BRAC's Contribution to Gross Domestic Product of Bangladesh

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Abstract

This paper estimates the contribution of BRAC programmes to the gross domestic product (GDP) of Bangladesh. BRAC's contribution to GDP of Bangladesh has been divided into four components. These are 1) Value added in BRAC as an organization in a given year, 2) Incremental value added in linked sectors due to input supply to BRAC in a given year, 3) Incremental value added in linked sectors attributed to loans disbursed by BRAC in a given year, and 4) Incremental value added in linked sectors attributed to non-financial development inputs (skill training, non-formal primary education, and health services) in a given year. BRAC contributed Tk. 8,215.3 million, Tk. 10,479.1 million, Tk. 13,558 million and Tk. 17,770.3 million to GDP of Bangladesh in 1995, 1996, 1997 and 1998 respectively. In 1995 BRAC's share to GDP was 0.7%, which increased to 1.15% in 1998. This shows that output of BRAC increased faster than GDP of Bangladesh. During the period output of BRAC increased, on average, at 29.1% annually. But estimating the contribution of education intervention was not possible due to lack of information on the sectoral wage differential of the BRAC graduates and those without any education. Therefore, the total output of BRAC is not fully captured in the present study.

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INTRODUCTION

The objective of BRAC is poverty alleviation and empowerment of the poor. BRAC views poverty in a holistic sense and regards it as a complex syndrome that requires extensive and innovative efforts to overcome. It tries to attain its objective through three major programmes, viz., Rural Development Programme (RDP), Health, Nutrition and Population Programme (HNPP) and Non-Formal Primary Education (NFPE). RDP covers all the 64 districts of Bangladesh with nearly 3.4 million borrower-households. BRAC is operating more than 34 thousand non-formal primary schools where children of poor households attend free of cost. Currently BRAC's health and population programme covers about 35 million people throughout the country. BRAC has several other programmes aimed to create income and employment opportunities of the poor and to support the vulnerable group. BRAC also has a number of income generating projects, profit of which is channelled to finance development works.

It has become a concern that whether such development interventions have impact on the macro economy of the country i.e., whether the standard macro variables like national income, savings, investment, employment are affected by NGO intervention. Contribution of some of the development interventions viz., credit and savings programme is observable while contribution of some other programmes viz., training, education, and health interventions is unobservable and difficult to estimate.

Research on the above issues is almost non-existent and also difficult to conduct mainly due to the lack of an established methodology. Dr. Mohiuddin Alamgir pioneered such a study on the contribution of Grameen Bank to GDP[1] of Bangladesh. The study found that Grameen Bank contributed 1.1% of Bangladesh's GDP in 1996 (1). The present study which follows the same methodology employed by Dr. Alamgir, attempts to estimate the contribution of BRAC to GDP of Bangladesh.

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[1] GDP is the value of final goods and services produced within the country (in a year).

METHODOLOGY

BRAC's contribution to GDP of Bangladesh, V_b can be divided into four components. These are:

First component (Direct): Value added in BRAC as an organization in a given year (V_{b1}),

Second component (Indirect): Incremental value added in linked sectors due to input supply to BRAC in a given year (V_{b2}),

Third component (Indirect): Incremental value added in linked sectors attributed to loans disbursed by BRAC in a given year (V_{b3}), and

Fourth component (indirect): Incremental value added in linked sectors attributed to non-financial development inputs (skill training, non-formal primary education, and health services) in a given year (V_{b4}). Therefore,

$$V_b = \sum_{i=1}^{4} V_{bi}$$

First component

Value added in BRAC in a given year is the sum of 1) wages and salaries paid by BRAC (Y_{b1}), 2) net interest earned by BRAC (Y_{b2}), 3) net profit earned by BRAC (Y_{b3}) on non-loan activities, and 4) provision for depreciation (Y_{b4}) during the period. Thus,

$$V_{b1} = \sum_{i=1}^{4} Y_{bi}$$

Second component

Incremental value added in linked sectors due to input supply to BRAC in a given year is estimated by:

$$V_{b2} = \sum_{i} [(a_i I_b) v_i]$$

Where,

I_b = Input supply to BRAC in a given year.

a_i = Input coefficient of sector (i).

v_i = Value added coefficient of sector (i).

Third component

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Incremental value added in linked sectors attributed to loans disbursed by BRAC in a given year consists of four elements. Of these, three elements are from different uses of loan proceeds viz., i) capital investment of different types (K), ii) intermediate inputs purchase (I), and iii) wage payments (W). The fourth element is net profit of loan-financed activities less income from alternative activities in the absence of BRAC loan (Π).

$$V_{b3} = V(K) + V(I) + W + \Pi$$

Where,

$V(\cdot)$ = Incremental value added in supplying sectors due to loan proceeds in a given year.

Therefore, total loan disbursed to sector (j), (C_j) is the sum of 1) amount of investment in items supplied by different capital goods sectors out of loan disbursed to sector (j) in a given year (K_j), 2) amount of intermediate input purchase out of loan disbursed to sector (j) in a given year (I_j), and 3) amount of wage payments out of loan disbursed to sector (j) in a given year (W_j).

$$C_j = K_j + I_j + W_j \qquad \forall\, j = 1, \text{------}, 9.$$

The sectors are 1) Agriculture, 2) Fisheries, 3) Poultry and livestock, 4) Sericulture, 5) Cottage industry, 6) Rural transport, 7) Rural trading, 8) Food process, and 9) Housing.

It is assumed that loan-use in sectors are distributed by a given coefficient c. This is given as follows:

$$K_j = c_{kj}\, C_j\,,\ I_j = c_{ij}\, C_j\,,\ \text{and}\ W_j = c_{wj}\, C_j$$

Or

$$C_j = \sum_p c_{pj} C_j \qquad \forall\, p = k,\, I\ \text{and}\ w$$

Where,

c_{pj} = Share of loan disbursed to sector (j) used for p-th item.

a) A number of steps have been followed to calculate total incremental value added due to increase in capital investment financed by loan proceeds to a receiving sector in a given year.

First, the amount of purchase from each capital supplying sector has been estimated. Amount of capital purchased from sector (i) for sector (j) financed by loans (K_{ij}) is estimated by

$$K_{ij} = k_{ij} c_{kj} C_j$$

Where,

k_{ij} = Share of capital supplying sector (i) in the amount of capital investment in sector (j) out of loan proceeds.

Second, each type of capital purchased by loan receiving sectors is added to estimate the total investment demand (D_i) from each sector.

$$D_i = \sum_j k_{ij} c_{kj} C_j$$

Third, direct and indirect increases in output of all linked sectors due to increase in final demand of capital supplying sectors has been estimated through input-output inverse matrix.

$$Q = [I-A]^{-1}F$$

Where,

Q = output vector, $[I-A]^{-1}$ = Leontiff inverse matrix, and F = final demand vector.

For sector (i), the estimated total output increase is given by

$$X_i = \sum_m A_{mi} D_i$$

Where,

A_{mi} = the element of the inverse matrix showing output increase in linked sector (m) due to unit demand increase in D_i.

X_i = total output increase due to increase in K in all sectors.

To get value added in linked sector (i), X_i has been multiplied by vector of sectoral value added coefficients (v_i). Total value added $V(K)$ is the sum of value added in all sectors.

$$V(K) = \sum_i X_i v_i$$

b) Incremental value added in sectors supplying intermediate inputs financed by loan proceeds to sector (j), $V(I_j)$ is as follows:

$$V(I_j) = \sum_i [(a_{ij} c_{il} C_j) v_i]$$

Where,

a_{ij} = Input coefficient of sector (j) from sector (i).

v_i = Value added coefficient of sector (i)

Therefore, incremental value added in sectors supplying intermediate inputs is estimated by:

$$V(I) = \sum_j \sum_i [(a_{ij} c_{il} C_j) v_i]$$

(Secondary effects working through input-output relationship is ignored)

c) Wage payments financed by loan disbursed to sector (j) create value added directly and this is given by the following:

$$W_j = c_{wj} C_j \text{ and } W = \sum_j c_{wj} C_j$$

d) Net profit from activities financed by loan proceeds of sector (j) less opportunity cost in a given year is estimated by:

$$\Pi_j = r_j C_j - Y_j \text{ and } \Pi = \sum_j (r_j C_j - Y_j)$$

Where,

r_j = Average return on investment in sector (i).

Y_j = Return from alternative activities.

Fourth component

a) Contribution of skill development training
The potential earnings of the beneficiaries who received training from BRAC in year t-1 estimate the contribution of BRAC training to GDP in year t. Therefore, the contribution of BRAC's skill training, $v_t(s)$ is given by the excess of $y_t(s)$ over $y_0(s)$ less cost per trainee, C_t (capital and recurrent incurred by BRAC plus cost borne by the trainee). Thus,

$$v_t(s) = [y_t(s) - y_0(s)] - C_t$$

where

$y_t(s)$ = annual income in sector s of the beneficiary who received training from BRAC

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$y_0(s)$ = annual income in sector s without any training

A beneficiary can receive training for more than one sector and can be involved in the sectors in which she received training. A weighted average of $v_t(s)$ has been taken as the unit value added of a beneficiary receiving training.

$$v_t = \sum_s a_s v_t(s)$$

For a total number of N beneficiaries who received training and got themselves engaged in income earning activities, the contribution of BRAC training is estimated by

$$V(T) = \sum_N v_t$$

b) Contribution of education intervention

The potential wage earnings of the graduates of year t-1 can estimate the contribution of education intervention of BRAC to GDP in year t. For example, if the BRAC school system produced only one graduate of level L (say primary) in year t-1 who joined the labour force in year t to earn an annual wage of $w_L(s)$ in sector s, then the contribution to GDP of BRAC's education intervention, $v_1(s)$ is given by excess of $w_L(s)$ over $w_0(s)$, wage in sector s without education less per student cost of education (capital and recurrent incurred by BRAC plus cost borne by the student), i.e.,

$$v_1(s) = [w_L(s) - w_0(s)] - c_L.$$

In calculating, $w_L(s)$ and $w_0(s)$, weighted average of male and female wage has been taken.

Each level of graduate may be employed in more than one sector. A weighted average of $v_1(s)$ gives the unit value added of an L level graduate as shown below:

$$v_1 = \Sigma_s \alpha_s \, v_1(s).$$

For a total number of graduates of level L, N_L, with labor force participation rate of l_p and employment ratio of l_e, total contribution of education intervention of BRAC, V (E), is estimated by

$$V(E) = \Sigma_L N_L v_l l_p l_c.$$

c) Contribution of health intervention

The contribution of BRAC's health intervention to GDP, $V(H)$, is given by (a) value of the annual number of days saved (d_1) of working adults which would otherwise have been lost due to illness $(V_1 = v_1 d_1)$, (b) value of the annual number of days saved (d_2) of working adults which would otherwise have been lost due to care of the sick $(V_2 = v_2 d_2)$, and (c) incremental value added by health care beneficiaries due to improved health care (V_3), less total health care costs incurred by BRAC (C_h). V_3 has been omitted since empirical work on the relationship between health and productivity is not firmly established in the Bangladesh context. Thus,

$$V(H) = (V_1 + V_2) - C_h.$$

Where

$$V_1 = v_1 d_1 \text{ and } V_2 = v_2 d_2.$$

Sources of data

Data on components of BRAC's direct contribution and input supply to BRAC have been collected from BRAC audit reports (2-4). Information on the amount of loan disbursed to different sectors and number of persons received skill training were collected from RDP-MIS. Sectoral value added coefficients were taken from *An Input-Output Table for Bangladesh Economy* prepared by BIDS (5). The coefficients a, c, k, and v_t (unit value added of a person receiving skill training) have been estimated based on *Microenterprise Profiles contained in the ADB* (7) and discussion with BRAC's RDP personnel. Income from alternative sources in the absence of BRAC loan was taken a Grameen Bank study (1). Data on number of patients treated in the BRAC heath centres and cost per patient have been collected from BRAC's HNPP office. Value of the annual number of days saved of working adults which would otherwise have been lost due to illness was taken from a recent BRAC study (6).

FINDINGS

GDP is equal to total income earned domestically and is also equal to total spending. In this study some components of BRAC's contribution to GDP (net profit or net interest, for example) have been estimated based on income method while some others (value added in linked sectors due to input supply to BRAC or that due to loan disbursed by BRAC, for example) based on expenditure method. Findings on BRAC's contribution to GDP are presented in Table 1.

Table 1. Contribution of BRAC to GDP of Bangladesh

Items	1995	1996	1997	1998
Direct Contribution (Value added in BRAC)	1,492,504,030	1,948,726,219	2,313,090,986	3,144,043,428
Value added in linked sectors due to input supply to BRAC	464,840,679	405,306,268	516,309,411	671,717,244
Value added in linked sectors due to BRAC loan				
1. Capital supplying sector	909,885,386	1,159,446,867	1,551,571,053	1,926,550,056
2. Input supplying sector	1,093,348,009	1,570,855,525	2,132,243,230	2,538,678,413
Wage payment from loan	443,307,937	565,761,252	724,901,682	910,341,625
Return on loan-financed activities at 48%	1,770,692,509	2,450,528,763	3,306,722,048	4,003,945,390
Value added due to skill development training	2,040,692,780	2,252,037,340	2,720,997,300	4,248,248,760
Value added due to health intervention	NA	126,419,458	292,131,137	326,803,562
Total contribution of BRAC to GDP of Bangladesh	8,215,271,330	10,479,081,692	13,557,966,847	17,770,328,478
Total GDP of Bangladesh (In million Tk.)	1,170,261	1,301,600	1,403,045	1,548,334
% contribution of BRAC to GDP of Bangladesh	0.702	0.805	0.966	1.148

BRAC contributed Tk. 8,215.3 million, Tk. 10,479.1 million, Tk. 13,558 million and Tk. 17,770.3 million to the GDP of Bangladesh in 1995, 1996, 1997 and 1998 respectively. In 1995 BRAC's share to the GDP was 0.7%, while it increased to 1.15% in 1998. This shows that output of BRAC increased faster than GDP of Bangladesh. During the period output of BRAC increased, on average, at 29.1% annually. It may be mentioned that the share of Grameen Bank to GDP of Bangladesh was estimated at 1.1% in 1996 (1) which increased at a slower rate than the GDP of the country.

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BRAC's direct contribution to the GDP was Tk. 1,492.5 million, Tk. 1,948.7 million, Tk. 2,313.1 million and Tk. 3,144 million in 1995, 1996, 1997 and 1998 respectively (Annex Table 1).

Capital supplying sectors contributed Tk. 909.9 million, Tk. 1,159.4 million, Tk. 1,551.6 million and Tk. 1,926.6 million in 1995, 1996, 1997 and 1998 respectively (Annex Table 3 through 8). The contribution from input supplying sector was Tk. 1,093.3 million, Tk. 1,570.9 million, Tk. 2,132.2 million and Tk. 2,538.7 million respectively (Annex Table 3,4, and 9 through 11).

Value added in linked sectors due to input supply to BRAC were Tk. 464.8 million, Tk. 405.3 million, Tk. 516.3 million and Tk. 671.7 million in 1995, 1996, 1997 and 1998 respectively (Annex Table 2).

The annual weighted average return on loan financed activities is estimated to be 72%. One-third of the above has been deducted to account for income from alternative sources in the absence of BRAC loan. Thus, the net rate of return was calculated at 48%. At this rate the return from loan-financed activities is estimated at Tk. 1,770.7 million, Tk. 2,450.5 million, Tk. 3,306.7 million, and Tk. 4,003.9 million in 1995, 1996, 1997 and 1998 respectively (Annex Table 12).

Weighted average of the difference in monthly income of those with and without BRAC's skill training is estimated to be Tk. 1,010. Average cost of training per person is Tk. 500. At this rate annual contribution of skill training is estimated at Tk. 2,040.7 million, Tk. 2,252 million, Tk. 2,721 million, and Tk. 4,248.2 million in 1995, 1996, 1997 and 1998 respectively (Number of persons received skill training and got themselves involved in income generating activities were 175,619, 193,807, 234,165 and 365,598 in 1995, 1996, 1997 and 1998 respectively).

Value of the annual number of days (8 hours a day) saved of working adults which would otherwise have been lost due to illness is estimated to be Tk. 1990. Value of the annual

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number of days saved of working adults which would otherwise have been lost due to care of the sick is estimated to be Tk. 497.5 (2 hours a day). At this rate value added due to BRAC's health intervention is estimated at Tk. 126.4 million, Tk. 292.1 million, and Tk. 326.8 in 1996, 1997 and 1998 respectively (Annex Table 13).

Estimating the contribution of BRAC's education programme was not possible since data on the sectoral wage differential of the BRAC graduate and those without any education was not available.

LIMITATIONS

The estimation of BRAC's contribution to GDP in the present study is not beyond criticism since the methodology is still in its preliminary stage. It is expected that further studies will improve both the methodology and the authenticity of the estimate.

For more accurate estimation data quality needs to be improved. For example, all the sectors which supply input to BRAC and where BRAC disburses loan, need to be specified as much as possible. That will help calculate weighted average of the sectoral value added coefficient more accurately. An MIS system with all the programme information in detail is required. Some data such as the potential earnings of a beneficiary who received training from BRAC, was collected from BRAC programme. Such information would be more acceptable to the researchers and other people outside BRAC if that could be known from past research.

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Table 1. Direct Contribution of BRAC to GDP of Bangladesh 1995-1998 (Taka)

Item	1995	1996	1997	1998
Wages and salaries	835,216,777	942,338,409	1,158,407,013	1,409,784,188
Net interest	408,933,648	703,590,640	888,094,100	1,184,840,133
Net profit	199,259,305	223,920,934	164,964,943	395,252,453
Provision for depreciation	49,094,300	78,876,236	101,624,930	154,166,654
Total	1,492,504,030	1,948,726,219	2,313,090,986	3,144,043,428

Table 1-a. Calculation of net interest

Item	1995	1996	1997	1998
Interest income				
Loan to VO members	390,418,578	694,708,869	888,359,541	1,237,919,305
Bank accounts, fixed deposits and PSPs	52,763,110	59,470,831	103,107,047	131,231,348
Project/ companies	39,178,924	20,461,067	------	------
Sub-total (a)	482,360,612	774,640,767	991,466,588	1,369,150,653
Interest expenses				
Deposit of VO members	28,123,936	48,531,602	71,853,236	100,803,842
Long term loans	41,573,309	35,702,635	24,415,704	55,203,679
Bank overdraft interest and charges	3,729,719	6,815,890	7,103,548	28,302,999
Sub-total (b)	73,426,964	71,050,127	103,372,488	184,310,520
Net interest (a-b)	408,933,648	703,590,640	888,094,100	1,184,840,133

Table 1-b. Calculation of net profit

Item	1995	1996	1997	1998
a) Revenue from sales of commercial ventures	526,124,971	557,918,171	643,303,809	847,403,538
b) Cost of sales of commercial ventures	390,934,340	404,577,212	474,786,704	652,340,412
c) Income from investment in related companies	6,875,000	3,750,000	3,249,987	11,539,798
d) Other income*	57,193,674	66,829,975	109,912,412	171,821,797
e) Loss on investment	0	0	116,714,561	10,172,268
Net profit (a-b+c+d-e)	199,259,305	223,920,934	164,964,943	395,252,453

* Include service charges, sectoral income, rental income, gain on sale of assets and others.

Table-2.1. Value added in linked sectors due to Input Supply to BRAC (Taka) 1995-1996

Expenses	Sector	Input supply (1995)	Input supply (1996)	Value added coefficient	Value added (1995)	Value added (1996)
Travelling and transport	Transport service	98,936,459	108,127,135	0.6625	65,545,404	71,634,227
Training	Professional service	196,552,619	147,551,723	0.5729	112,604,995	84,532,382
School rent and maintenance	Rural building	61,536,694	66,078,804	0.5714	35,162,067	37,757,429
Stationary, rent and utilities	Printing and publishing	85,390,870	120,154,399	0.4296	36,683,918	51,618,330
Maintenance and general expenses	Communication	38,366,079	42,033,473	0.8222	31,544,590	34,559,922
Program supplies	Printing and publishing	420,983,476	281,041,624	0.4296	180,854,501	120,735,482
Publicity, advertisement and sales commission	Professional service	----	----	0.5729	----	----
Bank charges	Banking and insurance	3,729,719	6,815,890	0.6556	2,445,204	4,468,497
Total					464,840,679	405,306,268

Table-2.2. Value added in linked sectors due to Input Supply to BRAC (Taka) 1997-1998

Expenses	Sector	Input supply (1997)	Input supply (1998)	Value added coefficient	Value added (1997)	Value added (1998)
Travelling and transport	Transport service	108,127,135	192,352,866	0.6625	98,883,459	127,433,774
Training	Professional service	147,551,723	223,360,413	0.5729	106,005,653	127,963,181
School rent and maintenance	Rural building	66,078,804	82,529,347	0.5714	44,005,363	47,157,269
Stationary, rent and utilities	Printing and publishing	120,154,399	161,189,798	0.4296	61,425,510	69,247,137
Maintenance and general expenses	Communication	42,033,473	78,996,259	0.8222	42,522,267	64,950,724
Program supplies	Printing and publishing	281,041,624	483,228,404	0.4296	156,528,979	207,594,922
Publicity, advertisement and sales commission	Professional service	----	15,386,265	0.5729	2,281,094	8,814,791
Bank charges	Banking and insurance	6,815,890	28,302,999	0.6556	4,657,086	18,555,446
Total					516,309,411	671,717,244

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Table 3. Percentage allocation of loan to various sectors by use (capital, intermediate inputs and labour)

Sector	% allocation		
	Capital	Intermediate inputs	Labour
Agriculture	30	51	19
Fisheries	38	36	26
Poultry and livestock	25	65	10
Sericulture	54	24	22
Collage industry	15	66	19
Rural transport	63	14	23
Rural trading	16	79	5
Food processing	18	65	17
Housing	90	00	10

Table 4.1. Allocation of loan to various sectors by use (Taka) 1995-1996

Sector	1995			1996		
	Capital	Intermediate inputs	Labour	Capital	Intermediate inputs	Labour
Agriculture	135,549,175	230,433,598	85,847,811	172,992,648	294,087,502	109,562,010
Fisheries	53,959,463	51,119,491	36,919,632	81,908,088	77,597,136	56,042,376
Poultry and livestock	218,621,067	568,414,773	87,448,427	250,620,413	651,613,073	100,248,165
Sericulture	29,148,543	12,954,908	11,875,332	6,758,289	3,003,684	2,753,377
Collage industry	8,567,982	37,699,123	10,852,778	8,855,336	38,963,476	11,216,758
Rural transport	82,550,790	18,344,620	30,137,590	105,866,059	23,525,791	38,649,514
Rural trading	201,602,620	995,412,935	63,000,819	363,126,092	1,792,935,080	113,476,904
Food processing	116,684,802	421,361,785	110,202,313	137,996,997	498,322,490	130,330,497
Housing	63,209,115	00	7,023,235	31,334,850	00	3,481,650

Table 4.2. Allocation of loan to various sectors by use (Taka) 1997-1998

Sector	1997			1998		
	Capital	Intermediate inputs	Labour	Capital	Intermediate inputs	Labour
Agriculture	193,053,902	328,191,634	122,267,472	357,040,485	606,968,825	226,125,641
Fisheries	118,996,620	112,733,640	81,418,740	197,356,420	186,969,240	135,033,340
Poultry and livestock	390,325,285	1,014,845,740	156,130,114	427,176,350	1,110,658,510	170,870,540
Sericulture	7,329,420	3,257,520	2,986,060	8,462,880	3,761,280	3,447,840
Collage industry	9,338,925	41,091,270	11,829,305	6,831,675	30,059,370	8,653,455
Rural transport	116,653,005	25,922,890	42,587,605	91,718,235	20,381,830	33,484,435
Rural trading	516,104,912	2,548,268,003	161,282,785	616,878,703	3,045,838,597	192,774,595
Food processing	149,041,696	538,206,123	140,761,601	138,460,410	499,995,925	130,768,165
Housing	50,742,000	00	5,638,000	82,652,535	00	9,183,615

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Table 5. Percentage allocation of loan financed capital expenses by supplying sector

Capital Supplying sector	% allocation of capital								
	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing	Housing
Wooden furniture	00	00	00	22	5	15	12	12	56
Metal products	7	17	00	00	7	52	38	8	44
Machinery	51	00	00	00	75	33	00	00	00
Transport equipment	00	3	00	00	00	00	00	00	00
Rural building	00	00	75	48	13	00	50	80	00
Other construction	42	80	25	30	00	00	00	00	00

Table 6.1. Allocation of loan-financed capital expenses by supplying sector (Taka) 1995

Capital Supplying sector	Capital expenses (Taka)									
	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing	Housing	Total
Wooden furniture				6,412,679	428,399	12,382,619	24,192,314	14,002,176	35,397,104	92,815,292
Metal products	9,488,442	9,173,109			599,759	42,926,411	76,608,996	9,334,784	27,812,011	175,943,511
Machinery	69,130,079				6,425,987	27,241,761				102,797,827
Transport equipment		1,618,784								1,618,784
Rural building			163,965,800	13,991,301	1,113,838		100,801,310	93,347,842		373,220,090
Other construction	56,930,654	43,167,570	54,655,267	8,744,563						163,498,053

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Table 6.2. Allocation of loan-financed capital expenses by supplying sector (Taka) 1996

Capital Supplying sector	Capital expenses (Taka)									
	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing	Housing	Total
Wooden furniture				1,486,824	442,767	15,879,909	43,575,131	16,559,640	17,547,516	95,491,786
Metal products	12,109,485	13,924,375			619,874	55,050,351	137,987,915	11,039,760	13,787,334	244,519,093
Machinery	88,226,250				6,641,502	34,935,800				129,803,552
Transport equipment		2,457,243								2,457,243
Rural building			187,965,310	3,243,979	1,151,194		181,563,046	110,397,598		484,321,126
Other construction	72,656,912	6,552,6470	62,655,103	2,027,487						202,865,972

Table 6.3. Allocation of loan financed capital expenses by supplying sector (Taka) 1997

Capital Supplying sector	Capital expenses (Taka)									
	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing	Housing	Total
Wooden furniture				1,612,472	466,946	17,497,951	61,932,589	1,788,5004	28,415,520	127,810,482
Metal products	13,513,773	20,229,425			653,725	60,659,563	19,611,9867	11,923,336	22,326,480	325,426,168
Machinery	98,457,490				7,004,194	38,495,492				143,957,176
Transport equipment		3,569,899								3,569,899
Rural building			292,743,963	3,518,122	1,214,060		25,805,2456	11,923,3357		674,761,958
Other construction	81,082,639	95,197,296	97,581,321	2,198,826						276,060,082

Table 6.4. Allocation of loan financed capital expenses by supplying sector (Taka) 1998

Capital Supplying sector	Capital expenses (Taka)									
	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing	Housing	Total
Wooden furniture				1,861,834	341,584	13,757,735	74,025,444	16,615,249	46,285,420	152,887,266
Metal products	24,992,834	33,550,591			478,217	47,693,482	234,413,907	11,076,833	36,367,115	388,572,980
Machinery	182,090,647				5,123,756	30,267,018				217,481,421
Transport equipment		5,920,693								5,920,693
Rural building			320,382,263	4,062,182	888,118		308,439,352	110,768,328		744,540,242
Other construction	149,957,004	157,885,136	106,794,088	2,538,864						417,175,091

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Table 7. Leontiff inverse matrix for Bangladesh economy

Sectors	Wooden Furniture	Fabricated Metal products	Machinery	Transport equipment	Rural building	Other construction
Paddy	0.000130	0.000140	0.000238	0.000096	0.000104	0.000205
Wheat	0.000695	0.000611	0.001030	0.000414	0.000530	0.000898
Other grains	0.000002	0.000003	0.000007	0.000003	0.000002	0.000005
Jute	0.000700	0.000325	0.000319	0.000160	0.001005	0.000381
Sugarcane	0.000370	0.000308	0.000434	0.000196	0.000263	0.000460
Potato	0.000007	0.000010	0.000024	0.000009	0.000005	0.000018
Vegetables	0.000012	0.000020	0.000048	0.000019	0.000010	0.000035
Pulses	0.000031	0.000040	0.000080	0.000032	0.000025	0.000064
Oilseeds	0.000500	0.000487	0.000980	0.000355	0.000317	0.000717
Fruits	0.000006	0.000008	0.000018	0.000007	0.000004	0.000013
Cotton	0.000929	0.000553	0.001096	0.000393	0.000267	0.001058
Tobacco	0.000002	0.000001	0.000002	0.000001	0.000001	0.000006
Tea	0.000002	0.000003	0.000007	0.000003	0.000001	0.000005
Major species	0.000054	0.000063	0.000120	0.000049	0.000044	0.000099
Other crops	0.000022	0.000024	0.000040	0.000016	0.000016	0.000283
Livestock	0.000531	0.000491	0.000845	0.000342	0.000426	0.000757
Poultry	0.000060	0.000091	0.000196	0.000077	0.000049	0.000148
Shrimp	0.000004	0.000007	0.000018	0.000007	0.000003	0.000013
Other fish	0.000034	0.000060	0.000141	0.000055	0.000028	0.000103
Forestry	0.241310	0.012387	0.026168	0.015408	0.156660	0.017157
Rice milling	0.000042	0.000054	0.000113	0.000045	0.000034	0.000089
Ata and flour milling	0.000867	0.000780	0.001343	0.000535	0.000670	0.001155
Fish and sea food processing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Edible oil	0.000791	0.000756	0.001402	0.000537	0.000549	0.001105
Sugar and gur	0.000777	0.000648	0.000912	0.000412	0.000552	0.000967
Tea (processing and blending)	0.000005	0.000010	0.000023	0.000009	0.000004	0.000016
Salt	0.001525	0.000828	0.001139	0.000592	0.001290	0.000941
Other food	0.003899	0.003364	0.004633	0.002036	0.003222	0.004627
Tanning and leather finishing	0.000018	0.000023	0.000025	0.000012	0.000014	0.000026
Leather products	0.000031	0.000063	0.000062	0.000028	0.000036	0.000052
Jute bailing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Jute textile	0.000819	0.000774	0.000735	0.000364	0.000669	0.000874
Yarn	0.001395	0.000999	0.001986	0.000710	0.000480	0.001913
Mill cloth	0.002387	0.001707	0.003431	0.001212	0.000784	0.003059
Handloom cloth	0.000000	0.000001	0.000002	0.000001	0.000000	0.000001
Dyeing and bleaching	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Readymade garments	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Knitting and hosiery	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table 7 continued…..

Sectors	Wooden Furniture	Fabricated Metal products	Machinery	Transport equipment	Rural building	Other construction
Other textiles	0.000006	0.000006	0.000015	0.000005	0.000007	0.000011
Cigarettes	0.000011	0.000007	0.000012	0.000005	0.000009	0.000037
Bidi	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Saw and planning mills	0.535363	0.002416	0.003384	0.011445	0.001127	0.003021
Wooden furniture	1.002802	0.000537	0.000751	0.000398	0.000762	0.001400
Pulp, paper and board	0.160039	0.011431	0.024383	0.015239	0.005710	0.017928
Printing and publishing	0.037469	0.018772	0.040550	0.041836	0.005999	0.025471
Drugs and pharmaceuticals	0.000313	0.000683	0.001026	0.000384	0.000242	0.001403
Fertilizer	0.000253	0.000212	0.000390	0.000148	0.000179	0.000327
Other chemicals	0.109051	0.110864	0.274393	0.086286	0.048000	0.166033
Petroleum products	0.037420	0.026641	0.033226	0.017908	0.014913	0.027234
Pottery and earthenware	0.000006	0.000005	0.000008	0.000003	0.000005	0.000008
China and ceramic	0.000025	0.000028	0.000058	0.000032	0.000009	0.000048
Glass and glass products	0.002550	0.003963	0.048150	0.010143	0.000859	0.023193
Brick, tiles and clay products	0.001772	0.002845	0.002855	0.001932	0.045516	0.010090
Cement	0.002429	0.003917	0.007563	0.003361	0.030046	0.017904
Iron and steel basic industry	0.087834	1.048869	0.912153	0.387824	0.282747	0.781298
Fabricated metal products	0.031720	1.092243	0.076822	0.151649	0.014574	0.046713
Machinery	0.051287	0.082199	1.314612	0.270588	0.020614	0.629617
Transport equipment	0.007379	0.012148	0.023475	1.020430	0.007161	0.020071
Miscellaneous industries	0.035862	0.023347	0.031469	0.016349	0.015267	0.042926
Urban building	0.029316	0.027629	0.054346	0.034369	0.007578	0.037175
Rural building	0.006467	0.004295	0.001668	0.001446	1.000662	0.001525
Construction: Electricity and gas	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Construction: Rural road	0.000029	0.000001	0.000003	0.000002	0.000019	0.000002
Construction: other transport	0.000152	0.000014	0.000024	0.000014	0.000018	0.000024
Other construction	0.000241	0.000390	0.000369	0.000229	0.000118	1.000276
Electricity	0.036831	0.041668	0.040371	0.031070	0.009231	0.028389
Gas	0.013444	0.033183	0.029911	0.015086	0.006824	0.021354

Table 8. Value added in linked sectors due to increase in capital expenses by loan receiving sectors (Taka)

Sectors	Total output in different years				Value added coefficient	Value added in different years			
	1995	1996	1997	1998		1995	1996	1997	1998
Paddy	133,651	169,733	223,547	289,558	0.5474	73,161	92,912	122,370	158,504
Wheat	623,188	789,347	1,042,943	1,339,361	0.4242	264,356	334,841	442,417	568,157
Other grains	3,002	3,824	4,980	6,587	0.6263	1,880	2,395	3,119	4,125
Jute	592,583	752,148	1,025,039	1,210,838	0.5400	319,995	406,160	553,521	653,852
Sugarcane	306,830	388,155	515,148	659,511	0.5042	154,704	195,708	259,738	332,525
Potato	9,700	12,324	15,979	21,461	0.5330	5,170	6,569	8,517	11,439
Vegetables	19,052	24,257	31,430	42,204	0.5025	9,574	12,189	15,793	21,208
Pulses	37,985	48,295	63,147	83,183	0.6158	2,3391	29,740	38,886	51,224
Oilseeds	468,948	593,891	776,568	1,016,046	0.4673	219,139	277,525	362,890	474,798
Fruits	7,444	9,457	12,274	16,383	0.6671	4,966	6,309	8,188	10,929
Cotton	569,455	711,107	930,110	1,237,763	0.5412	308,189	384,851	503,375	669,877
Tobacco	1,923	2,399	3,204	4,383	0.4576	880	1,098	1,466	2,006
Tea	2,629	3,339	4,306	5,842	0.6442	1,693	2,151	2,774	3,763
Major species	61,120	77,652	101,873	133,184	0.5945	36,336	46,164	60,563	79,178
Other crops	62,644	78,361	105,359	151,456	0.5077	31,804	39,784	53,491	76,894
Livestock	505,851	641,180	846,942	1,090,745	0.5245	265,319	336,299	444,221	572,096
Poultry	84,338	107,367	139,693	185,840	0.4428	37,345	47,542	61,856	82,290
Shrimp	6,710	8,537	11,019	14,945	0.4629	3,106	3,952	5,100	6,918
Other fish	55,586	70,812	91,693	123,319	0.4828	26,837	34,188	44,269	59,539
Forestry	88,565,422	108,860,861	149,139,649	171,285,907	0.4376	38,756,228	47,637,513	65,263,510	74,954,713
Rice milling	52,329	66,515	86,880	114,689	0.1526	7,985	10,150	13,258	17,502
Ata and flour milling	795,528	1,007,962	1,330,828	1,711,565	0.2181	173,505	219,837	290,254	373,292
Fish and sea food processing	00	00	00	00	0.2717	00	00	00	00
Edible oil	736,985	933,754	1,226,356	1,592,514	0.2039	150,271	190,392	250,054	324,714

Sectors	Total output in different years				Value added coefficient	Value added in different years			
	1995	1996	1997	1998		1995	1996	1997	1998
Sugar and gur	644,668	815,555	1,082,363	1,385,766	0.1988	128,160	162,132	215,174	275,490
Tea (processing and blending)	8,711	11,113	14,352	19,358	0.3791	3,302	4,213	5,441	7,339
Salt	1,040,575	1,313,059	1,760,660	2,159,127	0.8890	925,071	1,167,309	1,565,227	1,919,464
Other food	3,392,340	4,300,411	5,718,702	7,252,091	0.2650	898,970	1,139,609	1,515,456	1,921,804
Tanning and leather finishing	17,783	22,672	30,051	38,467	0.1158	2,059	2,625	3,480	4,455
Leather products	42,318	54,466	72,136	91,366	0.3057	12,937	16,650	22,052	27,931
Jute bailing	00	00	00	00	0.1263	00	00	00	00
Jute textile	680,923	865,081	1,156,357	1,450,683	0.2020	137,546	174,746	233,584	293,038
Yarn	1,002,468	1,257,577	1,643,819	2,193,019	0.2536	254,226	318,921	416,872	556,150
Mill cloth	1,669,292	2,093,942	2,732,311	3,641,449	0.2814	469,739	589,235	768,872	1,024,704
Handloom cloth	547	709	983	1,247	0.2020	109	142	179	250
Dyeing and bleaching	00	00	00	00	0.5082	00	00	00	00
Readymade garments	00	00	00	00	0.1872	00	00	00	00
Knitting and hosiery	00	00	00	00	0.2001	00	00	00	00
Other textiles	7,574	9,621	12,657	16,341	0.3523	2,668	3,390	4,459	5,757
Cigarettes	12,903	16,197	21,716	29,177	0.4763	6,146	7,715	10,343	13,897
Bidi	00	00	00	00	0.5686	00	00	00	00
Saw and planning mills	51,395,894	53,339,594	71,333,676	85,692,080	0.4221	21,694,207	22,514,642	30,109,944	36,170,627
Wooden furniture	93,760,979	96,642,186	129,353,546	154,841,390	0.2231	20,749,305	21,386,916	28,625,940	34,266,400
Pulp, paper and board	24,458,745	27,682,408	36,541,214	46,033,218	0.2674	6,540,268	7,402,276	9,771,121	12,309,282

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Table 8 continued…..

Sectors	Total output in different years				Value added coefficient	Value added in different years			
	1995	1996	1997	1998		1995	1996	1997	1998
Printing and publishing	17,420,089	21,607,071	27,964,068	37,181,758	0.4296	7,483,670	9,282,398	12,013,364	15,973,284
Drugs and pharmaceuticals	575,020	732,844	961,946	1,304,134	0.3221	185,214	236,049	309,843	420,062
Fertilizer	221,383	280,015	369,052	476,441	0.1222	27,053	34,218	45,098	58,221
Other chemicals	103,034,721	130,280,911	168,048,439	224,940,280	0.1971	19,854,791	25,105,132	32,382,934	43,345,992
Petroleum products	21,623,546	27,191,926	35,880,343	45,869,755	0.4277	9,248,391	11,629,987	15,346,023	19,618,494
Pottery and earthenware	5,438	6,886	9,139	11,678	0.3876	2,108	2,669	3,542	4,526
China and ceramic	24,468	30,938	40,095	54,231	0.3052	7,468	9,442	12,237	16,551
Glass and glass products	10,012,684	12,608,600	15,565,610	22,776,663	0.4274	4,279,421	5,388,916	6,652,742	9,734,746
Brick, tiles and clay products	19,598,824	25,331,483	35,068,124	40,106,545	0.4837	9,479,951	12,252,838	16,962,452	19,399,536
Cement	15,838,560	20,363,719	27,902,370	33,397,674	0.2169	3,435,384	4,416,891	6,052,024	7,243,955
Iron and steel basic industry	520,356,745	679,648,723	891,723,097	1,158,117,955	0.1923	100,064,602	130,696,449	171,478,352	222,706,083
Fabricated metal products	216,336,585	296,982,648	393,828,628	477,209,356	0.4138	89,520,079	122,891,420	162,966,286	197,469,231
Machinery	265,434,592	334,014,580	411,240,188	605,295,676	0.1854	49,211,573	61,926,303	76,243,931	112,221,818
Transport equipment	12,841,479	16,769,581	22,291,390	30,700,343	0.5397	6,930,546	9,050,543	12,030,663	16,568,975
Miscellaneous industries	23,413,974	29,360,630	38,921,563	50,770,131	0.4797	11,030,323	13,831,793	18,335,948	23,917,809
Urban building	22,130,705	27,905,740	36,060,162	48,391,270	0.4062	8,989,492	11,335,312	14,647,638	19,656,534

Table 8 continued.....

Sectors	Total output in different years				Value added coefficient	Value added in different years			
	1995	1996	1997	1998		1995	1996	1997	1998
Rural building	375,246,218	486,838,938	678,099,180	748,698,283	0.5714	214,415,689	278,179,769	387,465,872	427,806,199
Construction: Electricity and gas	00	00	00	00	0.2170	00	00	00	00
Construction: Rural road	10,597	13,016	17,844	20,467	0.4212	4,464	5,482	7,516	8,621
Construction: other transport	29,703	34,674	46,259	57,395	0.3281	9,746	11,377	15,178	18,831
Other construction	163,716,508	203,145,949	276,427,553	417,648,083	0.2088	34,184,007	42,416,874	57,718,073	87,204,920
Electricity	23,036,782	29,252,256	38,255,655	49,501,983	0.6712	15,462,288	19,634,114	25,677,195	33,225,731
Gas	16,223,540	20,954,300	27,376,222	35,532,939	0.8998	14,597,942	18,854,679	24,633,124	31,972,539
Mining and quarrying	31,378,498	40,586,070	54,501,266	67,391,842	0.5057	15,868,106	20,524,376	27,561,290	34,080,054
Trade service	128,483,299	162,119,293	217,413,841	266,501,894	0.7585	97,454,582	122,967,484	164,908,398	202,141,687
Transport service	62,748,579	79,565,582	106,040,510	133,858,856	0.6625	41,570,934	52,712,198	70,251,838	88,681,492
Housing service	7,221,959	9,104,055	12,184,757	15,351,987	0.7536	5,442,468	6,860,816	9,182,433	11,569,258
Health service	939,093	1,219,268	1,578,360	2,099,236	0.5195	487,859	633,410	819,958	1,090,553
Education service	1,075,152	1,386,766	1,783,275	2,411,346	0.7026	755,402	974,342	1,252,929	1,694,211
Public administration and defence	17,366,895	21,816,832	29,245,793	40,740,492	0.6746	11,715,707	14,717,635	19,729,212	27,483,536
Banking and insurance	3,947,2471	50,392,018	64,716,512	87,524,171	0.6556	25,878,152	3,307,007	42,428,145	57,380,847
Professing services	13,326,872	16,595,644	22,442,915	33,399,381	0.5729	7,634,965	9,507,644	12,857,546	19,134,505
Hotels and restaurants	783,204	997,292	1,291,307	1,737,187	0.3099	242,715	309,061	400,176	538,354
Communications	11,359,252	14,363,640	18,365,982	25,280,156	0.8222	9,339,577	11,809,785	15,100,510	20,785,345
Other services	2,662,513	3,360,665	4,494,281	5,696,954	0.8902	2,370,169	2,991,664	4,000,809	5,071,428
Total	2,415,775,180	3,068,631,490	4,069,336,567	5,197,214,068		909,885,386	1,159,446,867	1,551,571,053	1,926,550,056

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Table 9. Loan in sectors supplying intermediate inputs financed by loan proceeds (%)

Input supplying sectors	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing
Paddy	17				15		30	80
Wheat			7					
Other grain			8					
Vegetables							10	
Pulses							3	
Fruits							3	5
Major spices							4	
Edible oil							6	
Tobacco							4	
Bidi/cigarettes							6	
Livestock	23		40				2	
Poultry			20				6	
Other fish		45					2	
Forestry					68		4	
Ata and flour milling			10					
Sugar and gur							1	15
Salt							1	
Other food							10	
Mill cloth					10			
Yarn		10			4			
Drugs and pharmaceuticals	1		8				2	
Fertilizer	15	40		20			6	
Other Chemicals	7	5		20				
Petroleum products	2							
Transport equipment						75		
Machinery	1							
Miscellaneous industries			5					
Other construction	1			5				
Electricity	1		2		3			
Trade service	27							
Transport service	5							
Other service				55		25		

Table 10.1. Loan in sectors supplying intermediate inputs financed by loan proceeds (Taka) 1995

Input supplying sectors	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing
Paddy	39,173,712				5,654,868		298,623,881	337,089,428
Wheat			39,789,034					
Other grain			45,473,182					
Vegetables							99,541,294	
Pulses							29,862,388	
Fruits							29,862,388	21,068,089
Major spices							39,816,517	
Edible oil							59,724,776	
Tobacco							39,816,517	
Bidi/cigarettes							59,724,776	
Livestock	52,999,728		227,365,909				19,908,259	
Poultry			113,682,955				59,724,776	
Other fish		23,003,771					19,908,259	
Forestry					25,635,403		39,816,517	
Ata and flour milling			56,841,477					
Sugar and gur							99,541,294	63,204,268
Salt							9,954,129	
Other food							99,541,294	
Mill cloth					3,769,912			
Yarn		5,111,949			1,507,965			
Drugs and pharmaceuticals	2,304,336		45,473,182				19,908,259	
Fertilizer	34,565,040	20,447,796		2,590,982			59,724,776	
Other Chemicals	16,130,352	2,555,975		2,590,982				
Petroleum products	4,608,672							

Table 10.1 continued....

Input supplying sectors	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing
Transport equipment						13,758,465		
Machinery	2,304,336							
Miscellaneous industries			28,420,739					
Other construction	2,304,336			647,745				
Electricity	2,304,336		11,368,295		1,130,974			
Trade service	62,217,071							
Transport service	11,521,680							
Other service				7,125,199		4,586,155		

Table 10.2. Loan in sectors supplying intermediate inputs financed by loan proceeds (Taka) 1996

Input supplying sectors	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing
Paddy	49,994,875				5,844,521		537,880,524	398,657,992
Wheat			45,612,915					
Other grain			52,129,046					
Vegetables							179,293,508	
Pulses							53,788,052	
Fruits							53,788,052	24,916,125
Major spices							71,717,403	
Edible oil							107,576,105	
Tobacco							71,717,403	
Bidi/cigarettes							107,576,105	
Livestock	67,640,125		260,645,229				35,858,702	

Table 10.2 continued....

Input supplying sectors	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing
Poultry			130,322,615				107,576,105	
Other fish		34,918,711					35,858,702	
Forestry					26,495,164		71,717,403	
Ata and flour milling			65,161,307					
Sugar and gur							17,929,351	74,748,374
Salt							17,929,351	
Other food							179,293,508	
Mill cloth					3,896,347			
Yarn		7,759,714			1,558,539			
Drugs and pharmaceuticals	2,940,875		52,129,046				35,858,702	
Fertilizer	44,113,125	31,038,854		600,737			107,576,105	
Other Chemicals	20,586,125	3,879,857		600,737				
Petroleum products	5,881750							
Transport equipment						17,644,343		
Machinery	2,940,875							
Miscellaneous industries			32,580,654					
Other construction	2,940,875			150,184				
Electricity	2,940,875		13,032,261		1,168,904			
Trade service	79,403,652							
Transport service	14,704,375							
Other service				1,652,026				

Table 10.3. Loan in sectors supplying intermediate inputs financed by loan proceeds (Taka) 1997

Input supplying sectors	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing
Paddy	55,792,578				6,163,691		764,480,401	430,564,898
Wheat			71,039,202					
Other grain			81,187,659					
Vegetables							254,826,800	
Pulses							76,448,040	
Fruits							76,448,040	26,910,306
Major spices							101,930,720	
Edible oil							152,896,080	
Tobacco							101,930,720	
Bidi/cigarettes							152,896,080	
Livestock	75,484,076		405,938,296				50,965,360	
Poultry			202,969,148				152,896,080	
Other fish		50,730,138					50,965,360	
Forestry					27,942,064		101,930,720	
Ata and flour milling			101,484,574					
Sugar and gur							25,482,680	80,730,918
Salt							25,482,680	
Other food							254,826,800	
Mill cloth					4,109,127			
Yarn		11,273,364			1,643,651			
Drugs and pharmaceuticals	3,281,916		81,187,659				50,965,360	
Fertilizer	49,228,745	45,093,456		651,504			152,896,080	
Other Chemicals	22,973,414	5,636,682		651,504				
Petroleum products	6,563,833							

Table 10.3 continued…..

Input supplying sectors	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing
Transport equipment						19,442,168		
Machinery	3,281,916							
Miscellaneous industries			50,742,287					
Other construction	3,281,916			162,876				
Electricity	3,281,916		20,296,915		1,232,738			
Trade service	88,611,741							
Transport service	16,409,582							
Other service				1,791,636		6,480,723		

Table 10.4. Loan in sectors supplying intermediate inputs financed by loan proceeds (Taka) 1998

Input supplying sectors	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing
Paddy	103,184,700				4,508,906		913,751,579	399,996,740
Wheat			77,746,096					
Other grain			88,852,681					
Vegetables							304,583,860	
Pulses							91,375,158	
Fruits							91,375,158	24,999,796
Major spices							121,833,544	
Edible oil							182,750,316	
Tobacco							121,833,544	
Bidi/cigarettes							182,750,316	
Livestock	139,602,830		444,263,404				60,916,772	

Table 10.4 continued…..

Input supplying sectors	Agriculture	Fisheries	Poultry and livestock	Sericulture	Cottage industry	Rural transport	Rural trading	Food processing
Poultry			222,131,702				182,750,316	
Other fish		84,136,158					60,916,772	
Forestry					20,440,372		121,833,544	
Ata and flour milling			111,065,851					
Sugar and gur							30,458,386	
Salt							30,458,386	
Other food							304,583,860	
Mill cloth					3,005,937			
Yarn		18,696,924			1,202,375			
Drugs and pharmaceuticals	6,069,688		88,852,681			60,916,772		
Fertilizer	91,045,324	74,787,696		752,256		182,750,316		
Other Chemicals	42,487,818	9,348,462		752,256				
Petroleum products	12,139,376							
Transport equipment						15,286,373		
Machinery	6,069,688							
Miscellaneous industries			55,532,926					
Other construction	6,069,688			188,064				
Electricity	6,069,688		22,213,170		901,781			
Trade service	163,881,583							
Transport service	30,348,441							
Other service				2,068,704		5,095,458		

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Table 11. Value added in sectors supplying intermediate inputs financed by loan proceeds (Taka)

Input supplying sectors	Total input supply				Value added coefficient	Value added			
	1995	1996	1997	1998		1995	1996	1997	1998
Paddy	680,541,889	992,377,912	125,7001,568	1,421,441,925	0.5474	372,528,630	543,227,669	688,082,658	778,097,310
Wheat	39,789,034	45,612,915	71,039,202	77,746,096	0.4242	16,878,508	19,348,998	30,134,829	32,979,894
Other grain	45,473,182	52,129,046	81,187,659	88,852,681	0.6263	28,479,854	32,648,421	50,847,830	55,648,434
Vegetables	99,541,294	179,293,508	254,826,800	304,583,860	0.5025	50,019,500	90,094,987	128,050,467	153,053,390
Pulses	29,862,388	53,788,052	76,448,040	91,375,158	0.6158	18,389,259	33,122,682	47,076,703	56,268,822
Fruits	50,930,477	78,704,177	103,358,346	116,374,954	0.6671	33,975,721	52,503,556	68,950,352	77,633,732
Major spices	39,816,517	71,717,403	101,930,720	121,833,544	0.5945	23,670,919	42,635,996	60,597,813	72,430,042
Edible oil	59,724,776	107,576,105	152,896,080	182,750,316	0.2039	12,177,882	21,934,767	31,175,510	37,262,789
Tobacco	39,816,517	71,717,403	101,930,720	121,833,544	0.4576	18,220,038	32,817,883	46,643,497	55,751,030
Bidi/cigarettes	59,724,776	107,576,105	152,896,080	182,750,316	0.5225	31,206,195	56,208,514	79,888,201	95,487,040
Livestock	300,273,896	364,144,056	532,387,732	644,786,006	0.5245	157,493,658	190,993,557	279,237,365	338,190,260
Poultry	173,407,731	237,898,720	355,865,228	404,882,018	0.4428	76,784,943	105,341,553	157,577,122	179,281,758
Other fish	42,912,030	70,777,413	101,695,498	145,052,930	0.4828	20,717,928	34,171,335	49,098,586	70,031,555
Forestry	65,451,920	98,212,567	129,872,784	142,273,916	0.4376	28,641,760	42,977,819	56,832,330	62,259,066
Ata and flour milling	56,841,477	65,161,307	101,484,574	111,065,851	0.2181	12,397,126	14,211,681	22,133,785	24,223,462
Sugar and gur	73,158,397	92,677,725	106,213,598	105,457,775	0.1988	14,543,889	18,424,331	21,115,263	20,965,006
Salt	9,954,129	17,929,351	25,482,680	30,458,386	0.8890	8,849,221	15,939,193	22,654,102	27,077,505
Other food	99,541,294	179,293,508	254,826,800	304,583,860	0.2650	26,378,443	47,512,779	67,529,102	80,714,723
Mill cloth	3,769,912	3,896,347	4,109,127	3005937	0.2814	1,060,853	1,096,432	1,156,308	845,871
Yarn	6,619,914	9,318,253	12,917,015	19,899,299	0.2536	1,678,810	2,363,109	3,275,755	5,046,462
Drugs and pharmaceuticals	67,685,777	90,928,623	135,434,935	155,839,141	0.3221	21,801,589	29,288,109	43,623,592	50,195,787
Fertilizer	117,328,594	183,328,821	247,869,785	349,335,592	0.1222	14,337,554	22,402,781	30,289,687	42,688,809
Other Chemicals	21,277,309	25,066,719	29,261,600	52,588,536	0.1927	4,100,137	4,830,357	5,638,710	10,133,811
Petroleum products	4,608,672	5,881,750	6,563,833	12,139,376	0.4277	1,971,129	2,515,624	2,807,351	5,192,011
Transport equipment	13,758,465	17,644,343	19,442,168	15,286,373	0.5397	7,425,444	9,522,652	10,492,938	8,250,056
Machinery	2,304,336	2,940,875	3,281,916	6,069,688	0.1854	427,224	545,238	608,467	1,125,320
Miscellaneous industries	28,420,739	3,280,654	50,742,287	55,532,926	0.4711	13,389,010	15,348,746	23,904,691	26,161,561
Other construction	2,952,081	3,091,059	3,444,792	6,257,752	0.2088	616,395	645,413	719,273	1,306,619
Electricity	14,803,605	17,142,040	24,811,569	29,184,639	0.6712	9,936,180	11,505,737	16,653,525	19,588,730
Trade service	62,217,071	79,403,625	88,611,741	163,881,583	0.7585	47,191,648	60,227,649	67,212,005	124,304,181
Transport service	11,521,680	14,704,375	16,409,582	30,348,441	0.6625	7,633,113	9,741,648	10,871,348	20,105,842
Other service	11,711,354	7,533,474	8,272,359	7,164,162	0.8902	10,425,447	6,706,299	7,364,054	6,377,537

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Table 12. Rate of Return on Investment (First year) in different sectors

Sector	% Return on investment	BRAC loan from inception to December 1998	Weight	Weighted return
Agriculture	63	3,730,417,879	0.124534	7.845642
Fisheries	93	1,318,952,754	0.044031	4.094883
Poultry and livestock	88	5,888,247,534	0.196570	17.29816
Sericulture	38	95,739,133	0.00320	0.1216
Cottage industry	112	477,151,158	0.01593	1.78416
Rural transport	100	850,152,854	0.028381	2.8381
Rural trading	63	12,862,637,371	0.42940	27.0522
Food processing	77	4,282,047,544	0.14295	11.00715
Housing	10	449,635,953	0.0110	0.1501
Total		29,954,982,117	1.0000	72.191995

Table 13. Calculation of the contribution of health intervention

Item	1996	1997	1998
a) Value of the annual number of days saved of working adults which would otherwise have been lost due to illness*	103,422,290	239,016,910	269,674,850
b) Value of the annual number of days saved of working adults which would otherwise have been lost due to care of the sick**	25,855,573	59,754,227	67,418,712
c) Total health care costs incurred by BRAC	2,858,405	6,640,000	10,290,000
d) Contribution of BRAC health intervention (a+b-c)	126,419,458	292,131,137	326,803,562

*Number of adult patients receiving treatment from BRAC health centres multiplied by wage loss of a single patient ($v_1 d_1$ = 1990).
** One fourth of item (a)