KOICA
Korea International Cooperation Agency

World Vision

BASELINE SURVEY
RAJSHAHI MATERNAL AND CHILD NUTRITION PROJECT

Prepared by

nielsen

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Acknowledgement

With great pleasure, joy and enthusiasm, I am writing this acknowledgment page for the report of Baseline Survey of Rajshahi Maternal and Child Nutrition Project" for World Vision Bangladesh. We, the study team, believe this work would not have been possible without the cordial support from World Vision Bangladesh.

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Yours sincerely,

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Khandaker Samina Afrin

Marketing and Commercial Leader

The Nielsen Company (Bangladesh) Limited

Affirmation

This report summarizes the baseline findings of Rajshahi Maternal & Child Nutrition Project of World Vision Bangladesh (WVB). Implementation of Rajshahi Maternal & Child Nutrition Project started in April 2018 at three upazilas of Jpypurhat & Naogaon districts. The Nielsen Company (Bangladesh) Ltd. conducted the baseline survey of the project in August 2018. The aim of this survey was to create benchmark of the key health and nutrition indicators of the project in order to track the changes on indicators over the project period.

I acknowledge that the motive and objectives of the evaluation report being presented and also that the material is original work. I also state that the intellectual properties of the evaluation report rest with the communities about which the report is written.

Except as acknowledged by the references in this paper to other authors and publications, the evaluation described herein consists of our own work, undertaken to secure funding, implement the activities, describe and advance learning, as part of the requirements of World Vision's Design, Monitoring and Evaluation Learning System.

Primary quantitative and qualitative data collected throughout the evaluation process remain the property of the communities and families described in this document. Information and data must be used only with their consent.

Yours sincerely,

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Khandaker Samina Afrin

Marketing and Commercial Leader

The Nielsen Company (Bangladesh) Limited

Glossary

ANC	Antenatal care
BDHS	Bangladesh Demographic & Health Survey
BDT	Bangladeshi Taka
CF	Community Facilitator
CG	Community Groups
CSBA	Community Skilled Birth Attendants
CSG	Community Support Groups
DGFP	Directorate General of Family Planning
DGHS	Directorate General of Health Services
FP	Family Planning
FGD	Focus Group Discussion
FWA	Family Welfare Assistant
FWC	Family Welfare Center
GMP	Growth Monitoring Promotion
GoB	Government of Bangladesh
IGA	Income Generating Activities
HA	Health Assistant
HPNSDP	Health Population & Nutrition Sector Development Plan
Icddr,b	International Centre for Diarrhoeal Disease Research, Bangladesh
IGA	Income Generating Activities
IMCI	integrated Management of Childhood Illness
IPHN	Institute of Public Health and Nutrition
IYCF	Infant & Young Child Feeding
KII	Key Informant Interview
MDG	Millennium Development Goals
MOHFW	Ministry of Health and Family Welfare
PDHearth	Positive Deviance Hearth
PNC	Postnatal Care
UH&FPO	Upazila Health & Family Planning Officer
RM&CN	Rajshahi Maternal & Child Nutrition
SACMO	Sub-Assistant Community Medical Officer
SDG	Sustainable Development Goals
UAO	Upazila Agriculture Officer
ULO	Upazila Livestock Officer
WHO	World Health Organization
WVB	World Vision Bangladesh

Executive Summary

Malnutrition is considered as the greatest single threat to the world's public health especially in developing countries. Considering Health as the one of the fundamental rights of human being, the Government of Bangladesh has prioritized Health, Population and Nutrition (HPN) among the most urgent development issues for the government. Nationally, prevalence of stunting, wasting and underweight among children under 5 years of age were 36%, 14% and 33% respectively in 2014. The Vision 2021 of the Government of Bangladesh envisions a country where all citizens enjoy a quality of life assured with basic health care and adequate nutrition. With an aim to support GoB's vision and to contribute in improving the nutrition for the children under 5 as well as for the mothers/caregivers in the targeted area, Rajshahi Maternal and Child Nutrition Project funded by KOICA and implemented by World Vision Bangladesh, employed an integrated package of nutrition interventions covering areas of nutrition, water, sanitation and hygiene and livelihood to address the underlying causes of under nutrition. The Rajshahi Maternal & Child Nutrition project will be implemented in 3 Upazilas of Joypurhat & Naogaon.

Before the initiation of the main project main activities, Nielsen conducted baseline survey to measure the baseline indicators in order to track the progress of the project over the project period. The Survey was carried out between August 07, 2018 to August 22, 2018 and a total of 1600 (900 in intervention & 700 in control) pregnant women & mothers/caregivers of children aged 0-59 months were selected randomly for the interview. In addition, 14 FGDs & 8 KIIs were also administered with different stakeholders.

Key findings:

Demographic and socioeconomic characteristics of the respondents:

- The intervention and control areas were comparable in terms of average household size, access to improved sources of drinking water (100%).
- In terms of wealth, higher proportion of households belong to lower wealth quintiles in the intervention areas compared to control areas.
- 162 out of 900 interviewed respondents (18%) in the intervention areas and 154 out of 700 interviewed respondents (22%) in control areas had savings for the consecutive last 3 months.

Nutrition

Stunting, Wasting & Underweight:

- 33% percent of the children (36% in intervention & 30% in control) in the survey areas were found to be stunted (< -2 height-for-age z –score) while 15% (17% in intervention & 11% in control) were severely stunted (< -3 height-for-age z –score).
- 18% children (18% in both intervention & control) were found to be wasted (< -2 weight-for-height z –score) at baseline while 7% (7% in both

intervention & control) were severely wasted (< -3 weight-for-height z – score).
- 23% (31% in intervention & 24% in control) of children were underweight (<-2SD weight for age z- score) while 8% (8% in intervention & 9% in control) who were severely underweight (<-3SD weight for age z- score).

Exclusive Breastfeeding & Food Diversity according to PD Hearth Guideline

- All the infants (100%) 0-5 months received breast milk during the previous day of survey.
- 78% of the infants under 6 months (77.0% in intervention and 79% in control) received exclusive breastfeeding
- 21.3% of the infants aged 6-23 months in the intervention areas and 25.6% of the infants aged 6-23 months in control areas consumed 4 food groups or more according to PD Hearth Guideline.
- 25.2% of infants aged 6-23 months consumed 4 groups or more according to PD Hearth Guideline among ED beneficiaries.
- 33.5% of women consumed minimum adequate diet among ED beneficiaries.

ANC & PNC Care

- 58% of the recently delivered women in intervention areas & 56% of the recently delivered women in the control areas claimed to be aware of the number of times a pregnant woman should receive ANC.
- 82% of the recently delivered women received any ANC (Intervention: 83% & Control: 80%). However, 29% of the women in intervention areas and 22% of the women in control areas reported that they received ANC care 4 times or more.
- To receive ANC, women mostly visited public sectors (Intervention: 66% and Control: 57%).
- Home is the most common place where recently delivered women gave birth to (Intervention: 41% and Control: 44%)
- Delivery was assisted by Qualified Doctor/Certified Doctor by government (Intervention 40% & control 54%).
- The percentage of recently delivered women received PNC; 4 times or more is very low (Intervention 9% & Control 22%).

Hygiene & Health Seeking Behavior

- Except after defecation, the hand washing practice in other events was low in both intervention and control areas.
- Majority of the children aged below 5 years received measles vaccination, Penta 3 vaccination, and vitamin A supplementation.
- None (0%) of the respondents in intervention & control areas had participated in PD/Hearth program and Growth Monitoring Promotion Program as the survey was conducted before these activities were initiated.
- Majority of the people had access to government health facilities (intervention 60%, Control 69%)
- All the (100%) CG groups were found to be functioned whereas 40% of the CSG groups were found to be functioned

IGA Activities

- Almost half of the respondents claimed that they had some knowledge on poultry bird & livestock rearing but knowledge on vegetable gardening and non-agricultural activities was found to be very low.
- 34% respondents from control areas and 58% of the respondents from intervention areas stated that they know how to manage or utilize resources.
- A total of 346 ED beneficiaries were interviewed during survey and 237 children aged 0-59 months were found among ED beneficiary households. Out of 237 children, 37.55% children were found to be underweight.
- 71.7% (248 out of 346) of the ED beneficiaries stated that they received any sort of asset management training. All the training recipients received the training from World Vision.
- Whether the ED beneficiaries received any asset (farm & non-farm) from government or any NGO, all the beneficiaries (100%, 346 out of 346) stated affirmative. Almost all (99%) who claimed to receive assets mentioned that they received assets from World Vision Bangladesh

Chapter One: Introduction

1.1 Background

Bangladesh is the most densely populated country in the world, with about 163 million people living in a landmass of 147,570 square kilometers, and around one-third of the population under 15 years (UNICEF 2017; NIPORT et al. 2016). Bangladesh has maintained an impressive track record of 6% economic growth rate over the past decade, coupled with remarkable improvements in human development (World Bank 2017). The agriculture and fisheries sectors are pillars of the economy, employing more than half the population (USAID 2017a). However, population growth, urbanization, and soil and natural resource depletion have resulted in the degradation of land, water bodies, wetlands, and forests, and pose a significant threat to the agricultural sector. Despite these challenges, Bangladesh reached Millennium Development Goal (MDG) 1, of halving poverty by 2015, reducing the number of people in poverty from 57% in 1991 to 32% in 2010 (General Economics Division [GED] et al. 2015). Bangladesh has also seen impressive improvements in primary school enrollment, gender parity in primary- and secondary-level education, immunization coverage, reduced incidence of communicable diseases, and substantial reductions in child and maternal mortality, meeting key targets for MDGs 2,3,4, and 5 (GED et al. 2015). Bangladesh has also made strides in reducing the prevalence of stunting, wasting & under nutrition among the under 5 children (NIPORT et al. 2013; NIPORT et al. 2016).

Despite of these achievements, levels of malnutrition in Bangladesh are amongst the highest in the world and it incurs heavy costs from the health care system through excess morbidity, increased premature delivery and increases risks of other diseases (Save the Children, 2015). About 35% of Bangladesh's population remains food insecure (NIPORT et al. 2013). Loss of arable land, rising sea levels, frequent flooding, and extreme weather patterns, and climate change; compound the threats to food security. Under nutrition is exacerbated by poor dietary diversity, with 70% of the diet comprising cereals, and inadequate protein and micronutrient intake (Magnani et al. 2015). Poor sanitation and hygiene, which result in diarrhea and other infectious diseases, also contribute to under nutrition in children.

To combat with these challenges, a series of nutrition related programmes have been implemented by the government of Bangladesh over time. The Bangladesh Integrated Nutrition Programme (BINP) was implemented since 1995 with the focus on improving nutritional status of women, adolescent girls and young children. The BINP was replaced by the National Nutrition Programme (NNP) from 2004 to 2010. In 2011, an integrated approach, National Nutrition Service (NNS) was initiated. All relevant agencies of the government started working in collaboration for combating malnutrition as part of NNS. Besides the government, other stakeholders are also implementing and supporting smaller-scale interventions to improve nutritional status of women and children.

To continue the Bangladesh Government's commitment towards making a country where all citizens enjoy a quality of life assured with basic health care and adequate nutrition; the government has also signed onto achieving the Sustainable Development Goals (SDGs). In the new target of SDGS; the issues of maternal & child health & nutrition are

fitting under goal number 2 & 3[1]; Good health and well-being which was targeted under fifth goal in pervious Millennium Development Goals (MDGs) framework. The targets of the 7th Five Year Plan (2016–2020) and the fourth health sector program (2017–2021) are fully aligned with global commitments to nutrition, such as SDG 2 and SDG 3.

1.2 Background of RM&CN Project (Rajshahi Maternal & Child Nutrition Project)

The Vision 2021 of the Government of Bangladesh envisions a country where all citizens enjoy a quality of life assured with basic health care and adequate nutrition. The milestones of Vision 2021 has been articulated under the "'Perspective Plan of Bangladesh 2010-2021" and to implement the perspective plan; the government decided to formulate two 5-year plans, the Sixth Five Year Plan (FY2010-FY2015) and the Seventh Plan (FY2016-FY2020). The Seventh Plan has been aligned with the Sustainable Development Goals (SDG). Health, Nutrition and Population situation appears satisfactory as health outcomes continue to improve as demonstrated by the progress on the MDGs, which has been mentioned in Health, Nutrition and Population (HPN) Development Strategy of the Seventh plan. It also states that despite the good progress made in improving health outcomes, malnutrition continues at an unacceptably high level in Bangladesh, with children and women the most affected. It describes some challenges which are barrier to reduce malnutrition. The challenges are inadequate skilled attendance at birth, and child marriage and teenage pregnancy. These endanger the health status of women and children. It also acknowledges the challenges related to rapid demographic changes, epidemiological transition and confronted with double burden in nutrition. It describes the geographical location of Bangladesh as a challenge, which makes the country vulnerable to different natural disasters and climate change as well. Issues in service delivery, governance and health workforce are also important challenges in the HPN sector. The Government targets to address these challenges in the Seventh plan to pave the way for a healthy, happy and prosperous nation. The Plan also states some limitations. Some of the important limitations are inadequate health financing, insufficient human resources of GoB, limited progress in providing health services in hard-to-reach areas, availability of village quacks and non-trained birth attendants, lack of skilled staff who are engaged in Management Information System (MIS).

With an aim to support GoB's vision and to contribute in improving the nutrition for the children under 5 as well as for the mothers/caregivers in the targeted area, World Vision with the funding of Korea Overseas International Cooperation Agency (KOICA), initiated 'Bangladesh Rajshahi Division Maternal and Child Nutrition Project' (Phase I) in the sub-districts of Joypurhat, Panchbibi and Dhamoirhat in January 2015.

[1] SDG2- End hunger, achieves food security and improved nutrition, and promote sustainable agriculture, SDG 3- Ensure healthy lives and promote well-being for all at all ages.

The project made significant improvement of health and nutrition indicators in the project area. According to the final evaluation conducted by icddr,b in 2017), the rate of underweight and wasting rates of under-5 children, which was 20% and 34.7% respectively in baseline, dropped to 14% and 26% respectively by end line.

Based on the learning and success from Phase I and with the increased knowledge and technical expertise, World Vision has initiated the phase II of the project in the surrounding Unions in March 2018.

The proposed project has been designed considering all these challenges and limitations so that it is well-supported with the Health, Nutrition and Population (HPN) Development Strategy of the Seventh plan. It will complement the GoB in achieving health and nutrition targets mentioned in the Seventh plan. Bangladesh National Nutrition Policy 2015 is the reflection of the commitment of the Government of the People's Republic of Bangladesh to improve the nutritional status of its people. The proposed project is fully aligned with the Nutrition Policy 2015. In this project, both nutrition-specific direct interventions and nutrition-sensitive indirect interventions along with strategies have been undertaken considering both Nutrition Policy 2015 and project location context.

In implementing development projects, WVB collaborates with relevant government ministries and agencies at local and national levels such as Ministry of Health and Family Welfare (MOHFW), Directorate General of Health Services (DGHS), and Directorate General of Family Planning (DGFP). WVB has a formal agreement with the Institute of Public Health and Nutrition (IPHN) and Community-Based Health Care to operate health and nutrition interventions across the country[2].

1.3 Objectives of the Study

Before starting the project activities, World Vision Bangladesh intended to collect baseline information regarding the targeted beneficiaries to set out benchmark against project indicators to measure the project outcome at the end of the project.

Keeping in mind that, the project has identifies the some primary objectives for this baseline survey. While doing so, the survey was also conducted to measure a set of secondary objectives. Both the primary and secondary objectives were as follows:

Primary Objectives:

- To establish the pre-intervention situation (base line of indicators) prior to project start up hereby preparing the ground for project performance measurement and enabling comparison both at sub-district, district and national.
- To assess existing socio-economic conditions under sets indicators in programme impact area
- To measure the existing nutritional status of under-five children (underweight, stunting, wasting, breastfeeding practices) of the project areas.

[2] Project Goals & Indicators are presented in Annex 4.

Secondary Objective:

To assess the existing situation of

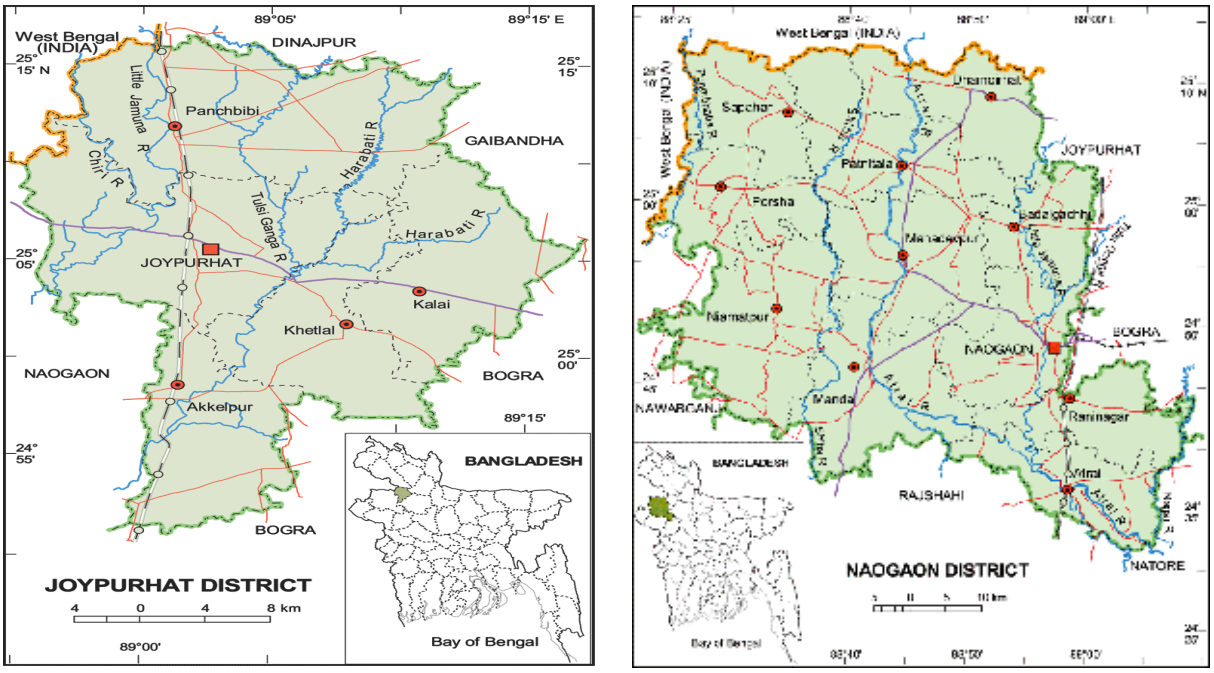
- Morbidity pattern and care seeking for illnesses among under-5 children Infant and Young Child Feeding practices
- Knowledge and practices of mothers/caregivers/families for maternal and new-born health care
- Referral by health workers for the management of problems child health problems
- Practice of appropriate health and nutrition care.

Chapter Two: Methodology

2.1 Study Areas

The baseline study was conducted in 2 districts i.e. Joypurhat & Naogaon for 'Bangladesh Rajshahi Division Maternal and Child Nutrition Project' as shown in figure below

Figure 1: Study locations



WVB has decided to conduct the baseline survey in two arms; intervention and control. RM&CN-KOICA project's working area was presented as intervention areas and the control areas were chosen from the closest possible neighboring Upazilas that more comparable in terms of demographic and socioeconomic characteristics. Thereby Dhamoirhat upazila, Joypurhat Sadar upazila and Panchbibi Upazila were chosen as intervention areas and Akkelpur and Badalgachi Upazilas were chosen as control areas.

2.2 Target Population

As the project targets to improve the nutrition status of mothers and children under 5 therefore the primary target respondents for the study were the children aged 0-59 months and their mothers/caregivers.

- Pregnant women
- Recently delivered women (with children aged 0-12 months)
- Mother of under-five child

In addition to the primary target group, information was also collected from the following segments

- Representatives from Community Groups (CG) and Community Support Groups (CSG)
- Community People
- Upazila Health & Family Planning Officer (UH&FPO), Upazila Agriculture Officer (UAO), Upazila Livestock Officer (ULO) and project facilitators

2.3 Study Approach

The study followed a mix method of quantitative and qualitative data collection techniques. A semi structured questionnaire was used for collecting quantitative data, incorporating all necessary questions as per tentative information coverage. Anthropometric measurement of all under-5 children were collected using necessary instruments by especially trained data collectors. Qualitative part will be anchored through discussion guideline and checklists.

2.3.1 Sample Size[3]

A total of 1,600 respondents were covered (900 in intervention areas & 700 in control areas) and sample distribution is as follows:

Table 1: Sample Distribution (Respondent Type)

Respondent Type	Intervention area	Control area
Mother of under-five child	300	240
Recently delivered women	300	230
Pregnant women & Mother of children <2 years	300	230
Total	**900**	**700**

2.3.2 Qualitative Data Collection

The qualitative part of this baseline study was applied using FGD and KII techniques. The qualitative sample distribution was as follows:

Table 2: Qualitative Sample Distribution

Respondent type	Tools	Intervention	Control	Total
CG/CSG	FGD	6	-	6
Community People		6	2	8
UH&FPO, UAO, ULO and project facilitators	KII			8

[3] The details on sample size calculation is provided in Annex 2

2.4 Field Work and Quality Control Mechanism

The fieldwork for the study was conducted from August 07, 2018 to August 22, 2018 with the cooperation from World Vision Bangladesh. It should be noted that the project has started before the conduction of baseline survey and World Vision Bangladesh the list of primary beneficiaries had already done before the survey period. Some of the beneficiaries had also received training on asset management and IGA support.

A total of five teams (6 members in each team – 5 interviewers and 1 supervisor) were responsible for collecting data. For qualitative data collection, 3 moderators were employed who completed the interviews within the stipulated timeline. In terms of employing data collectors, focus was given on data collectors who had previous exposure in the study areas as well as on similar studies.

The field staffs were given adequate training on the techniques of data collection and on the data collection instruments (e.g. questionnaire, height & weight measurement, FGD and KII). A 3 days training for survey enumerators and 2 days training for qualitative research moderators were arranged. The respondents who performed satisfactorily were selected for the study.

During fieldwork, information on exclusive breastfeeding was not collected according FANTA[4] guideline. It was discussed with World Vision Bangladesh and telephone survey was conducted with the mothers of infants aged 0-5 months to collect required information.

To ensure quality of the data collection process, Nielsen representatives were present in the field during the first few days of the data collection. Site supervisors checked all questionnaires for completeness every day at the end of all interviews beside accompany check. They also back checked questions whenever was necessary. The field controller and field manager was responsible for overall management and quality control.

2.5 Data Processing

The data collected through the survey was edited and then coded and tabulated. After that the data were manually edited. Editing was undertaken to ensure that the data were accurate and consistent with other facts gathered. After the completion of editing and coding, the filled-in questionnaires were sent for data entry which was done using CSPro software (version 6.1) and analysis was done using SPSS windows program (version 24).

The analysis team analyzed data under the guidance of the expert panel. Descriptive statistics were used as appropriate (frequency, mean, standard deviation, etc.) to describe the socioeconomic characteristics of the respondents. WHO Anthro software (version 3.2.2, 2011) was used for analysis of anthropometric data.

[4] FANTA -Food and Nutrition Technical Assistance

Analysis has been done to provide estimates by intervention and comparison areas. Significance test was also run to check whether any major difference found in terms of key indicators of the project between intervention & control area.

Regarding qualitative section, all the interviews and FGDs were recorded and transcribed verbatim in native language- Bangla. After that, content analysis was done on different thematic areas of the study.

2.6 Ethical Consideration

In order to protect the right of the respondents, prior to approaching them for the detailed interview, their oral consent to participate in the interviews was obtained. They were provided full and correct information regarding the purpose of the study, nature of information required, benefits of the study, confidentiality to be maintained and freedom to be exercised by the respondents during the interviews. Nielsen team also provided training on child protection so that the interviewers can understand the dos and don'ts while interaction with children.

2.7 Limitations

One of the major limitation of the study was the information on exclusive breastfeeding was not collected according to FANTA guideline. Post the field survey, telephone survey was conducted with the mothers of infants aged 0-5 months to collect required information on exclusive breastfeeding according to FANTA guideline. Response bias might occur during the telephone survey.

On the other hand, the baseline survey data collection was conducted few months after the initiation of the project. Some of the project activities had already been started before baseline data collection; thereby response bias might occur in the intervention areas.

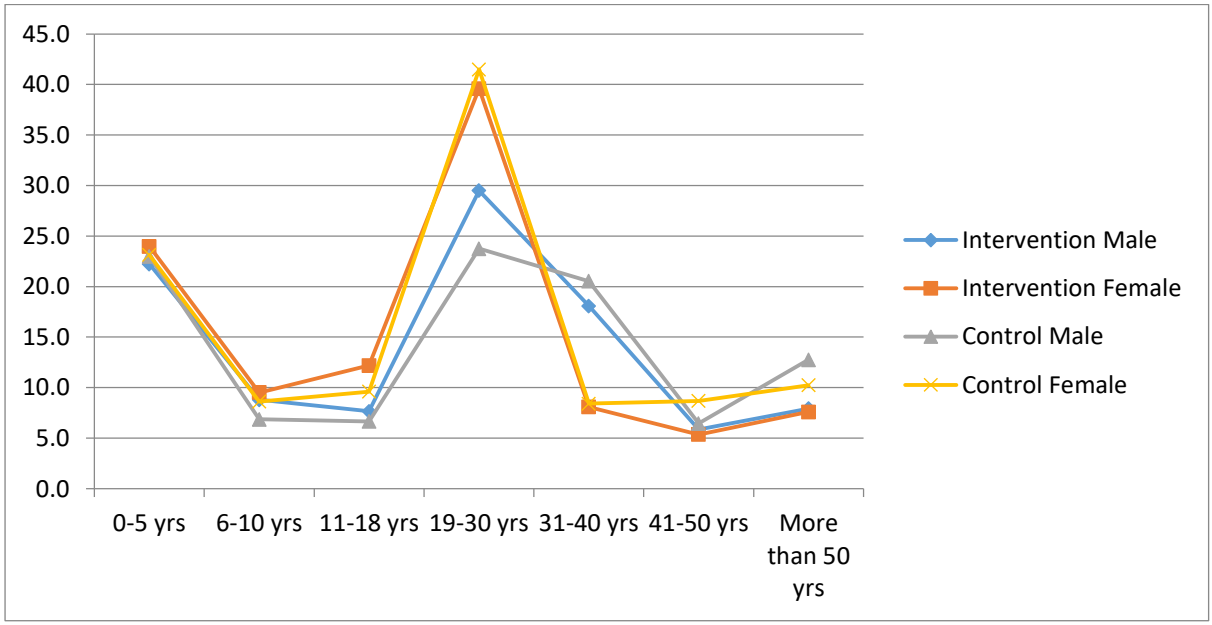
Chapter Three: Household Information

This section presents information on the demographic and socioeconomic information of the Survey respondents and their households. The information in this section is based on 1,600 randomly selected households.

3.1 Household population and composition

The average household size in the surveyed areas was found to be 4.2, which was at par with the national average (4.5) (Annex Table 27a). Majority of the household population belongs to the age group of 19 to 30 years followed by 0-5 years.

Figure 2: Percentage Distribution of Age of the Household Members (n-Intervention: 3,777 Control 2,999)



3.2 Household characteristics

The data was collected on certain household characteristics including type of sanitation facility, source of drinking water and main housing materials. These physical characteristics were used to assess the general wellbeing and socioeconomic status of the households. Table 3 shows that access to improved source for drinking water was universal in both intervention and comparison areas.

Around 71.6% household had access to improved sanitation facilities. This result is similar to the result of baseline survey of phase one of the project where 72% of the respondents had access to improved sanitation facilities. Access to improved sanitation facilities was found to be higher in control areas (83.8%) compared to intervention areas

(62.0%). With respect to intervention Upazilas, access to improved sanitation facilities was found to be higher in Joypurhat Sadar (63.0%) and Panchbibi (70.7%) compared to Dhamoirhat (52.3%) (Annex: Table 1). Open defecation was also found to be higher in Dhamoirhat (26.7%). During the FGD sessions, the community members and CG (community group) & CSG (community support group) members stated that many ethnic people live in Dhamoirhat & they do not have improved sanitation facilities & majority of them practice open defecation.

It was also found that for the majority of the households, wall was made of mud/soil (intervention 69.0% and control 55.4%), ceiling was made of tin (intervention 97.2% and control 93.4%), and floor was made of mud/soil (intervention 95.2% and control 84.1%). It is observed that the situation of control areas is better in terms of improved toilet facilities & household condition as about 30% of the respondents in intervention areas belong to lowest wealth quintiles where in control areas only 7% of the respondents belong to lowest wealth quintiles (see Table 4).

Table 3: Percent distribution households by type of source of drinking water, toilet/latrine facilities and housing characteristics

	Intervention	Control	Total
Source of drinking water			
Improved Source	100.0	100.0	100.0
Tube-well	95.1	97.9	96.3
Shallow Tube well	4.9	1.9	3.6
Protected Well	0.0	0.2	0.2
Toilet facility			
Improved Facility			
Sanitary toilet	15.6	16.7	16.1
Pit toilet	24.3	30.4	27.0
Ring slab	22.1	36.7	28.5
Non-Improved Facility			
Kaccha toilet	26.4	9.3	18.9
Hanging toilet	0.1	0.0	0.1
No facility/bush/field	11.4	6.9	9.4
Main Roof material			
Tin	97.2	93.4	95.6
Brick/Cement	2.7	6.4	4.3
Others	0.1	0.1	0.2
Main Floor material			
Mud/Soil	95.2	84.1	90.4
Brick/Cement	4.8	15.9	9.6
Main Wall material			
Mud/Soil	69.0	55.4	63.1
Brick/Cement	19.7	33.4	25.7
Tin	5.4	10.3	7.6
Fencing/Bamboo/ leaf/straw/chon	3.3	0.4	2.1
Jute Stick	2.2	0.4	1.4
Others	0.3	0.0	0.2
n	900	700	1600

3.3 Household Possession

Data was collected household ownership of selected assets, some of which were used along with other indicators for calculating the wealth index for the survey. The difference was found between intervention & control areas in terms of possession of household durables (especially possession of TV, table/chair, gold jewelry, & agricultural equipment), farm animals, & agricultural land. The possession of household durables, farm animals and agricultural land was found to be higher in control areas compared to intervention areas (Annex: Table 29).

3.4 Wealth Index

The wealth index was constructed from the data on ownership of household durable goods, as well as dwelling characteristics, source of drinking water and sanitation facilities. Each asset was assigned a weight (factor score) generated through principle components analysis, and the resulting asset scores were standardized to a normal distribution with a mean of zero and a standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for the household. Households were ranked according to the total score, and then divided into quintiles from the lowest (poorest) to the highest (richest). Distribution of households by wealth index in the study area is presented in Table 4. Higher proportion of households in intervention areas belongs to lower wealth quintiles in the comparison to control areas.

Table 4: Percentage of Distribution of wealth index for all households

Characteristics	n	Wealth quintiles				
		Lowest	Second	Middle	Fourth	Highest
Total	1600	20.0	20.0	20.0	20.0	20.0
Area						
Intervention	900	29.8	22.6	17.0	17.2	13.4
Control	700	7.4	16.6	24.0	23.6	28.4

3.5 Characteristics of Survey respondents

Table 5 provides information on the characteristics of the Survey respondents (ever-married women aged 15-49 years). Around half of the respondents in both intervention and comparison areas were aged between 20-29 years and the mean age was 25 years. In both the areas, almost 100% women were married at the time of the survey. Around 14% of the respondents in the intervention and 8% of the respondents in the control areas had never been to school.

Table 5: Percentage Distribution of Characteristics of survey respondents (eligible women 15-49 years)

Characteristics	Intervention	Control	Total
Age			
15-19 years	16.8	10.7	14.1
20-24 years	34.6	38.1	36.1
25-29 years	24.8	28.7	26.5
30-34 years	14.3	14.0	14.2
35+ years	9.6	8.4	9.1
Mean age in years	24.9	25.2	25.0
SD	5.7	5.3	5.5
Marital status			
Married	99.8	99.3	99.6
Widow/widower	0.0	0.1	0.1
Divorced	0.1	0.3	0.2
Separated/Deserted	0.1	0.3	0.2
Education			
No education	13.7	6.7	10.6
Primary incomplete	11.3	5.7	8.9
Primary complete	13.8	15.6	14.6
Secondary incomplete	47.4	50.4	48.8
Secondary or higher	13.8	21.6	17.2
n	900	700	1600

3.6 Household Income, Expenditure & Savings

The average monthly household income of the control area was found to be higher than intervention area (BDT 8,461 vs. BDT 6,698). The average monthly household income for intervention Upazilas was found to be BDT 8,173 for Jaypurhat Sadar, BDT 5,874 for Dhamoirhat and BDT 6,047 for Panchbibi.

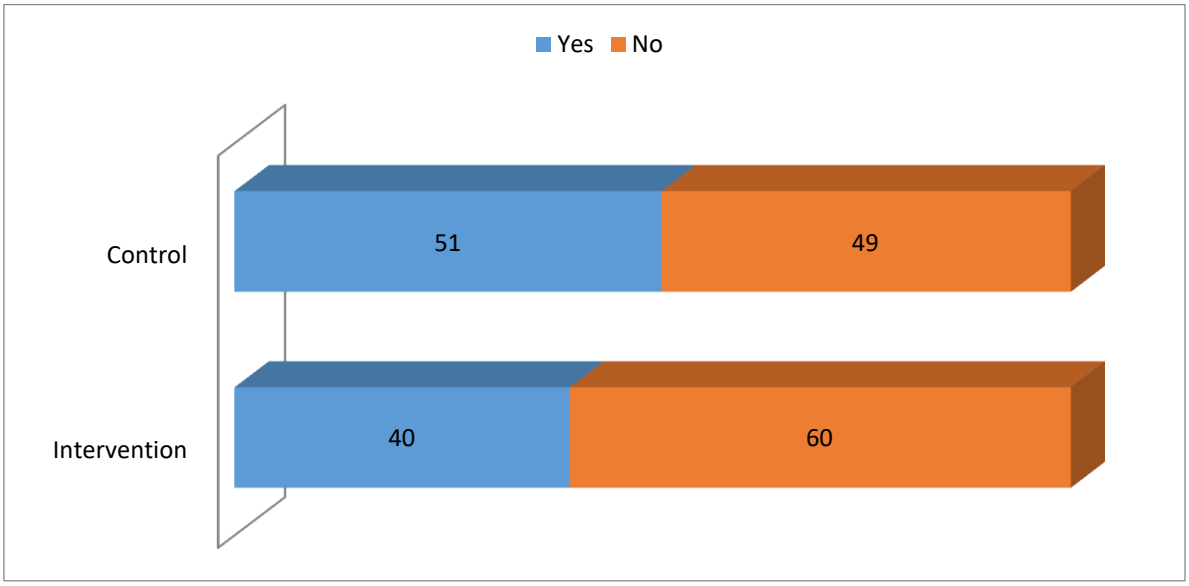
The average monthly household expenditure was also found to be higher in control area (BDT 6,622 vs. BDT 5,499) (Annex: Table 2). The average annual household income and expenditure is estimated BDT 80,376 & in 65,988 intervention areas and BDT 101,532 & 79,463 in control areas.

Table 6: Percentage Distribution of Average Monthly Household Income

Average Annual HH Income	Intervention	Control
Less than BDT 4,000	8.0	4.0
BDT 4,000-BDT 8,000	77.0	63.0
BDT 8,001-BDT 12,000	11.0	24.0
More than BDT 12,000	4.0	9.0
n	900	700
Average Monthly HH Income (BDT)	6,698	8,461
Median (BDT)	6,000	8,000

With respect to savings, it was found that 40% of the respondents in the intervention areas and 51% of the respondents in control area had any kind of savings. The saving practice of Dhamoirhat was found to be lowest compared to other intervention upazilas (30% in Dhamoirhat, 47% in Joypurhat Sadar, 43% in Panchbibi). During the FGD sessions with community members stated that the majority of the people are farmers and day labors and they do not have enough income to save money.

Figure 3: Percentage Distribution of Households had Savings (n-Intervention: 900, Control 700)

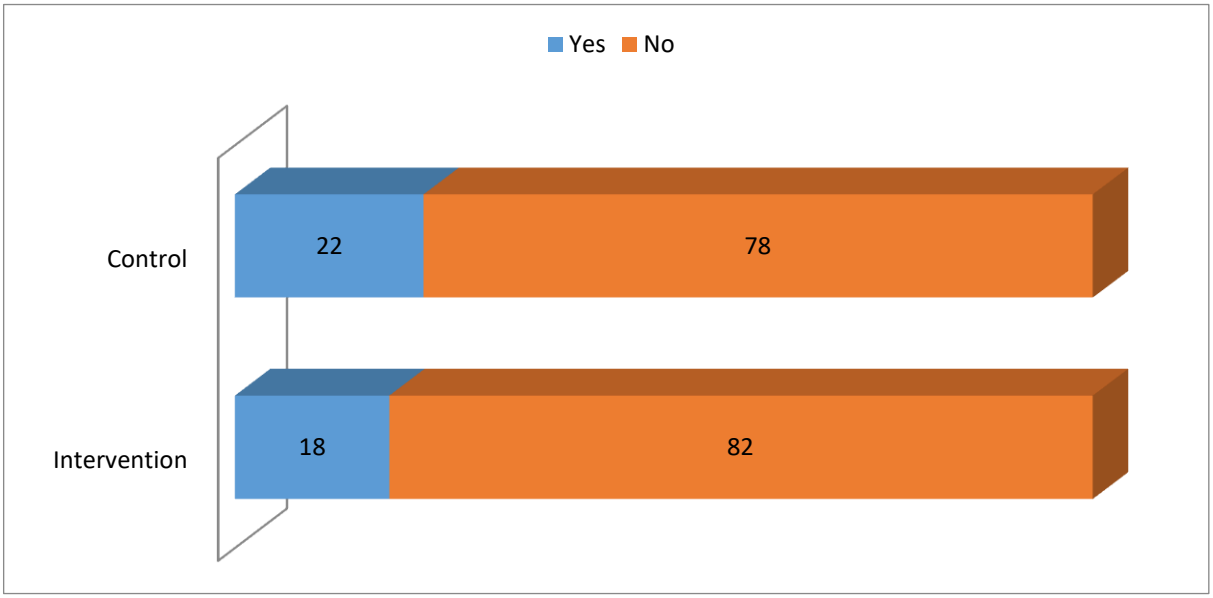


Output: 3.2. Targeted Households have capital to invest in their food production and income earning activities

# of target HH that achieved their target saving amount for 3 consecutive months

When the respondents were further asked about whether they have savings for the consecutive last 3 months, it was found that only 162 out of 900 interviewed respondents (18%) in the intervention areas and 154 out of 700 interviewed respondents (22) % in control areas had savings for the consecutive last 3 months. Majority of the households in intervention area save money in NGOs where the households in control areas save money either in NGOs or they save money at home (Annex: Table 3).

Figure 4: Percentage Distribution of Households had Savings in consecutive 3 months (n-Intervention: 900, Control 700)



Chapter Four: Nutrition

This section presents information on anthropometric measurement of children, exclusive breastfeeding, and IYCF practices. Information was obtained for children under five years of age. Information was also collected on the food diversity of the mothers of children aged 0-59 months.

4.1 Nutrition Status of the children aged 0-59 months

Project Goal: Reduce the incidence of malnutrition in children under five years of age living in three Upazilas: Dhamoiraht, Phanchibibi, Joypurhat

1) *Prevalence of stunting in children under 5 years of age*
2) *Prevalence of wasting in children under 5 years of age*
3) *Prevalence of underweight in children under 5 years of age*

The nutritional status of children in the survey population is compared with the World Health Organization (WHO) Child Growth Standards, which are based on an international sample of ethnically, culturally, and genetically diverse healthy children living under optimum conditions that are conducive to achieve a child's full genetic growth potential (WHO 2006). The WHO Child Growth Standards identify breastfed children as the normative model for growth and development and document how children should grow under optimum conditions and with optimum infant feeding and child health practices. Use of the WHO Child Growth Standards is based on the finding that well-nourished children in all population groups for which data exist follow very similar growth patterns before puberty. These standards can therefore be used to assess the nutritional status of children all over the world, regardless of ethnicity, social and economic influences, and feeding practices.

Three standard indices of physical growth that describe the nutritional status of children are:

- Height-for-age (stunting)
- Weight-for-height (wasting)
- Weight-for-age (underweight)

Stunting, Wasting & Underweight

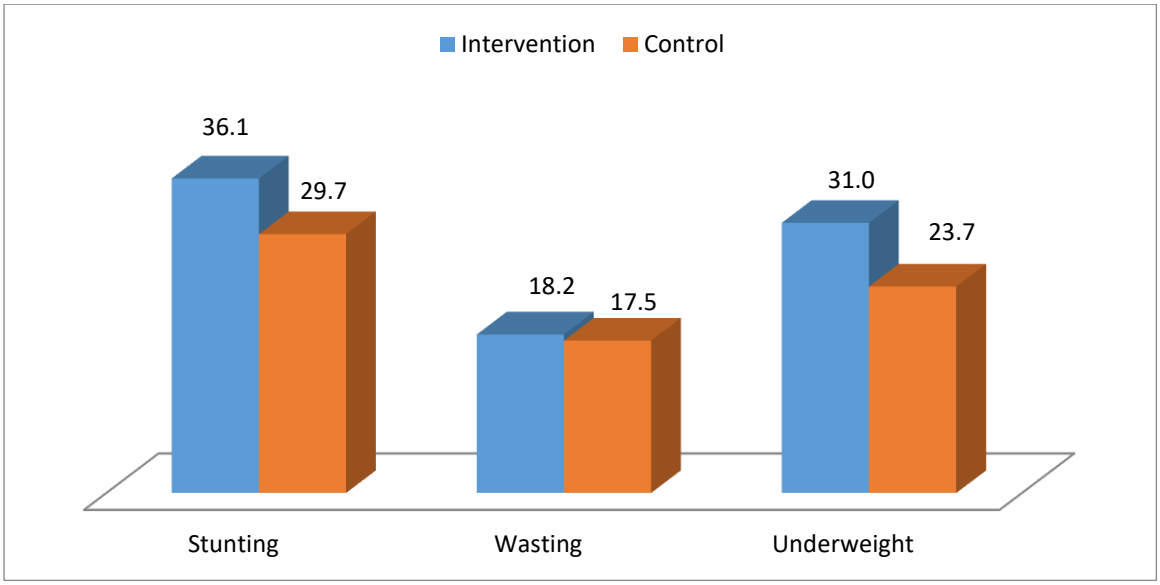
33% of the children in the survey area were found to be stunted (< -2 height-for-age z –score) while 15% were severely stunted (< -3 height-for-age z –score) (Annex: Table 30). The prevalence of stunting was higher among boys and was more common in children who were 12 months or older. Mother's educational attainment and household wealth status was positively related with decreased prevalence of stunting.

18% of the children aged under five years in the study areas were found to have wasting. The prevalence of wasting was more common in children who were 18 months or older. Mother's educational attainment and household wealth status was positively related with decreased prevalence of wasting. Overall 28% of the children in the survey area were underweight, including 8.4% who were severely underweight. Prevalence of underweight was higher among children 18-59 months age. The percentage of underweight among under five children decreased with increasing maternal educational attainment and household wealth (Annex Table 30).

The prevalence of stunting & underweight was found to be significantly[5] higher in intervention area compared to control area (figure 5). This can be attributed to the poor income, sanitation facilities and food diversity of the people in intervention areas compared to control areas.

Overall the data was at par with Rajshahi division data where 31% of the children were stunned, 17% were wasted and 37% of the children were under weight. The data is also at par with the result of baseline survey of phase one of the project in Rajshahi; where 30% of the children were stunned, 20% were wasted and 35% were underweight. At national level 36% of the children were stunned, 14% of the children were wasted and 33% of the children were underweight (BDHS 2014).

Figure 5: Prevalence of Stunting, Wasting and Underweight in children under age 5 years (n-Intervention: 825, Control 617)



During the FGD sessions, the community people especially in the intervention areas stated that majority of the people in their community are poor. They cannot provide nutritious food to their children. They also pointed out the lack of awareness of mothers on the nutrients of different food items. Thus the children are not getting balanced diet. In addition, the children are continuously suffering from cold, diarrhea, pneumonia. This also affects healthy growth of the children. As a result children are found to be with bloated bellies and thing arms & legs.

[5] Proportion Z test was done at 5% level of significance

4.2 Exclusive Breastfeeding[6]

Outcome 1: Improve nutritional status of children under 5 years

Proportion of children receiving exclusively breastfed until 6 months of age

WHO recommends mothers worldwide to breastfeed exclusively infants for the child's first six months to achieve the child's optimal growth and development. Thereafter, they should be given nutritious complementary foods and continue breastfeeding up to the age of two years or beyond.

All the infants (100%) 0-5 months received breast milk during the previous day. The mothers of infants 0-5 months further asked whether the infant 0-5 months received anything else except breast milk. It was found that 77.7% of the infants (77.0% in intervention and 79% in control) received exclusive breastfeeding which is higher than national data (55%, BDHS 2014) but closer to baseline result of phase one of the project (84%). No significance difference[7] was found in the result of intervention & control areas.

Table 7: Percentage of infant 0–5 months of age who received only breast milk during the previous day of survey

	Infants 0–5 months received breast milk during the previous day	Infants 0–5 months received breast milk & others during the previous day	Infants 0–5 months received only breast milk during the previous day	n
Intervention	100.0	23.0	77.0	158
Control	100.0	21.0	79.0	84
Total	100.0	22.3	77.7	242

[6] As mentioned in the methodology section that information on exclusive breastfeeding is collected through phone survey

[7] Proportion Z test was done at 5% level of significance

4.3 Food Diversity for infants aged 6-23 months

Indicators:

Percentage of children aged 6-23 months receiving minimum dietary diversify according to PD/Hearth guideline
Proportion of children aged 6-23 months receiving minimum dietary diversity among the HHs who received IGA support
Proportion of women receiving minimum adequate diet among the HHs who received IGA support

In order to understand the quality of food that the 6-23 months children consume, data was collected on the food items ate in the previous day of survey. The food items were further categorized into 7 groups[8] as follows:

1. Grains, roots and tubers
2. Legumes and nuts
3. Dairy products (milk, yoghurt, cheese)
4. Flesh foods (meat, fish, poultry, and liver/organ meats)
5. Eggs
6. Vitamin A rich fruits and vegetables
7. Other fruits and vegetables

While counting on how many food groups the infants aged 6-23 months received during previous day of conducting survey, it was found that only 21.3% of the infants in the intervention areas and 25.6% of the infants in control areas consumed 4 food groups or more. The result is similar with the baseline result of phase one of the project; where 26.4% of the children aged 6-23 months consumed 4 food groups or more. Variety of food consumption increases with the increase of age (Table 8). It was also found that the 25.2% of infants aged 6-23 months received 4 or more food groups among the ED beneficiaries. In terms of intervention upazilas, the percentage of infants aged 6-23 months consumed more than 4 food groups was found to be 14% in Dhamoirhat, 23% in Panchbibi and 26% in Joypurhat Sadar (Annex: Table 22). It was also observed that the consumption of dairy products, eggs, vitamin A rich fruits and vegetables & flesh food (Annex: Table 31).

Table 8: Percentage Distribution of Food Groups Received by 6-23 months Infants according to PD/Hearth guideline

	Intervention				Control			
Child's Age (in month)	1 group	2 groups	3 groups	4+ groups	1 group	2 groups	3 groups	4+ groups
6-8 months	33.3	21.4	19.3	14.3	44.0	32.1	19.4	17.8
9-11 months	29.3	30.8	26.1	23.4	44.0	28.6	30.1	15.1
12-17 months	21.3	22.2	27.3	26.0	12.0	13.1	18.4	26.0
18-23 months	16.0	25.6	27.3	36.4	0.0	26.2	32.0	41.1
Total	20.7	32.3	24.3	21.3	8.8	29.5	36.1	25.6
n	362				286			

[8] FANTA guideline was followed to analyze the infant & young child feeding practice

Women of reproductive age (WRA) are often nutritionally vulnerable because of the physiological demands during pregnancy and lactation. Requirements for most nutrients are higher for pregnant and lactating women than for adult men (National Research Council, 2006; World Health Organization [WHO]/Food and Agriculture Organization of the United Nations [FAO], 2004).

To measure the minimum dietary diversity for the women who will receive IGA support, food items were bifurcated into 10 groups[9] as follows

1. Grains, white roots and tubers, and plantains
2. Pulses (beans, peas and lentils)
3. Nuts and seeds
4. Dairy
5. Meat, poultry and fish
6. Eggs
7. Dark green leafy vegetables
8. Other vitamin A-rich fruits and vegetables
9. Other vegetables
10. Other fruits

It was found that among the ED beneficiaries, 33.5% of women received minimum adequate diet. The result is also similar with the overall sample covered in both intervention & control Areas (Table 9). Though consumption of 5 or more food groups is higher among pregnant mother compared to recently delivered women, mother of children aged 0-59 months; it was found the only 14% of the pregnant women in Dhamoirhat consumed 5 or more food groups (Annex: Table 32). This can be associated with the poor income and household condition of the people of Dhamoirhat as they are not able to provide additional & nutritious food items to the pregnant women.

> *The people here take rice 3 times a day. This is the most common food here. The consumption of egg, dairy and meat items is very low because these are very expensive items.*
>
> - *Mother of under 5 years children*

During the FGD & KII sessions with the community members, CG (community group) & CSG (community support group) members, community facilitators stated that the community people are aware of the nutritional values of different food items. Although the community people mentioned milk, egg, fruits & vegetables, meat, fish as the nutritious food items but majority of them could not tell that which food item contains which nutritional value as well as the definition of balanced food. They also mentioned that the pregnant women, mother of children under 5 years, children 6-59 months require the nutritional food items more than other family members but due to poverty people cannot provide them nutritional food items. Rice & potato are very popular in those areas and people eat rice three times a day. They also consume vegetables on regular basis. But consumption of meat, dairy products, eggs are very infrequent, mostly once in a week. The respondents further added due to poverty it is not possible to provide these food items to the

[9] FANTA guideline was followed to analyze the minimum dietary diversity for women

children, pregnant woman, recently delivered mother and mother of children aged 6 months to 59 months.

Figure 6: Percentage Distribution of ED beneficiary Women Received minimum adequate diet (n 346)

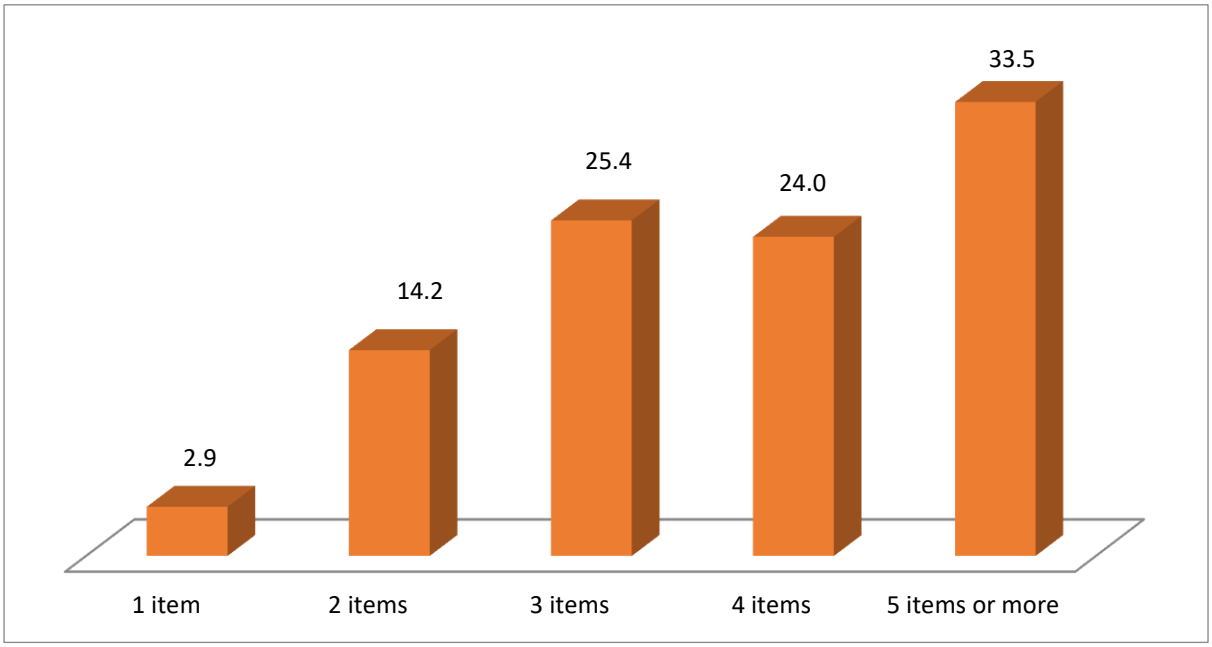


Table 9: Percentage Distribution of Women Received minimum adequate diet

	Intervention	Control
1 food group	2.8	0.0
2 food groups	12.2	8.2
3 food groups	27.3	31.3
4 food groups	24.1	27.2
5 food groups or more	33.6	33.3
n	900	700

4.4 Food Security

Majority of the respondents (80% in intervention & 82% in control areas) stated that they were happy with the amount of food they had in the last 3 months (annex: Table 22).

40% of the respondents in the intervention area and 22% of the respondents in control areas reported that their household members eat less amount of food than they usually take in the last 3 months.

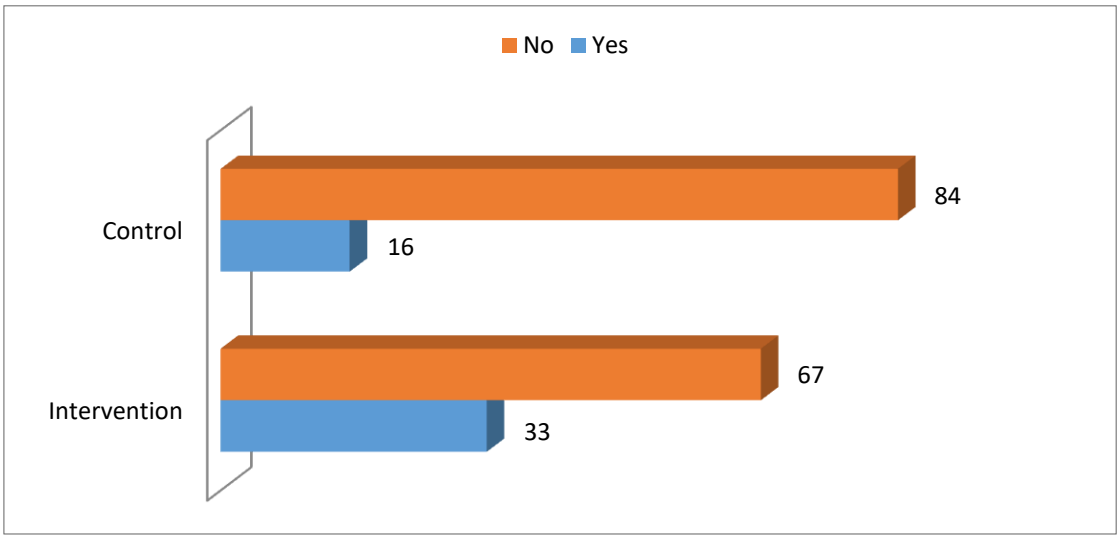
Table 10: Percentage Distribution of Whether the household members eat less amount of food in the last 3 months

	Intervention				Control			
	Currently Pregnant	Recently delivered women	Mother of children aged 0-59 months	Total	Currently Pregnant	Recently delivered women	Mother of children aged 0-59 months	Total
Yes	39.6	33.7	45.2	40.4	26.3	21.7	19.9	21.6
No	60.4	66.3	54.8	59.6	73.7	78.3	80.1	78.4
n	149	300	451	900	114	230	356	700

Regarding the intervention upazilas, it was found that the respondents from Dhamoirhat upazila had less amount of food in the last three 3 months compared to other two upazilas (Annex: Table 23). It was also found that pregnant women, recently delivered women, mother of child 0-59 months were the more vulnerable (93% in the intervention area and 80% in the control area) as they eat less amount of food among the family members (Annex: Table 24). The respondents also reported that this happens rarely (intervention 50% & control 67%) (Annex: Table 25)

Regarding whether the respondents or any of their family members had food less than three times a day, 33% of the respondents in the intervention area & 16% of the respondents in the control area said affirmative. Difference observed in the response between intervention & control areas as the respondents from intervention areas found to have poor household condition, less income & less savings compared to the respondents from control areas.

Figure 7: Percentage Distribution of Whether the household members eat less than three times a day in last three months (n: Intervention 900, Control 700)



In terms of intervention upazilas, the situation was found to be worse in Dhamoirhat upazila compared to other intervention upazilas. Like before the pregnant women, recently delivered women, mother of child 0-59 months were the more vulnerable (93% in the intervention area and 83% in the control area) as they eat less than 3 times a day in the last 3 months. (Annex: Table 26). The respondents also reported that this happens rarely (intervention 52% & control 42%) (Annex: Table 27)

During the FGD sessions, the community members stated that in the month of September & October and month of April & May, the people face food insecurity due to flood, rain and drought. During this time the pregnant recently delivered women & mother of children aged 0-59 months suffers most as they are the first person to sacrifice food for their family members.

Chapter Five: ANC & PNC Care

This section presents information on the awareness and practice of receiving ANC & PNC care. Information was obtained from only recently delivered women who have children aged 0-12 months. Thus the recall period was considered 1 year for receiving ANC & PNC care.

5.1 ANC Care

Outcome 1: Improve nutritional status of children under 5 years

Proportion of mothers who report that they had four or more antenatal visits while they were pregnant with their youngest child)

58% of the recently delivered women in the intervention areas & 56% in control areas claimed to be aware of how many times a pregnant woman should receive ANC (Table 11).

Among those who claimed to be aware of how many times a pregnant women should receive ANC, majority of them could state 4 or more than 4 times (Intervention 75.9%, control 75.0%).

When the recently delivered women asked about whether they received any antenatal care during their last pregnancy, the response was quite positive. For both intervention and control areas 82% of the recently delivered women said they received any ANC (Intervention: 83.3% & Control: 80.4%) which is close to national & Rajshahi division data (National 78%, Rajshahi 76%; BDHS report, 2014). The data is also close to the baseline survey report of phase one where 86% of the recently delivered women reported to receive ANC care.

To receive ANC during last pregnancy in both intervention and control areas women mostly visited public sectors; community clinic (Intervention: 66.0% and Control: 57.3%). This is much higher than the national and Rajshahi estimations (at national level, 43.7% women visited public sectors and in Rajshahi 36.2% women visit public sectors for ANC care, BDHS, 2014). Visiting public sectors to receive ANC during last pregnancy is also high among women from both Dhamoirhat and Joypurthat Sadar (83.5% and 75.9% respectively) compared to Panchbibi (31.9%) (Annex: Table 7).

Majority of the recently delivered women visited qualified doctor/government certified doctor to receive ANC during their last pregnancy (Intervention: 46.8% and Control: 42.2%) which is close to national & Rajshahi division data (National: 58%, Rashahi Division: 55%; BDHS 2014). During the FGD sessions, it was found that the majority of the respondents considered SACMO (Sub-Assistant Community Medical Officer) as government qualified doctor. Some of respondents also visited Nurse/Midwife/paramedic and Community health care provider for receiving ANC purpose.
Although it was found that higher number of recently delivered women received ANC care but only 28.8% of the women in intervention areas and 21.9% of the women in

control areas reported that they received ANC care 4 times or more. This is almost similar to national rural level data (26%; BDHS, 2014) and baseline data of phase one of the project (29.9%). Although the situation in intervention is at par with national level data, but still focus should be given to create awareness and motivate women to take ANC care 4 times or more during pregnancy to prevent complications and ensure a healthy pregnancy.

Table 11: Percentage Distribution of Respondents are Aware & Receive ANC Care

With respect to intervention upazilas, only 12.5% of the women in Panchbibi received ANC care 4 times or more. The situation was found to be better for Joypurhat Sadar

	Intervention	Control
Awareness on Number of times a pregnant woman should receive ANC		
Yes	58.0	55.7
Awareness On How many time a pregnant woman should receive ANC		
1 time	3.4	0.0
2 times	2.3	2.3
3 times	18.4	22.7
4 times or more	75.9	75.0
Whether the respondents received any ANC Care		
Yes	83.3	80.4
No	16.7	19.6
Place where ANC Received		
At Own home	6.0	24.3
Public Sectors	66.0	57.3
NGO Sector	4.4	3.2
Private Sector	22.0	14.6
Others	1.6	0.5
Who Visited for ANC		
Qualified doctor/government certified doctor	46.8	42.2
Nurse/Midwife/paramedic	27.6	11.4
Family welfare visitor	4.4	8.1
Community skilled birth attendants	3.2	7.0
SACMO (Sub-Assistant Community Medical Officer	1.2	6.5
Community health care provider	8.4	34.6
Health Assistant	6.4	16.8
Family Welfare Assistant	6.0	3.2
NGO Worker	7.6	15.1
Number of times ANC Received		
1 time	15.6	8.1
2 times	24.4	40.3
3 times	31.2	29.7
4 and more than 4 times	28.8	21.9
n	300.0	230.0

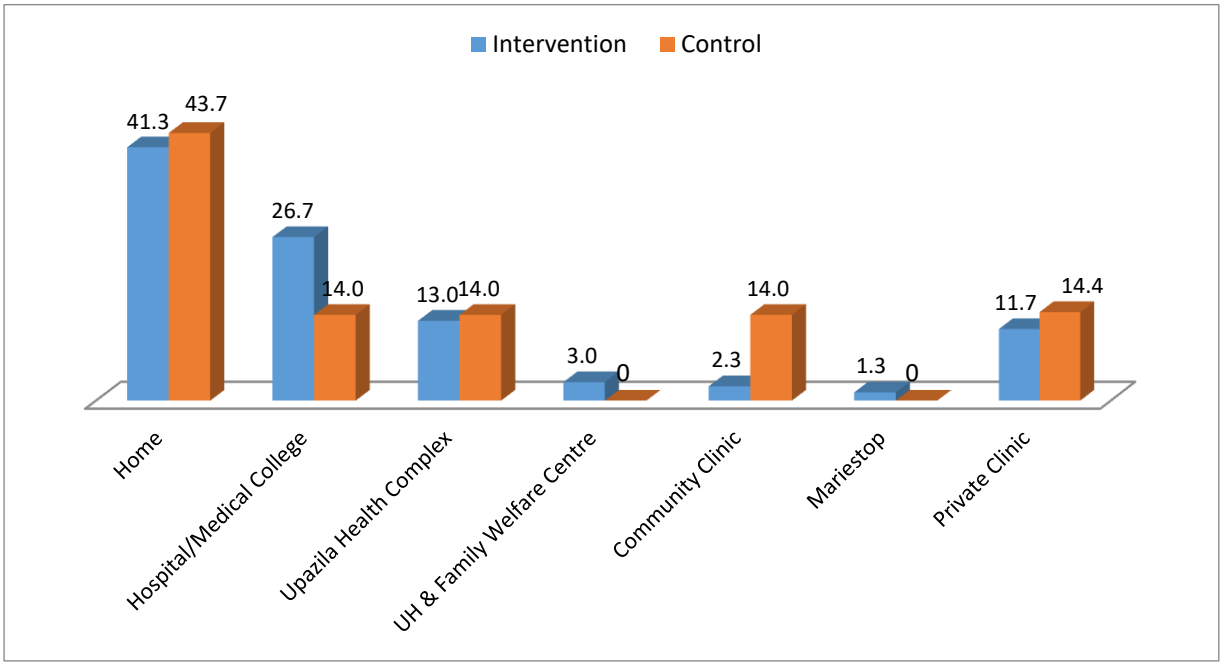
where 44.0% of the women received ANC care 4 times or more and in Dhamoirhat the result is 26.4% (Annex: Table 8).

During FGD sessions, the community members claimed to be aware of the danger signs during pregnancy but no one was able to say about the danger signs. Some of them stated that during pregnancy, a woman should take appropriate rest and should not carry heavy things. Lack of awareness, poverty, and poor road condition in the rural areas were found to be main reasons for not receiving ANC care. They further added that ANC services are available in community clinics but the service quality of the community clinics is not satisfactory and the medicines are not available there. The pregnant women participated in the FGDs were found to take ANC care less than 4 times. They also stated that health assistants from BRAC, ASHA also visit door to door and measure weight, blood pressure and provide iron and calcium tablets.

5.2 PNC Care

Both in intervention and control area, the recently delivered women gave birth at home (Intervention: 41.3% and Control: 43.7%) which is lower than national & Rajshahi division data (National 62% Rajshahi division 61%; BDHS, 2014). However the data is close to baseline result of phase one of the project; where 41.3% of the recently delivered women in Rajshahi gave birth at home.

Figure 8: percentage Distribution of Place Where the Recently Delivered Women Gave Birth to (n: Intervention- 374 and Control- 238)



The percentage of giving birth at home is comparatively lower in urban areas (Joypurhat sadar 29.0 compared to other two areas (Dhamoirhat 51% & Panchbibi 44%) (Annex: Table 9).

Around 40% of the respondents in the intervention areas said the delivery was assisted by Qualified Doctor/Certified doctor by government whereas the percentage in control areas was 54.1%. It was also found that 39.6% of the respondents in intervention areas & 33.2% of the respondents in the control areas were assisted by untrained TBA (traditional birth attendants), relatives and neighbors at home. Therefore there is lot of scope for the project to create awareness and promote institutional delivery.

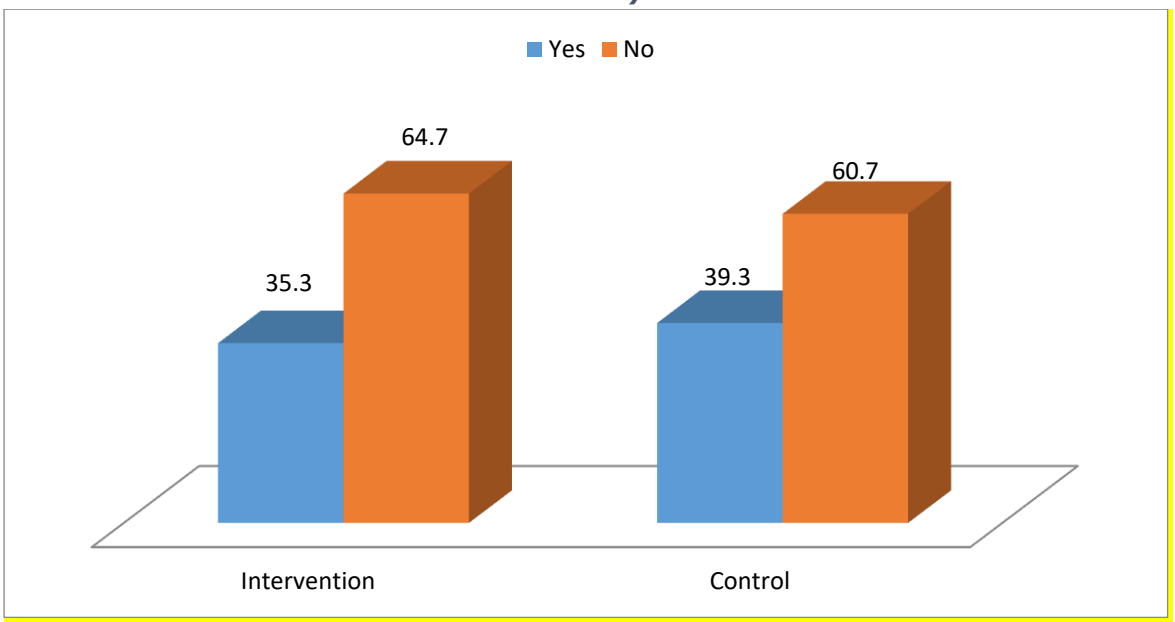
Table 12: Percentage Distribution of Persons Who Assisted with the delivery

	Intervention	Control
Qualified Doctor/Certified doctor by govt.	41.3	54.1
Nurse/Midwife/Paramedic	29.0	21.4
Trained TBA (traditional birth attendants)	7.7	19.2
Untrained TBA (traditional birth attendants)	11.3	13.1
Relatives & Neighbors	28.3	20.1
n	300	229

In Joypurhat, 22% of the respondents reported that their delivery was assisted by untrained TBA, relatives & neighbors, where in Panchbibi and Dhamoirhat the percentage was found to be 59% & 38% (Annex: Table 10).

35.3% of the respondents in intervention areas & 39.3% of the respondents in control areas found to be aware of how many times a recently delivered woman should take PNC.

Figure 9: Percentage Distribution of Awareness about How Many Times the recently delivered mother should take PNC (n: Intervention- 300 and Control- 229)



The percentage of respondents received PNC 4 times or more was found to be low. Those who have received PNC services received it from public sectors (Table 13).

Table 13: Percentage Distribution of Recently Delivered Women Received Number of PNC

	Intervention	Control
Number of PNC Received		
1 time	32.8	21.2
2 times	37.0	36.5
3 times	17.6	18.8
4 times and more	9.2	22.4
Don't know	3.4	1.2
Place where PNC received		
At Own home	0.8	21.2
Public Sector	92.4	80.0
Others	0.8	0.0
NGO Sector	0.8	2.4
Private Sector	31.9	28.2
n	119	85

During the FGD & KII sessions, the UH&FPO (upazila Health & Family Planning officers) CG (community group) & CSG (community support group) members stated that the current situation has improved and more than half of the pregnant women go to government health facilities for delivery. However, the community people stated that majority of the delivery take place at home if the situation of the pregnant woman found not complicated. If the complication arises then the people take the pregnant women to the government health facilities and other private clinics. Majority of the recently delivered women participated in the FGD reported that their delivery was assisted by trained or untrained birth assistants at home. The major reasons for not going to health facilities for delivery were found to be poor road condition & lack of credibility of the local government health facilities. The awareness and practice of taking PNC care were also found to be poor during FGD sessions. The community members reported that majority of the people are not aware of the importance of taking PNC and the practice of taking PNC care is also very low. Some of the respondents further added that the health assistants from different NGOs (BRAC, ASHA etc.) visit their home & provide basic PNC cares and advices.

Chapter Six: Hygiene Practice, Health Seeking Behavior & Vaccination

This section presents information on the hand washing practices, health seeking behavior and vaccination received by children.

6.1 Hand Washing Practice

Appropriate hand hygiene practices is defined as use of soap & water for hand washing before the four events (before preparing food, before taking food, before feeding children, and after defecation) in the past 24 hours preceding the survey. Table 14 provides information on reported hand hygiene practices of mother of under-5 children. The practice of hand washing with soap was found to be higher in intervention areas compared to control areas. However, it is also observed that except after defecation, the hand washing practice in other events was low in both intervention and control areas. The respondents participated in the FGDs and KIIs reported that now the community people are aware of importance of hand washing as well as hand washing occasions and agents to wash hand. But the practice of hand washing with soap is very poor. Thereby the project has the opportunity to work in this and inspire people to practice hand washing with soap.

Table 14: Percentage of mothers of under five children who reported hand washing practices with soap at different points 24 hours preceding the survey

Hand Washing Practice With Soap [10]	Intervention	Control
Before Eating	50.9	29.9
After defecation	89.6	78.4
Before Feeding Child	51.6	29.7
Before preparing food	37.5	27.1

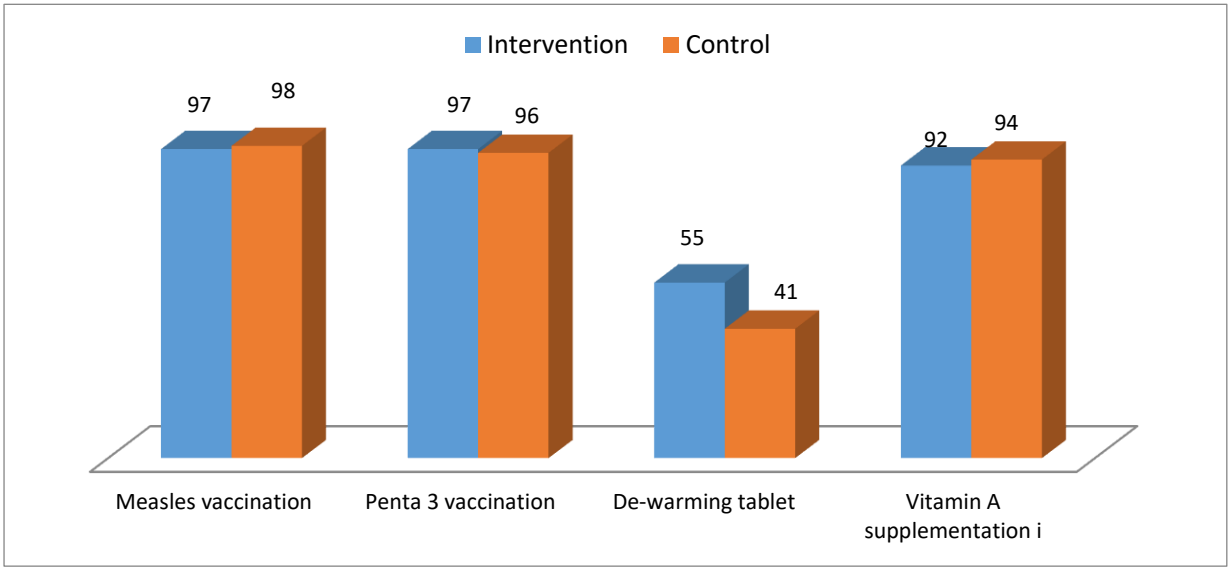
6.2 Vaccination & Vitamin A Supplementation

Majority of the children aged below 5 years received measles vaccination, Penta 3 vaccination, and vitamin A supplementation. On contrary, about half of the children received de-warming tablet. While investigating on why the percentage on receiving de-warming tablet is low, it was found that the supply of de-warming tablet is low in the community clinics thereby the community clinics are not being able to provide de-warming tablets as per demand of the community.

Similar situation was observed among intervention areas. Satellite clinic & community clinic were found to be major vaccination providers.

[10] Soap includes any kind of soap including hand wash, detergent

Figure 10: Percentage Distribution of Children Aged 12 months to 23 months Receive Vaccination, De-Warming & Vitamin A Supplementation



The community members and CG & CSG members during the FGD sessions stated that now people are well aware of the vaccination of children aged 0-18 months. They further added now community clinics provide vaccination card to all recently delivered women detailing out when and how many vaccinations will be needed for a child till the age of 18 months. Besides, the community facilitators also visit door to door to make people aware of vaccination of children.

We have taken numerous steps to make people aware of vaccination of children. The CC clinic provides vaccination cards to the parents of new born child. Besides, we do courtyard meeting and community facilitators visit door to door to make the people aware. Before Vitamin A campaign we also do announcement to inform people about the campaign.

-CG member

6.3 Participation in PD hearth Program & Growth Monitoring Promotion Program

Output:1.1 Implementation of growth monitoring for children aged 0-59 months and monitoring their health/ nutrition status

# of children aged 0-59 months participating in the GMP(Growth Monitoring and Promotion session)

Output:1.2 Implementation of PD/Hearth program for malnourished children aged 0-59 month

# of children participating in the PD/Hearth program

In case of both participating in PD/Hearth program and Growth Monitoring Promotion Program children's participation is negative. No one in any area has participated in both the programs. This is because the project has not initiated the PD/Hearth program and Growth Monitoring Promotion Program during the baseline data collection.

6.4 Health Seeking Behavior

Outcome 2: Strengthening partners(community facilitators, government bodies, WV staff)' capacity building on health &WASH in the community

Access to services from Government health facilities

It was found that the majority of the respondents had access to community clinic and family welfare center in terms of maternal and neonatal health care services (ANC & PNC), integrated Management of Childhood Illness (IMCI), Reproductive Health and FP services, health education & counseling and EPI (See table 15). 60% of the respondents in the intervention areas & 69% of the respondents in the control areas reported that they have access to different services from government health facilities. It was observed that the access and types of services available are higher in urban areas (Joypurhat Sadar) compared to other two intervention upazilas (Panchbibi & Dhamoirhat).

During the FGD sessions the community members mentioned some problems in access services from community clinic and family welfare center. The major problem was identified as the shortage of service providers. This was also acknowledged by UH&FPO (upazila health & family planning officer) participated during KII sessions as they feel the number of service providers is insufficient to provide the service to community people. Another problem raised by community members is absence of medicine. Although the community clinic is mandated to provide 30 types of medicines for free to community members, however in most of cases it was found that the medicines are not available. That is why they do not prefer to go to community clinics. Besides, community members complained that the service providers stay only 3 or 4 hours at community clinics therefore they do not get the opportunity to take services from these health facilities. Moreover, the service providers prescribed same medicine for different diseases that also

lowers the confidence of the community members about the services provided by community clinics.

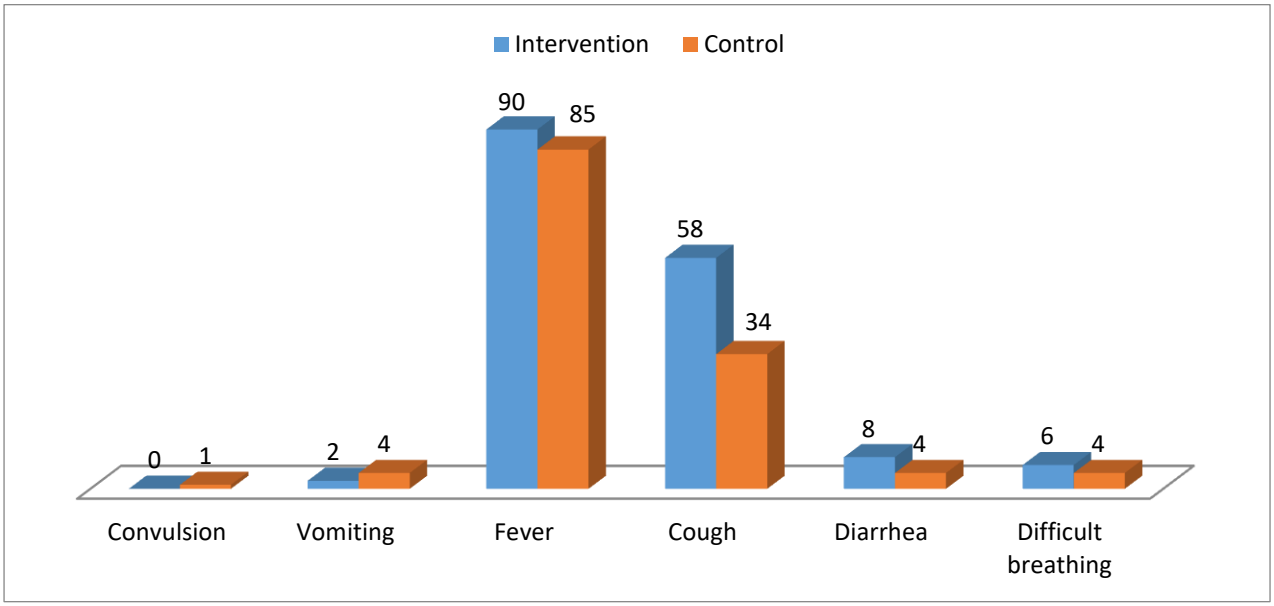
Table 15: Percentage Distribution of People having access to services in Government Health facilities

	Intervention				Control
	Joypurhat	**Panchbibi**	**Dhamoirhat**	**Total**	**Yes**
Maternal and neonatal health care services (ANC & PNC)	98	80	75	84	94
Integrated Management of Childhood Illness (IMCI)	84	53	56	64	86
Reproductive Health and FP services	87	80	79	82	90
EPI	94	67	76	79	92
Nutritional education and micro-nutrient supplements	75	18	27	40	44
Health education & counseling	91	62	62	72	72
Screening of Chronic Non Communicable Diseases	64	6	27	33	33
Treatment of minor ailments, common diseases & first aid	70	8	17	32	38
Composite Score[11]	**83**	**47**	**52**	**60**	**69**
n		900			700

41% respondents in the intervention areas and 20% of the respondents in control areas reported that their children had illness or any health problems in the last one month (Annex: Table 11). Those who reported yes further mentioned fever & cough.

[11] Composite score was calculated by summing up to access to all the services divided by total number of services provided by government health facilities

Figure 11: Percentage Distribution of the common health problems faced by children aged 0-59 months (n-Intervention 368, Control 141)



Those who had reported diarrhea and difficult breathing further mentioned in case of diarrhea the parents provide saline to the children. Regarding difficult breathing, the parents with visited hospitals or consult with doctor/health assistant (Annex: Table: 12 & 13).

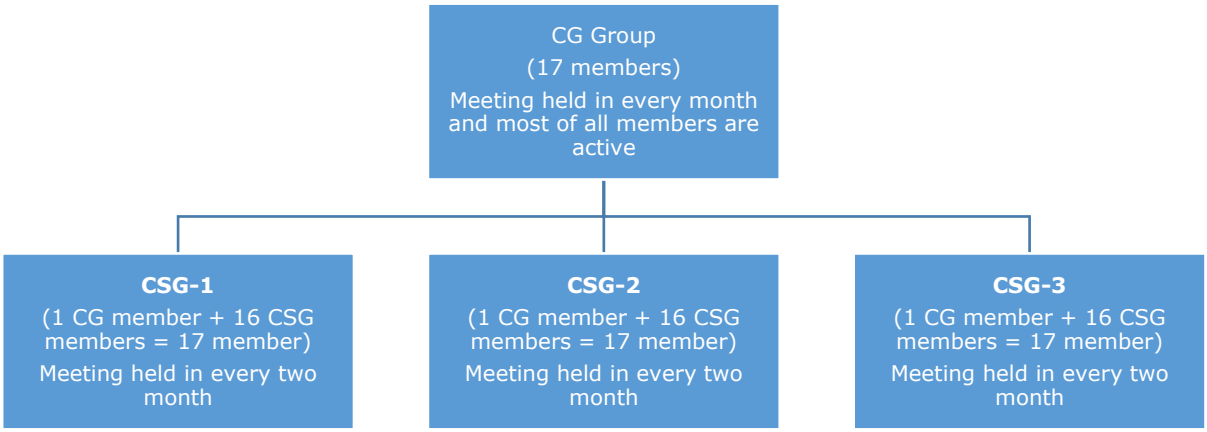
6.5 Number of CG (community group) & CSG (community support group) Functioned

Outcome 2: Strengthening partners(community facilitators, government bodies, WV staff)' capacity building on health &WASH in the community

Percentage of CG and CSG are functioned

During the FGD sessions with CG & CSG, it was found that for every community clinic there is one CG group and 3 CSG groups. This can be shown as below

Figure 12: Group Formation in every Community Clinic (CC)



Based on the discussion with the following assumption is made. It should be noted that all the CG groups were found to be functioned[12] and the members of CG regularly (once a month) attend the meeting and take notes on the discussion. This is because the members of CC groups are different community influential i.e. local government representatives, women representative from local government, teachers, religious leaders and others. These people regularly meet, discuss the action plans and follow up the progress of the actions.

Sl	Area Name	Number of CC	Number of Group		Total Member	
			Number of CG (1 CG group in 1 CC)	Number of CSG (3 CSG group work under 1 CG group)	Number of CG member (17 members per CG)	Number of CSG member (consist of 1 CG member + other 16 = 17 members per CSG)
1	Joypurhat Sadar	27	27	81	459	1377
2	Panchbibi	30	30	90	510	1530
3	Dhamoirhat	21	21	63	357	1071
TOTAL		**78**	**78**	**234**	**3978**	**1326**

On the other hand, the respondents stated although meeting held in every two months but majority of the members (around 60%[13]) of CSG are inactive. Investigating the reasons for inactiveness of the CSG members, it was found that majority of the members belong to different political groups. They are not interested in participating in meetings as well as follow up the activities. The project can work closely with the CSG groups in order to make these groups functional and hence increase the access of community people to the government health facilities.

[12] Number of CG and CSG those are formed and functioned according to the CC operation standard (Conduct monthly /bi-monthly meeting, Community Groups- keeping meeting minutes record with follow up actions.

[13] Findings need to be read with caution as the percentage was derived from qualitative finding and Nielsen checked the document in CC for one month during data collection period.

Chapter Seven: Income Generating Activities

This section presents information on knowledge & practice of vegetable gardening, poultry bird & livestock rearing, and non-agricultural income generating activities i.e. sewing machine, rickshaw/van, business, handicraft etc.

7.1 Knowledge on IGA Activities

Almost half of the respondents in both intervention & control areas claimed that they had some knowledge on poultry bird & livestock rearing (Table 16). The knowledge on vegetable gardening and non-agricultural activities was found to be very low.

Table 16: Percentage Distribution on Knowledge on IGA activities?

Knowledge[14]	Intervention	Control
Vegetable gardening	28.9	15.1
Poultry bird rearing	53.9	48.3
Livestock rearing	45.4	46.1
Non-agricultural income generating activities i.e. sewing machine, rickshaw/van, business, handicraft etc.	12.0	5.4
n	900	700

Those who claimed to be aware of the things need to do for vegetable gardening; mentioned about soil preparation (intervention: 92% and control 94%); (Annex: Table 13). On the other hand, the knowledge on other things (fertilizer, pest management, improved pit/bed preparation, weed management) was found to be low.

The respondents also mentioned that the things people have to do for poultry bird rearing are improved feed for poultry (Intervention: 87% & control: 73%) and diseases (intervention: 74% and control: 57%). Awareness on poultry house, vaccination & relevant service providers were found to be low (Annex: Table 14)

In case of livestock rearing, the respondents stated about improved feed and feed preparation and livestock diseases and disease management. When asked about the Non agriculture sewing machine, rickshaw/van, business, and handicraft, the respondents stated about the sectors where they can practice at HH level and importance of small business (Annex: Table 15,16)

[14] Top 2 box analysis was done to estimate knowledge. Those who had responded in somewhat & to a great extent were considered to have knowledge on the subject issue.

7.2 Household Capacity to do IGA Activities

It was found that the respondents are involved in poultry bird (66% in intervention, 68% in control) and livestock rearing (47% in intervention, 59% in control) whereas the practice of vegetable gardening (13% in intervention, 16% in control) and other non-agricultural work (7% in intervention & 9% in control) found to be low (Annex: Table 17).

Small proportion of the respondents reported that they have capacity to invest in IGA activities (Table 22). Those who claimed to have capacity to invest mentioned about poultry bird & livestock rearing.

Table 17: Percentage Distribution of Respondents Have Capacity to Invest in IGA Activities

Capacity to Invest[15]	Intervention	Control
Vegetable gardening	5.0	9.0
Poultry birds rearing	30.0	31.0
Livestock rearing	23.0	28.0
Non agriculture sewing machine, rickshaw/van, business, handicraft	4.0	5.0
n	900	700

The UAO (upazila agriculture officer) & ULO (upazila livestock officer) participated in the KII sessions stated that the majority of the people in the community are involved in agriculture and paddy, wheat, lentil are the main crops cultivated in the community. Besides, the people are also involved in poultry bird rearing specially hen & duck. The respondents identified several challenges that the community people face in doing vegetable gardening, poultry bird and livestock rearing and they are as follows

- Lack of asset
- Lack of technological knowledge on vegetable gardening and poultry and livestock rearing
- Lack of capital
- Lack of training for the community people
- Lack of access to local market and not get actual price after selling
- Lack of storage capacity in the community
- No fixed selling price by government on agricultural products

34% of the respondents from control areas and 58% of the respondents from intervention areas stated that they know how to manage or utilize resources and in case of both areas majority people do it with the help of other family members (61% for both).

15 Top 2 box analysis was done to estimate capacity to invest. Those who had responded in somewhat & to a great extent were considered to have capacity to invest.

Table 18: Percentage Distribution of Respondents Know how to manage asset/utilize recourses

Knowledge on how to manage asset	Intervention	Control
Yes	58	34
No	42	66
n	900	700

38%[16] of the respondents from intervention areas said that they are Economic Development group member (beneficiary) by KOICA WV Project, whereas no respondents from control areas said to be a part of such group (Annex: Table 18). It should be noted that the project has started before the baseline survey data collection and World Vision Bangladesh the list of primary beneficiaries had already done before the survey period.

Outcome 3: Improving behavior through supporting income generating activities

Percentage of underweight children among ED beneficiary's children under 5 years

Output:1.2 Implementation of PD/Hearth program for malnourished children aged 0-59 month

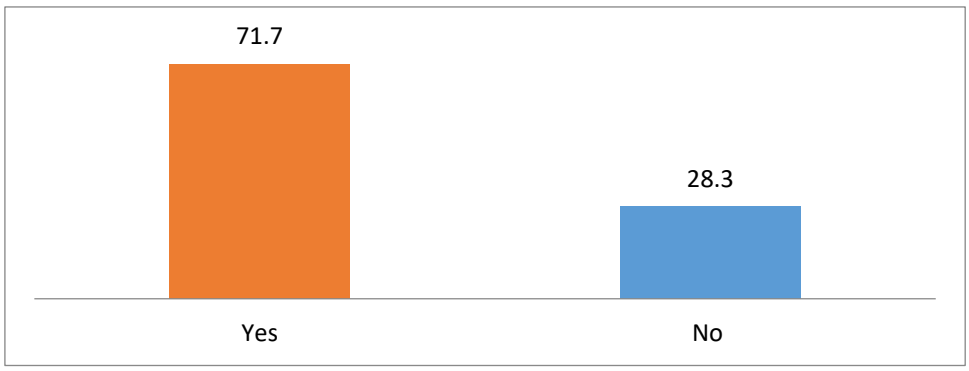
# of households who received assets

Number of beneficiaries receiving asset management training

A total of 346 ED beneficiaries were interviewed during survey and 237 children aged 0-59 months were found among ED beneficiary households. Out of 237 children, 37.55% children were found to be underweight.

71.7% (248 out of 346) stated that they received any sort of asset management training All the training receivers received the training from World Vision.

Figure 13: Percentage Distribution of ED beneficiaries received any asset management training (n: 346)



[16] It should be noted that the data was collected 4 months after the initiation of the project and by that time the beneficiary selection was done and some of the beneficiaries received asset management training and assets.

Whether the ED beneficiaries received any asset (farm & non-farm) from government or any NGO, all the beneficiaries (100%, 346 out of 346) stated affirmative. Almost all (99%) who claimed to receive assets mentioned that they received assets from World Vision Bangladesh (Annex: Table 19).

Table 19: Percentage Distribution of ED beneficiries received assets (farm & non-farm) support from government or any NGO

	Intervention
Yes	100
No	0
n	**346**

7.3 Awareness on KOICA & World Vision Bangladesh

It was found that all the government stakeholders (100%, 8 respondents) i.e. UAO (upazila agriculture officer), ULO (upazila livestock officer), UH&FPO (upazila health & family planning officer) and the community facilitators, CG (community group) & CSG (community support groups) members (100%, 51 respondents) & community members in intervention areas (100%, 40 respondents) are well aware of the activities of World Vision Bangladesh. According to them, World vision is working on maternal & child nutrition, sanitation, skill training and so on. They applauded the activities of World Vision Bangladesh and stated that the people have very positive perception about WVB and they are working in the field of maternal and child health & nutrition, sanitation, education, child marriage & so on. They also added that people will happily participate in the project run by WVB. However, the local government stakeholders stated that WVB should also focus on capacity building of the local of instead of only providing support to the poor people. This will help the people in the long run to generate sustainable income options.

However mixed response observed regarding awareness of KOICA. All the government stakeholders were found to be aware of KOICA as they came to know about KOCA by participating in KOICA Rajshahi Maternal & Child Health project training. On the other hand, about half of the CG & CSG members (53%, 51 respondents) and around 10% of the community member claimed to be aware of KOICA but did not have much knowledge on the activities of KOICA.

According to respondents, KOICA does not work directly in Bangladesh. They provide fund to execute different development projects. They applauded the initiative taken by KOICA as they feel this project would be able to improve the nutritional status of the mother and children of age below 5 years and also help the poor-ultra-poor people to engage in different income generating activities so that they can support their livelihood options and ensure minimum dietary diversity.

Chapter Eight: Conclusion & Recommendation

Findings from baseline survey depict that Rajshahi Maternal & child Nutrition project has chosen working areas where majority of the people live below poverty line. The household conditions, income, household possessions, and savings were found to be poor in the intervention areas.

One third of the children aged 0-59 months were found to be stunned (36%) and underweight (31%) where 18% of the children was found to be wasted in intervention areas. No visibility was found regarding the application of PD hearth guideline and growth monitoring of the children aged 0-59 months to ensure nutritional requirements of the children. Though exclusive breastfeeding was found to be satisfactory (77%) for the children aged 0-5 months, but minimum adequate diet intake according PD/Hearth guideline was found to be poor (21%) among the children aged 6-23 months. The minimum adequate diet intake was also found to be poor (33%) for the mothers with children aged 0-59 months.

Though the awareness (58%) was found to be high on the required number of ANC care a pregnant woman should receive but the proportion of recently delivered women received ANC care 4 times or more was also found to be poor (29%). Home was found to be common place for almost half of the recently delivered women (41%) for giving birth to which indicates lack of awareness and practice on the importance of institutional delivery. The assistance by untrained birth attendants during delivery was also found to be high. In addition, the practice of hand washing with soap was found to be low. The awareness and practice of receiving critical vaccinations and Vitamin A supplementation was found to be high among the children aged 0-59 months.

Regarding IGA activities, it was found that majority of the households had limited knowledge and practice on IGA activities as well as asset management and capacity to invest on IGA activities.

Since World Vision Bangladesh has worked on the first phase of the project in adjacent areas, the project personnel is very well acquainted with the local context & people as well as the challenges that they might face during the implementation of the project activities & thereby they can implement the project in a very cost effective way. The community people and the government stakeholders are well aware of the activities of World Vision Bangladesh and also have very positive perception about WVB. They are willing to participate in the activities of the project and building capacity of the stakeholders would help to ensure the sustainability of the project. It was also suggested by the government stakeholders that World Vision should focus on capacity building of the community people so that they can choose sustainable livelihood options for themselves. They further added that it would not be possible for World Vision Bangladesh to support all the poor people in the community so some people might spread negative word of mouth that KOICA & World Vision are Christian based organization and they are working in the community to covert people into Christian religion (Details SWOT analysis is provided in Appendix: C).

Based on the findings and discussions in above section below is the summary table highlighting the results of key indicators of the project are as

Table 20: Indicator Summary Table

Indicator	I	C	P value[17]	National & Rajshahi Level data[18]
Project Goal: Reduce the incidence of malnutrition in children under five years of age living in three Upazilas: Dhamoiraht, Phanchibibi, Joypurhat				
1) Prevalence of stunting in children under 5 years of age	36.1% (n 825)	29.7% (n 617)	P value=0.01*	N: 36% R: 31%
2) Prevalence of wasting in children under 5 years of age	18.2 % (n 825)	17.5% (n 617)	P value=0.73	N: 14% R: 17%
3) Prevalence of underweight in children under 5 years of age	31.0% (n 825)	23.7% (n 617)	P value=0.00*	N: 33% R: 37%
Outcome 1: Improve nutritional status of children under 5 years				
1) Proportion of children receiving exclusively breastfed until 6 months of age	77% (n 158)	79% (n 84)	P value=0.7	N: 55% R: NA
3) Proportion of mothers who report that they had four or more antenatal visits while they were pregnant with their youngest child)	28.8% (n 250)	21.9% (n 185)	P value=0.01*	N: 78% R: 76%
Outcome 2: Strengthening partners(community facilitators, government bodies, WV staff)' capacity building on health &WASH in the community				
1) Percentage of CG and CSG are functioned (A)	CG 100%, CSG 40% (n 42)	NA	NA	NA
2) Access to services from Government health facilities	60% (n 900)	69% (n 700)	P value=0.0*	NA
3) Percentage of children aged 6-23 months receiving minimum dietary diversify according to PD/Hearth guideline	21.3% (n 362)	25.6% (n 286)	P value=0.23	NA

[17] P value less than or equal to 0.05 denotes significant different exist between the result of intervention & control areas
[18] N denotes National, R denotes Rajshahi, NA denotes not available or not applicable

Outcome 3: Improving behavior through supporting income generating activities				
1) Percentage of underweight children among ED beneficiary's children under 5 years	37.55% (n 237)	NA	NA	NA
2) Proportion of children aged 6-23 months receiving minimum dietary diversity among the HHs who received IGA support	25.2% (n 143)	NA	NA	NA
3) Proportion of women receiving minimum adequate diet among the HHs who received IGA support	33.5% (n 346)	NA	NA	NA
Proportion of women receiving minimum adequate diet (B)	33.6% (n 900)	33.3% (n 700)	P value=0.90	NA
Output:1.1 Implementation of growth monitoring for children aged 0-59 months and monitoring their health/ nutrition status				
1)# of children aged 0-59 months participating in the GMP(Growth Monitoring and Promotion session)	O (n 825)	0 (n 617)	NA	NA
Output:1.2 Implementation of PD/Hearth program for malnourished children aged 0-59 month				
1)# of children participating in the PD/Hearth program	O (n 825)	0 (n 617)	NA	NA
Output:3.1 Support for income generation activity				
1) # of households who received assets	100% 346 out of 346 ED beneficiries	NA	NA	NA
2) Number of beneficiaries receiving asset management training	71.7% 248 out of 346 interviewed	NA	NA	NA
Output:3.2 Targeted HHs have capital to invest in their food production and income earning activities				
1) # of target HH that achieved their target saving amount for 3 consecutive months	18% 162 out of 900 interviewed	22% 154 out of 700 interviewed	P value=0.05*	NA

(A) The percentage of CG and CSG functioned was estimated through qualitative FGD sessions & it was conducted only in intervention areas. Therefore CI value is not calculated due to insufficient number o

(B) Though proportion of women receiving minimum adequate diet was not included in project log frame. It is included due to requirement from World Vision Bangladesh

The following recommendations has been made in light of the findings discussed above

- Awareness raising activities should be taken on the nutritional values of different food items, balanced diet, and nutritional requirement of children aged 6-59 months, pregnant women and mothers of children aged o-59 months.

- PD Hearth and growth monitoring sessions should be promoted to reduce the prevalence of stunting, wasting and underweight among children aged 0-59 months.

- Behavior change communication (BCC) should be taken on using improved sanitation facilities, critical hand washing occasions, hand washing agents, number of required visits for ANC & PNC care, importance of institutional delivery and delivery by trained birth attendants.

- Institutional delivery should be promoted to encourage people to take pregnant women to nearby health facilities.

- Ensuring the participation of the community members as volunteer in the awareness raising, monitoring of the results of the project would encourage them to actively participate in the project, prepare themselves as the role model in their communities as well as would capacitate them to carry the project activities in future.

- The project can also promote the case studies on different critical issues related to maternal & child health & nutrition so that people would be motivated to follow those learning.

- Focus should be given on Dhamoirhat & Panchbibi upazilas especially on the ethnic communities in order to ensure the achievement of project goals.

- Steps can be taken to make the CSG groups functioning in order to ensure the monitoring of the quality of service provided by government health facilities.

- Steps should also be taken to build capacity and promote the services of community clinics so that the pregnant women & recently delivered women would be motivated to take required number of ANC & PNC care from these clinics as well as would seek the assistance from qualified birth attendants during delivery of child.

- Training needs to be provided on how to do IGA activities using modern technology and in cost effective way so that the training recipient can generate income for their families and produce nutritional items to meet the nutritional requirements of the family members in cost effective way.

- Steps can be taken to build the capacity of local government stakeholders and community people to ensure the sustainability of the project results even after end of the project.

- Steps should be taken to create backward forward linkage so that the training recipient can have financial support and can have access to market channels to start and run the enterprise and sell their products.

Appendices

Appendix A: Percentage Distribution Table

Percentage distribution table is provided in separate word file and link is provided in table of content.

Appendix B: Sample Size Calculation

The quantitative technique was applied for collecting data at household level from the targeted respondents e.g. caregivers/mothers of children under 5, pregnant women and recently delivered women. The sample size for this study has been calculated using the Anthony G. turner's formula to identify the estimated sample size for interview

$$n_{h=} \frac{z^2 r(1-r)(f)(k)}{p\,(n)e^2}$$

Where,

n_h = Sample size to be calculated (in terms of number of households)

z = The level of desired confidence, Standard normal variate value at 95% confidence level I;e 1.96

r = an available estimate of a key indicator (here, children under 5 are stunted which is 0.36; source: BDHS 2014)

p = Proportion of the total population accounted for by the target population and upon which the parameter r is based = 12.01%

f = Design effect (deff), assumed to be 1.2

k = Multiplier to account for the anticipated rate of non-response (typically under 10% in developing countries, that is 1.1 can be used for the parameter, k – suggested by Turner) however considering the non-response rate at 10%, the parameter is also 1.1

n = Average household size (i.e. number of persons per household, in project areas it's 3.7 as per the information provided in the ToR.

To calculate the sample size, the survey indicators were considered that it would contribute to reach the expected outcome of the targeted population. Thus, taking 0.33 as P (here r; which is the proportion of the stunted children under 5), with permissible margin of error- e set at 5%, z at 1.96 (considering 95% confidence level), and design effect 1.2, the maximum sample size has been estimated at 1757.

Since the number of intervention and control areas were not equal (3 Upazilas from intervention & 2 Uapzilas from control), the samples size was further adjusted to 1600 (900 from intervention areas and 700 from control areas) in order to ensure representation from all cohorts.

Furthermore, the sample was distributed proportionately among the different categories of respondents. The sample distribution for different categories is shown in the table below:

Table 21: Sample Distribution (Respondent Type)

Respondent Type	Intervention area	Control area
Mother of under-five child	300	240
Recently delivered women	300	230
Pregnant women & Mother of children <2 years	300	230
Total	**900**	**700**

Sample Selection Procedure:

- From each upazilla, three unions were selected randomly.
- From each union, 3-4 villages were selected
- These villages were selected as cluster.
- The villages of each union were divided into 2/3 blocks consisting of 200-250 households. 2 blocks were selected by lottery and the interviews took place.
- If the sample was not covered from the selected block, the study went for more blocks/villages to cover the sample.
- For selecting the household with children under five the study team knocked each alternative household (Considering the number of household and number of under 5 children) and if the eligible respondent was available the interview took place

Appendix C: SWOT Analysis

Strength	Weakness
• The project personnel are well aware of the context & people as well as the challneges. • Project personnel would be able to excute the similar model and learning implemented in phase I • Srong regional presence of Worls Vision Bangladesh • Community people & different stakeholders are familiar with the activities of WVB and this reputation would motivate them to participate in the project activities	• All the poor & ultra-poor people would not be possible to reach due to resource limitation • Lack of primary care network
Opportunity	**Threat**
• Community people are willing to participate in the project as they percieve this project would improve the nutritional status of the mother and children of age below 5 years and also help the poor-ultra-poor people to engage in different income generating activities so that they can support their livelihood options and ensure minimum dietary diversity. • The government stakeholds are willing to collaborate with World Vision Bangladesh in providing support and training. • Capacity building of the government stakeholders would ensure sustainability of the project even if the project has been closed • Learning from phase I, would enable World Vision Bangladesh to impment the project in more cost effective way.	• Political turmoil especially the upcoming national election might hinder the progress of the project • Lack of funds or sudden budget cut • Religious barrier as this project is funded by Christian based organization.

Appendix D: Project Goals & Indicators

The project has set some goals & indicators for phase II of and below is the list of goals and indicators set for the phase II of the project as

	Goal and Outcomes	Indicators
Project Goal:	Reduce the incidence of malnutrition in children under five years of age living in three Upazilas: Dhamoiraht, Phanchibibi, Joypurhat	Prevalence of stunting in children under 5 years 2) Prevalence of wasting in children under 5 years 3) Prevalence of underweight in children under 5 years
Outcome 1	Improve nutritional status of children under 5 years	1) Proportion of children receiving exclusively breastfed until 6 months of age 2) Proportion of mothers who report that they had four or more antenatal visits while they were pregnant with their youngest child) 3) Percentage of children achieving + 400g within 30 days of participating in the PD/Hearth program
Outcome 2	Strengthening partners(community facilitators, government bodies, WV staff)' capacity building on health &WASH in the community	1) Percentage of CG and CSG are functioned 2) % increased access to services from Government health facilities 3) Percentage of children aged 6-23 months receiving minimum dietary diversify according to PD/Hearth guideline
Outcome 3	Improving behavior through supporting income generating activities	1)Percentage of the underweight children aged under 5 of the households benefited project income generation interventions 2)Proportion of children aged 6-23 months receiving minimum dietary diversity among the HHs who received IGA support 3)Proportion of women receiving minimum adequate diet among the HHs who received IGA support
Output:1.1	Implementation of growth monitoring for children aged 0-59 months and monitoring their health/ nutrition status	1)# of children aged 0-59 months participating in the GMP(Growth Monitoring and Promotion session

Output:1.2	Implementation of PD/Hearth program for malnourished children aged 0-59 month	1)# of children participating in the PD/Hearth program
Output:2.1	Capacity building on health/ WASH/ nutrition behavior change	1) # of HH orientation session (where primary caregiver is oriented with maternal health care) conducted by CF(community facilitators)
Output:2.2	Conduct CVA training for community group	1) Number of CVA groups conducting health centre monitoring activities over 3 months
Output:3.1	Support for income generation activity	1) # of households whose assets are distributed 2) # of persons acquired training
Output:3.2	Targeted HHs have capital to invest in their food production and income earning activities	# of target HH that achieved their target saving amount for 3 consecutive months