farm	Non-farm	Service	Farm	Non-farm	Service	
No loan	1 (9.1)	4 (36.4)	—	2 (18.2)	2 (18.2)	2 (18.2)	11
1-5000	4 (10.8)	12 (32.4)	6 (16.2)	6 (16.2)	4 (10.8)	5 (13.5)	37
5001-10000	24 (32.0)	30 (40.0)	—	7 (9.3)	11 (14.7)	3 (4.0)	75
10001-15000	20 (25.0)	22 (27.5)	3 (3.8)	13 (16.3)	15 (18.8)	7 (8.8)	80
15001-20000	6 (20.0)	10 (33.3)	2 (6.7)	6 (20.0)	4 (13.3)	2 (6.7)	30
20001+	17 (19.1)	46 (51.7)	1 (1.1)	10 (11.2)	8 (9.0)	7 (7.9)	89

(Figures in the parentheses indicate percentage)

Table A.7. Cumulative amount of BRAC loan (Taka) by occupational status

Occupational Status	Amount of BRAC loan	
	1993	1996
No change in		
Farm	4,833	14,993
Non-farm	4,902	16,552
Service	4,000	10,833
Changed to		
Farm	4,507	14,223
Non-farm	4,627	13,557
Service	4,423	14,385

Table A.8. BRAC training and occupational status

Occupational Status	Cumulative number of BRAC members received training	
	1993	1996
No change in		
Farm	21 (20.2)	20 (17.9)
Non-farm	43 (41.3)	56 (50.0)
Service	5 (4.8)	6 (5.4)
Changed to		
Farm	13 (12.5)	16 (14.3)
Non-farm	16 (15.4)	13 (11.6)
Service	6 (5.8)	11 (9.8)

(Figures in the parentheses indicate percentage)

Table A.9: Occupational status by education level of the household head in 1993

Occupational Status	BRAC				Comparison			
	Illiterate	Class (I-V)	Class (VI-X)	Class (XI+)	Illiterate	Class (I-V)	Class (VI-X)	Class (XI+)
No change in								
Farm	60 (83.3)	7 (9.7)	5 (6.9)	—	54 (80.6)	6 (9.0)	7 (10.4)	—
Non-farm	91 (73.4)	12 (9.7)	16 (12.9)	5 (4.0)	67 (77.9)	11 (12.8)	8 (9.3)	—
Service	8 (80.0)	1 (10.0)	1 (10.0)	—	8 (88.9)	—	1 (11.1)	—
Changed to								
Farm	34 (81.0)	4 (9.5)	4 (9.5)	—	25 (89.3)	1 (3.6)	2 (7.1)	—
Non-farm	34 (87.2)	4 (10.3)	1 (2.6)	—	21 (87.5)	3 (12.5)	—	—
Service	25 (96.2)	1 (3.8)	—	—	8 (88.9)	—	1 (11.1)	—

(Figures in the parentheses indicate percentage)

Table A.10 Pre-BRAC landholding and occupational status in 1993

Landholding category	Farm		Non-farm		Others	Total
	Self	Wage	Self	Wage		
No land	3 (5.6)	14 (25.9)	24 (44.4)	9 (16.7)	4 (7.4)	54 (18.1)
1-25 decimal	7 (4.20)	45 (27.3)	68 (41.2)	28 (17.0)	17 (10.3)	165 (52.6)
26-50 decimal	4 (9.5)	9 (21.4)	17 (40.5)	4 (9.5)	8 (19.0)	42 (13.4)
51-100 decimal	6 (24.0)	3 (12.0)	12 (48.0)	1 (4.0)	3 (12.0)	25 (7.8)
101+ decimal	14 (53.8)	2 (7.7)	8 (30.8)	—	2 (7.7)	26 (8.1)

(Figures in the parentheses indicate percentage)

Note: Missing observation: 10

Table A.11. Pre-BRAC landholding and occupational status in 1996

Landholding category	Farm		Non-farm		Others	Total
	Self	Wage	Self	Wage		
No land	4 (6.9)	14 (24.1)	21 (36.2)	9 (15.5)	10 (17.2)	58 (18.1)
1-25 decimal	16 (9.5)	32 (18.9)	74 (43.8)	25 (14.8)	22 (13.0)	170 (52.6)
26-50 decimal	13 (30.2)	7 (16.3)	17 (39.5)	2 (4.7)	4 (9.3)	43 (13.4)
51-100 decimal	9 (36.0)	1 (4.0)	13 (52.0)	1 (4.0)	1 (4.0)	25 (7.8)
101+ decimal	18 (69.2)	2 (7.7)	6 (23.1)	—	—	26 (8.1)

(Figures in the parentheses indicate percentage)

Table A.12. Occupational status by level of infrastructure

Economic vibrancy	No change in			Changed to			Total
	Farm	Non-farm	Service	Farm	Non-farm	Service	
Low	15 (35.7)	8 (19.0)	3 (7.1)	7 (16.7)	6 (14.3)	3 (7.1)	42 (13.0)
Medium	55 (22.0)	101 (40.4)	6 (2.4)	33 (13.2)	33 (13.2)	22 (8.8)	250 (77.6)
High	2 (6.7)	15 (50.0)	3 (10.0)	4 (13.3)	5 (16.7)	1 (3.3)	30 (9.3)

(Figures in the parentheses indicate percentage)

Table A.13. Determinants of switching occupation to farm sector

Explanatory variables	Coefficient	Log-odd ratio
Constant	-1.91 (4.24)	
Amount of BRAC loan till 1993		
No loan	-0.34 (0.39)	0.71
Taka (1-1000)	0.39 (0.55)	1.47
Taka (1001-2500)	-0.24 (0.41)	0.79
Taka (2501-5000)	-0.64 (0.55)	0.53
Taka (5001+)	0.82 (0.43)*	2.28
Amount of non-institutional loan in 1993	-0.45 (0.74)	100
Membership length	-0.02 (0.01)**	0.98
Involvement in IGA	0.001 (0.01)	1.00
Family size	-0.09 (0.10)	0.92
Pre-BRAC land holding	-0.001 (0.001)	0.99
Economic vibrancy	0.01 (0.04)	1.01
BARC training	0.11 (0.20)	1.11
Education level of the household head		
Illiterate	1.31 (4.09)	3.71
Class (I-V)	1.43 (4.11)	4.18
Class (VI-X)	1.62 (4.11)	5.05
Total amount of savings in 1993	-0.01 (1.02)	0.99
Total value of productive assets in 1993	0.01 (0.00)***	1.01

(Figures in the parentheses indicate standard error)

* Significant at 10% level, ** Significant at 5% level, *** Significant at 1% level

Table A.14. Determinants of switching occupation to non-farm sector

Explanatory variables	Coefficient	Log-odd ratio
Constant	-4.77 (4.26)	
Amount of BRAC loan till 1993		
No loan	-0.15 (0.41)	0.86
Taka (1-1000)	0.85 (0.54)	2.35
Taka (1001-2500)	0.03 (0.40)	1.03
Taka (2501-5000)	0.01 (0.43)	1.01
Taka (5001+)	-0.27 (0.50)	0.76
Amount of non-institutional loan in 1993	0.004 (0.002)	1.00
Membership length	0.01 (0.01)	1.01
Involvement in IGA	0.28 (0.19)	1.32
Family size	0.20 (0.09)**	1.22
Pre-BRAC land holding	-0.01 (0.00)	0.99
Economic vibrancy	-0.01 (0.04)	0.99
BARC training	-0.17 (0.02)	0.84
Education level of the household head		
Illiterate	1.62 (4.10)	5.04
Class (I-V)	1.53 (4.11)	4.62
Class (VI-X)	0.003 (4.16)	1.00
Total amount of savings in 1993	0.02 (0.004)	1.02
Total value of productive assets in 1993	-0.002 (0.004)	0.99

(Figures in the parentheses indicate standard error)

** Significant at 5% level

**Table A.15. Determinants of occupational status (1= non-farm, 0= otherwise) in 1996
(service sector excluded)**

Explanatory variables	Coefficient	Log-odd ratio
Constant	-10.1 (4.080)	
Amount of BRAC loan till 1993		
No loan	0.07 (0.30)	1.07
Taka (1-1000)	0.25 (0.49)	1.29
Taka (1001-2500)	-0.27 (0.311)	0.76
Taka (2501-5000)	0.08 (0.36)	1.08
Taka (5001+)	0.003 (0.36)	1.00
Amount of non-institutional loan in 1993	0.12 (0.13)	1.00
Membership length	0.01 (0.01)*	1.01
Involvement in IGA	-0.17 (0.14)	0.84
Family size	0.19 (0.08)**	1.20
Pre-BRAC land holding	-0.001 (0.001)	0.99
Economic vibrancy	0.11 (0.03)***	1.11
BARC training	-0.11 (0.15)	0.89
Education level of the household head		
Illiterate	-1.99 (3.99)	0.14
Class (I-V)	-1.81 (3.99)	0.16
Class (VI-X)	-1.66 (3.99)	0.19
Total amount of savings in 1993	-0.004 (0.01)	0.99
Total value of productive assets in 1993	-0.01 (0.00)***	0.99

(Figures in the parentheses indicate standard error)

* Significant at 10% level, ** Significant at 5% level, *** Significant at 1% level