NUTRITIONAL IMPACT STUDY OF THE
INCOME GENERATION FOR VULNERABLE GROUP DEVELOPMENT PROGRAM:
REPORT OF JANUARY 1995

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SUMMARY

This report is a part of the longitudinal study titled "Nutritional Impact Study of the Income Generation for the Vulnerable Group Development Programme" launched in Tangail district in January 1993. The data has been collected every six months on a cohort of population. Data for this study was collected in January 1995 on the three types of the study population: IGVGDP participants, non-IGVGDP from within the programme area and non-IGVGDP from outside the programme area. The study compares nutritional and other socioeconomic variables between the population groups to assess impact of the programme on nutritional status of the target populations. It may be concluded from the study that the programme could bring about positive impact on pre-school children's nutritional status through increasing socio-economic and hygiene status of the programme participating households.

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INTRODUCTION

Women in Bangladesh are traditionally being left-out from the
economically active activities. Despite the fact that women
particularly in the rural farming households perform the major
post-harvest activities, their contribution in the economy is
under-recognised at the household and even at the national levels.
Women are the key actors to ensure proper nutrition of the
household members and are often considered as "Home based
nutritionist". Many nutrition planners argue that household
resources controlled by women would be utilized better on food
items compared to the males which in turn helps improving
nutritional status. This is particularly true in case of a
resource constraint poor household whose major share of the cash
earnings is spent on food items.

Many growth oriented development programmes aiming to increase real
income experienced difficulties in including the poorest rural
households in the long term development activities. It may be
because of the fact that the immediate concern of the poorest
households is to ensure the minimum amount of food for their
survival. This philosophy led BRAC to launch a food aid oriented
development programme with the bottom 10% rural poor women in
collaboration with the Government of Bangladesh titled "Income
Generation for the Vulnerable Group Development Programme". The
programme along with the income generating and motivational
activities provides monthly food aid (31.25 kg wheat/household) to
the participants for a period of two years. The immediate aim of
this programme is to involve the rural destitute women in the
income generating activities such as poultry rearing. The
activities along with economic upliftment would lead to nutritional

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well-being of the household members.

AIM

The aim of this report is to assess impact of the IGVGD programme on some selected socio-economic and nutritional status indicators.

METHODOLOGY

This report is based on data collected in January 1995 from Tangail Sadar and Kalihati thana on a total of 665 children (Table 1). The study children were drawn from 3 types of households such as IGVGDP participating households, IGVGDP non-participating households from within the programme area and IGVGDP non-participating households from outside the programme area. All households who did not participate in the IGVGD programme were matched against the respective programme participating households for some selected socio-economic and demographic characterstics[2]. The RED interviewers collected anthropometric, health and socio-economic data through home visits using pre-tested and structured questionnaires.

Table 1: Area and Household profile of The Study Children

Household Type	1GVGDP Households	Non-1GVGDP Households Within Programme Area	Non-1GVGDP Households Outside Programme Area	All
Thana	Tangail Sadar	Tangail Sadar	Kalihati	Tangail Sadar Kalihati
Union	Karatia Gala Gharinda Selimpur Porabari Dainna	Karatia Gala Gharinda Selimpur Porabari Dainna	Elenga	Karatia Gala Gharinda Selimpur Porabari Dainna Elenga
No. of Villages	51	26	11	64
No. of Households	202	172	164	538
No. of Children	293	187	185	665

RESULTS

Some important socio-economic and demographic characterstics of the study households desegregated by type of population are given in Tables 2 & 3.

It is revealed from Table 2 that about 11% of the IGVGDP households were headed by female compared to about 4% in both the non-IGVGDP households from within and outside the programme area. Indicators such as Family size, number of children aged less than 6 years, housing material, occupation of the household head, mother's literacy and household land ownership do not show significant variation between the IGVGDP households, non-IGVGDP households from within the programme area and non-IGVGDP households from outside the programme area. About 28% of the programme households were rearing high yielding variety (HYV) poultry compared to 6% in the non-programme households from within the programme area and 1% in the non-programme households from outside the programme area.

Small trading found to be the highest means of cash earnings for all types of the study households followed by vegetable gardening, cow and goat rearing. According to Table 3 the IGVGDP households earned on average Tk. 601.80 from small trading compared to Tk. 520.30 and Tk. 322.70 by the non-IGVGDP households from within and outside the programme area respectively. Cash earnings from goat rearing, vegetable gardening and small trading was higher in the IGVGDP households than both the control groups (Table 3). It is revealed from the same table that 6.5% of the IGVGDP households sold their assets compared to 2.7% in the non-programme households from within the programme area and 0.5% in the non-programme households from outside the programme area. 23.5% of the IGVGDP households had bought new assets compared to 15.5% and 16.2% in the control households from within and outside the programme areas respectively (Table 3).

It is revealed from Table 4 that about 98% of the IGVGDP households had access to safe drinking water (tubewell water) compared to about 94% and 87% from within and outside the programme areas respectively. More than 22% of the IGVGDP households had access to safe latrine (mostly pit and slab latrines) compared to 11% and 13% in both types of the non-programme households.

According to Table 5 about 40% of the IGVGDP mothers used soap to wash hands after defecation compared to 27% non-IGVGDP mothers from within the programme area and 40% of the non-IGVGDP mothers from outside the programme area. About 2% of the study children had suffered from diarrhoea during the time of interview which was more or less equal between the groups. The prevalence of nightblindness was found to be higher in the IGVGDP households (1.7%) compared to its prevalence in the total population (1.2%). Vitamin A capsule distribution coverage was highest in the non-IGVGDP households from outside the programme area (53%) compared to 38% in the IGVGDP households. About 24% of the IGVGDP children had an immunization card during the survey compared to 23% and 15% in the non-IGVGDP households from within and outside the programme areas.

It is revealed from Table 6 that 15% of the IGVGDP children had eaten egg in last 24 hours of the survey compared to around 6% among both the non-programme children. The mean frequency of household food intake was 2.9 in all three types of the study households.

Table 7 presents anthropometric data of the study children. The average age of the IGVGDP children seems to be higher than both the non-IGVGDP children. Means of weight, height and mid-upper arm circumference (MUAC) of the IGVGDP children were 13.3 kg, 95.1 cm and 143.8 mm respectively which seem to be a bit higher than the non-IGVGDP children. This is perhaps because of the higher age range of the IGVGDP children. About 5.8% of the IGVGDP children had suffered from severe malnutrition (defined by MUAC <125 mm)

compared to 5.8% in the non-programme households from within the programme area and 7.1% in the non-programme households from outside the programme area. The proportion of thin children (weight for height <80%) was lowest in the IGVGDP households (4.1%) compared to both the non-programme households (4.8% and 9.2% respectively). However, the proportion of short children (height for age <90% of the NCHS median value) was higher in the IGVGDP children (58%) compared to non-IGVGDP children (53.1%) from within the programme area. The weight based indicators show better nutritional status of the IGVGDP children as against the non-IGVGDP children.

CONCLUSION

This study attempts to examine the impact of the IGVGD programme right at the end of the 2 years programme implementation. It was assumed that the programme through the improvement in socioeconomic and health based indicators would improve the nutritional well-being of the participating households. The children's nutritional status indicators have been used as proxy to the household nutritional well-being. It may be concluded from the results that the IGVGD programme could bring about positive changes in the nutritional status of the pre-school children at the end of the 2 years programme implementation as reflected in the weight based nutritional status indicators.

Table 2: Socioeconomic and Demographic Profile of the Study Households

Indicators	IGVGDP Household (n=202)	Non-IGVGDP Households within Programme Area n=(172)	Non-IGVGDP Households Outside Programme Area (n=164)	All (N=538)
Woman headed household (%)	10.9	3.7	4.3	7.1
Family size (mean±sd)	5.6±1.6	5.0±1.6	5.0±1.6	5.3±1.6
No. of children <6 yrs. old (mean±sd)	1.7±0.7	1.4±0.5	1.4±0.6	1.5±0.6
Households with kacha house (%)	89.1	91.4	94.6	91.3
Households with irregular occupation (%)	49.8	51.9	60.0	53.2
Illiterate mothers (%)	37.2	45.5	27.6	36.8
Landless households (%)	78.8	89.3	74.1	80.5
HYV poultry rearer (%)	27.6	6.4	1.1	14.3

Table 3:   Economic Profile of the Study Households

Indicators	IGVGDP Household (n=202)	Non-IGVGDP Households Within Programme Area (n=172)	Non-IGVGDP Households Outside Programme Area (N=164)	All (N=538)
One Month's Average Cash Earnings:				
Cow Rearing	3.8	11.7	10.7	8.0
Goat Rearing	15.6	0.0	2.6	7.4
Veg. Gardening	19.4	7.4	1.2	10.8
Small Trading	601.8	520.3	322.7	499.9
Proportion of HHs Engaged in Distress Sale	6.5	2.7	0.5	3.8
Proportion of HHs Bought New Assets: All Assets	23.5	15.5	16,2	19.2
Breakdown of Assets Bought by the HHs:				
Land	2.0	7.0	4.9	4.2
HH Equipments	2.7	--	0.5	1.4
Cow/Goat	5.5	2.1	2.7	3.8
Roof Tin	8.9	5.3	7.0	7.4
Ornaments	0.3	--	0.0	0.2
Others	7.5	1.6	1.6	4.2

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Table 4: Sanitary and Hygiene Profile of the Study Households

Indicators	IGVGDP Household (n=202)	Non-IGVGDP Households Within Programme Area (n=172)	Non-IGVGDP Households Outside Programme Area (n=164)	All (N=538)
Access to safe water (%)	98.6	94.1	88.6	94.6
Access to safe latrine (%)	22.2	11.2	13.0	16.5

Table 5: Health Status Profile of the children

Indicators	IGVGDP Children (n=202)	Non-IGVGDP Children Within Programme Area (n=172)	Non-IGVGDP Children Outside Programme Area (n=164)	All (N=538)
Proportion of Soap mothers used Shop after defecation	39.6	27.3	40.5	36.4
Prevalence of diarrhoea (%)	2.0	2.1	1.6	2.0
Prevalence of Common Cold (%)	32.1	28.9	31.9	31.1
Prevalence of nightblindness (%)	1.7	0.5	1.1	1.2
Vitamin A capsule coverage (%)	38.2	36.9	53.1	42.1
Children with immunization cards (%)	23.9	23.7	15.7	22.1

Table 6: Food Intake Profile of the children

Indicators	IGVGDP Children (n=293)	Non-IGVGDP Children Within Programme Area (n=207)	Non-IGVGDP Children Outside Programme Area (n=196)	All (N=702)
Children eaten egg preceding 24 hours of interview (%)	15.0	6.4	6.5	10.2
Frequency of serving meals (mean±sd)	2.9±0.3	2.9±0.3	2.9±0.3	2.9±0.3

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Table 7: Nutritional Status Profile of the Children

Indicators	IGVGDP Children (n=293)	Non-IGVGDP Children Within Programme Area (n=207)	Non-IGVGDP Children Outside Programme Area (n=196)	All (N=702)
Age in Month (mean±sd)	59.3±21.6	55.6±21.9	56.8±21.6	57.6±21.7
Weight (kg) (mean±sd)	13.3±3.2	12.9±3.1	12.7±3.0	12.9±3.0
Height (cm) (mean±sd)	95.1±13.2	94.3±14.7	95.7±13.7	95.6±14.9
MUAC (mm) (mean±sd)	143.8±11.6	143.7±10.3	140.5±10.9	142.8±11.3
MUAC <125mm (%)	5.8	5.8	7.1	6.1
Wt/Ht <80% (%)	4.1	4.8	9.2	7.3
Wt/Age <60% (%)	5.1	5.3	7.9	7.5
Wt/Age <75% (%)	62.5	60.4	73.5	65.0
Ht/Age <90% (%)	58.0	53.1	59.2	54.1
Ht/Ag <-2 Z-Score (%)	74.4	71.5	69.9	68.7
Wt/Ht <-2 Z-score (%)	7.8	12.1	18.9	16.0
Wt/Ag <-2 Z-Score	63.8	69.6	78.1	72.2
Wt/Ag <-3 Z-score (%)	23.7	19.3	26.0	23.1