Report

on

Baseline Survey of

Strengthening Women's Ability for Productive New Opportunities - SWAPNO Project (Household Part)

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PMID
Participatory Management Initiative for Development

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Annexure:

Acronyms

ASA-	Association for Social Advancement
BMI-	Body Mass Index
BRAC-	Bangladesh Rural Advancement Committee
CPI -	Consumer Price Index
FCS-	Food Consumption Score
FGD-	Focus Group Discussion
MDG-	Millennium Development Goals
MoLGRDC-	Ministry of Local Government Rural Development & Cooperatives
MPI-	Multi-dimensional Poverty Index
PPP -	Purchase Power Parity
RCT-	Randomized Control Trial
RDRS-	Rangpur Dinajpur Rural Services
REOPA-	Rural Employment Opportunities for Public Assets
SSC-	Secondary School Certificate
TV-	Television
UNDP-	United Nations Development Program
UP-	Union Parishad
VGF-	Vulnerable Group Feedings
WHO-	World Health Organization

Executive Summary

Introduction:

As part of multifarious government programs on social safety nets, *Strengthening Women's Ability for Productive New Opportunities (SWAPNO)* Project was launched in 2015 with the objective of achieving sustainable exit from extreme poverty with a focus on future scope of employment. The cycle for cash-for-work employment in public works for extreme poor women was 18 months. In order to achieve the project outputs, Local Government Institutions would need increased capacities and improved management skills, with particular attention to their responsiveness to the needs and demands of the poor. The improved capacity through various capacity development initiatives will promote good governance in implementing social transfer programs and pro-poor & gender-sensitive service delivery with respect to accountability, responsiveness and inclusive development.
The objective of the Baseline study was to establish benchmark of the prevailing situation before the introduction of the project interventions to serve as the basis for impact assessment. The assignment consisted of conducting a Household Baseline Survey and UP Capacity Baseline Survey.

Methodology:

The Baseline study design comprises two sub-populations: intervention and control from the same union using randomized control trial (RCT) study design. The impact of the study would be assessed by comparing this baseline with the survey to be conducted after completion of the 18-month long intervention program. Under this survey a stratified two-stage random sampling was considered. At the first stage, 20 Unions (UPs) were selected randomly within each stratum (district). From each UP, a random sample of 20 disadvantaged women was selected for household survey for intervention group. A random sample of 10 disadvantaged women from the same union was chosen for control group. Households were the basic unit from which information was collected for household survey.

For determining the sample size for household survey, the confidence interval approach for proportion was used for each district separately. Assuming the confidence level at 95%, a desired precision level of 5% and non-response adjustment rate of 5%, the sample size was determined to be 400 for each of the Kurigram and Satkhira districts. Half of the sample size (200) of the intervention group was considered for control sample size for comparison purpose. Thus, a total of 1,200 samples planned both from Kurigram and Satkhira though actually 1,201 households were interviewed.

Demographic and socio-economic characteristics of the target population:

Almost all disadvantaged women interviewed as respondents in intervention households were less than 50 years old including more than a half having less than 40 years. Most of them were widow or separated or divorced indicating that they were vulnerable from socio-economic point of view. Marital status of household members showed that large proportion

was either widow or separated or divorced (46%). They had poor educational background with about 80% of whom never attended any school.

Compared to the national average household size of 4.5, the surveyed women were maintaining small family size of average 3 in intervention households. The male to female ratio was quite low, 52 men against every 100 women. Likewise, demographic dependency ratio was low since majority of household members were in the 15-59 age group.

Literacy rate among household members was as low as 52%. Satkhira seemed to be better than Kurigram in this respect. Proportion of no schooling was also high. About 15% school-age children were still out of school and about 5% were either irregularly or not at all attending schools mainly due to inability of households to bear their educational expenses. Household members were found to be basically engaged in 3 income earning occupations: non-agricultural labor, agricultural labor and maid servant, all of which were low paid activities. Non-agricultural labor basically include earth work along with rice processing, brick manufacturing work, fish cultivation, puffed rice making, quilt (*Kantha)* stitching, different handicrafts making etc. In spite of their low income, they were basically the main bread earner for the family.

Ownership of Household Assets:

Slightly over 40% households owned only homestead land having 4 decimal on an average. Personal ownership of cultivable land was almost absent. Hence about 60% were landless. About one-fifth of the surveyed women had no dwelling house of their own; as such they lived in other's house. Moreover about two-fifths lived in houses made of straw/bamboo/earth which were vulnerable to cyclone and remaining three-fifths lived in tin-shed houses. For cooking purpose they mostly used straw/leaves and cow- dung. Access to electricity was limited to only 15% with only 3% owning TV. No one was found having refrigerator and motor cycle though sizable number of households owned mobile phone (42%) and bicycle (8%). The average value of the movable assets they owned was low, about Tk. 6,000.

About 17% were affiliated with GO/NGOs other than SWAPNO out of which BRAC, RDRS and Grameen Bank were the major organizations. However, large majority of them were affiliated with local level organizations and UPs. The main purpose of their affiliation was : to get loan and savings, government services such as vaccination for livestock and birds, safety net support etc. A limited proportion was found to have received training.

Household Income, Expenditure and Savings:

The average number of earning members was 1.4 in intervention and 1.5 in control households with average monthly household income was to the tune of Tk. 2,126 (SD = 1252.86). The average monthly household income for intervention and control group were Tk. 2,059 and Tk. 2,260 respectively. The per capita monthly income for population in intervention and control households were Tk. 779 and 781 respectively. This means that they were

involved in rudimentary activities from where earning was low. Distribution of monthly household income showed that about 84% and 78% households in intervention and control group respectively earned less than Tk. 3,000 a month. In control group of Satkhira district 18.5% households even earned less than Tk. 1,000 a month. Monthly above Tk. 5000 was earned by only 3% households. Composition of household income showed that non-agricultural labor including domestic help, earth cutting, construction and repair works, were the main sources of income contributing 53% of total income in intervention households followed by agricultural labor (19%). Other sources, such as small business, personal support/gift, cottage industry, rickshaw /van etc. were not significant. The average monthly expenditure was estimated at Tk. 2,666 in intervention households (per capita per month Tk. 886). Presumably, expenditure on food was the major household head of expenditure. About three-fourths of the total household expenditure were spent on food by intervention households. Expenditure in other categories, such as health care, education, clothing, etc. was lower, less than 5% each.

Average propensity to consume (apc), the ratio between the average monthly household consumption expenditure and the average monthly household income, was calculated for households of each income group. For households with less than Tk. 1,000 as income, the average propensity to consume (apc) was 1.09 in intervention households. This means that their average consumption expenditure was more than their income. As the income goes on increasing, the apc comes down. The apc for intervention group declined as the income had increased. This was very much visible in Kurigram district and among the whole sample population. However, apc does not fall below 1 .00 as the income are not unusually very high for any income group. In order to draw solid conclusion there should be cross section of households with higher number of samples. In spite of their low income, many of them had some savings mainly in cash and with *Samitees*.

Poverty and Vulnerability:

Poverty was calculated using head count ratio based on per capita per day income and multidimensional poverty index (MPI). Using the upper and lower poverty levels for rural areas of Rajshahi and Khulna divisions as obtained from the 2010 Household Income and Expenditure Survey and the Consumer Price Index, poverty level in Kurigram and Satkhira districts was estimated. About 98.0% and 98.5% intervention households from Kurigram and Satkhira were found poor including about 95.8% and 96.0% households were found extreme poor respectively. There were no remarkable variations in poverty between intervention and control households.

Poverty gap measures the distance of the poor households from the poverty line. The estimated normalized poverty gap for entire population is 64.1%. This gaps were 64.2% and 63.9% for population in intervention and control households. The normalized poverty gap for intervention households in Kurigram and Satkhira district were 62.3% and 66.1%. It means intervention households would require more than 60% increase of their income to

escape from poverty. The squared poverty gap among intervention household in Kurigram and Satkhira was 43.5% and 45.1% respectively.

Multidimensional poverty is made up of several factors that constitute poor people's experience of deprivation – such as poor health, lack of education, inadequate living standard, etc. A person is considered poor if they are deprived of at least a third of the weighted indicators of MPI. According to multi-dimensional poverty index (MPI) over all incidence of poverty is (i.e. MPI poor, H) 60.7%. It means 60.7% population of the study districts are multi-dimensionally poor (MPI poor). The overall intensity of poverty is (i.e. A) 46.04% which means peoples are poor in 46.04% indicators of MPI. Finally the overall MPI (HxA) is 27.66% which means about 28.0% population are poor in all the 10 dimensions of MPI. Poverty situation was found high in Satkhira district as compared to Kurigram district. Overall MPI poverty was high among intervention groups than control group.

Multifarious vulnerabilities and shocks faced by women have been categorized into two broad groups: common shocks and personal/individual shocks. It appears that among the common shocks food deficit and unemployment were the main faced by 85.0% and 74.0% intervention households respectively in the last 12 months preceding the survey. Other common shocks were flood/draught/excessive rain, less production, dearth of drinking water, salinity in coastal areas, river erosion, etc. Among individual shocks, sickness of household members was faced most commonly, by more than 60% households. Other personal shocks were loss of livestock animals and poultry birds, death of household members, funerals and divorce/separation, etc. Different shocks were faced in different times of the year.

Food deficit was almost a permanent phenomenon in large number of households (85%). But in the months of *Ashar, Srabon*, Ashwin and *Kartrik* it occurred most. In the months of *Ashar* and *Srabon* large number of rural people do not have any job/work. As a result, their purchasing power declines. Hence they face food deficit. Months of *Ashwin* and *Kartrik* coincide with the pre-harvesting season of *Aman* rice when also many people do not have any work. Moreover during this time food price generally rises. So food shortage deepens.

Coping strategies as adopted by households for facing varieties of shocks were divided into two broad categories: injurious and resilience strategies. It appeared that the households in the study mostly used injurious strategies for facing such shocks as unemployment, sickness, flood/excessive rain, death of household members particularly earning members, shortage of drinking water, etc. In injurious strategies the poor women were compelled to take loans from shopkeepers/money lenders at high rate of interest, sell assets and business capital, skipping/adjustment meals, mortgage of farm land, avoidance of treatment, etc. On the other hand for tackling loss of livestock and poultry birds resilience strategy was mostly adopted by intervention households.

Morbidity and Treatment:

Majority of household members (60%) suffered from diseases either one or more times during the last 12 months prior to field work. They sought health care treatment from 3 major sources: village doctors (56%), MBBS doctors (20%) and pharmacies (10%). Other insignificant sources were: quack, community/satellite clinic, kabiraj, BRAC service center etc. It appeared that more than 20% households did not have any treatment from registered doctors due to high cost, long distance from home and non-availability of doctors in his/her workplace.

About 20% households reported deaths in their households during the last 5 years prior to field work of which a large majority lost their husbands during this time. Heart attack, cancer, old age disease, and stroke were the main killers.

Tube-well was the main source of drinking water across all study districts. It is also worth mentioning that quite large proportion in Satkhira used pond water and rain water for drinking purpose though a good numbers of tube wells were arsenic contaminated in both districts. However, about one-fourth of the intervention households did not know whether or not their tube-well water was arsenic contaminated. Almost all intervention respondent HHs in Kurigram (98.7%) had access to clean/safe drinking water which was lower (91.5%) in Satkhira. As far as sanitation is concerned, large majority of households (about 80%) had own latrines, mostly slab latrine.

Food Security and Nutritional Status:

Various food items were taken by household members, of which rice was the staple food, usually being taken more than once daily. Rice was usually taken with vegetables and sometimes with fish. The average number of days that the respondents took vegetables, fish/dry fish and lentil, were 5.1, 2.4 and 1.6 respectively in the last week preceding field work. Meat/chicken and milk/dairy products were consumed less frequently. In spite of that there was food shortage almost in every household (95%) in last year prior to field work. The comparable proportion in control households was about the same (96%). Food shortage was experienced in the rainy season particularly in *Ashar* & *Srabon* and *Ashwin* & *Kartrik*, when there was less job opportunity in rural areas.

Using Food Consumption Score (FCS), a composite score based on dietary diversity, food frequency, and the relative nutritional importance of different food groups, surveyed households were categorized as either poor, borderline, or acceptable food consumption. According to food consumption score about 18.1% intervention households and 15.7% control households were food poor. Another 46.0% intervention and 43.9% control households were in borderline of consumption who could also be regarded as food poor. Thus the proportion of food poor was 64.1% and 59.6% among the intervention and control households in the total sample respectively. According to head count ratio poverty rate was 98.2% in intervention households, but as per food consumption score the rate was 64.1%. It

is to be noted that FCS is based on only incidence of taking some specific items of food in the last week preceding the interview. But no data on quantity of food was collected. Probably this was the reason why FCS provided so high rate of non-poor.

Household food security had been assessed following the HIAFS tools which employs a set of 9 questions related to consumption pattern and food availability status of households in the last one month preceding the field survey. It appears that most of the intervention households (93.6%) in the total sample were food insecure with about 41% being severely food insecure. Control households showed about the same proportion of household food insecurity (94.5%). About 60.4% and 55.0% population were severely food insecure in Intervention and control group is Satkhira district. By contrast 68.9% and 69.2% households were moderately food insecure in intervention and control group of Kurigram district. Broadly food security situation was comparatively little better in Kurigram district than people living in Satkhira district.

Nutritional status of women using their Body Mass Index (BMI) and under 5 children using their height, weight and age, was assessed in the Baseline study. According to BMI measure, about 70% women in intervention households were not malnourished while the remaining 30% were malnourished. Nutritional status of under 5 children showed that about 36% of the under-5 children were stunted either severely or moderately with 11% being severely stunted in intervention households. In control households proportion of stunted children was somewhat lower. As far as underweight was concerned, about 42% of the children were underweight with 17% being severely underweight. On the other hand, about 30% were wasted with 11% being severely wasted in intervention households. The nutritional status of women and under 5 children was about the same in control households.

Violence, Harassment, Empowerment and decision making:

About 7% intervention and 6% control households became victims of violence. In Satkhira district women were more likely to be affected by violence. Various types of violence had been reported: physical abuse, noises, quarrel, mental torture, threat, sexual oppression etc. Most of the women knew where they should go for redress: UP, Police Station (Thana), hospital, court etc. About 11% and 12% intervention and control household members respectively were harassed in the last 12 months. Incidence of harassment was also higher in Satkhira than in Kurigram. Most common type of harassment was misbehavior and cheating. Women had control over income and savings, but it was difficult for them to have control over immovable property. It was reported that women could easily go from one place to another though for distant location they needed help from someone.

Women in the SWAPNO Baseline study were largely found to have participated in decision making on diversified family matters. About 95% women in intervention households participated in decision making process with other household members on services to be obtained from different agencies. Likewise they participated in income generating activities, purchase and sale of livestock and poultry birds, house construction, purchase and sale of

vegetables, health care for children, votes in election, etc. There were also some issues on which the women were reluctant to participate such as in school management committee, participation in village court, education and training, meeting, etc.

Women were largely aware of their property rights and basic citizen rights. A large number of them were aware of legal support provided by government agencies and civil society organizations, health care services provided by government, and minimum age for marriage. They were largely aware of the services provided by local government agencies through different types of safety net programs/services targeted to the rural poor.

Based on the above discussion, it can be said that women interviewed as respondents were destitute and disadvantaged having poor educational background. They were involved in basically 3 occupations: maid servant, agricultural and non-agricultural labor from where they had low income. Moreover during lean period many of them remained unemployed. They had minimum asset having low income. They were easily vulnerable to natural and man-made shocks and had been suffering from food insecurity and malnutrition. Their main problem was the year round employment for which they should be given livelihood and skills training in some common trades catering to the local needs. Also there were almost no differences between intervention and control households with respect to their demographic and socio-economic conditions including income, expenditure, savings, consumption and food security etc.

Chapter 1: Introduction

1.1 Background:

For the successful implementation of Rural Employment Opportunities for Public Assets (REOPA) project by the Local Government Division (LGD) of MoLGRD&C from 2007 to 2011, UNDP has designed the project "Strengthening Women's Ability for Productive New Opportunities'' (SWAPNO) following a state-of-the- art graduation strategy that aims at beneficiaries' sustainable exit from extreme poverty with a focus on future scope of employment. SWAPNO is delivered in concert with a social protection policy support program at the entry point of the project through an 18 months of cash-for-work employment program in public works, in addition to building human capital for extreme poor women. It envisages a delivery mechanism that combines government ownership, transparency/ accountability and development impact having graduation out of poverty combined with building public assets. Moreover, the project will enhance good governance at local level and develop capacity of local government institutions through addressing a number of key actions during the intervention of the project.

The first set of key actions addresses the conventional financing constraint that limits the scope of programs implemented by non-state actors by leveraging community asset development to generate the returns that justify subsequent investments in asset transfers. A second set of activities will provide a package of technical assistance for enhancing productivity, employment generation and income. A third set of activities will work to build the capacities of both implementing institutions as well as the participating women and the fourth set of activities will include the implementation of schemes to address the challenges posed by climate change and reduce risks associated with natural disasters.

In order to achieve the project outputs, Local Government Institutions will need increased capacities and improved management skills, with particular attention to their responsiveness to the needs and demands of the poor. Strengthening local government capacity not only supports effective project implementation but also strengthens a range of service delivery mechanisms. The improved capacity through various capacity development initiatives will promote good governance in implementing social transfer programs and pro-poor & gender-sensitive service delivery with respect to accountability, responsiveness and inclusive development.

1.2 Purpose of the Baseline Survey:

The baseline study serves as a starting point of reference against which the progress, achievements and success of the project would be subsequently measured, would provide a sound basis for assessing the project's progress and achievements by comparing not only between 'before-after', but also between 'intervention-control' scenarios. Furthermore, the baseline study would provide a situation analysis of existing scenario of the project that would assist the project management to determine the priorities accordingly for revising the operational plan, in case of necessity.

1.3 Objectives of the Baseline Survey:

The objective of the study was to establish benchmark of the prevailing situation of the project before the introduction of the interventions to serve as the basis for impact assessment of the project's interventions. To achieve the objective, two studies were conducted simultaneously i.e. Household Baseline Survey and UP Capacity Baseline Survey.

This report focuses on the Household Baseline Survey based on collected data from the districts of Kurigram and Satkhira, two different regions of Bangladesh. For UP assessment separate Report has been prepared.

Chapter 2: Methodology

2.1. Survey Location

The study was carried out in 124 sample unions of Kurigram and Satkhira districts. Seventy unions were from Kurigram district and the remaining 52 from Satkhira district (Table-2.1). Each of the sample unions had both intervention and control households. From intervention category 20 beneficiary women were selected and from control category of the same union 10 women were selected out of a list of 36 beneficiaries selected by the concerned UP. The survey location was in Kurigram and Satkhira districts for data collection.

Table 2.1: District wise distribution of union

Districts	No. of unions	Beneficiaries
Kurigram	72	2,592
Satkhira	52	1,872
Total	124	4,464

2.2. Household Baseline Survey:

2.2.1. Study Population:

Thirty six disadvantaged women in each union were the primary beneficiaries totaling (124 x 36) = 4,464 beneficiary households. The study was designed on randomized control trial (RCT), according to which both intervention and control households were selected randomly from the same population of an area. The intervention program carried out among the beneficiary groups compared with the control group. It may be stated here that the impact of the study will be assessed comparing this baseline with the end line survey, to be conducted after completion of the 18-month 'long intervention program. For household survey the disadvantaged women and their household members in these 124 unions comprised the study population.

2.2.2. Sampling Plan

For better representation of the study districts, a stratified two-stage random sampling was considered for sampling plan in which the districts corresponded to strata. In each district (stratum) a two-stage random sampling procedure was considered. At the initial stage 20 Unions (UPs) were selected randomly within each stratum (district). From each UP a random sample of 20 disadvantaged women were chosen for household survey for intervention group and a random sample of 10 disadvantaged women from the same union were selected for control group. Households were the basic unit from which information was collected for household survey. All members of the randomly selected households from intervention group were considered as samples for calculation of BMI.

2.2.3. Sample Size Calculation

For determining the sample size for household survey, the confidence interval approach for sample size determination for proportion was used within each district. The formula is as follows:

$$n = \frac{Z^2.p(1-p)}{d^2}$$

where,

p= proportion of beneficiaries expected to be benefited by the SWAPNO project,

Z= Standard Normal value associated with confidence level (at 95% confidence level, Z=1.96),

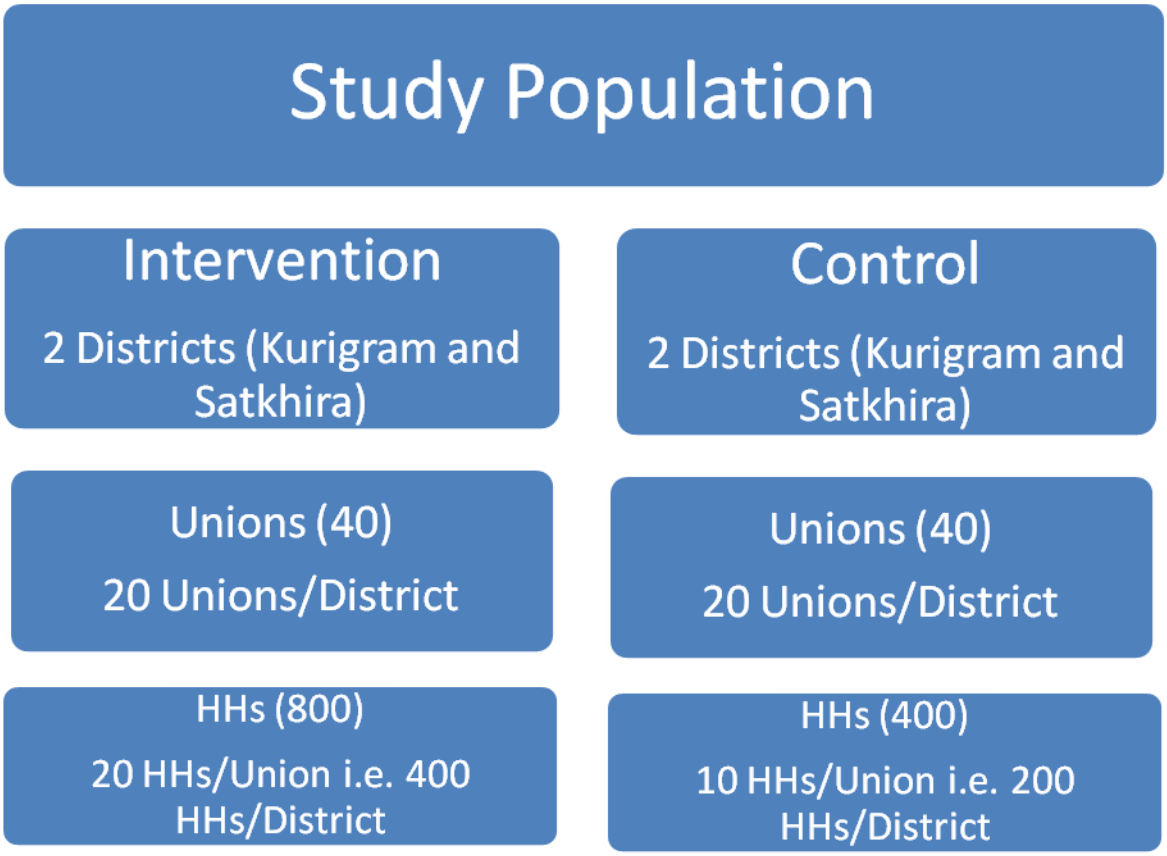
d= desired precision level i.e. maximum permissible difference between the sample statistics and population parameters which is considered at 5% (0.05).

In this study p is considered as unknown parameter. So, p = 0.5 (i.e. 50%) which gives maximum sample size by using the above formula. Putting the values of the variables in the formula we get 384 as the sample size for any study population. Considering about 5% non-response error the final sample size was increased to 400 per stratum or district. Finally a total of 800 samples were considered for intervention group in two districts, validated by statistical judgments. For comparison purpose, half of the sample size (400) of the intervention group was considered for control sample size (200) from each district.

2.2.4. Sample Distribution

The stepwise sample size distribution is illustrated below. For intervention group from every randomly selected union a sample size of 20 was considered. Finally from 20 randomly selected unions in each district or stratum a total sample of (20 x 20) or 400 were selected. From two districts (400 x 2) =800 samples were selected in this baseline survey for intervention group.

Similarly from the same 20 randomly selected unions in each district a total sample of (10 x 20) or 200 were selected for control group. From two districts (200 x 2) =400 samples were selected in this baseline survey for control group. In a diagram this sampling distribution is given below.



In order to obtain in-depth data relating to opinion and attitude of women, a total of 10 FGDs, 8 from Kurigram and 2 from Satkhira districts were conducted. Each FGD consisted of 10-15 beneficiary women.

The following is the Report for the Baseline survey consisting of 9 chapters including (1) Introduction and (2) Methodology. The remaining chapters are (3) Demographic and Scio-economic Profile of Study Population, (4) Ownership of Household Assets, (5) Household Income, Expenditure and Savings, (6) Poverty and Vulnerability, (7) Morbidity and treatment, (8) Food Security and Nutritional Status, and (9) Violence, Harassment, Empowerment and Decision Making.

Chapter 3: Demographic and Socio-economic Profile of Study Population

In this chapter the demographic and socio-economic characteristics of respondents and household members have been described with respect to age, household size, sex ratio, marital status, occupation, educational attainment, etc. of women and household members. It was observed that there were no substantial differences between women of intervention and control groups with respect to the demographic and socio-economic characteristics.

3.1 Characteristics of respondents

Almost all women interviewed as respondents in the SWAPNO Baseline survey were less than 50 years of age including more than a half having less than 40 years indicating their physical and mental ability to conduct labor intensive activities such as rural road maintenance and social resource building (Table 3.1). Control households show almost the same age distribution. No significant difference in age has been found between intervention and control households. Distribution of women by districts shows that 98.5% women in Satkhira and 93% in Kurigram were less than 50 years of age. Thus it can be said that almost all women in intervention households would be able to provide physical labor for road maintenance and other relevant activities.

Table 3.1: Age of respondents in percentage

Age group	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Less than 30	11.0	15.4	21.0	19.1	16.0	17.2
30-39	35.5	34.8	39.5	38.7	37.5	36.8
40-49	46.5	47.8	38.0	36.7	42.2	42.2
50+	7.0	2.0	1.5	5.0	4.2	3.7
Total (n)	400	201	400	200	800	401

Respondents selected for the SWAPNO Baseline survey were mostly widow or separated or divorced across all the study areas both for invention and control groups. For example about 91% and 85% respondents from intervention and control households respectively in the total sample belonged to this category. This means that they are vulnerable from socio-economic point of view. On the other hand only 8.5% women in the intervention households were married with disable or sick husband. The similar proportion in control households was a bit higher at 13.5%.The table also shows no discernible variation between two groups of sample. Distribution of data shows that proportion of widow or separated or divorced were predominantly high (91%) in each of Kurigram and Satkhira districts (Table 3.2). Statistically there is no significant difference in marital status of women between intervention and control households.

Data reveals that the number of women married before the age of 18 were 18 and 10 in case of intervention and control household respectively. In other words they were married at under age. Moreover, 3 of the women were deserted in intervention area.

Table 3.2: Marital status of respondents in percentage

Marital Status	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Unmarried	0.8	0.5	0.8	2.0	0.8	1.2
Married with disable & sick husband	8.5	11.4	8.5	15.6	8.5	13.5
Divorced	22.8	17.4	22.5	16.6	22.6	17.0
Widowed	51.5	51.2	34.0	35.2	42.8	43.2
Separated/deserted	16.5	19.4	34.2	30.7	25.4	25.0
Total (n)	400	201	400	200	800	401

In spite of conducting multifarious programs for enhancing literacy by GO/NGOs, literacy among the disadvantaged women was still low in study districts. Proportion of women attending schools was also low. As shown in Table 3.3, about 95% women interviewed in both intervention and control households had either no schooling or incomplete primary education basically due to poverty. Women having some secondary level education was only 4% in intervention households and 3% in control households. Distribution of data by district shows that women of Kurigram intervention area had worse situation with 87% women never attending schools. Percentage of women with incomplete primary education was about 11%, while about 2% were with complete primary or above level of education (Table 3.3). Thus, women interviewed as respondents had low educational background. There were no significant variations between intervention and control households with respect to educational background.

Table 3.3: Educational attainments of respondents in percentage

Educational attainment	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
No schooling	87.0	82.6	71.2	74.4	79.1	78.5
Incomplete primary	10.8	13.4	21.3	20.6	16.0	17.0
Complete primary	0.8	1.5	1.0	1.0	0.9	1.2
Incomplete secondary	1.5	2.5	6.5	3.5	4.0	3.0
SSC or above	0	0	0	0.5	0	0.2
Total (n)	400	201	400	200	800	401

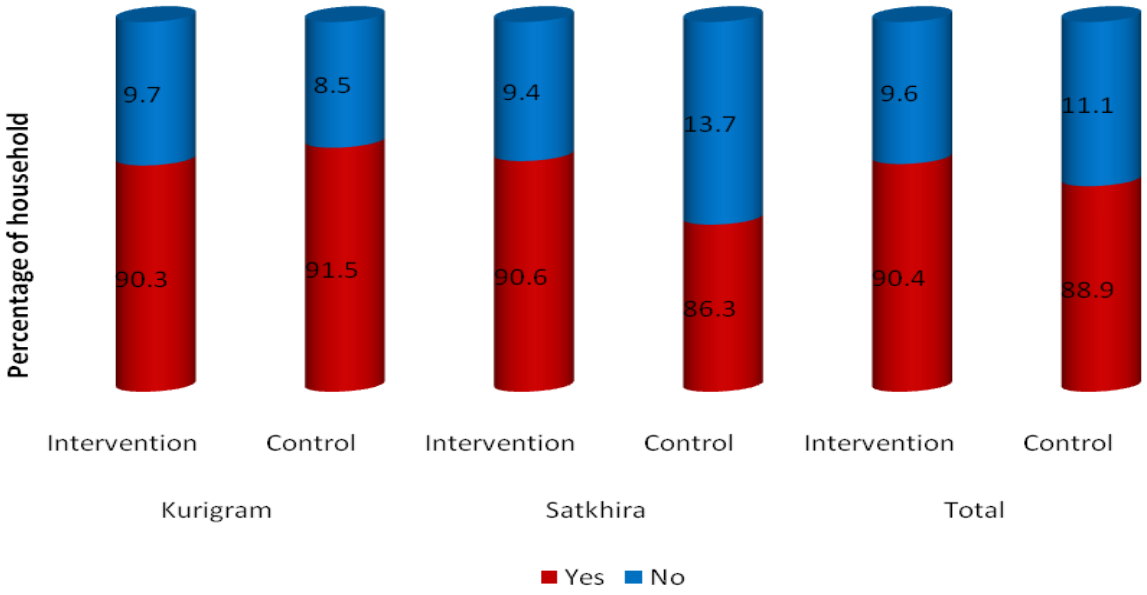
Surveyed beneficiary women were basically engaged in three types of occupations including agricultural and non-agriculture labor, and domestic help prior to joining SWAPNO. About 95% of the beneficiary women were engaged in those occupation against 91% in control group. Of the total surveyed beneficiaries of Kurigram and Satkhira district about 41% were engaged in non-agriculture labor which basically include earth work along with rice processing, brick manufacturing work, fish cultivation, puffed rice making , Quilt (*Kantha)* stitching, different handicrafts etc. For earth work, women used to get daily wage and a meal but regular earth work was not available in their locality and often they had no work. In Kurigram majority about 51% of the beneficiary women were engaged in domestic help work. For domestic help, women used to get minimal monthly wage along with one or two meals daily and clothing annually. On the other hand in Satkhira only 5% beneficiary women were engaged as domestic help and about 50% of the beneficiary women were engaged in non-agricultural occupations. In Satkhira, poor women had opportunity to be engaged in occupations related to shrimp culture. It may be mentioned here that about 2.1% beneficiary women were unemployed in most of the time. In these households, expenditure was borne by other household members. It is to mention here that about 1.6% women in intervention households were involved in 'other activities' such as land lease or sharecropping, birth attendant, collecting left out paddy or other agricultural crops, etc. Thus the disadvantaged women were basically engaged in occupations that gave them minimal income. Comparison of data on occupation of women between intervention and control households showed no discernable difference in occupational pattern.

Table 3.4: Major occupation of respondents in percentage

Major occupation	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Maid servant	50.8	52.2	4.8	6.0	27.8	29.2
Non-agri Labor	31.8	28.4	49.5	52.5	40.6	40.4
Agri Labor	13.5	12.4	40.0	30.0	26.8	21.2
Small Business	0.8	0.5	0.3	1.5	0.5	1.0
Begging	0.8	0.5	0.5	1.0	0.6	0.7
Unemployed	1.3	4.5	3.0	5.5	2.1	5.0
Other	1.3	1.5	2.0	3.5	1.6	2.5
Total (n)	400	201	400	200	800	401

In spite of the fact that destitute women surveyed were engaged in low paid activity, they were basically the main bread earner for most of the households. In the Baseline survey 90% women were found to be the main income earner in both Kurigram and Satkhira (Figure 3.1). The remaining income earners for the households were their sons/daughters, brothers, fathers, father in laws, etc.

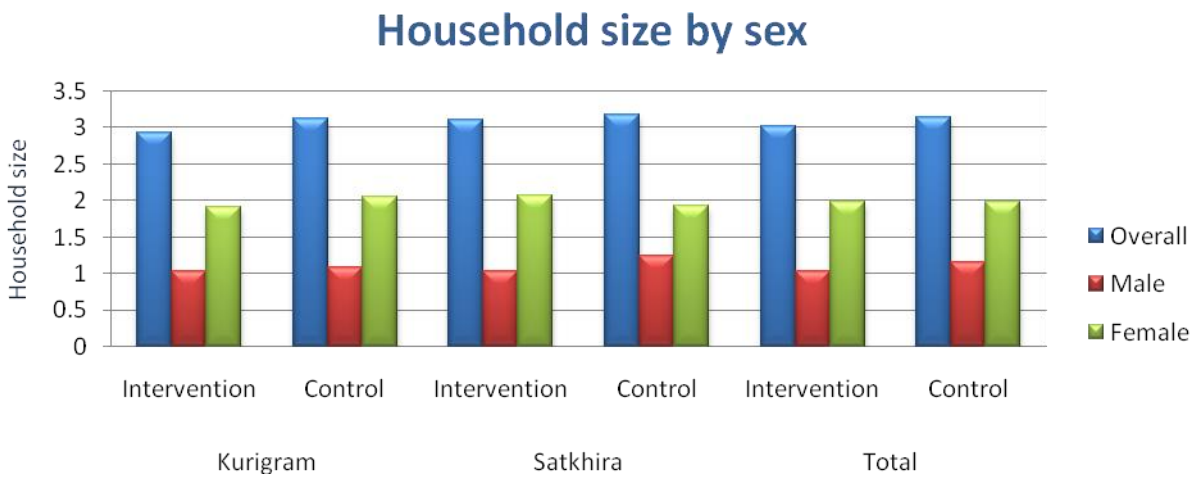
Figure 3.1: Main income earner for households



3.2 Demographic characteristics of population

Household size: Compared to the national average household size of 4.5, the surveyed women were maintaining small family size. As shown in Figure 3.2, the average household size was calculated at 3.02 consisting of 1.02 male and 1.99 female members in intervention households. Distribution of data by districts shows that compared to Kurigram (2.94), the average household size in Satkhira was a bit higher at 3.1. On the other hand in control households the average household size was found somewhat higher at 3.15 consisting of 1.16 male and about 2 female. It shows that women were more in number than men in both intervention and control households.

Figure 3.2: Average household size by sex



Age of household members: Data on age of household members in Kurigram and Satkhira belonging to both intervention and control groups are presented in Table 3.5. It appears from this table that about one-third of the population was below 15 years in the total sample of intervention households including about 5% in under 5 age group. About 9% belonged to 60+ age group, while the remaining (about 60%) in 15-59 age group, the active household population. In the control households the distribution of population was also the same. Age distribution of population by districts shows no significant variations between different categories of households.

Table 3.5 Percentage distribution of household members by age

Age in years	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
0-4	4.1	4.8	5.6	4.9	4.8	4.8
5-9	13.7	14.8	11.9	11.3	12.8	13.0
10-14	17.0	16.5	13.9	15.9	15.4	16.2
15-19	11.2	10.0	9.8	13.2	10.5	11.6
20-24	4.8	5.4	7.1	5.8	6.0	5.6
25-29	4.5	5.4	7.6	9.0	6.1	7.2
30-34	5.4	5.6	6.8	6.9	6.1	6.2
35-39	7.8	7.3	7.7	7.9	7.7	7.6
40-49	17.1	18.1	14.9	13.4	16.0	15.7
50-59	6.0	5.1	6.2	5.7	6.1	5.4
60-64	2.3	1.9	2.0	1.4	2.2	1.7
65+	6.2	5.1	6.6	4.7	6.4	4.9
Total (n)	1,174	629	1,240	636	2,414	1,265

Distribution of household members belonging to different age groups by sex is shown in Tables 3.5a and 3.5b. It appears that men were younger than women in intervention households. Against 51% men aged below 15 years, only 23% were women. In contrast with 16.8% men aged 40+, 37.4% were women. The trend was duly reflected in their average age. As shown in Table 3.5a, the average age of male household members in intervention group was 20.8 years, while the average age for female household members was 32.2 years. District-wise data also show the same trend. The main reason behind the difference in age is that in most of the households (91%) there was no husband. The similar trend was found in households in control area.

Table 3.5a: Percentage distribution of members in intervention households by sex

Age in years	Kurigram		Satkhira		Total	
	Male	Female	Male	Female	Male	Female
0-4	7.8	3.3	9.2	5.7	8.5	4.5
5-9	17.7	10.2	15.1	8.1	16.4	9.1
10-14	27.2	11.4	24.8	8.3	26.0	9.8
15-19	21.1	5.8	15.3	7.2	18.2	6.5
20-24	7.0	3.5	7.8	6.8	7.4	5.2
25-29	2.9	5.4	4.6	9.2	3.7	7.4
30-34	1.7	7.3	2.2	9.1	1.9	8.2
35-39	0.7	12.5	1.0	11.1	0.9	11.8
40-49	4.1	25.2	4.4	20.5	4.2	22.8
50-59	3.2	5.8	7.3	5.3	5.2	5.5
60-64	0.2	3.4	1.2	2.4	0.7	2.9
65+	6.3	6.2	7.1	6.2	6.7	6.2
Total (n)	412	762	411	823	823	1,585
Avg. age (years)	**19.2**	**32.9**	**22.4**	**31.6**	**20.8**	**32.2**

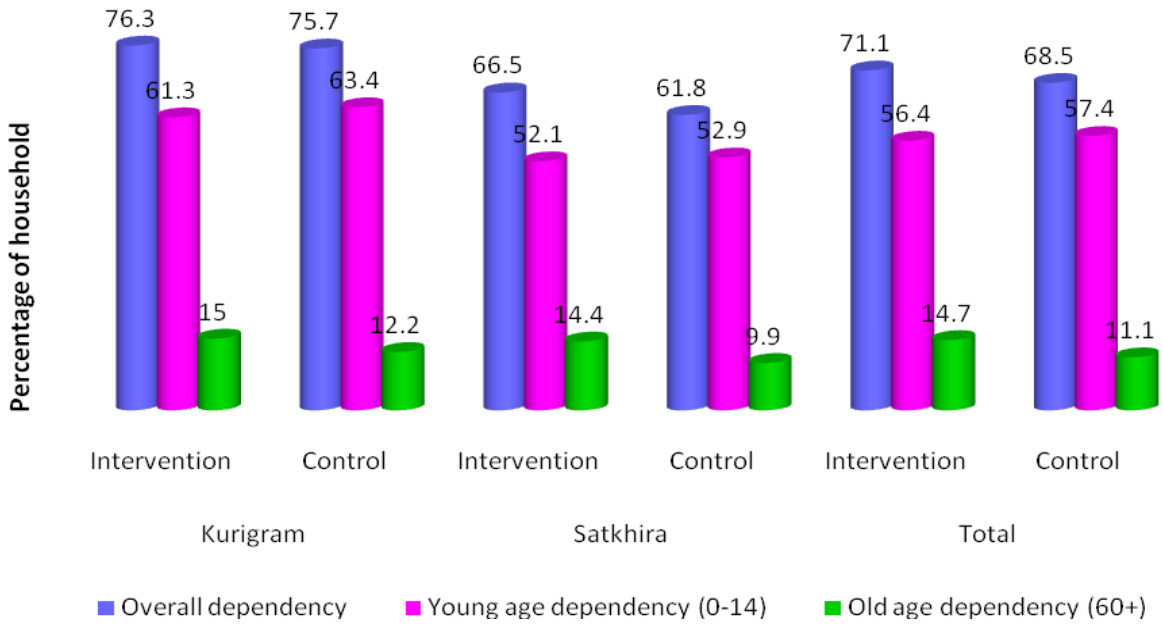
Table 3.5b: Percentage distribution of members in control households by age

Age in years	Kurigram		Satkhira		Total	
	Male	Female	Male	Female	Male	Female
0-4	5.1	5.1	7.2	4.5	6.2	4.8
5-9	20.3	11.4	13.2	8.5	16.5	10.0
10-14	25.3	11.9	26.4	9.0	25.9	10.5
15-19	16.6	6.6	21.2	7.7	19.1	7.1
20-24	5.5	5.3	5.2	6.1	5.3	5.7
25-29	4.6	6.1	6.0	11.1	5.3	8.5
30-34	.9	8.3	2.8	9.8	1.9	9.0
35-39	3.7	9.2	2.4	11.9	3.0	10.5
40-49	6.0	25.5	4.4	20.9	5.1	23.3
50-59	6.5	2.9	5.2	4.5	5.8	3.7
60-64	.9	2.4	1.2	1.6	1.1	2.0
65+	4.6	5.3	4.8	4.5	4.7	4.9
Total (n)	217	412	250	378	467	790
Avg age (years)	**21.3**	**30.3**	**21.2**	**30.8**	**21.3**	**30.5**

Demographic dependency: Household members aged 0-14 and 60+ are said to be dependent on those who are in 15-59 age group. Overall dependency has been calculated as the ratio of population aged 0-14 and 60+ to population aged 15-59. This is divided into young age dependency calculated as the ratio of population aged 0-14 to population aged 15-59, while old age dependency is calculated as the of ratio of population aged 60+ to

population aged 15-59. Dependency data based on this calculation is presented in Figure 3.3. As shown, overall dependency ratio in intervention households was 71.1% against 68.5% in control households. Comparison of dependency ratio between the study districts shows that compared to Kurigram (76.3%) dependency in Satkhira (66.5%) was lower in intervention households. Young age dependency was 56.4% and old age dependency 14.7% in intervention households. Lower dependency rate in the disadvantaged households was probably due to the fact that young population particularly under 5 children was lower.

Figure 3.3: Demographic dependency ratio of household members



Household members were predominantly female. As shown by Table 3.6, about two-thirds of the population in intervention households was female and the remaining one-third was male. In the control households' samples, male-female distribution was about the same. Due to outnumbering of women, sex ratio, i. e, the ratio of males per 100 females, was low, 52 in intervention and 59 in control households. Between the two study districts there were no discernible variations.

Table 3.6: Percentage distribution of population by sex

Sex	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Male	35.1	34.5	33.9	39.8	34.2	37.2
Female	64.9	65.5	66.7	60.2	65.8	62.8
Total (n)	1,174	629	1,240	636	2,414	1,265
Sex ratio	**54.0**	**52.7**	**49.2**	**66.1**	**52.0**	**59.2**

Marital status of household members shows that about 46% were either widow or separated or divorced and 32% were unmarried in intervention households. Only 22% were found married. Between intervention and control households there were no remarkable variations with respect to marital status (Table 3.7).

Table 3.7: Marital status of household members in percentage

Marital Status	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Unmarried	35.3	33.8	29.2	32.6	32.2	33.2
Married	19.0	25.1	25.3	30.7	22.2	28.0
Divorced	9.9	7.3	10.0	7.3	10.0	7.3
Widowed	28.3	26.3	20.7	16.8	24.4	21.4
Separated/deserted	7.5	7.5	14.8	12.6	11.2	10.1
Total (n)	1,174	629	1,239	634	2,413	1,263

3.3 Socio-economic characteristics of population

Socio-economic characteristics of households have been examined using basically three indicators: education, occupation and income earning status. The following paragraphs will show an analysis of these issues.

Education: Compared to the respondents (destitute women), the literacy rate among their household members was better with 51.8% in intervention group and 52.3% in control group having some literacy. Literacy in Satkhira both for intervention and control groups seems to be better than that of Kurigram district. Data on educational attainment shown in Table 3.8 reveal that about 48% household members age 6+ in intervention group did not attend any school at all, while about 37% had attended primary schools but did not complete, i, e, had incomplete primary education. It shows slightly over 14% had completed primary schools or above. Again Satkhira appears to be in better situation with respect to school attainments. However, the difference between intervention and control areas with respect to educational attainment of household members was found not statistically significant.

Table 3.8: Literacy and educational attainments among household members age 6+ in %

Literacy & education	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Whether having literacy						
Yes	49.0	48.5	54.4	56.2	51.8	52.3
No	51.0	51.5	45.6	43.8	48.2	47.7
Educational attainments						
No schooling	51.0	51.9	45.8	44.1	48.4	48.0
Incomplete primary	38.5	40.6	35.9	38.4	37.2	39.5
Complete primary	3.1	2.1	3.5	3.4	3.3	2.7
Incomplete secondary	6.8	5.0	13.1	11.8	10.0	8.4
SSC or above	0.6	0.5	1.7	2.4	1.2	1.4
Total (n)	1,104	584	1,141	594	2,245	1,178

The number of school age children was 768 and 425 in intervention and control households respectively. Of them only 87% in intervention households and 85% in control households were admitted to schools when primary education is compulsory in the country (Table 3.9a). There was no remarkable variation between 2 districts with respect to school admission rate of children. On the other hand, most of the children admitted to schools were reported attending schools regularly. Only 4% in intervention households and 7% in control households were either irregularly attending or not at all attending schools.

Table 3.9a: Percentage distribution of households by status of children's schooling

Status	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Whether or not getting children age 5-16 admitted in schools						
Yes	**86.9**	**83.1**	**87.1**	**86.5**	**87.0**	**84.7**
No	13.1	16.9	12.9	13.5	13.0	15.3
Total (n)	411	225	357	200	768	425
Whether or not school age children going to school:						
Regularly	96.1	92.5	95.8	93.1	96.0	93.8
Irregularly	2.2	3.7	1.2	2.3	1.8	3.0
Not at all going	1.7	3.7	3.0	4.6	2.2	4.2
Total (n)	357	187	311	173	668	360

It is stated that four major reasons were responsible for which children had no interest in attending schools (52.8%) which included, inability of households to bear their educational expenses (42.6%), and involvement of children in income generating activities (20.4%). However, a good number of children were not attending schools regularly for 'other reasons' including distance of schools, child marriage, sickness, physical disability, lacking

learning skills etc. Control households showed also the same reasons for not attending schools regularly.

Table 3.9b: Percentage of households by reasons of children's not attending schools regularly

Reasons	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Busy in HH work	5.2	6.7	6	11.8	5.6	8.3
Child labour	17.2	20.0	24	29.4	20.4	22.6
No interest in schools	60.4	73.4	44	32.4	52.8	52.4
Insecurity	0	4.4	8.0	0.0	3.7	2.4
Inability to bear educational expenses	27.6	35.6	60	50.0	42.6	39.3
Others	13.8	13.3	26	23.5	23.1	16.7
Total (n)	58	45	50	34	108	84

NB: Multiple answers included

Occupation: Household members aged 10+ belonging to intervention group were basically engaged in 3 income earning occupations: non-agricultural labor (20.8%), agricultural labor (14.6%) and maid servant (13.1%). Household members were also engaged in some non-income activities such as study and domestic/chore work, where sizable proportion of members (30.5%) was found in intervention households. Control households almost show the same occupational pattern. This is also confirmed by statistical test showing no significant differences between intervention and control households in occupational pattern of household members aged 10+. Comparison of data by districts shows that domestic help was the major occupation in Kurigram, the most poverty stricken district. On the other hand non-agricultural labor in Satkhira both in intervention and control households was the major occupation category. Limited number of household members was engaged in small business, van/rickshaw pulling and livestock including poultry rearing, etc. Around 6% household members were reported unemployed during the time of field work. About 10% household members were found to be involved in 'other occupations' such as fishing, barber, brick field worker, cobbler, cook, etc. Thus, like the respondents, household members were involved in low paid income earning activities.

Table 3.10: Major occupation of household members age 10+ in percentage

Occupation	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Maid servant	23.9	24.8	2.9	3.0	13.1	13.6
Agri labor	9.8	10.8	19.1	14.2	14.6	12.6
Non-agri labor	16.0	15.6	25.4	26.9	20.8	21.4
Begging	1.4	1.4	0.8	1.1	1.1	1.3
Small business	1.6	2.6	1.6	2.8	1.7	2.8
Van/rickshaw	0.9	0.8	0.9	2.3	0.9	1.6
Livestock raising	1.4	0.4	0.6	1.0	1.1	0.7
Household work	7.5	8.6	10.9	9.7	9.2	9.2
Students	23.4	20.8	19.6	21.2	21.5	21.0
Unemployed	5.3	4.4	6.4	6.6	5.9	5.6
Others	8.6	9.6	11.9	11.2	10.4	10.4
Total (n)	1,162	619	1,121	628	2,383	1,247

As mentioned above non-agriculture labor was the major occupation of 10+ household members. Attempts have been made to assess the occupation by sex (Table 3.11). It is seen in the Table that about two-thirds of the household members mentioning non-agricultural labor as major occupation were engaged in various activities such as earth cutting, construction & repair work, cooking, sweeping in public place including market, bringing potable water, etc, were female members. The remaining were male.

Table 3.11: Involvement of household members in non-agricultural labor by sex in %

Sex	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Male	35.1	34.5	33.3	39.8	34.2	37.2
Female	64.9	65.5	66.7	60.2	65.8	62.8
Total (n)	1174	629	1234	628	2408	1257

From the above table it is seen that beneficiary women were selected from among the poorest of the poor. Majority of them were less than 50 years with more than 50% in less than 40 years meaning that they were physically fit for undertaking any road maintenance and other social resource building activities. Almost all of them were either widow or divorced or separated showing their vulnerability from socio-economic point of view. They have poor educational background and are basically engaged in two occupations: labor (agricultural and non-agricultural) and maid servant. Although these activities give gave them low income, they were the main bread earner for the family. Their standard of living was also poor. Moreover, there were no significant differences between intervention and control household with respect to demographic and socio-economic conditions.

Chapter 4: Ownership of Household Assets

Possession of assets and properties either movable or immovable, in one hand increases household income and on the other hand reflects household status in the society. In the Baseline survey in this assignment required data were collected to ascertain the benchmark position of intervention as well as control households with respect to the ownership of assets, their number/quantity and value, household fuel consumption and access to electricity, and households' organizational affiliation, etc.

4.1 Ownership of dwelling house, its pattern and construction materials

The survey result reveals that more than 80% households owned their dwelling house. Although about 60% respondents did not have their own homestead land or any cultivable land. In most of the cases they built their dwelling unit in relatives' land, landlords' land for whom they work for or abandoned (*Khas*) land. Proportion owning dwelling house was higher in Kurigram both for intervention and control households. But their dwelling house was make- shift in nature, either made of earth/bamboo/straw or C.I. sheets. It is also observed that about 15% of the surveyed women had no dwelling house of their own. In other words they lived in other's including relative's house (Table 4.01).

Table 4.1: Ownership of dwelling house in percentage

Ownership	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Own	87.4	86.6	78.1	75.2	82.8	80.9
Rented	0.0	0.0	0.3	1.0	0.1	0.5
Relative's house	3.0	8.4	7.9	14.2	5.4	11.3
Others' house	8.3	5.0	10.1	7.6	9.2	6.3
Others	1.3	0.0	3.6	2.0	2.4	1.0
Total (n)	400	201	400	200	800	401

Many of the respondents used to live in thatched houses made of straw/bamboo/earth. In the survey about 38% women reported that they lived in this type of houses (Table 4.02). Proportion of respondents living in thatched houses was somewhat lower in control households (35%). 96% make- shift houses either thatched or tin shed with bamboo or straw wall. Distribution of respondents by study districts showed that substantially high proportion of women live in bamboo/straw/earthen houses in Satkhira. Against 11.3% in Kurigram, 65.1% women in intervention households in Satkhira were found to be living in houses made of straw/bamboo/earth. The other type of houses where the surveyed women live in large number is tin-shed house which often has only CI sheet roof, earthen/thatched wall and muddy floor. About 57% in the total sample lived in such type of houses. *Kancha* tin shed houses were predominant in number in Kurigram. In the conclusion it can be said that more than 95% dwelling houses in study districts were make- shift of tin or straw/bamboo, which were vulnerable to natural calamities.

Table 4.2: Type of dwelling house in percentage

Type of dwelling house	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Pucca[1]	0.3	.0	0.3	3.4	.3	1.6
Semi-pucca tin shed[2]	1.2	0.6	6.2	10.1	3.5	5.0
Kancha tin shed[3]	86.4	85.6	25.7	27	57.9	58.7
Bamboo/straw/earthen	12.12	13.8	67.8	59.5	38.3	34.8
Total (n)	400	201	400	200	800	401

4.2. Energy use

Energy is used at household level basically for two purposes: cooking and lighting. For cooking purpose straw is mostly used as fuel at household level. Every 3 out of 4 women mentioned that they used straw for cooking. Straw was predominantly used by intervention households in Kurigram districts. Against 53.6% in Satkhira, 88.8% intervention households in Kurigram have been using straw as cooking fuel. The second most important fuel as used by SWAPNO women was firewood, particularly in Satkhira. Cow- dung was mentioned by only 5% intervention households. Other type of fuels was almost not used (Table 4.03). Comparison of data on use of energy at household level between intervention and control households shows no discernible variation.

Table 4.3: Fuel for cooking at household level in percentage

Source of fuel	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Fire wood	8.6	11.6	34.2	27.4	21.3	19.4
Coal	0.0	0.0	0.8	0.5	0.4	0.3
Straw	88.8	84.8	53.6	64.0	71.3	74.5
Gas	0.0	1.5	0.0	0.5	0.0	1.0
Electricity	0.5	0.5	0.3	0.0	0.4	0.3
Animal dung	1.5	1.5	8.4	4.6	4.9	3.0
Others	0.6	0.0	2.5	3.0	1.7	1.5
Total (n)	400	201	400	200	800	401

In rural areas, electricity is used basically for lighting. But access to electricity is limited among the SWAPNO women. As shown in Table 4.04, only 15.4% intervention households in the total sample were found to have access to electricity. Access to electricity in control households was somewhat higher at 18%. Distribution of electricity coverage between two study districts shows that access to electricity was higher in Satkhira both in intervention and control households. Against 8.5% in Kurigram, 22.2% intervention households in Satkhira had access to electricity.

[1] Pucca house has roof, wall and floor made of rod, cement and bricks/stone
[2] Semi-pucca tin shed house has roof made of CI sheets/tin and wall and floor made of rod, cement and bricks
[3] Kancha tin shed house has floor made of earth, wall made of bamboo and straw and roof made of CI sheets

Table 4.4: Access to electricity in percentage

Whether or not having electricity	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
No	91.5	89.6	77.8	74.5	84.6	82.0
Yes	8.5	10.4	22.2	25.5	15.4	18.0
Total (n)	400	201	400	200	800	401

4.3 Ownership of household assets

Women under SWAPNO project owned various household assets in limited number. As reported only 3% and 1% households owned TV and radio respectively. No one had refrigerator and motor cycle due to poverty. However sizable number of households owned mobile phone and bicycle. As shown in Table 4.5, 42% and 8% intervention households owned mobile phone and bicycle respectively. In some households there was more than one mobile phone set with the average number of sets being calculated at 1.06. Comparison between two study districts shows that Satkhira was better than Kurigram in owning assets. For example against 29% in Kurigram, 54.5% intervention households in Satkhira owned mobile phone. Compared to 4.5% in Kurigram, 11.3% intervention households in Satkhira owned bicycle. However, there was no discernible variation between intervention and control areas with respect to the ownership of other household assets.

Table 4.5: Ownership of other household assets

Assets	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
TV						
Percentage of HHs owning	0.75	1.0	5.25	6.5	3.0	3.7
Avg value (Tk)	5,833	3,750	1,772	2,185	2,787	2,445
Max value (Tk)	12,000	4,500	6000	5,000	12,000	5,000
Min Value (Tk)	500	3000	500	350	500	350
Radio						
Percentage of HH owning	.75	.50	.75	1.5	.75	1.0
Avg. value (Tk)	575	600	600	300	583	400
Max value (Tk)	1,000	600	1,100	300	1,100	600
Min Value (Tk)	300	600	100	300	100	300
Mobile phone						
Percentage of HH owning	29.3	29.4	54.5	62.0	41.9	45.6
Avg. value (Tk)	744	749	751	828	649	802
Max value (Tk)	2,000	2,000	5,000	7,000	5,000	7,000
Min Value (Tk)	100	200	200	100	100	100
Bicycle						
Percentage of HH owning	4.5	2.5	11.3	6.3	7.9	8.75

Avg. value (Tk)	1,300	2,280	1,590	1865	1,510	1990
Max value (Tk)	4,000	7,000	5,000	5,500	5,000	7,000
Min Value (Tk)	300	600	400	500	300	500
Motor Cycle						
Percentage of HH owning	0.25	0.0	0.75	0.0	0.5	0.0
Avg. value (Tk)	5,000	0.0	27,567	0.0	20,750	0.0
Max value (Tk)	5,000	0.0	80,000	0.0	80,000	0.0
Min Value (Tk)	5,000	0.0	4,000	0.0	4,000	0.0

4.4. Ownership of land

Few people only 1.4% intervention and 1.2% control households, were found to have owned some arable land. The average size of arable land owned was 10.5 decimal and 12 decimal respectively. On the other hand sizable proportion of households have owned homestead land: 43% intervention and 44% control households. Cases of land ownership was higher in Satkhira (46%), compared to 39% in Kurigram. The average size of homestead land for intervention group was 4 decimal and 4.75 decimal for control group. Hence the women were poor in land ownership. According to the definition provided by BBS, all women under this project were landless either actually or functionally, i.e, owning less than 5 decimal of land (Table 4.6b).

Table 4.6a: Incidence of ownership of different types of land (average size)

Categories of land	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Homestead land						
Percentage of HH owning	39.0	38.8	46.3	49.0	42.6	43.9
Avg. size (decimal)	3.92	3.72	4.15	5.57	4.04	4.75
Agricultural land						
Percentage of HH owning	1.0	0.5	1.7	1.0	1.4	1.2
Avg. size (decimal)	15.8	12.0	7.5	12.0	10.5	12.0
Pond						
Percentage of HH owning	0.25	0	2.0	1.5	1.1	0.6
Avg. size (decimal)	1.0	.0	4.0	14.2	3.7	14.3

Table 4.6b: Percentage distribution of households by ownership of land

Size of land owned (decimal)	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
0	61.0	61.5	54.2	50.5	57.6	56.0
1-4	27.0	29.0	31.3	28.3	29.1	28.6
5-49	12.0	9.5	14.2	20.2	13.1	14.8
Total (n)	156	78	182	97	338	175

Net resources have been derived by deducting liabilities (mainly loans) from the value of total assets. As seen from Table 4.05, women under SWAPNO project had poor resource-

base. The average value of their resources was calculated at about 6,000, while liabilities at about 2,100 in intervention households. They used to take loans from NGOs, friends and relatives. NGO loans are paid back along with interest in installment, while loans from friends and relatives are usually without interest. In difficult time they also take loans from money lenders and shop-keepers at high rate of interest. The value of net resources owned by intervention households is amount to about Tk. 3,900, while the control households Tk 4,400. Comparison of net resources belonging to intervention groups in 2 districts shows almost no remarkable variations (Table 4.7).

Table 4.7: Average value of total assets, net assets & liabilities (Tk)

Services	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Total assets	4,795	4,907	7,229	8,880	6,012	6,893
Liabilities	482	667	3,769	4,399	2,126	2,533
Net assets	4,313	4,240	3,460	4,481	3,886	4,360

4.5 Organizational Affiliation

Only 17.3% of women under SWAPNO project belonging to intervention households were affiliated with any GO/NGOs other than SWAPNO (Table 4.08). The comparable proportion for control households was similar at 19.7%. District-wise data on the affiliation shows that proportion of women affiliated with GO/NGOs was much lower in Kurigram than those in Satkhira. For example, against 29% in Satkhira, the GO/NGO affiliated women in Kurigram was only 6%. In control households the proportion was even lower at 4%. Thus efforts should be made to affiliate the women with multifarious activities of GO/NGOs.

BRAC and Grameen Bank were the major organizations, with which one-fourth of the women in intervention households were affiliated. But majority of them were affiliated with local NGOs and UPs. The purpose of their affiliation was many: credit support (27%), savings (19%), getting government services including support from government safety net program (17%), maintaining public relations with UPs, NGOs and civil society organizations (17%), etc. There were no significant variations between intervention and control households with respect to organizational affiliation.

Table 4.8: Percentage distribution of women by organizational affiliation

Categories of land	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Whether or not affiliated with any organization other than SWAPNO:						
Yes	5.5	4.0	29.0	35.5	17.3	19.7
No	94.5	96.0	71.0	64.5	82.8	80.3
Total (n)	400	201	400	200	800	401
Name of organizations						
BRAC	13.6	0.00	11.1	14.1	11.5	12.7
Grameen Bank	31.8	37.5	8.5	12.7	12.2	15.2
ASA	18.2	37.5	2.6	4.2	5.0	7.6
Ganomukhi Samobay Samitee	13.6		14.5	8.5	14.4	7.6
Others	22.7	25.0	63.2	60.6	56.8	57.0
Total (n)	20	8	116	71	136	79
Purpose of affiliation with NGO:						
To get credit/financial facility	23.7	47.1	30.0	56.5	27.1	55.1
Saving programs	12.1	17.7	22.5	22.8	18.9	22.0
To get honored	3.7	17.7	3.6	3.3	3.6	5.5
Public Relation	20.4	5.9	15.0	0.0	17.1	0.9
To avail service provided by government	11.1	11.8	17.7	15.2	16.8	14.7
Others	11.1	0.0	0.7	0.0	2.0	0.0

Different types of services are provided by GO/NGOs at Union and Upazila levels in the areas of agriculture, livestock, fisheries, health care, information technology, etc. Respondents were asked to mention whether or not they were aware about these services (Table 4.09). It is seen that more than 90% were aware about health care services provided at Union and Upazila levels followed by information technology (48%). Awareness about other services was at low levels: livestock services (13%), agriculture (11%), hand fisheries (4.5%). There were no discernible variations in the awareness levels between intervention and control households in both study districts.

Table 4.9a: Opportunity to avail of the services provided by UP and UZ in percentage

Services	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Agriculture	13.9	9.5	6.1	2.8	10.7	6.3
Livestock	14.9	9.5	11.3	10.6	13.2	10.0
Fisheries	7.4	4.5	5.5	4.4	6.5	4.5
Heath care	92.4	92.5	89.3	91.5	90.9	92.0
Information & technology	36.8	33.1	63.4	62.1	50.5	47.7
Total (n)	400	201	400	200	800	401

Training received: Beneficiary women were asked whether they obtained any training from NGOs (Table 4.09b). It appears that few women obtained training (2.8% in intervention households and 3.2% in control households). Most of the trainings they received were short and mostly related to livestock rearing (60%). Other types of training they received were substantially less. These are: poultry rearing (9%), vegetables cultivation (9%), handicrafts, sewing, fish culture, etc. through the SWAPNO project they could be brought under different training programs to fit them for employability and life survival skills.

Table 4.9b: Distribution of women receiving training in %

Training related issues	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Percentage of women obtaining training	3.2	1.5	2.2	5.0	2.8	3.2
Training on:						
Livestock rearing	53.8	66.7	66.7	70.0	59.1	69.2
Poultry rearing	7.7	0	11.1	20.0	9.1	15.4
Vegetables cultivation	15.4	0	0	0	9.1	0
Others (Handicrafts, fish culture, sewing, etc)	22.0	33.3	22.1	10.0	18.2	15.4
Total (n)	13	3	9	10	22	13

Status of affiliation: In FGD sessions women discussed about various aspects of their organizational affiliation. For injustice or any problem and for getting information the women go to UP. For arbitration they visit Union Parishad. They also visit government hospitals for health care treatment including medicine and medical test; sometimes they get medicine free of cost. From BRAC they get seeds of paddy and vegetables. Two of the participants received ring slab and tube well from BRAC. Moreover micro credit service is also offered by BRAC. From Uttaran 2 participants received rickshaw-van, cow, and poultry

birds. They obtain loan facilities from almost all NGOs such as Grameen Bank, Jagoroni Chakkra, Buro-Bangladesh, Uttaran, ASA, Sushilon, RDRS, etc. But before providing any loan, they are brought to savings program. As mentioned in FGDs they also receive veterinary medicine and vaccine from veterinary hospital in exchange of money; or buy veterinary medicine from veterinary pharmacy or hospital. They buy other inputs such as fertilizer and insecticide from fertilizer shop. They get marriage kabinnama from marriage registrar's office; can give divorce to their husband through marriage registrar's office. Their children have been vaccinated in government hospitals/health care facilities. All the respondents reported that they do not get bank loan without land deed; all banks irrespective of government or private do not sanction any loan to them. They reported that as they had no land or resources they do not get any loan.

It is also reported in FGDs that from Grameen Bank, ASA and BRAC they receive loans and limited training on sanitary latrine. Union Parishad provides sapling, fodder for cattle, widow allowance, maternal allowance, disability allowance, wheat, rice and warm clothes etc. Govt. hospital provides treatment and medicine free of cost; however non-govt. hospitals take money for services. Community hospital provides treatment for cold, cough, fever, pain and blood pressure. It also provides treatment for the children, pregnant women, new born and vaccination. Some participants reported that they receive loan from Bangladesh Krishi Bank, Grameen Bank and various NGOs. They sell labor in advance, besides they borrow money from private money lenders and relatives in time of need.

4.6. Use of public assets and their quality of service:

For ascertaining the level of use of public assets and their service quality the respondents were asked to provide their opinion. Responses are presented in Table 4.10. It appears that everyone was found to be using the public assets in the survey. These were: roads, market, schools, health care center, etc. All these services were within two kilometers of their residence. According to them the service quality of public assets was quite satisfactory. As shown more than 95% women covered in the study were satisfied at different degrees with the service quality of the public goods.

Table 4.10: Use public assets, average distance of their location & satisfaction levels in %

Public goods	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Road:						
Use of roads	99.5	99.5	99.5	99.5	99.5	99.5
Average distance from home (km)	0.42	0.33	0.37	0.32	0.39	0.32
Satisfaction level:						
Highly satisfactory	14.9	16.0	35.1	37.2	25.0	26.6
Satisfied	63.7	68.6	35.8	40.8	49.7	54.6
Moderate	12.3	8.5	16.0	10.5	14.1	9.5
Somewhat satisfied	2.3	1.1	6.2	7.3	4.3	4.2
Not at all	6.8	5.9	7.0	4.2	6.9	5.0
Total (n)	383	188	388	191	771	379
Market:						
Use of markets	99.7	99.5	100.0	100.0	99.9	99.8
Average distance from home (km)	1.04	1.01	1.51	1.50	1.28	1.25
Satisfaction level:						
Highly satisfactory	8.5	13.8	19.9	23.3	14.3	18.6
Satisfied	69.9	68.8	48.6	47.2	59.2	57.9
Moderate	16.3	13.8	23.0	20.7	19.7	17.3
Somewhat satisfied	2.3	2.6	4.6	4.7	3.5	3.7
Not at all	2.8	1.1	3.8	4.1	3.3	2.6
Total (n)	386	189	391	193	777	382
School:						
Use of schools	97.5	97.0	99.5	99.0	98.5	98.0
Average distance from home (km)	0.67	0.68	0.86	0.91	0.77	0.79
Satisfaction level:						
Highly satisfactory	11.9	16.2	25.3	26.2	18.7	21.3
Satisfied	65.9	65.9	49.5	50.8	57.6	58.2
Moderate	19.0	15.7	21.9	20.4	20.5	18.1
Somewhat satisfied	1.6	1.6	2.1	1.0	1.8	1.3
Not at all	1.6	0.5	1.3	1.6	1.4	1.1
Total (n)	378	185	388	191	766	376
Health care center:						
Use of markets	98.0	97.5	99.5	100.0	98.7	98.8
Average distance from home (km)	1.26	1.00	1.83	1.56	1.55	1.28
Satisfaction level:						
Highly satisfactory	9.5	11.8	14.0	17.3	11.7	14.6
Satisfied	58.6	61.5	38.5	40.3	48.4	50.8
Moderate	23.0	18.2	31.3	27.2	27.2	22.8
Somewhat satisfied	3.7	5.9	8.5	10.5	6.1	8.2
Not at all	5.3	2.7	7.8	4.7	6.5	3.7
Total (n)	379	187	387	191	766	378

As conclusion of this chapter it can be said that, the women selected as beneficiary for the project have poor resource base with only around 1% having owned some agricultural land of about 10 decimal on an average in intervention households. Proportion of women owning some homestead land is slightly over 40% with average size being at 4 decimal. This indicates that, the women were largely landless. Also about 18% of them do not have their own dwelling house. This means that they are to live on others house. Those who live in their own house, use to live in temporary house either made of tin (CI sheet) or bamboo/straw/earth. Only 3% were found to have owned black and white TV set whereas proportion of owning mobile telephone set is 42% in the respondent HHs. Organizational affiliation other than SWAPNO is low, only 17%. The purpose of their affiliation is to be involved in loans and savings programs and also to various support services provided by government. Proportion of women obtaining training is also low, only 3%. Training is basically limited to livestock and poultry rearing. No appreciable differences are found between intervention and control households with respect to ownership and use of resources.

Chapter 5: Household Income, Expenditure and Savings

5.1 Number of household earning members

Generally household income depends on two factors: number of income earning members in the household and their per capita income/productivity. Data on the number of earning members per household is presented in Table 5.1a. It appears that the average number of earning member was 1.41 in intervention households and 1.52 in control households. Comparison of earning members by study districts shows no discernible variations between two districts. It should be noted that SWAPNO women were the main income earners in the households. In 89% households they were the main bread earners followed by their sons at 7% in intervention households. Households depending on husband's income were almost non-existent.

Table 5.1a: Number of HH size, income earning members and main income earners

Items	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Avg HH size	2.91	3.15	3.10	3.14	3.01	3.14
Avg number of income earners	1.36	1.47	1.45	1.56	1.41	1.52
Main income earner						
Respondent	89.0	87.1	88.5	79.0	88.8	83.0
Sons	8.8	4.5	4.8	10.5	6.8	7.5
Husband	0.5	3.4	0.8	4.5	0.6	4.0
Others	1.7	5.0	5.9	6.0	2.8	5.5
Total (n)	400	201	400	200	800	401

As found more than 90% of the main household income earners were women across all study districts. However in control households the proportion of women was slightly lower (Table 5.1b).

Table 5.1b: main income earned by sex

Sex	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Male	9.0	12.4	8.8	16.4	8.9	14.4
Female	91.0	87.6	91.2	83.6	91.1	85.6
Total (n)	399	201	398	200	797	401

5.2 Household income and its sources

The surveyed households received their income from various sources. These were crop agriculture; livestock and poultry rearing, labor both agriculture and non-agriculture; small business, personal support/gift, relief/support self-employment, begging, etc. Of these, five

sources were dominant. Non-agricultural labor was mentioned by about 77% households as their source of income followed by personal support/gift (66%), relief/support (52%), agricultural labor (48%), poultry rearing (29%), etc. Less than 10% households received their income from such important sources as livestock rearing, crop agriculture, small business, cottage industry, etc. (Table 5.2a). Small business as reported were: hawker, small grocery, vegetable traders etc. Thus they were basically engaged in those activities from where small amount of income can be earned.

Table 5.2a: Household income sources in percentage (multiple response possible)

Sources of income	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Crop agriculture	6.8	6.5	4.2	4.0	5.5	5.2
Agri labor	42.3	39.3	53.5	45.5	47.8	42.4
Non-agri labor	82.5	91.50	69.8	64.5	76.1	78.1
Small business	3.8	2.5	5.0	10.0	4.4	6.2
Institutional grants	16.5	13.4	15.5	15.0	16.0	14.2
Personal support/gift	67.8	63.2	64.8	65.5	66.2	64.3
Relief/support	45.8	48.8	58.5	55.0	52.1	51.9
Livestock rearing	7.0	7.0	10.8	12.0	8.9	9.5
Poultry rearing	29.0	25.4	256.5	24.5	28.2	23.4
Rickshaw/van	2.2	2.5	2.5	6.0	2.4	4.5
Cottage industry	13.2	13.9	6.2	5.5	9.8	9.7
Begging	3.8	3.0	2.5	2.5	3.1	2.7
IGA	0.0	2.5	7.7	9.5	7.7	6.4
Job	0.0	2.0	2.2	4.0	2.1	3.0
Others	42.5	38.4	44.8	50.0	45.2	44.3
Total (n)	400	201	400	200	800	401

Data on monthly income is presented in Table 5.2b, as per which it is seen that in SWAPNO project's total sample household's average monthly household income was Tk 2,126 (SD = 1,252.86). The average monthly household income for intervention and control group were Tk 2,059 and 2,260 respectively. Accordingly the per capita monthly income for entire study sample was Tk 780 (SD = 467.31). The per capita monthly income for population in intervention and control households were Tk 779 and 781 respectively. Distribution of income by study districts shows that the average household income is Tk 2182 (SD = 1,135.55) and Tk 2,070 (SD = 1,358.92) in Kurigram and Satkhira district respectively. Distribution of monthly household income showed that about 84% and 78% households in intervention and control group earned less than Tk 3,000 a month. In control group of Satkhira district 18.5% households even earned less than Tk 1,000 a month. Monthly earning above Tk 5,000 was earned by only about 3% households.

Table 5.2b: Percentage distribution of HHs by their monthly household income

Monthly income (Tk.)	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Less than 1,000	12.5	5.0	17.2	18.5	14.9	11.7
1,000 - 2,999	69.5	74.6	68.0	57.5	68.8	66.1
3,000 - 4,999	16.0	16.4	11.0	18,5	13.5	17.5
5,000+	2.0	4.0	3.8	5.5	2.9	4.7
Total (n)	400	201	400	200	800	401
Avg. monthly HH income	2125	2297	1994	1994	2059	2260
Household size	2.91	3.15	3.10	3.14	3.01	3.14
Avg. monthly per capita	839	793	720	720	779	781

Per capita per day income has been calculated based on the monthly household income and presented in Table 5.2c. Assuming 1 USD equivalent to Tk 80, it is estimated that about 99% of the intervention households earn less than 1 USD per capita per day. Based on the data of 2011, the UNDP's Human Development Report 2015[4] shows that in Bangladesh as a whole 43.3% people earn below 1 USD per capita per day. This comparison implied that the target population of SWAPNO project is poorest of the poor because 100% of them were below Purchase Power Parity (PPP) adjusted 1.25 USD poverty level. Comparison of per capita per day income between the intervention and control households in both the districts showed almost no variations.

Table 5.2c: Percentage distribution of households by per capita per day income

Per capita per day income (Tk)	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Less than 80	99.0	100.0	99.0	98.5	99.0	99.3
80 -100	0.2	0.0	0.8	1.0	0.5	0.5
100+	0.8	0.0	0.2	0.5	0.5	0.2
Total (n)	400	201	400	200	800	401

Composition of household income shows that non-agricultural labor was the main source of income providing about 53.4% of total income in intervention households followed by agricultural labor (19.4%). Hence about 75% income of intervention households was obtained from labor. Other sources were non-significant such as small business (4.1%), personal support/gift (3.7%), cottage industry (3.2%), rickshaw /van (2.0%), etc. Non-agricultural labor among others included maid servant, earth cutting, construction and repair work, cleaning in public places including market places, etc. It can be mentioned here

[4] Human Development Report 2015: Work for human development. the United Nations Development Programme
1 UN Plaza, New York, NY 10017, USA

that about 26% of women under SWAPNO project including 13% of their household members were maid servants. Distribution of income obtained by intervention households in 2 study districts showed that non-agricultural labor (61.1%) was more pronounced in Kurigram, while agricultural labor in Satkhira (25.6%). Other tendencies were more or less the same.

Table 5.2d: Composition of household income in percentage

Sources of income	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Crop agriculture	0.9	1.2	1.0	0.9	1.09	1.0
Agri labor	13.5	11.8	25.6	19.5	19.4	15.5
Non-agri labor	61.1	65.0	42.5	40.8	53.4	53.2
Small business	3.8	3.0	4.4	6.7	4.1	4.8
Institutional grants	0.6	0.4	0.5	0.7	0.5	0.5
Personal support/gift	3.6	3.2	3.9	3.5	3.7	3.4
Relief/support	0.9	0.8	1.0	1.1	0.9	0.9
Livestock rearing	0.9	0.8	1.8	1.8	1.3	1.3
Poultry rearing	1.2	0.7	0.8	0.9	1.0	0.8
Rickshaw/van	1.5	2.3	2.6	5.3	2.0	3.8
Cottage industry	3.6	4.3	2.7	2.1	3.2	3.2
Begging	3.0	1.3	1.7	1.1	2.4	1.2
IGA	0.0	1.7	3.1	5.7	1.5	2.9
Job	1.7	1.6	1.8	6.0	1.8	3.8
Others	3.6	3.4	4.0	4.0	3.8	3.7
Total (n)	400	201	400	200	800	401

5.3 Household expenditure

The poor living condition of women under this project was reflected in their household expenditure provided in Table 5.3a. The average monthly expenditure was estimated at Tk 2,666 in intervention households (per capita per month at Tk 886 or per capita per day at Tk 30). The average monthly household expenditure was slightly lower in control households at Tk 2,534 (per capita per month at Tk 807). From comparison of household expenditure between 2 study districts it is apparent that there was no significant variation between two groups of households. It is also observed that about 62% of households belonging to intervention category had spent Tk 1,000-3,000 per month, while the proportion spending Tk 3,000-5,000 per month was 34 % in intervention households. It shows more than 95% households had to be satisfied with less than Tk 5,000 as monthly household expenditure.

Table 5.3a: Percentage distribution of HHs by average monthly household expenditure

Avg. monthly expenditure (Tk.)	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Less than 1,000	1.5	4.0	2.2	3.5	1.9	3.7
1,000 - 2,999	68.0	68.2	55.8	63.0	61.9	65.6
3,000 - 4,999	29.0	26.9	38.2	31.0	33.6	28.9
5,000 +	1.5	1.0	3.8	2.5	2.6	1.7
Total (n)	400	201	400	200	800	401
Avg. monthly HH expend	2,559	2,471	2,774	2,596	2,666	2,534
Household size	2.91	3.15	3.10	3.14	3.01	3.14
Avg. per capita expend	879	784	895	827	886	807

Presumably expenditure on food was the major household head of expenditure. As seen from Table 5.3a, about three-fourths of the total household expenditure (72%) was spent on food by intervention households. Comparison of household expenditure incurred in 2 study districts shows that food expenditure in Kurigram both for intervention and control households was higher. Thus against 71% in Satkhira, the intervention households in Kurigram spent about 81% on food. For control households similar trend was reported. Thus the expenditure behavior of SWAPNO households is consistent to the Engels law that lower the income higher will be the proportion of income spent on food. Each of other expenditure categories such as health care, education, clothing, etc. was lower, less than 5%.

Figure 5.2a: Food & non-food expenditure of intervention households

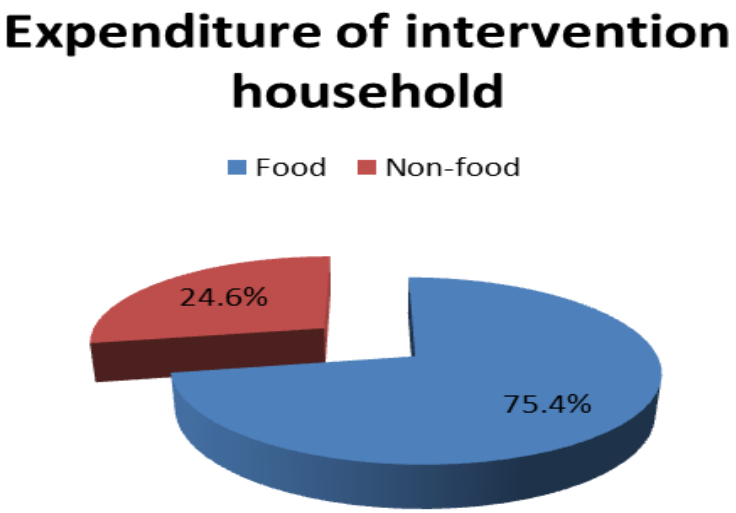


Figure 5.2b: Food & non-food expenditure in control households

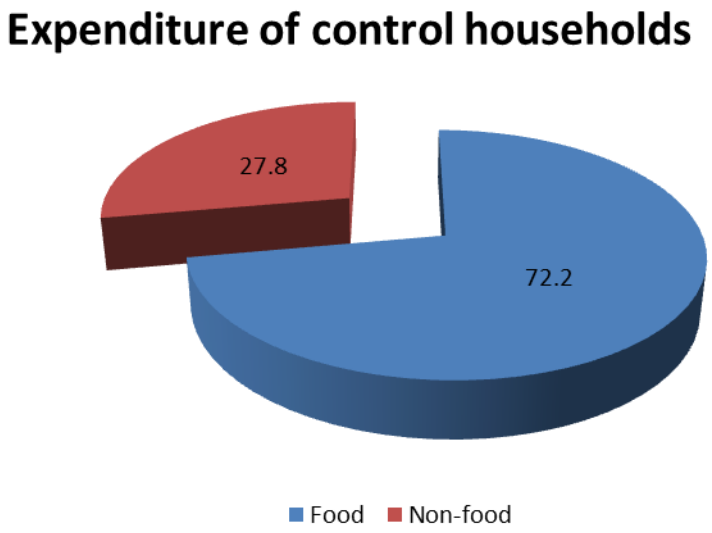


Table 5.3b: Composition of household expenditure in percentage

Heads of HH expenditure	Kurigram		Satkhira		Total	
	Intervention (n= 400)	Control (n=201)	Intervention (n= 400)	Control (n=200)	Intervention (n= 800)	Control (n=401)
Consumption expenditure						
Food	81.1	79.1	70.8	67.2	75.4	72.2
Education	2.1	2.1	3.3	2.9	2.8	2.6
Health care	3.5	3.9	6.9	4.5	5.4	4.2
Clothing	2.5	2.7	3.2	3.5	2.9	3.2
Gift/donation	0.2	0.1	0.3	0.4	0.3	0.3
Telephone cost (mobile)	0.7	0.9	1.2	2.2	1.0	1.6
Cosmetics	5.8	5.2	7.5	9.5	6.8	7.7
Livestock rearing	0.4	0.3	0.5	1.2	0.5	0.8
Others	0.7	2.0	0.8	0.7	0.8	1.3
Sub-total	97.1	96.2	94.5	92.3	97.1	96.2
Investment expenditure						
House construction	1.6	1.5	2.3	2.6	1.6	1.5
Sanitation	0.0	0.1	0.1	0.1	0.0	0.1
Loan repayment	1.3	2.2	3.1	5.1	1.3	2.2
Sub-total	2.9	3.8	5.5	7.7	2.9	3.8

5.4 Propensity to Consume

Propensity to consume is the ratio between consumption expenditure to total household income (average propensity to consume, i.e., apc = C/Y, where C=consumption expenditure, and Y=household income). According to consumption function in Economics, lower the income higher is the proportion of income spent on consumption expenditure; on the other

hand higher the income lower will be the proportion of income spent on consumption expenditure. The surveyed households were divided between different income groups. For each income group average consumption expenditure and average household income have been calculated. Accordingly average propensity to consume has been calculated for each income group. Relevant data are shown in Table 5.4.

For households with less than Tk 1,000 as income, the average propensity to consume (apc) is 1.09 in intervention households. This means that their average consumption expenditure is was more than their income. As the income goes on increasing, the apc comes down. As seen from Table 5.4, the apc for intervention group has declined as the income increases. This is was very much visible for Kurigram district and for the whole sample population. However, apc does not fall below 1 .00 as the income are not unusually very high for any income group. In order to draw solid conclusion there should be cross section of households with higher number of samples.

Table 5.4: Percentage distribution of HHs by propensity to consume

Avg. monthly expenditure (Tk.)	Kurigram		Satkhira		Total	
	Intervention (n= 397)	Control (n= 192)	Intervention (n= 394)	Control (n= 189)	Intervention (n= 791)	Control (n= 381)
Less than 1,000:						
Avg. income	684	725	741	696	717	726
Avg. consumption expenditure	763	709	807	712	782	710
Avg. propensity to consume	1.12	0.98	1.09	1.02	1.09	0.98
Sub-total	15	3	24	23	39	26
1,000-2,999						
Avg. income	1914	1885	1791	1833	1853	1863
Avg. consumption expenditure	2085	2130	2115	2094	2099	2115
Avg. propensity to consume	1.09	1.13	1.18	1.14	1.13	1.14
Sub-total	162	83	201	75	363	158
3,000 -4,999						
Avg. income	3,693	3,693	3,765	3,691	3,722	3,692
Avg. consumption expenditure	3,740	3,676	3,822	3,706	3,779	3,716
Avg. propensity to consume	1.01	1.00	1.02	1.00	1.02	1.01
Sub-total	162	70	122	58	284	128
5,000+						
Avg. income	5,885	6,216	6,245	6,493	6,119	6,376
Avg. consumption expenditure	6,303	6,394	6,480	6,718	6,392	6,563
Avg. propensity to consume	1.07	1.03	1.04	1.03	1.04	1.03
Sub-total	58	36	47	33	105	69

5.5 Savings

Many of the women under this project, about two-thirds, had small savings at less than Tk 200. However about one-sixth had a saving of more than Tk 1,000 (Table 5.5a). It seems that savings scenario was better in Satkhira than that of Kurigram. Regarding savings, cash saving was most frequently mentioned. In the total sample belonging to intervention households about 25% households had cash savings and another 15% with *Samitees*. Saving with bank and informal saving was least frequently mentioned. Control households had almost the same type of savings.

Table 5.5a: Percentage distribution of households by monthly savings

Savings (Tk.)	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Less than 200	71.0	65.2	62.0	53.0	66.5	59.1
200-499	9.2	6.5	8.0	7.5	8.6	7.0
500- 749	6.2	9.5	6.2	5.5	6.2	7.5
750-999	1.2	1.5	2.8	2.5	2.0	2.0
1,000+	12.2	17.4	21.0	31.5	16.6	24.4
Total (n)	400	201	400	200	800	401
Avg. monthly savings (Tk.)	**632**	**756**	**859**	**1,422**	**745**	**1.088**

Table 5.5b: Destination of respondents' personal savings

Destination	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
percentage of respondents having savings with bank	1.7	0	1.0	0.5	1.4	0.2
percentage of respondents having savings with Samitees	6.0	8.9	23.3	29.0	14.6	19.0
percentage of respondents having cash savings	29.5	33.3	20.5	26.0	25.0	29.7
percentage of respondents having informal savings	1.2	2.5	3.7	2.0	2.5	2.2
Total (n)	400	201	400	200	800	401

On the basis of above analysis it can be said that, the women interviewed as respondents had poor household income in spite of more than one earning member in a household. They were the main income earners. In some cases their sons, daughters, son- in- laws were found in income earning activities for the household. They mainly earned from non-agricultural and agricultural labor. Since their income was low, their household expenditure was also low.

Average propensity to consume among the lowest income group of households were generally greater than 1, while among relatively higher income group apc was close to 1.00. This means they have less chance to save; but they have some saving no matter whether that saving again resulted from previous borrowing.

Chapter 6: Poverty and Vulnerability

6.1 Income poverty and its measurements:

Using the upper and lower poverty levels for rural areas of Rajshahi and Khulna divisions as obtained from the 2010 Household Income and Expenditure Survey and then the poverty line of 2010 for Rajshahi and Khulna division was inflated by annual inflation rate of Consumer Price Index (CPI) for 2011, 2012, 2013 and 2014 to get the poverty line for 2015. Poverty lines 2015 of Rajhsahi and Khulna were used for Kurigram and Satkhira districts respectively as Kurigram and Satkhira districts were located in these divisions. Relevant data is presented in Table 6.1. In the overall study samples, population living below upper and lower poverty line were 98.5% and 96.2 respectively. In intervention households 98.2% and 95.8% population lived below upper and lower poverty line respectively. In controlled households the proportions were 99.0% and 97.0% respectively. In Kurigram district 98.0% population lived below upper poverty line (2181 taka per person per month) and 95.8% population lived below lower poverty line (1813 taka per person per month). In Satkhira district, however, 98.5% population lived below upper poverty line (2104 taka per person per month) and 96.2% population lived below lower poverty line (1749 taka per person per month). When the income poverty of surveyed households of SWAPNO project are compared with income poverty of national average (24.8%)[5] of Bangladesh for the year 2015 (of course UNDP HD Report 2015 reveals that 31.5% population are below national upper poverty line[6]) one can understand without any difficulty that poverty situation was the worst among the target population of SWAPNO project.

As shown, about 98.0% and 98.5% households surveyed from the intervention sample of both Kurigram and Satkhira districts were poor considering the upper poverty lines for the areas. Based on the upper poverty lines the figures in the control households were 99.5.0% and 98.5 respectively for Kurigram and Satkhira. Based on the lower poverty lines proportion of poor population in intervention and control households were 95.8% and 97.0% respectively in Kurigram district. In Satkhira district these proportion were 96.0% and 96.5% respectively. However, as regards upper poverty line, the Chi-square tests showed that there were no statistically significant differences in poverty level between intervention and control households in the study households as a whole (Person Chi-square = 1.03; p-value=.311; df=1) and in Kurigram district (Person Chi-square = 2.05; p-value =.152; df=1) (Table 6.1).

[5] Millennium Development Goals: Bangladesh Progress Report 2015. **General Economics Division (GED),** Bangladesh Planning Commission, Government of the People's Republic of Bangladesh. Published in September 2015

[6] Human Development Report 2015: Work for human development. the United Nations Development Programme 1 UN Plaza, New York, NY 10017, USA

Table 6.1: Incidence, depth and severity of income poverty

Poverty line	Kurigram			Satkhira			Total		
	Int.	Cont.	Tot.	Int.	Cont.	Tot.	Int.	Cont.	Tot.
% below lower poverty line	95.8	97.0	96.2	96.0	96.5	96.2	95.8	97.0	96.2
% below upper poverty line	98.0	99.5	98.5	98.5	98.5	98.5	98.2	99.0	98.5
Non-poor (%)	2.0	0.5	1.5	1.5	1.5	1.5	1.8	1.0	1.5
Total(n)	400	201	601	400	200	600	800	401	1201
Avg normalized poverty gap (using UPL)	62.3	63.6	62.7	66.1	64.1	65.4	64.2	63.9	64.1
Avg squared normalized poverty gap	42.9	43.5	43.1	47.5	45.1	46.7	45.2	44.3	44.9

NB: Int: Intervention; Cont: Control; Tot: Total

Average normalized poverty gap and squared poverty gap: Poverty gap estimates the depth of poverty of a population. It measures the distance of the poor households from the poverty line. The estimated normalized poverty gap and squared poverty gap for upper poverty line are presented in the Table 6.1. The estimated normalized poverty gap for entire population was 64.1%. This gaps were 64.2% and 63.9% for population in intervention and control households. The normalized poverty gap for Bangladesh as a whole is noted 6.5% in September 2015 by Bangladesh Planning Commission[7] which implies that a great deal of effort will be needed to bring the SWAPNO beneficiaries out of poverty as the poverty gap ration is more than 60% among the SWAPNO beneficiaries. Similarly the normalized poverty gap for intervention and controlled households in Kurigram district were 62.3% and 63.6 respectively. It means people of intervention group in Kurigram district required 62.3% more of their current income to escape from income poverty. In Satkhira district, normalized poverty gap was 66.1% and 64.1% among the households of intervention and control group respectively. It means in Satkhira district the households in intervention group needed 66.1% increase of their current income to escape from income poverty.

Squared Poverty Gap measures the squared distance of poor households from the poverty line. It will be useful to understand how well the project has been able to improve the condition of the poorest of the poor relative to the other poor beneficiaries during end-line assessment. In table 6.1, normalize poverty gap tells that on average around 64% income of beneficiary households needs to be increased to elevate them out of poverty. If proper interventions are undertaken households who are just below the poverty line will escape

[7] Millennium Development Goals: Bangladesh Progress Report 2015. **General Economics Division (GED),** Bangladesh Planning Commission, Government of the People's Republic of Bangladesh. Published in September 2015

poverty quickly with few percentage of income increase than who are far away from poverty line. Due to the intervention although headcount poverty will reduce, inequality among households line will be even worse. This problem is addressed by normalized squared poverty gap. As we see in the table above, on an average additional about 45% income has to be increased in order to elevate households who are faraway (i.e. whose income far less than 64%) from poverty line.

The survey further reveals that the squared poverty gap among control and intervention household in Kurigram district were 42.9% and 43.5% respectively. Similarly, squared poverty gap among control and intervention household in Satkhira district were 47.5% and 45.1% respectively. However, independent sample t-tests showed that there was no statistically significant difference between the intervention and control households of the Satkhira district with respect to normalized poverty gap (p-value=.254, t = 1.141; df = 598) and squared poverty gap (p-value=.212, t = 1.248; df = 598). Similarly, there was no statistically significant difference between the two types of households of the Kurigram district with respect to normalized poverty gap (p-value=.409, t = -.826; df= 599) and squared poverty gap, (p-value=.704, t = - .381; df = 599).

6.2 Poverty as per Multidimensional Poverty Index (MPI)

Poverty can also be measured capturing multiple aspects that constitute poverty.[8] Multidimensional poverty is made up of several factors that constitute poor people's experience of deprivation – such as poor health, lack of education, inadequate living standard, lack of income (as one of several factors considered), disempowerment, poor quality of work and threat from violence. A multidimensional measure can incorporate a range of indicators to capture the complexity of poverty and better inform policies to relieve it. Different indicators can be chosen to arrive at poverty level, which can be as follows:

The following ten indicators are used to calculate the MPI[9]:

- **Education (each indicator is weighted equally at 1/6)**
  i. Years of schooling: deprived if no household member has completed five years of schooling
  ii. Child school attendance: deprived if any school-age child is not attending school up to class 8
- **Health (each indicator is weighted equally at 1/6)**
  i. Child mortality: deprived if any child has died in the family
  ii. Nutrition: deprived if any adult or child for whom there is nutritional information is malnourished
- **Standard of Living (each indicator is weighted equally at 1/18)**
  i. Electricity: deprived if the household has no electricity

[8]Policy-A multidimensional approach, Oxford Poverty & Human Development Initiative, Oxford Department of International Development.

[9]*Alkire Roche Santos Seth.["Multidimensional Poverty Index 2011: Brief Methodological Note"] (PDF). Oxford Poverty & Human Development Initiative (OPHI).*

ii. Sanitation: deprived if the household's sanitation facility is not improved (according to MDG guidelines), or it is improved but shared with other households
iii. Drinking water: deprived if the household does not have access to safe/clean drinking water (according to MDG guidelines) or safe drinking water is more than a 30-minute walk from home round-trip
iv. Floor: deprived if the household has a dirt, sand or dung floor
v. Cooking fuel: deprived if the household cooks with dung, wood or charcoal
vi. Assets ownership: deprived if the household does not own more than one radio, TV, telephone, bike, motorbike or refrigerator and does not own a car or truck

A three-stage procedure is followed to compute the multidimensional poverty index (MPI). In first stage, each of the households is assigned 1 or 0 score (binary coding) against each of the above 10 indicators[10]. For instance if a household is found deprived of electricity connection, it is assigned 1 and if it has electricity connection it scores 0. Scoring 1 against a specific indicator means, the household is poor with respect to that indicator. Similarly, if the household is deprived of clean water, it scores 1 and if it has access to clean water it scores 0. For other indicators same procedure is followed which is shown in the table below. Scoring 1 against a specific indicator means, the household is poor with respect to that indicator. Conversely, scoring 0 against a specific indicator implies that the household is not poor with respect to that indicator.

Table 6.2a MPI indicators and their scoring

Indicators	Score
Education:	
i. No one has completed five years of schooling	yes response scores 1; otherwise 0
ii. At least one school-age child not enrolled in school	yes response scores 1; otherwise 0
Health:	
i. At least one member is malnourished (BMI<18.5)	yes response scores 1; otherwise 0
ii. One or more children have died	yes response scores 1; otherwise 0
Living Standard:	
i. No electricity	yes response scores 1; otherwise 0
ii. No access to clean drinking water	yes response scores 1; otherwise 0
iii. No access to adequate sanitation	yes response scores 1; otherwise 0
iv. House has dirt floor	yes response scores 1; otherwise 0
v. Household uses "dirty" cooking fuel (dung, firewood or charcoal)	yes response scores 1; otherwise 0
vi Household has no car and owns at most one bicycle, motorcycle, radio, refrigerator, telephone or television	yes response scores 1; otherwise 0

NB: 1 indicates deprivation in the indicator; 0 indicates non-deprivation.

[10] For comprehensive review of 10 MPI indicators please see: Alkire, S., and M.E. Santos. 2010. "Acute Multidimensional Poverty: A New Index for Developing Countries." Background paper for the 2010 *Human Development Report*. UNDP (United Nations Development Programme).

In second stage, each of the score of education and health related indicators is multiplied by weight (1/6 i.e 0.167) of respective indicator for each household. However, each of the scores of living standard related indicators is multiplied by 1/18 (i.e 0.056) for each household. At this point we will get each households total score *ci* (sum of each deprivation multiplied by its weight) against the 10 MPI indicators. The total score of a household could range 0 to 1. In the third stage a cut-off point of 1/3 (i.e. 0.333) weight of total score is used to binary code each household. If the household i's score ci is ≥ 1/3 (0.333), the household i is categorized as poor. But if ci is < 0.333, the household i is categorized as non-poor. Because according to MPI a household is considered poor if it is deprived in at least one-third of the weighted indicators.

To compute multidimensional headcount ratio (H) i.e. incidence of poverty, the total number of household members of poor households is divided by total number of household members of all households. To compute the intensity of multidimensional poverty (A) total Censored score ci(k) of only poor households is divided by total number of household members of all poor households. Before computing A, the Censored score ci(k) of each poor household is computed by multiplying each poor household's score ci with the number of family member of that poor household. The intensity of poverty (A) denotes the proportion of indicators in which they are deprived. Finally the MPI of the surveyed population is computed by multiplying H with A. In the following table 6.2b the deprivation of households against the 10 MPI indicators are presented.

Table 6.2b: Deprivation of households against 10 indicators of MPI

Indicators	% of households in Kurigram		% of households in Satkhira		Total % of households	
	Intervention	Control	Intervention	Control	Intervention	Control
Education:						
Deprivation in years of schooling	24.0	19.4	38.8	37.5	31.4	28.4
Deprivation in child school attendance	3.8	6.5	7.3	7.5	5.5	7.0
Health:						
Deprivation for child mortality	0.8	1.0	0.8	0.5	0.8	0.7
Deprivation in nutrition	25.8	33.8	29.5	24.5	27.6	29.2
Living standard:						
Deprivation in electricity	91.5	89.6	77.8	74.5	84.6	82.0
Deprivation in adequate sanitation	73.0	77.6	68.8	71.5	70.9	74.6
Deprivation in clean drinking water	1.3	1.5	15.8	19.5	8.5	10.5
Deprivation in floor materials	99.8	100.0	98.3	97.5	99.0	98.8

Deprivation in cooking fuel	99.5	98.0	99.8	99.5	99.6	98.8
Deprivation in specific set of assets	100.0	100.0	100.0	100.0	100.0	100.0
Total (n)	400	201	400	200	800	401

Table 6.2b shows that almost all households are deprived in more than half of the indicators (4 out of 6) that relate to living standard. Severe deprivation is observed in having specific set of assets, having non-dirty floor of dwelling, and access to clean (i.e. non-dirty) cooking fuel. Similarly with minor exception high to very high level of deprivation of all households is observed in having access to adequate sanitation and electricity. Although no deprivation in access to clean drinking water of intervention households are observed in Kurigram yet it is present in Satkhira when compared with Bangladesh as a whole where about 98% population have access to clean drinking water and 56% population have access to adequate sanitation[11]. About 16% deprivation is observed in beneficiary households in Satkhira to access clean drinking water, probably attributed to crisis of fresh water due to high salinity in south west region particularly in the dry season. Very low level deprivation of households are observed in school attendance and child mortality. This low level deprivation in child mortality and school attendance of children are also indicated in MDG's Progress Report which reveals that school enrolment rate is almost 98% and the child mortality declined from 151 (per 1000) in 1990 to only 41 in 2013[12].

Based on the procedures cited earlier the incidence of multidimensional poverty (Headcount poverty ratio, H), severity of multidimensional poverty (A) and MPI index for the two study districts are computed and presented in the following Table 6.3

Table 6.3: Households poverty level based on MPI

Multidimensional Poverty Measures	Kurigram		Satkhira		Total	
	Inter.	Cont.	Inter.	Cont.	Inter.	Cont.
MPI Non-poor	48.58	48.97	30.52	33.44	39.25	41.24
Headcount Poor (H)	51.42	51.03	69.48	66.56	60.75	58.76
Intensity of poverty (A)	45.35	46.79	46.40	45.70	45.97	46.18
Multidimensional poverty index, MPI (H x A)	23.32	23.88	32.24	30.42	27.93	27.14
Total (n)	400	201	400	200	800	401

According to multi-dimensional poverty index (MPI) over all incidence of poverty is (i.e. MPI poor, H) 60.7%. It means that 60.7% population of the study districts are multidimensional poor (MPI poor). The overall intensity of poverty is (i.e. A) 46.04% which means people are

[11] Millennium Development Goals: Bangladesh Progress Report 2015. **General Economics Division (GED),** Bangladesh Planning Commission, Government of the People's Republic of Bangladesh. Published in September 2015

[12] Millennium Development Goals: Bangladesh Progress Report 2015. **General Economics Division (GED),** Bangladesh Planning Commission, Government of the People's Republic of Bangladesh. Published in September 2015

poor in 46.04% indicators of MPI. Finally the overall MPI (HxA) is 27.66% which means about 28% population are poor in all the 10 dimensions of MPI. This finding is almost consistent with the findings of UNDP's Human Development Report 2015 as regards MPI in Bangladesh[13]. The UNDP's report reveals that incidence of MPI poor (head count, H) is 49.5% and intensity of poverty (A) is 47.8% and MPI index is 23.7%. Among the SWAPNO households relatively better (as compared to their income poverty) MPI poverty is probably attributed to their almost free access to social services such as primary education, primary health care, and WASH services. From disaggregated MPI it is seen that overall 60.75% population of intervention group is MPI poor and for control group 58.76% are poor. Poverty situation is high in Satkhira district as compare to Kurigram district. In Satkhira district, the proportion of MPI poor is 69.48% and 66.56% for intervention and control group respectively. However in Kurigram district, MPI poor is 51.42% and 51.03% for intervention and control group respectively. Overall MPI poverty is high among intervention groups than control group.

However overall intensity of poverty (A) is high for control group which is 46.18%; the intensity of poverty for intervention group is 45.97%. It means in 46.18% indicators of MPI, population of control group are multi-dimensionally poor; whereas the population of intervention group are poor in 45.97% indicators. In Kurigram district intensity of poverty (A) is 45.35% and 46.79% for population of intervention and control group. On the other hand in Satkhira district the intensity of poverty (A) is 46.40% and 45.70% for population intervention and controlled households respectively. Multi-dimensional poverty index (MPI) is high for intervention group in Satkhira district which is 32.24%; it means 32.24% populations are poor in all the 10 dimensions of MPI. Conversely MPI is low for intervention group of Kurigram district which is 23.32%. It means only 23.32% populations are multidimensional poor in all the 10 dimensions of MPI.

6.3 Vulnerability and shocks: type, time of occurring and levels of severity

Multifarious shocks faced by women have been categorized into two broad groups: common shocks and personal/individual shocks. Common shock are those which are common to all but felt in different degrees including food deficit, unemployment, disasters such as flood, draught, excessive rain or cyclones, less production, salinity, river erosions, etc. On the other hand personal or individual shock consists of individual sickness, loss of livestock animals and poultry birds, death of household members, funerals, dowry or marriage ceremonies, divorce/separation, etc. Relevant data is presented in Table 6.4a. It appears that among the common shocks food deficit was faced by as many as 85% intervention households in the last 12 months preceding the survey followed by unemployment (74%) and flood/draught/excessive rain (42%). Other common shock such as

[13] Human Development Report 2015: Work for human development. the United Nations Development Programme
1 UN Plaza, New York, NY 10017, USA

less production, dearth of drinking water, salinity in coastal areas, river erosion, etc. were faced by only about 5% or less.

Among individual shock, sickness of household members was mentioned as the major shock encountered by the surveyed households in the last 12 months preceding the survey. About 62% intervention households mentioned that their household members suffered from illness during this period. Other shocks belonging to this group were loss of livestock animals and poultry birds (6.2%), death of household members (4.7%), funerals (4.2%) and divorce/separation (3.2%), etc. Comparison of shocks faced by households belonging to both intervention and control groups shows no significant variations.

Table 6.4a: Type of crisis/shocks encountered in percentage

Crises/shocks & their type	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Common						
Food deficit	85.0	88.1	84.5	82.0	84.8	85.0
Unemployment	62.2	57.2	85.5	83.5	73.9	70.3
Flood/drought/excessive rain/cyclone	17.25	12.4	67.0	65.5	42.1	38.9
Less production	1.2	1.5	9.5	9.5	5.4	5.5
Dearth of drinking water	4.5	2.5	13.0	8.5	8.8	5.5
Salinity	0.2	0.0	5.5	5.0	2.9	2.5
River erosion/loss of land	3.5	1.5	1.0	2.5	2.3	2.0
Others	0.2	0.0	1.0	2.0	0.6	1.0
Total (n)	400	201	400	200	800	401
Personal/individual						
Sickness	57.3	59.2	66.0	68.0	61.6	63.6
Loss of livestock and birds	9.0	7.5	3.3	5.0	6.1	6.2
Death of HH members	7.5	6.5	6.0	3.0	6.8	4.7
Funeral	4.2	6.5	0.8	2.0	2.5	4.2
Dowry/marriage ceremony	2.7	2.0	2.5	2.0	2.6	2.0
Divorced/separation/deserted	2.3	2.0	5.0	4.5	3.6	3.2
Others	2.5	1.0	1.9	4.0	2.2	2.3
Total (n)	400	201	400	200	800	401

Different shocks were faced in different times of the year. For example in Satkhira district floods/excessive rain/cyclones were faced by both intervention and control households in the months of Ashar and Srabon. Moreover dearth of drinking water and salinity were mentioned by many women. Due to salinity in lower aquifer drinking water is not easily

available. Deep tube well is needed, which due to high cost most of them cannot afford. So they are to collect drinking water generally from distant places. In this case they spend substantial amount of time. On the other hand floods/cyclones were mentioned comparatively by less women in Kurigram, though there is an apprehension of floods in the district particularly for those who are living on and around the bank of the rivers Jamuna, Dharala and Dudhkumar.

Food deficit was almost a permanent phenomenon in some households in both the study districts of Kurigram and Satkhira. But in the months of Ashar, Srabon, Ashwin and Kartrik it occurred most. In the months of Ashar and Srabon large number of rural people do not have any job/work during rainy season. Resultantly their purchasing power declines. Hence they face food deficit. Months of Ashwin and Kartrik coincide with the pre-harvesting season of aman rice when also many people do not have any work. Moreover during this food price generally rises. So food shortage deepens.

Overall unemployment during rainy season increases particularly in the months of Ashar and Srabon both in intervention and control households. Salinity was reported to intrude in Satkhira in the months of Chaitra and Boishakh when water flows from the North through the perennial rivers declines (Table 6.4b). On the other hand salinity was not a problem in Kurigram.

Table 6.4b: Months when crisis/shocks are encountered most in percentage

Crises/shocks & their type	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Flood/drought/excessive rain/cyclone						
Ashar	3.0	2.0	45.8	43.5	24.4	22.7
Srabon	2.6	0.0	12.8	15.0	7.6	7.5
Total (n)	400	201	400	200	800	401
Unemployment						
Ashar	18.5	15.4	47.8	46.5	33.1	30.9
Srabon	10.5	6.5	13.8	15.0	12.1	10.7
Bhadra	7.3	7.0	5.3	6.5	6.3	6.7
Ashwin	4.8	4.5	6.0	9.0	5.4	6.7
Kartrik	12.5	15.4	4.8	2.0	8.6	8.7
Total (n)	400	201	400	200	800	401
Salinity						
Boishakh	0.0	0.0	1.5	0.0	0.8	0.0
Falgun	0.0	0.0	1.0	0.0	0.5	0.0
Chaitra	0.3	0.0	2.0	4.5	1.1	2.2
Total (n)	400	201	400	200	800	401
Food deficit						
Ashar	19.5	20.9	44.8	43.5	32.1	32.2

Srabon	10.3	10.9	8.8	12.0	9.5	11.5
Bhadra	7.8	4.5	6.0	8.5	6.9	6.5
Ashwin	10.3	11.9	9.3	7.0	9.8	9.5
Kartrik	21.8	24.4	7.0	6.0	14.4	15.2
Chaitra	9.8	10.4	1.3	1.0	5.5	5.7
Total (n)	400	201	400	200	800	401

6.4. Coping strategy

Coping strategies as adopted by households in the Baseline survey for facing varieties of shocks have been divided into two broad categories: injurious and resilience strategies. Injurious coping strategy included loans from money lenders/shop keepers at high rate of interest, sale of productive assets and business capital, engagement of child labor, skipping/adjustment of meals, mortgage of farm land, begging, avoidance of treatment etc. This coping mechanism, though gives some temporary relief for the time being, has far reaching adverse consequences to the households. Resilient strategy, on the other hand, are loans from neighbors/relatives and banks, relief, temporary migration, advance sale of labor, utilization of saved money, receipt of donation and gift etc. Relevant data are presented in Table 6.5. It appears that the households in the study mostly used injurious strategies for facing such shocks as unemployment (97%), sickness (98%), flood/excessive rain (95%), death of household members (100%), shortage of drinking water (95%), etc. The poor women have no other alternatives but to adopt injurious coping strategy in the backdrop of shortage of resources, absence of any savings and employment, etc. On the other hand for tackling loss of livestock and poultry birds (86%) resilience strategy was mostly adopted by intervention households. Comparison of households between two study populations: intervention and control, shows no significant variations with respect to coping strategies as adopted by households. However, comparison of study districts shows some peculiarities. In Kurigram due to floods/draughts particularly in and around the bank of the rivers Jamuna, Teesta and Dharal people are compelled to take various injurious mechanism; even they use to migrate to urban areas including Dhaka. They also migrate to other rural areas for agricultural employment. People use to cultivate early vegetables and crops including maize, sweet pumpkin, etc. As coping mechanism, people of Satkhira, on the other hand, depend most on the Sundarbans collecting wood, and honey and catching fishes and crabs. They also practice, in limited scale, the salinity resistant crops, vegetables and tree plantation with GO/NGOs support. For shortage of safe drinking water they harvest rain water. Besides, in both areas during flooding time they take shelter at flood centers in addition to raising the plinth level of their houses and head of the tube wells.

Table 6.5: Coping strategy adopted for encountering specific crisis/shocks

	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Coping Strategy (Flood)						
Injurious strategies	88.33	84	96.40	97.32	95.45	95.98
Resilience strategies	11.67	16	3.60	2.68	4.55	4.02
Total (n)	49	22	265	127	314	149
Coping Strategy (River Erosion/loss of land)						
Injurious strategies	100.0	100.0	100.0	100.0	100.0	100.0
Total (n)	15	3	3	3	18	6
Coping Strategy (Poor Production)						
Injurious strategies	66.67	50.0	84.48	85	82.81	81.81
Resilience strategies	33.33	.0	8.62	10	10.94	9.09
Could not be possible to cope by any means	.0	50.0	6.90	5	6.25	9.09
Total (n)	6	2	37	16	43	18
Coping Strategy (Crisis of Employment)						
Injurious strategies	99.02	99.28	95.75	96.76	96.90	97.60
Resilience strategies	.98	.72	4.25	3.24	3.10	2.40
Total (n)	243	113	332	161	575	274
Coping Strategy (Shortage of Drinking water)						
Injurious strategies	100.0	100.0	92.68	99.33	95.45	95.0
Resilience strategies	.0	.0	7.32	6.67	4.55	5.0
Total (n)	16	5	37	12	53	17
Coping Strategy (Illness Coping Strategy)						
Injurious strategies	95.76	91.13	98.75	97.96	97.65	95.31
Resilience strategies	4.24	8.87	1.25	2.04	2.35	4.69
Total (n)	220	113	259	129	479	242
Coping Strategy (Death of HH member)						
Injurious strategies	100.0	100.0	100.0	100.0	100.0	100.0
Total (n)	28	13	24	6	52	19
Coping Strategy loss of livestock and poultry)						
Injurious strategies	2.78	6.25	7.14	.0	4.0	3.57
Resilience strategies	91.67	87.50	71.43	100.0	86	92.86
Could not be possible to cope by any means	5.55	6.25	21.43	.0	10	3.57
Total (n)	35	16	14	12	49	28

Using both head count and MPI methods, it appears that almost all households are poor. They have been facing multifarious shocks to be categorized as both common and personal/individual.

Chapter 7: Morbidity and Treatment

7.1 Prevalence of diseases

During the last 12 months prior to field study, women and other household members in the two study districts suffered from various diseases in a number of times. Relevant data on prevalence of disease is presented in Table 7.1. Majority of respondents (58%) in intervention households in the total sample reported that they suffered from diseases either sometimes or many times in the last 12 months prior to field work. The remaining 42% did not suffer so much during the period mentioned. Proportion of women suffering from diseases was almost the same at 54% in the control households. Distribution of respondents by prevalence of diseases between two study districts shows no significant differences. But proportion of morbidity among household members seems to be higher. For example, against 58% women in the intervention households, 63% household members were reportedly suffering from diseases in the last 12 months prior to field work. Again, against 54.3% women in control households, 64% household members were suffering from diseases. Prevalence of diseases of household members between two study districts was almost the same.

Table 7.1: Prevalence of diseases in percentage

Prevalence of disease and treatment	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Frequency of suffering from disease by respondent in the last one year in percentage						
Many times	5.0	4.5	3.0	4.0	4.0	4.3
Some times	53.1	53.3	55.4	46.7	54.3	50.0
Not so much	41.9	42.2	41.6	49.2	41.7	45.7
Total (n)	400	201	400	200	800	401
Frequency of suffering from disease by household members in the last one year in percentage						
Many times	10.8	13.6	14.2	16.3	12.5	15.0
Some times	48.6	52.4	51.6	45.3	50.1	48.8
Not so much	40.5	34.0	34.1	38.4	37.3	36.2
Total (n)	400	201	400	200	800	401

Health seeking behavior: In the surveyed area, as reported by respondents, village doctors (quacks), MBBS doctors and homeopathic doctors are mostly available. As evident from Table 7.2, the rural people surveyed across all study districts in this survey sought health care treatment from 3 major sources: village doctors (quacks), MBBS doctors and pharmacies. About 56.5%, 20.2% and 10.2% intervention households in the total sample sought health care services from these 3 sources respectively. This means that about 87% respondents sought treatment from these sources for themselves as well as for other household members. Other non-frequently mentioned sources were: quack,

community/satellite clinic, kabiraj, BRAC service center, etc. The same trend is observed in control households too.

Table 7.2: Health seeking behavior of household members

Sources of treatment	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Availability of homeopathic/Village/MBBS doctors in percentage						
Yes	88.8	93.9	97.0	96.5	92.9	95.2
No	11.2	6.1	3.0	3.5	7.1	4.8
Total (n)	400	201	394	197	794	398
Sources of getting treatment in the last one year in percentage						
Self-treatment	2.1	0.6	0.0	1.6	1.0	1.1
MBBS doctor	24.1	24.0	16.5	22.2	20.2	23.1
Village doctor	42.9	52.5	69.2	68.3	56.5	60.6
Kabiraj	1.5	2.2	0.8	0.0	1.1	1.1
Quack	5.0	3.4	0.8	0.0	2.8	1.6
Pharmacy	16.2	10.1	4.7	3.2	10.2	6.5
Community/satellite clinic	1.2	1.1	1.9	0.5	1.6	0.9
ChhinnoMukul	0.3	0.6	0.3	0.0	0.3	0.3
BRAC	0.0	0.0	1.6	2.1	0.9	1.1
Total (n)	340	179	364	189	704	368

Reasons for not taking treatment from registered doctors: From the above analysis it is seen that about 77% intervention households and 84% control households sought treatment from village doctors (quacks) and MBBS doctors. It means that the remaining 23% intervention households and 16% control households either did not have any treatment or obtained treatment from personnel other than registered doctors. The three major reasons as mentioned by intervention households were: heavily expensive (46%), long distance from home (31%) and non-availability of doctors in his/her workplace (16%). Proportion obtaining no treatment or getting treatment from non-registered doctors was almost the same in control households. Distribution of responses between two study districts also shows no remarkable variations (Table 7.3).

Table 7.3: Reasons for not seeking treatment in percentage

Reasons for not taking treatment	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Not comfortable	4.5	.0	8.8	12.5	5.7	5.3
Heavily expensive	43.2	59.1	52.9	31.2	45.9	47.4
Long distance from home	36.4	27.3	17.6	31.2	31.1	28.9
Doctor not present in his/her workplace	15.9	4.5	14.7	18.8	15.6	10.5
Social restrictions	.0	.0	2.9	6.2	.8	2.6
All medicine not given	.0		2.9		.8	
Illness not serious	.0	9.1	.0	.0	.0	5.3

Total (n)	88	22	34	16	122	38

7.2. Sources of drinking water and its quality:

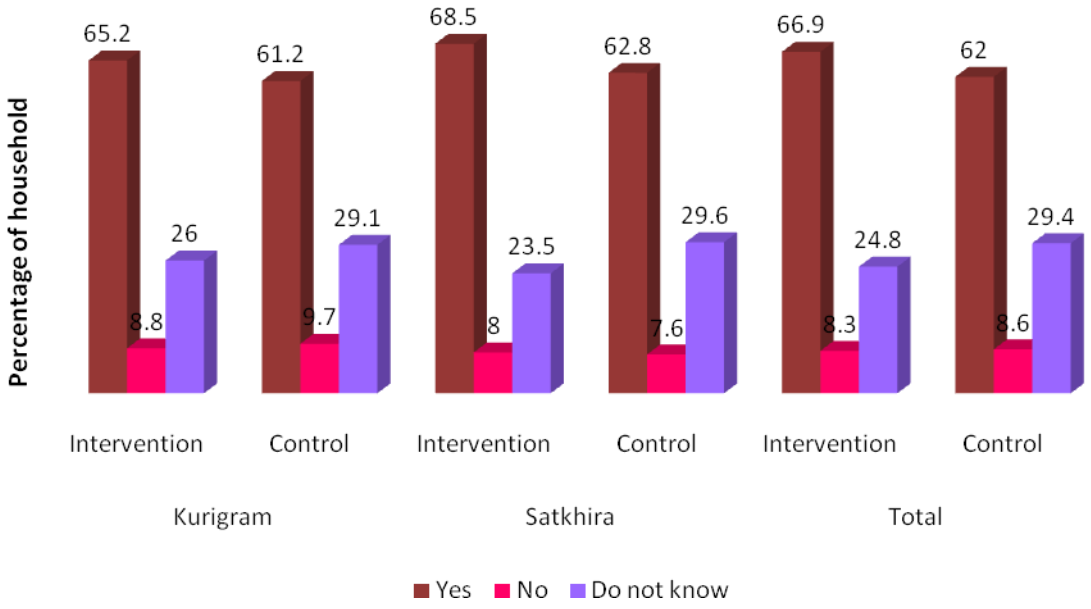
Tube- well was the dominant source of drinking water across all categories of households in both Kurigram and Satkhira districts. Data presented in Table 7.4 shows that 89% and 88% households belonging to intervention and control groups respectively had tube well as their source of drinking water. Tube well coverage was higher in Kurigram than that in Satkhira. Against 99% in Kurigram, only 78.5% intervention households in Satkhira used tube well water for drinking purpose. It is also worth mentioning that quite large proportion in both intervention and control households in Satkhira used pond water for drinking purpose. Also rain water harvesting was quite well known there.

Table 7.4: Sources of drinking water in percentage

Sources of drinking water	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Tube well	99.0	99.5	78.5	76.4	88.8	87.9
Dug well	.5	.0	.3	1.0	.4	.5
Pond	.0	.0	12.7	12.6	6.3	6.3
River	.0	.0	.0	.5	.0	.3
Filter	.0	.0	5.1	1.5	2.5	.8
Rain Water	.0	.0	1.8	5.0	.9	2.5
Pipeline water/Water Tape	.0	.0	1.3	1.5	.6	.8
Taken by Purchasing	.0	.0	.5	1.0	.3	.5
Collected from nearby household	.5	.5	.0	.0	.3	.3
Gazi Tank	.0	.0	.0	.5	.0	.3
Total (n)	399	199	395	199	794	398

Many tube wells were arsenic contaminated in both districts. As seen from figure 7.1, in total sample of intervention households about 8.3% tube wells were arsenic contaminated, while in control households the similar proportion was 8.6 %. Comparison of arsenic contamination by districts shows no discernible variations. There were however, about 25% respondents in the intervention households who did not know whether or not their tube well water was arsenic contaminated (Figure 7.1). In control households the proportion was 29%.

Figure 7.1: Arsenic free drinking water



7.3. Sanitation

About 78% intervention households and 82% control households were found to have owned latrine under their household possession (Table 7.6). Between two study districts there were no sizable variations in the ownership of latrine. Basically two types of latrine were owned: slab latrine and pit latrine. Slab latrine was owned by large majority of households both in intervention and control households. For example, 70% and 72% of those intervention and control households who owned latrines reported that they owned slab latrine respectively. No significant variations were found in the ownership of slab latrines between two study districts.

On the other hand about two thirds of women interviewed as respondents both in intervention and control households used slab latrine and another 5% used water sealed latrine. Thus about 70% of the women interviewed were using sanitary latrine. Among the other types of latrine used by them were pit latrine (25%) distantly followed by hanging latrine (4.5%), open space (1.9%) in intervention households. Proportion using the specific type of latrine was almost the same between intervention and control households belonging to both Kurigram and Satkhira districts.

Table 7.5: Possession and use of latrine in percentage

Item	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Whether or not having latrine under household possession in percentage						
Yes	78.2	80.0	78.2	83.7	78.2	81.8
No	21.8	20.0	21.8	16.3	21.8	18.2
Total (n)	377	185	372	184	749	369
Type of latrine in percentage						
Pit Latrine	29.7	27.2	29.7	28.2	29.7	27.7
Slab Latrine	70.3	72.8	70.3	71.8	70.3	72.3
Total (n)	100.0 300	100.0 151	100.0 320	100.0 163	100.0 620	100.0 314
Type of latrine used by respondent						
Pit Latrine	23.9	20.8	26.3	23.7	25.1	22.3
Slab Latrine	61.9	67.2	64.8	66.3	63.4	66.8
Water Sealed slab	7.4	7.8	1.3	2.1	4.3	5.0
Hanging Latrine	3.6	2.6	5.6	6.3	4.6	4.5
Others House	.0	.0	1.0	.0	.5	.0
Open Space	2.1	1.5	.8	1.6	1.9	1.6
Septic tank	.3	.0	.3	.0	.3	.0
Total (n)	394	192	392	190	786	382

7.4. Mortality in household

About 20% households belonging to both intervention and control groups reported deaths in their households during the last 5 years prior to field survey. Comparison of households reporting deaths between the two study districts shows that there were fewer deaths reported in Satkhira district among these households. Large majority of these women (65%) lost their husbands in the last 5 years prior to field survey in intervention households. The proportion in control households was also about the same at 63.4%. One of the reasons of their vulnerability is the loss of active husband.

There were different reasons for their death: disease and accident. Four diseases such as heart attack (18%), cancer (15%), old age disease (15%), stroke (12%) etc were the main diseases due to which they died. Accident was also the cause of death. Other minor diseases were- kidney disease, gangrene/paralysis, diabetes, stomach pain, fever, jaundice etc.

Table 7.6: Mortality Dynamics in responded household in percentage

Frequency	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Whether or not any person died in last 5 years in percentage						
Yes	20.6	23.4	17.8	14.6	19.2	19.1
No	79.4	76.6	82.2	85.4	80.8	80.9
Total (n)	389	192	381	185	770	377
Relationship with the deceased person in percentage						
Father	6.3	9.3	16.2	17.9	10.9	12.7
Mother	13.9	16.3	10.3	3.6	12.2	11.3
Husband	72.2	65.1	57.4	60.7	65.3	63.4
Other relatives	7.6	9.3	16.1	17.8	11.6	12.6
Total (n)	79	43	68	28	147	71
Causes of death in percentage						
Cancer	19.2	11.1	36.4	23.8	26.6	15.2
Heart attack	9.6	15.6	5.5	23.8	7.8	18.2
Stroke	6.8	8.9	14.5	19.0	10.2	12.1
Accident	12.3	11.1	10.9	19.1	11.7	13.6
Old age diseases	13.7	17.8	9.1	9.5	11.7	15.2
Asthma/TB	8.2	8.9	5.5	.0	7.0	6.1
Paralysis/Gangrene	5.5	6.7	7.3	.0	6.3	4.5
Kidney Diseases	4.1	4.4	.0	.0	2.3	3.0
Trauma	.0	4.4	1.8	.0	.8	3.0
Gastric	1.4	2.2	1.8	.0	1.6	1.5
Others	8.3	0	3.6	0	4.8	0
Total (n)	73	45	55	21	128	66

Chapter 8: Food Security and Nutritional Status

8.1 Food items and their frequency of food intake

Various food items were taken by household members, of which rice was the staple food usually taken daily in a number of times. The average number of days when rice was taken in the last week preceding the field work was about 7 both in intervention and control households. This is mostly taken with vegetables and sometimes with fish. In the total sample more than 65% intervention households were reported to have eaten vegetables followed by fish/dry fish (19.1%) and lentil (5.8%). The average numbers of days when vegetables, fish/dry fish and lentil soup were taken were 5.1, 2.4 and 1.6 respectively in the last week preceding field work. Meat/chicken and milk/dairy products are eaten less frequently (Table 8.1). Thus although rice was taken every day, protein was absent in their daily food in most of the cases.

Table 8.1: Number of days food items eaten in last week preceding field work in percentage

Food items & number of days	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Rice						
2-4	0.0	0.0	1.0	0.5	0.5	0.2
5-7	100.0	100.0	99.0	99.5	99.5	99.8
Total (n)	400	200	400	200	800	400
Average no of days	**6.98**	**6.99**	**6.94**	**6.97**	**6.96**	**6.98**
Vegetables						
0	2.0	1.0	2.0	3.5	2.0	2.3
1	3.2	1.5	5.8	4.5	4.5	3.0
2-4	24.5	24.0	37.5	34.8	31.0	29.4
5-7	70.2	73.5	54.7	57.1	62.5	65.3
Total (n)	400	200	397	198	797	398
Average no of days	**5.50**	**5.67**	**4.73**	**4.72**	**5.12**	**5.20**
Lentil						
0	34.0	29.6	20.9	23.6	27.5	26.6
1	27.5	30.7	32.2	28.2	29.8	29.4
2-4	33.2	35.7	38.4	40.5	35.8	38.1
5-7	5.3	4.0	8.5	7.7	6.9	5.8
Total (n)	397	199	388	195	785	394

Average no of days	**1.46**	**1.45**	**1.79**	**1.79**	**1.62**	**1.61**
Edible oil						
0	5.0	3.5	2.5	2.5	3.8	3.0
1	0.8	1.5	2.0	1.5	1.4	1.5
2-4	2.2	3.5	4.8	1.5	3.5	2.5
5-7	92.0	91.5	90.7	94.5	91.3	93.0
Total (n)	400	200	397	199	797	399
Average no of days	**6.42**	**6.43**	**6.42**	**6.59**	**6.42**	**6.51**
Meat/chicken/egg						
0	65.6	70.4	66.4	67.6	66.0	69.0
1	14.1	11.1	17.2	17.6	15.6	14.2
2-4	17.6	16.6	15.6	12.2	16.6	14.5
5-7	2.8	2.0	0.8	2.7	1.8	2.3
Total (n)	398	199	360	188	758	387
Average no of days	**0.75**	**0.64**	**0.60**	**0.66**	**0.68**	**0.65**
Milk and dairy products						
0	84.0	83.2	92.5	90.9	88.0	87.0
1	6.3	6.6	2.9	4.3	4.7	5.5
2-4	8.4	6.6	2.9	3.2	5.8	4.9
5-7	1.3	3.6	1.7	1.6	1.5	2.6
Total (n)	394	197	345	187	739	384
Average no of days	**0.35**	**0.47**	**0.23**	**0.24**	**0.29**	**0.36**
Fish/dry fish						
0	20.8	21.0	22.6	17.2	21.7	19.1
1	15.3	16.5	21.1	20.7	18.1	18.6
2-4	45.9	43.0	39.8	43.4	42.9	43.2
5-7	18.0	19.5	16.5	18.7	17.3	19.1
Total (n)	399	200	389	198	788	398
Average no of days	**2.44**	**2.58**	**2.33**	**2.55**	**2.39**	**2.56**

8.2. Food shortage

Last year there was food shortage almost in every household. As shown in Table 8.2 about 95% of intervention households suffered from food shortage in the last year preceding the field work. The comparable proportion for control households was about the same 96.2%. Distribution of households by food insecurity shows that in about one-fourth of the intervention households there was food shortage for a period of more than three months with about 9% mentioning food shortage for more than 5 months. Proportion mentioning food shortage for 1-3 months was about 45% in intervention households. There was food shortage for less than one month in 27% of the intervention households. Food shortage scenario in control households was almost the same (Table 8.2a).

Table 8.2a: Number of days there was food shortage in last year in percentage

No of days	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
0	3.2	2.0	6.5	5.6	4.9	3.8
1-30	32.8	32.5	21.5	27.3	27.1	29.9
31-60	29.0	26.0	20.0	19.2	24.5	22.6
61-90	23.5	23.5	14.2	14.1	18.9	18.8
91-150	10.2	12.5	21.2	22.7	15.8	17.6
150+	1.2	3.5	16.5	11.1	8.9	7.3
Total (n)	400	200	400	198	800	398
Avg. number of days	**57.1**	**63.9**	**91.8**	**78.4**	**74.4**	**71.1**

Households surveyed in this survey faced food shortage in the rainy season when there was less job opportunity in rural areas. It appears from Table 8.2b, about 45% intervention households mentioned that they felt acute food shortage in the Bangla month of Ashar, followed by 14.8% in Kartrik, 11.8% in Srabon and 8.9% in Ashwin. There were however, 7.5% households who felt acute food shortage in the month of Chaitra. The trend was almost the same in control households. However there are some differences between two study districts. With regard to food shortage Ashwin and Kartrik were the two difficult months with little scope of extra earning in Kurigram district both for intervention and control households, whereas in Satkhira districts the difficult months were Ashar and Srabon .

Table 8.2b: Most severe food deficit month in percentage (Section 7.3)

No of days	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Boishakh	3.1	2.1	2.4	3.2	2.8	2.7
Jaishtha	2.6	1.6	1.3	1.1	2.0	1.3
Ashar	25.6	24.6	64.9	64.0	45.0	44.0
Srabon	10.2	8.4	13.4	14.5	11.8	11.4
Bhadro	9.4	6.3	2.4	4.8	6.0	5.6
Ashwin	12.3	14.1	5.4	6.5	8.9	10.3
Kartik	23.0	26.7	6.4	3.8	14.8	15.4
Chaitra	13.3	15.2	1.6	1.1	7.5	8.2
Total (n)	383	191	373	186	756	377

As per their assessment, only 4.7% intervention and 3.5% control households were food surplus in the total sample and another 73.8% and 76.2% intervention and control households respectively faced occasional food deficit in the last year prior to field work. This also indicates that food deficit was almost permanent in more than one-fifth of the households belonging to both intervention and control groups. Thus, more than 95% households in the survey had been facing food shortage (Table 8.2c).

Table 8.2c: Status of food availability in last 12 months in percentage

Status	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Surplus	3.0	2.0	6.3	5.1	4.7	3.5
Occasional deficit	87.1	86.9	60.5	65.5	73.8	76.2
Always deficit	9.8	9.8	33.2	29.4	21.6	20.3
Total (n)	396	198	397	197	793	395

8.3. Food Consumption Score (FCS)

The Food Consumption Score (FCS) is a composite score based on dietary diversity, food frequency, and the relative nutritional importance of different food groups. The FCS is calculated using the frequency of consumption of different food groups consumed by a household during the 7 days before the survey. Scores are clustered into three groups; the results of the analysis categorize each household as having either poor, borderline, or acceptable food consumption.

Data on consumption of different food groups (nine groups) by any or all members of the households in the preceding 7 days of the interview date were collected and analyzed to assess the usual food practice of the surveyed households[14].

As seen from this Table 8.3, according to food consumption score about 18.1% intervention households and 15.7% control households had poor consumption i.e. their combined score was less or equal to 28. Another 46.0% intervention and 43.9% control households were in border line scoring 28-42. They could also be regarded as vulnerable food consumption. Thus the proportion of poor consumption was 64.1% and 59.6% among the intervention and control households in the total sample respectively. This finding is in line with the findings of Household Income and Expenditure Survey of Bangladesh. According to the HIES 2005 the food poverty is 40% in Bangladesh as a whole[15]. It can be mentioned here that substantial variations exist in the poverty rate using head count method and the poverty rate calculated using food consumption score data. According to head count ratio poverty rate is 98.2% in

[14] Food consumption pattern of households in terms of food diversity was determined by food consumption score (FCS). To determine FCS, the consumed foods were classified into 8 food groups with corresponding weight according to modified from draft 'CFSVA Guidelines'. To compute the FCS, consumption level of each food group was multiplied by the corresponding weight value. The score 0-28.0 indicates "poor food consumption", 28.01-42.0 indicates "borderline food consumption" and >42.0 indicates "acceptable food consumption".

[15] *HIES 2005 have measured poverty using Direct Calorie Intake (DCI) method but in HIES 2010 it is found missing*

intervention households, but as per food consumption score the poor food consumption rate is 64.1%. It is to be noted that FCS is based on only incidence of taking some specific items of food in the last week preceding the interview. But no data on quantity of food was collected. Probably this is the reason why FCS provides so high rate of acceptable food consumption. This implies that surveyed households simply use their meagre income for more diversified diet.

Table 8.3: Percentage distribution of households by FCS score

Score	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Poor consumption (<= 28)	20.0	18.4	16.2	13.0	18.1	15.7
Borderline consumption (>28 to 42)	43.5	46.8	48.5	43.0	46.0	43.9
Acceptable consumption (>42)	36.5	36.8	35.2	44.0	35.9	40.4
Total (n)	400	201	400	200	800	401

8.4 Food security

Household food security was assessed using Household Food Insecurity Access Scale (HFIAS)[16]. The HFIAS tool included 9 sets of question related to consumption pattern and food availability status of households in the last one month preceding the field work. The 9 sets of questions and the process of computing of HFIAS score are presented in the Table 8.4a below.

Table 8.4a: Instrument to compute food security (HFIAS)

Food security (HFIAS) questions	
Q1 In the past four weeks, did you worry that household would not have enough food? If response is 'yes' go to Q1a; if 'no' go to Q2.	Q1a. If yes how did this happen?
Q2. In the past four weeks, were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources? If response is 'yes' go to Q2a; if 'no' go to Q3	Q2a. If yes how did this happen?
Q3. In the past four weeks, did you or any household member have to eat a limited variety of foods due to a lack of resources? If response is 'yes' go to Q3a; if 'no' go to Q4	Q3a. If yes how did this happen?

[16] For comprehensive review of HIAFS please see: Coates, Jennifer, Anne Swindale and Paula Bilinsky. *Household Food Insecurity Access Scale (HFIAS) for Measurement of Household Food Access: Indicator Guide (v. 3).* Washington, D.C.: Food and Nutrition Technical Assistance Project, Academy for Educational Development, August 2007.

Q4. In the past four weeks, did you or any household member have to eat some foods that you really did not want to eat because of a lack of other types of food? If response is 'yes' go to Q4a; if 'no' go to Q5	Q4a. If yes how did this happen?
Q5. In the past four weeks, did you or any household member have to eat a smaller meal than you felt need because there was not enough food? If response is 'yes' go to Q5a; if 'no' go to Q6	Q5a. If yes how did this happen?
Q6. In the past four weeks, did you or any household member have to eat 2/1 times fewer meals in a day because there was not enough food? If response is 'yes' go to Q6a; if 'no' go to Q7	Q6a. If yes how did this happen?
Q7. In the past four weeks, did you or any household member ever not get any kind of food because of lack of affordability? If response is 'yes' go to Q7a; if 'no' go to Q8	Q7a. If yes how did this happen?
Q8. In the past four weeks, had you or any household member to sleep in starvation because there was not enough food? If response is 'yes' go to Q8a; if 'no' go to Q9	Q8a. If yes how did this happen?
Q9. In the past four weeks, had you or any household member to go a whole day and night without eating anything because there was not enough food?	Q9a. If yes how did this happen?

Each questions (Q1 to Q9) in the first column is assigned a score 1 if the response is 'yes'. But for response 'no' a score of 0 is assigned. Similarly each questions (Q1a to Q9a) in the second column is assigned a score 1 to 3. If the response is 'Rarely' (e.g. once or twice in the past four weeks) it score 1; If the response is 'Sometimes' (e.g. three to ten times in the past four weeks) it score 2; If the response is 'Often' (e.g. more than ten times in the past four weeks) it score 3.

The HFIAS categorizes the households in four ultimate categories which are: Category 1 (Food secure); Category 2 (Mildly food insecure); Category 3 (Moderately food insecure); and Category 4 (Severely food insecure).

- A households is considered Category 1: Mildly food insecure, if it got a response like [(Q1a=0 or Q1a=1) and Q2=0 and Q3=0 and Q4=0 and Q5=0 and Q6=0 and Q7=0 and Q8=0 and Q9=0]
- A households is considered Category 2: Food secure, if it got a response like [(Q1a=2 or Q1a=3 or Q2a=1 or Q2a=2 or Q2a=3 or Q3a=1 or Q4a=1) and Q5=0 and Q6=0 and Q7=0 and Q8=0 and Q9=0]
- A households is considered Category 3: Moderately food insecure, if it got a response like [(Q3a=2 or Q3a=3 or Q4a=2 or Q4a=3 or Q5a=1 or Q5a=2 or Q6a=1 or Q6a=2) and Q7=0 and Q8=0 and Q9=0]
- A households is considered Category 4: Severely food insecure, if it got a response like [Q5a=3 or Q6a=3 or Q7a=1 or Q7a=2 or Q7a=3 or Q8a=1 or Q8a=2 or Q8a=3 or Q9a=1 or Q9a=2 or Q9a=3]

Results using Household Food Insecurity Access Scale (HFIAS) are presented in Table 8.4b. It appears that most of the intervention households (93.6%) in the total sample were food insecure with about 41% being severely food insecure. According to the 'State of Food Insecurity (SOFI) 2014 report[17], jointly prepared by the FAO, IFAD and WFP, the proportion of severely food insecure population in Bangladesh as a whole is 16.4%. This huge difference indicates that hunger and poverty were in the worst among the SWAPNO beneficiaries. Control households showed about the same proportion of household food insecurity (94.5%). Comparison of food insecurity data by study districts showed that 60.4% and 55.0% population are severely food insecure in Intervention and control group is Satkhira district. By contrast 68.9% and 69.2% households were moderately food insecure in intervention and control group of Kurigram district. Broadly food security situation was comparatively little better in Kurigram district than people living in Satkhira district.

Table 8.4b: Percentage distribution of households according to Household Food Insecurity Access Scale (HFIAS)

HFIAS Scale	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Food secure	4.5	4.0	8.3	7.0	6.4	5.5
Mild food insecure	4.8	3.0	1.3	3.5	3.0	3.2
Moderate food insecure	68.9	69.2	30.1	34.5	49.6	51.9
Severe food insecure	21.8	23.9	60.4	55.0	41.0	39.4
Total (n)	399	201	396	200	795	401

8.5. Nutritional status

Nutritional status of women using their Body Mass Index (BMI) and under 5 children using their height, weight and age, was assessed in the SWAPNO Baseline study.

Body Mass Index (BMI): BMI measures weight-for-height, using the formula Wt (kg)/Ht (metre). The cut-off point for underweight has been set by WHO at BMI of 18.5. Underweight below a BMI of 18.5 is seen to indicate various degrees of malnourishment, though BMI, being a proxy measure of nutritional status, fails to account for other factors like body frame. As shown in Table 8.5, more than 70% of the women in intervention households have a BMI above the 18.5 cut-off point. Hence they were not malnourished. On the other hand less than 30% were malnourished. Proportion of malnourished women in the control area was almost the same. Between study districts there were no discernible variations in the nutritional status of women.

[17] *The State of Food Insecurity in the World: Economic growth is necessary but not sufficient to accelerate reduction of hunger and malnutrition, FAO, Rome, 2014*

Table 8.5: BMI status of women

BMI Status	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Not malnourished	74.2	66.5	70.6	76.2	72.4	71.2
Malnourished	25.8	33.5	29.4	24.0	27.6	28.8
Total (n)	400	200	398	200	798	400

Nutritional Status of children aged 0-59 months: Collected data on weight and length/height of the children aged 0-59 months are converted to z-scores of weight for age (WAZ, or underweight), length/height for age (HAZ, or stunting), weight for height (WHZ, or wasting) for children by using WHO Anthro 2007 software and applying growth reference standard (GRS) of WHO to get anthropometric status of children (overall as well as severe and moderate conditions). Cut off values of less than minus 3 SD z-score, minus 3 SD to less than minus 2 SD z score and sum of these two scores were used during data analysis to obtain the prevalence of severely, moderately as well as overall stunted, wasted and underweight children of the mentioned age group.

Prevalence of stunting, wasting and underweight

Height-for-age is a measure of linear growth. Children are classified as moderately and severely stunted (chronic malnourished, and short for their age), if the height for-age z-score (HAZ) is below minus two and minus three standard deviations (<-2 SD and <–3 SD) respectively from the median z-score of the WHO reference population.

Weight-for-height describes the current nutritional status. Children are classified as moderately and severely wasted (i.e. thin for height having acute or recent nutritional deficit), if the weight for-height z-score (WHZ) is below minus two and minus three standard deviations (<-2 SD and <–3 SD) respectively from the median z-score of the WHO reference population. The SDs of the observed height-for-age, weight-for-age, and weight-for-height Z-score distributions are relatively constant and close to the expected value of 1.0 for the reference distribution.

Weight-for-age is a composite index of weight-for-height and height-for-age and, thus, does not distinguish between acute malnutrition (wasting) and chronic malnutrition (stunting). A child can be underweight for his/her age because he/she is stunted, or because he/she is wasted, or may experience both conditions. Weight-for-age is a good indicator for nutritional health status of a population. Relevant data are presented in Table 8.6. As shown, about 36% of the under-5 children were stunted either severely or moderately with 11% having severely stunted in intervention households. In control households proportion of children stunted was somewhat lower. The national level prevalence of stunting was 38.8% and 32.5% respectively

in BDHS 2011 and 2014.

As far as underweight is concerned, about 42% of the children aged 0-59 months were underweight with 17% having severely underweight. Proportion of underweight in control households was somewhat lower at 32%. The national level prevalence of underweight was 31.9% and 29.7% respectively in the 2011 BDHS and 2014 BDHS. On the other hand, about 30% under 5 children were wasted with 11% having severely wasted in intervention households. In control households the proportion was a bit lower at 25%, In Kurigram the nutritional status of children with respect to wasting. The analysis is based on slightly over 140 children. For a nutritional study the size is definitely small. Moreover the samples were selected from among the poor households represented by destitute women. Therefore the study findings cannot be comparable to any national level studies.

Table 8.6: Nutritional status of children aged 6-59 months in percentage (Section 10.1)

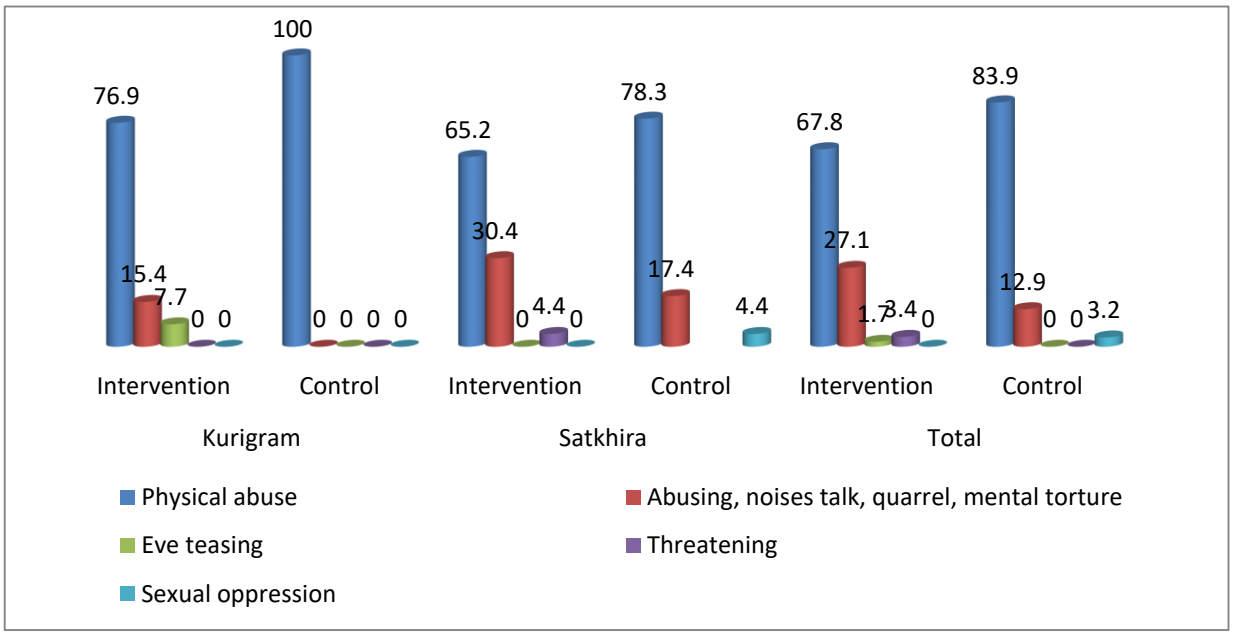
Nutritional status	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Underweight						
Severe	12.1	10.5	19.7	12.0	17.3	11.4
Moderate	30.3	21.1	22.5	20.0	25.0	20.5
Normal (Not underweight)	57.6	68.4	57.7	68.0	57.7	68.2
Total (n)	33	19	71	25	104	44
Stunting						
Severe	18.8	0.0	7.2	20.0	10.9	11.4
Moderate	25.0	15.8	24.6	12.0	24.8	13.6
Normal (Not Stunted)	56.3	84.2	68.1	68.0	64.4	75.0
Total (n)	32	19	69	25	101	44
Wasting						
Severe	6.7	10.5	17.4	8.0	14.1	9.1
Moderate	10.0	10.5	18.8	20.0	16.2	15.9
Normal (not Wasted)	83.3	78.9	63.8	72.0	69.7	75.0
Total (n)	30	19	69	25	99	44

Chapter 9: Violence, Harassment, Empowerment and decision making

9.1. Violence faced

Surveyed women in the SWAPNO Baseline survey were mostly destitute with vulnerable position. Most of them easily became the victim of violence. As provided in Table 9.1, about 7% intervention and 6% control households have become the prey of violence. In Satkhira district women were more likely to be affected by violence. For example against 3% in Kurigram, 11.6% intervention households in Satkhira district were affected by violence. Everyone in these households was more or less affected, but male members were most affected by violence. Various types' violence had been reported. Among them across all study districts physical abuse was most frequently mentioned. Other forms of abuse were noises, quarrelling, mental torture, threat, sexual oppression, etc (Figure below). But it is encouraging that most of the women knew where to go for redress. According to them, UP is the most appropriate place (70%) to visit for redress followed by Police Station (Thana), hospital, court etc.

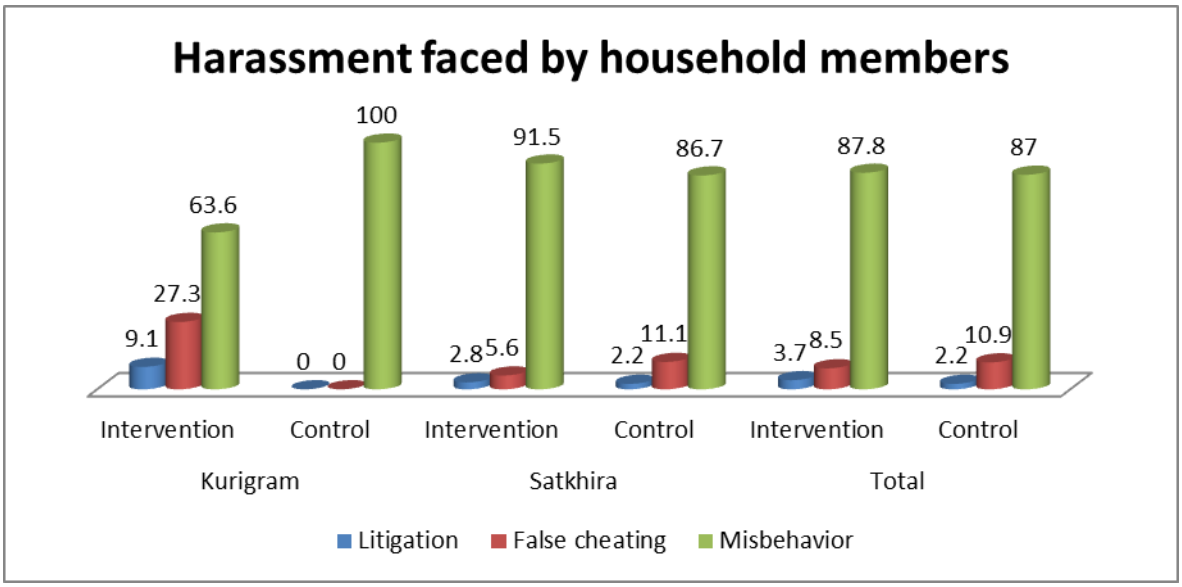
Figure 9.1: Violence faced



9.2. Harassment of household members

Data on incidence of harassment of household members is presented in Table 9.2. It appears that about 11% and 12% intervention and control household members respectively were harassed in the last 12 months preceding the field work. Incidence of harassment was higher in Satkhira than in Kurigram. Against 3% in Kurigram, 19% intervention household members in Satkhira were harassed. Women including the beneficiaries were harassed most including misbehavior (88%) and cheating (9%). Litigation was least mentioned.

Figure 9.2: Harassment faced by household members



FGD Participants mentioned various forms of physical and mental torture by members of husband's family. However the mental torture was more acute which included abusing in the name of daughter- in- laws' parents for not giving dowry. However they did not complain to anybody for all these out of shame. They reported that the number of women repression in their area was much less in comparison to other areas. For justice initially relatives and elders were approached. If initiatives were not taken by them, they went to local UP members. UP members with help of UP chairman arbitrate the matter at UP office or in the village. If it is not solved there, they go to police station or Court. Some of the participants pointed out that as they lived with the family of brothers they became victims of torture at the hands of brothers or brothers' wife. They took away forcibly their income which they earn. Moreover respondents were not allowed by their husband to take medical treatment. They added that they did not go anywhere for redress or justice which they thought would create further problem for them.

Female UP members helped them to solve family problems. It is true that repression against women is decreasing; Some NGOs are engaged in the area for awareness building to stop violence against women.

FGD participants in Satkhira expressed their opinion on the type of oppression committed by their husbands or other male family members. Some of the participants reported that other than abusing, they were not physically tortured by male members. However one or two participant expressed that male parsons of the family do not consider them as human being. Even they divorce wives on trifles matters and also remarry elsewhere. Problems also occur when daughters are forced to return from their husband's family. It is difficult to remarry a divorced or abandoned woman or widow. However there is no guarantee of continuation of the family even after remarriage.

Some participants reported that after marriage sons have their own household and live separately; their income is not shared with others family members or parents and in many cases they don't allow elderly mother to share their food with them. This causes hardship for both elderly and sick mothers. In many cases they are deprived of property rights to be obtained from their father, and husband.

9.3. Control over assets

Assets were divided into two broad categories: own assets and household assets. Own income and savings were largely under women's control. But in many cases their immovable property was not under their control, probably under others' control. Household income was under their control but other assets such household savings and immovable assets were others' control in many cases. Thus the surveyed women could exert control over assets, both individual and household assets (Table 9.3).

9.4. Mobility of Women

Women can easily go from one place to another. For example, almost every woman interviewed as respondent reported that they could go outside the locality within their *para*/village alone (99.2%), that they could go anywhere within their union alone (95%), that they could go to Upazila head quarter alone (64%) and that they could go to district/divisional head quarter alone (30%). Thus the women were free to move anywhere. In distant location they need help from someone to accompany them (Table 9.4).

FGD Participants were found to have given their opinion on various issues of mobility. They could move freely alone in the local hat-bazar, hospital, UP etc. They could go outside for buying things, for treatment and buying medicine, cloths for children, for depositing savings, for settlement of dispute at UP and Upazila office, for selling poultry birds etc. Some of the respondents had free movement and could go to Upazila or district town alone. However others needed support of male members to go to these places. Some of them go to other places mainly in neighboring districts to work in brick kilns.

9.5. Participation in decision making

Women in this study were largely found to have participated in decision making on diversified issues such as individual, household and social. On each issue, a number of subjects have been identified. Women were asked to respond whether they participated in decision making on these specific subjects. Their responses are presented in Tables 9.5a, 9.5b and 9.5c. As seen, 95% women in intervention households participated in decision making process with other household members on services to be obtained from different agencies. Women were also found to participate on income generating activities to be conducted (85%), purchase and sale of livestock and poultry birds (80%), house construction (81%), purchase and sell of vegetables (80%), health care for children (85%), votes in

election (89%), etc. There were also some issues on which the women were reluctant to participate. These included participation in school management committee, participation in village court, education and training, meeting, etc.

9.6. Awareness and right provided

Women were largely aware of property rights and basic citizen rights. About 97% women in intervention households were aware of their property right and 90% about citizen rights. There were no substantial differences between intervention and control households with respect to their awareness of property and citizen rights.

Majority of women were aware of legal support provided by government agencies and civil society organizations, health care services provided by government, and legal age at marriage. There were, however, sizable 31%, 20% and 28% women in intervention households who were not aware of the services available for beneficiaries. Therefore in order to make them aware about the basic rights, program by SWAPNO should be undertaken.

Regarding future life-based skills management, 78% women in intervention households were aware of future plans, 39% aware on child marriage, 4% on acceptance of husband after his return, 6% on marriage in future and 30% on acceptance of dowry at the time of their children's marriage, etc. Thus this Project has great opportunity to include in its program the issues regarding not to give in marriage the minor child, not to give dowry at the time of children's marriage, etc.

Local level government agencies provide different types of safety net programs/services targeted to the rural poor. Respondents were asked whether they had any knowledge about that. Their responses are presented in Table 9.7. As evident, women's awareness level was more than 60% for almost all services provided by the government. For example, 91% women were aware of widow allowances, 88% for VGD, 87% for Food for Works, 86% for old age pension, etc.

9.7. Child Marriage:

According to many FGD participants child marriage is a social curse. But if girls are not married at tender age it creates some local/ social problem, so they practice it. However if under age sons and daughters earn better income, guardians refrain from arranging their marriage. They also added that due to child marriage, both the mother and new born remain at stake during the delivery time. Moreover, mother and children suffer from malnutrition and illness.

Moreover if girls attain more years, it becomes difficult to get good bridegroom for their marriage. For aged girls, more dowries are required. Mothers also become relieved by giving marriage of their daughters to avoid any sort of bad activities or problem. The participants

also added some more disadvantages of child marriage which includes risk for under aged daughter if she becomes pregnant at tender age. They mentioned that if a girl is a victim of child marriage, she cannot manage family at tender age, becomes victim of different types of diseases leading to ill health, becomes weak and gives birth to ill-nourished baby due to malnutrition and all these lead to divorce and separation.

9.8. Dowry:

On the issue of dowry, the FGD participants had the opinion that it is impossible to give marriage of daughter without giving dowry. Without dowry the daughters will be tortured at her father in law's house. However if the daughter is beautiful to look at, the amount of dowry becomes less. Parents take dowry from their son's marriage. However they agreed that receiving and providing dowry is bad, but as they are poor they practice it. They also opined that if they could earn adequate income they would educate their children and would not practice dowry.

Table 9.1: Violence faced percentage

Violence related issues	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Whether or not violence faced by any HH members in last 12 months						
Yes	3.0	2.5	11.6	10.3	7.3	6.3
No	97.0	97.5	88.4	89.7	92.7	93.7
Total (n)	396	201	398	195	794	396
Household members affected:						
Respondents	76.92	37.5	47.06	30.43	53.13	32.26
Male	15.38	25	29.41	52.17	26.56	45.16
Female	7.69	37.5	23.53	17.39	20.31	22.58
Total (n)	13	8	51	23	64	31
Awareness about the place to visit to get redress						
Yes	94.9	91.9	90.3	92.9	92.7	92.4
No	5.1	8.1	9.7	7.1	7.3	7.6
Total (n)	391	197	372	184	763	381
Place of making complaint against violence:						
Union Parishad	72.83	74.35	67.90	68.86	70.37	71.62
Police, personnel of law enforcing agencies	20.65	17.83	20.31	20.61	20.48	19.21
Hospital	3.70	5.65	0.44	1.75	2.07	3.71
Court	1.96	0.87	7.86	6.58	4.90	3.71
Victim Support Centre	0.22	0.00	0.66	0.44	0.44	0.22
To local respectable people, local leaders	0.65	1.30	1.75	1.32	1.20	1.31
Total (n)	460	230	458	228	918	458

Table 9.2: Harassment faced by HHs percentage

Harassment related issues	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Whether or not harassment faced by any HH members in last 12 months						
Yes	3.1	.5	19.1	25.3	11.1	12.6
No	96.9	99.5	80.9	74.7	88.9	87.4
Total (n)	381	195	376	186	757	381
Members faced:						
Beneficiary	92.31	100	81.08	64.58	82.76	65.31
Male	7.69	0.00	4.05	10.42	4.60	10.20
Female	0.00	0.00	14.86	25.00	12.64	24.49
Total (n)	13	1	74	48	87	49

Table 9.3: Control over assets

Assets	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Own assets						
Own income	99.2	98.5	98.4	95.5	98.4	97.0
Own savings	72.5	69.2	76.5	79.3	74.5	74.2
Immovable assets	41.5	36.3	49.0	50.5	45.3	43.5
Others	15.5	19.5	1.6	2.2	6.3	7.5
Household assets						
Income	74.6	74.7	92.9	94.0	83.8	84.4
Savings	39.9	33.7	35.3	35.4	37.8	34.6
Immovable assets	34.2	32.8	48.8	51.5	41.7	42.4
Others	10.8	12.5	1.7	2.4	4.7	5.2

Table 9.4: Mobility of women in percentage

Mobility	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Outside the neighborhood but within village						
Alone	99.5	97.5	99.0	99.5	99.2	98.5
With husband	.3	.5	.0	.5	.1	.5
With others	.0	1.5	.5	.0	.3	.7
No	.3	.5	.5	.0	.4	.2
Total (n)	397	201	399	200	796	401
Within union						
Alone	94.5	93.5	94.5	94.0	94.5	93.8
With husband	1.0	1.5	2.0	1.5	1.5	1.5
With others	4.5	5.0	3.3	4.0	3.9	4.5
No	.0	.0	.3	.5	.1	.2
Total (n)	397	201	399	200	796	401

To upazila service offices and banks						
Alone	59.9	62.5	66.9	61.5	63.6	62.0
With husband	13.6	10.0	8.8	14.5	11.2	12.3
With others	23.2	26.0	19.8	14.5	21.5	23.3
No	3.3	1.5	4.5	3.5	3.9	2.5
Total (n)	397	200	399	200	796	400
To district/divisional HQ						
Alone	25.1	25.5	35.3	31.5	30.2	28.5
With husband	25.3	28.0	21.8	30.0	23.6	29.0
With others	32.2	32.5	35.1	30.0	33.6	31.3
No	17.5	14.0	7.8	8.5	12.6	11.3
Total (n)	395	200	399	200	794	400

Table 9.5a: Decision making on women's issues in percentage

Own issues	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Involvement in new income generating activities						
Alone	91.5	89.9	76.6	69.5	84.0	79.7
With husband/male	3.1	3.5	3.5	7.5	3.3	5.5
Decision taken by others	1.0	3.0	2.0	3.0	1.5	3.0
No	4.4	3.5	17.8	20.0	11.1	11.8
Total (n)	388	199	398	200	786	399
Obtaining services						
Alone	87.6	89.1	89.3	85.9	88.4	87.5
With husband/male	8.6	8.5	4.3	6.5	6.4	7.5
Decision taken by others	2.0	2.5	4.0	2.5	3.0	2.5
No	1.8	.0	2.5	5.0	2.1	2.5
Total (n)	395	201	400	199	795	400
Education/training						
Alone	29.8	26.5	44.8	38.3	37.2	33.2
With husband/male	8.6	12.5	7.0	9.7	7.8	11.1
Decision taken by others	2.3	3.0	2.6	1.5	2.4	2.3
No	59.3	58.0	45.6	50.0	52.6	54.3
Total (n)	396	200	386	196	782	396
Meetings						
Alone	18.3	16.1	32.7	23.5	25.4	19.7
With husband/male	10.4	11.6	7.5	8.7	9.0	10.1
Decision taken by others	5.9	6.5	2.9	4.1	4.4	5.3
No	65.4	65.8	56.9	63.8	61.2	64.8
Total (n)	257	199	385	196	778	395

Table 9.5b: Participation in decision making on household issues in percentage

Family issues	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Purchase and sale of physical assets						
Alone	32.5	25.1	51.9	50.0	42.2	37.5
With husband/male	33.8	34.7	11.6	15.3	22.7	25.1
Decision taken by others	2.0	3.0	4.3	2.6	3.2	2.8
No	31.7	37.2	32.2	32.1	31.9	34.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	394	199	395	196	789	395
Purchase and sale of ornaments						
Alone	41.5	34.8	56.9	55.0	49.2	45.0
With husband/male	24.4	29.8	11.2	12.0	17.8	20.9
Decision taken by others	.8	2.5	2.6	3.5	1.7	3.0
No	33.3	32.8	29.3	29.5	31.3	31.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	393	198	392	200	785	398
Purchase and sale of livestock and poultry birds						
Alone	68.5	66.8	68.8	62.5	68.7	64.7
With husband/male	18.3	19.6	7.3	11.5	12.8	15.5
Decision taken by others	.8	2.5	3.0	3.5	1.9	3.0
No	12.4	11.1	20.9	22.5	16.7	16.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	394	199	398	200	792	399
Purchase and sale of vegetables, fruits and trees						
Alone	85.3	77.0	66.8	63.0	76.0	70.0
With husband/male	9.1	15.0	6.0	4.5	7.6	9.8
Decision taken by others	.3	2.0	.8	1.5	.5	1.8
No participation	5.3	6.0	26.4	31.0	15.9	18.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	394	200	398	200	792	400
House construction and repair						
Alone	62.3	52.7	63.5	60.4	62.9	56.5
With husband/male	28.5	36.8	12.9	18.3	20.7	27.6
Decision taken by others	2.8	4.5	5.1	2.5	3.9	3.5
No	6.4	6.0	18.5	18.8	12.5	12.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	393	201	394	197	787	398
Children's education						
Alone	67.1	67.8	66.3	68.2	66.7	68.0
With husband/male	14.2	18.1	6.0	7.2	10.2	12.7
Decision taken by others	2.3	1.5	2.9	2.1	2.6	1.8
No	16.5	12.6	24.8	22.6	20.6	17.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	395	199	383	195	778	394
Marriage of children						
Alone	39.8	37.0	49.3	49.2	44.5	43.0
With husband/male	34.2	42.0	14.1	15.9	24.3	29.1
Decision taken by others	5.1	3.5	5.2	5.6	5.2	4.6

No	20.9	17.5	31.3	29.2	26.1	23.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	392	200	383	195	775	395
Health care treatment of children						
Alone	64.6	70.8	71.2	74.7	67.9	72.8
With husband/male	16.1	16.1	5.3	8.2	10.7	12.2
Decision taken by others	2.7	1.0	3.7	2.1	3.2	1.6
No	16.6	12.0	19.7	14.9	18.2	13.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	373	192	375	194	748	386

Table 9.5c: Participation in decision making on social issues in percentage

Family issues	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
School management committee						
Alone	1.5	2.5	6.0	4.8	3.7	3.6
With husband/male	11.2	10.6	9.0	10.1	10.1	10.3
Decision taken by others	4.6	3.0	.3	1.1	2.5	2.1
No	82.7	83.9	84.7	84.0	83.7	84.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	394	199	367	188	761	387
Village court/shalish						
Alone	10.7	12.0	19.6	17.0	15.0	14.5
With husband/male	9.7	7.5	8.7	13.9	9.2	10.7
Decision taken by others	.8	1.0	.5	2.1	.7	1.5
No	78.9	79.5	71.1	67.0	75.1	73.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	393	200	367	194	760	394
Votes in last election						
Alone	69.4	76.4	87.6	89.3	78.4	82.8
With husband/male	12.8	9.5	1.3	3.1	7.1	6.3
Decision taken by others	12.5	12.1	1.8	1.5	7.2	6.8
No	5.4	2.0	9.3	6.1	7.3	4.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	392	199	387	196	779	395

Table 9.6a: Knowledge and information about right in percentage

Level	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Property rights:						
Yes	97.2	93.5	96.8	97.0	97.0	95.3
No	2.8	6.5	3.3	2.5	3.0	4.5
NA	.0	.0	.0	.5	.0	.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	397	201	400	200	797	401
Basic Citizen rights:						
Yes	84.6	85.6	93.5	95.5	89.1	90.5
No	15.4	14.4	6.5	4.5	10.9	9.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
n	397	201	400	200	797	401

Table 9.6b: Knowledge and information about different services and legal support in percentage

Level	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Legal support:						
Yes	72.4	66.1	64.6	62.3	68.4	64.2
No	27.6	33.9	34.7	37.2	31.2	35.5
NA	.0	.0	.8	.5	.4	.3
Total (n)	391	192	398	199	789	391
Health care services and family planning:						
Yes	82.4	81.1	66.8	60.9	74.6	71.1
No	15.6	17.4	19.6	28.9	19.6	23.1
NA	2.0	1.5	5.8	10.2	5.8	5.8
Total (n)	397	201	397	197	794	398
Laws regarding child marriage:						
Yes	70.8	75.0	72.3	65.7	71.6	70.3
No	28.7	25.0	27.2	33.8	27.9	29.4
NA	.5	.0	.5	.5	.5	.3
Total (n)	390	196	394	198	784	394

Table 9.6c: Knowledge and information about skills management in percentage

Level	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Future plan:						
Yes	73.2	75.5	82.8	73.2	78.0	74.4
No	25.8	23.5	16.9	26.8	21.3	25.1
NA	1.0	1.0	.3	.0	.6	.5
Total (n)	396	200	396	198	792	398
Marriage of minor child:						
Yes	43.2	36.5	34.4	42.0	38.9	39.3
No	50.0	58.7	54.3	51.1	52.1	54.8
NA	6.8	4.8	11.3	6.9	9.1	5.9
Total (n)	352	167	337	174	689	341
Acceptance of husband after his return:						
Yes	2.6	3.6	6.1	4.7	4.4	4.1
No	32.5	29.1	52.3	46.6	42.4	37.8
NA	64.9	67.3	41.6	48.7	53.2	58.1
Total (n)	388	196	392	193	780	389
Marriage in future :						
Yes	3.1	5.0	8.8	7.7	5.9	6.3
No	65.6	61.8	81.2	76.9	73.5	69.3
NA	31.4	33.2	10.0	15.4	20.6	24.4
Total (n)	392	199	399	195	791	394
Acceptance of dowry at the time children's marriage :						
Yes	37.8	33.0	21.7	21.1	29.8	27.2
No	54.1	59.5	70.3	74.2	62.2	66.8
NA	8.2	7.5	7.9	4.6	8.0	6.1
Total (n)	392	200	391	194	783	394

Table 9.7: Awareness about initiatives/programs undertaken by local govt. agencies in percentage

Initiatives/programs	Kurigram		Satkhira		Total	
	Intervention	Control	Intervention	Control	Intervention	Control
Food for works	89.1	86.6	83.4	87.4	86.3	87.0
GR and TR	86.9	83.6	74.4	71.5	80.6	77.6
VGD	95.7	93.5	81.7	82.5	88.7	88.0
VGF	92.9	90.5	76.5	76.5	84.7	83.5
Widow allowance	95.2	94.0	91.2	87.5	93.2	90.8
Old age pension	89.8	87.1	88.4	84.5	89.1	85.8
Latrine	67.0	72.6	80.1	81.4	73.5	77.0
Tube well	57.3	57.5	73.0	26.5	65.2	65.5
Freedom fighters' allowance	63.8	64.7	59.7	64.3	61.7	64.5
Primary education stipend	39.4	49.5	54.7	45.2	47.1	47.4
Ward meeting	16.7	18.4	15.2	18.5	16.0	18.5

Annex-1: Methodological Notes on Poverty Indexes

Head-Count Index

The **headcount index** (P_0) measures the proportion of the population that is poor. It is popular because it is easy to understand and measure. But it does not indicate how poor the poor are.

By far the most widely-used measure is the headcount index, which simply measures the proportion of the population that is counted as poor, often denoted byP_0. Formally,

$$P_0 = \frac{N_P}{N}$$

Where, N_P is the number of poor and N is the total population (or sample). If 60 people are poor in a survey that samples 300 people, then P_0 = 60/300 = 0.2 = 20%. It is often helpful to rewrite it as

$$P_0 = \frac{1}{N}\sum_{i=1}^{N} I(y_i < z)$$

Here, $I(.)$ is an indicator function that takes on a value of 1 if the bracketed expression is true and 0 otherwise. So if expenditure (y_i) is less than the poverty line (z), then $I(.)$ equals to 1 and the household would be counted as poor. N_P is the total number of the poor.

The greatest virtues of the headcount index are that it is simple to construct and easy to understand. These are important qualities. However the measure has at least three weaknesses. First, the headcount index does not take the intensity of poverty into account. Second, the head-count index does not indicate how poor the poor are, and hence does not change if people below the poverty line become poorer. Third, the poverty estimates should be calculated for individuals and not households. If 20% of households are poor, it may be that 25% of the population is poor (if poor households are large) or 15% are poor (if poor households are small); the only relevant figures for policy analysis are those for individuals.

Poverty gap index

The **poverty gap index** (P_1) measures the extent to which individuals fall below the poverty line (the poverty gaps) as a proportion of the poverty line. The sum of these poverty gaps gives the minimum cost of eliminating poverty, if transfers were perfectly targeted. The measure does not reflect changes in inequality among the poor.

A moderately popular measure of poverty is the poverty gap index, which adds up the extent to which individuals on an average fall below the poverty line, and expresses it as a

percentage of the poverty line. More specifically, define the poverty gap (G_i) as the poverty line (z) less actual income (y_i) for poor individuals; the gap is considered to be zero for everyone else. Using the index function, we have

$$G_i = (z - y_i).I(y_i < z)$$

Then the poverty gap index (P_1) may be written as

$$P_1 = \frac{1}{N}\sum_{i=1}^{N}\frac{G_i}{z}$$

This measure is the mean proportionate poverty gap in the population (where the non-poor have zero poverty gap). Some people find it helpful to think of this measure as the cost of eliminating poverty (relative to the poverty line), because it shows how much would have to be transferred to the poor to bring their incomes or expenditures up to the poverty line (as a proportion of the poverty line). The minimum cost of eliminating poverty using targeted transfers is simply the sum of all the poverty gaps in a population; every gap is filled up to the poverty line. However this interpretation is only reasonable if the transfers could be made perfectly efficient, for instance with lump sum transfers, which is implausible. Clearly this assumes that the policymaker has a lot of information; one should not be surprised to find that a very "pro-poor" government would need to spend far more than this in the name of poverty reduction.

At the other extreme, one can consider the maximum cost of eliminating poverty, assuming that the policymaker knows nothing about who is poor and who is not. From the form of the index, it can be seen that the ratio of the minimum cost of eliminating poverty with perfect targeting (i.e.G_i) to the maximum cost with no targeting (i.e. z, which would involve providing everyone with enough to ensure they are not below the poverty line) is simply the poverty gap index. Thus this measure is an indicator of the potential saving to the poverty alleviation budget from targeting: the smaller is the poverty gap index, the greater the potential economies for poverty alleviation budget from identifying the characteristics of the poor – using survey or other information – so as to target benefits and programs.

Squared poverty gap ("poverty severity") index

The squared **poverty gap ("poverty severity") index (P_2)** averages the squares of the poverty gaps relative to the poverty line. It is one of the Foster-Greer-Thorbecke (FGT) class of poverty measures that may be written as

$$P_2 = \frac{1}{N}\sum_{i=1}^{N}\left(\frac{G_i}{z}\right)^2$$

Where N is the size of the sample, z is the poverty line, G_i is the poverty gap.

The measure lacks intuitive appeal, and because it is not easy to interpret it is not used very widely. It may be thought of as one of a family of measures proposed by Foster, Greer and Thorbecke (1984), which may be written, quite generally, as

$$P_\alpha = \frac{1}{N}\sum_{i=1}^{N}\left(\frac{G_i}{z}\right)^2, \qquad (\alpha \geq 0)$$

where α is a measure of the sensitivity of the index to poverty and the poverty line is z, the value of expenditure per capita for the ith person's household is x_i , and the poverty gap for individual i is $G_i = z - x_i$(with$G_i = 0$ when $x_i > z$) When parameter $\alpha = 0$, P_0 is simply the head-count index. When$\alpha = 1$, the index is the poverty gap index P_1, and when α is set equal to 2, P_2 is the poverty severity index. For all $\alpha > 0$, the measure is strictly decreasing in the living standard of the poor (the lower your standard of living, the poorer you are deemed to be). Furthermore, for $\alpha > 1$ it also has the property that the increase in measured poverty due to a fall in one's standard of living will be deemed greater the poorer one is. The measure is then said to be "strictly convex" in incomes (and "weakly convex" for α=1). Another convenient feature of the FGT class of poverty measures is that they can be disaggregated for population sub-groups and the contribution of each sub-group to national poverty can be calculated.

Rationale and Methodology to Derive UNDP's Multi-Dimensional Poverty Index (MPI) as Household Poverty Measure of SWAPNO

The multi-dimensional poverty index is a broad measure of acute human poverty across three dimensions. It reflects deprivations in very rudimentary services and core *human functionings*[18]. It reveals a different pattern of poverty than income poverty, as it illuminates a wider set of deprivations and is well-suited for measuring the broad welfare impact of SWAPNO's interventions. Moreover, in this context income poverty is difficult to collect and enumerate, and the legacy sample is not sufficiently robust to allow this.

The MPI has three dimensions: health, education, and standard of living, which are measured using ten indicators (Table 2.2). In supported low-income settlements, SWAPNO aims to impact directly and/or indirectly these dimensions and indicators through its settlement improvement and livelihoods development activities.

[18]Defined by Sen (2004) as key attributes which enable *key capabilities* or states of being, which offer a direct measure of welfare, to be realized.

Poor households are identified and an aggregate measure is constructed using the methodology proposed by Alkire and Foster (2007, 2009)[19]. Each of the three dimensions is equally weighted at one-third; and each indicator within a dimension is also equally weighted (Table 2.2).

The MPI reveals the combination of deprivations that may affect a household at the same time. A household is identified as multi-dimensionally poor if, and only if, it is deprived in some combination of indicators whose weighted sum is 30 percent or more of the dimensions.

The MPI has become the standard measure of poverty reported within UNDP's global Human Development Reports. The final Index is the product of two numbers: the Headcount (H), or percentage of people who are poor, and the Average intensity of deprivations (A) – which reflects the proportion of dimensions in which households are deprived.

Table 2.2: Summary of UNDP's Multi-Dimensional Poverty Index Dimensions, Indicators and Deprivations

MPI Dimension	Indicator	Household is deprived if	Related to	Relative weight
Education	Years of Schooling	No household member has completed five years of schooling	MDG 2	16.7%
Education	Child School Attendance	Any school-aged child is not attending school in years 1 to 8	MDG 2	16.7%
Health	Mortality	Any child has died in the family	MDG 4	16.7%
Health	Nutrition	Any adult or child for whom there is nutritional information is malnourished	MDG 1	16.7%
Standard of Living	Electricity	The household has no electricity	MDG 7	5.5%
Standard of Living	Sanitation	The household's sanitation facility is not improved (according to MDG guidelines), or it is improved but shared with other households	MDG 7	5.5%
Standard of Living	Water	The household does not have access to clean drinking water (according to MDG guidelines), or clean water is more than 30 minutes walking from home	MDG 7	5.5%
Standard of Living	Floor	The household has dirt, sand or dung floor	MDG 7	5.5%
Standard of Living	Cooking Fuel	The household cooks with dung, wood or charcoal	MDG 7	5.5%
Standard of Living	Assets	The household does not own more than one of: radio, TV, telephone, bike, motorbike or refrigerator, and does not own a car or a truck.	MDG 7	5.5%

[19]Alkire, S., & Foster, J. (2007).'Counting and Multidimensional Poverty Measurement', *Oxford Poverty and Human Development Initiative, Working Paper* No. 7, Oxford Department of International Development, University of Oxford.
Alkire, S., & Foster, J. (2009). 'Counting and Multidimensional Poverty', In Von Braun J. (Ed.) *The Poorest and Hungry: Assessment, Analysis and Actions.* Washington D.C.: International Food Policy Research Institute.

In addition, the MPI is also fully aligned to the Millennium Development Goals (MDGs). First, it employs indicators that relate to the MDGs: 8 of the 10 indicators are directly linked to MDGs; the other two (electricity, flooring) are plausibly related.

Second, it establishes the 'base' population as being the household. People live in households, the suffering of one member affects other members, and, similarly, the abilities of one member (e.g. literacy) often help other household members.

Lastly, the MPI illuminates the simultaneous deprivations of households. This enables the identification of different 'types' of deprivations, and clusters of deprivations, that occur regularly in different countries or groups. Such a measure can thus contribute to a better understanding of the interconnectedness among deprivations, can help identify poverty traps, and can thus strengthen the composition and sequencing of interventions required to meet the MDGs.

In SWAPNO project we carefully designed the questionnaire to get results of all the indicators which are jointly used to construct MPI. Nonetheless, two drawbacks arise in relation to health-related indicators. Firstly, child mortality data was restricted to deaths in the household during the previous one year, a duration that is not sufficient to adequately measure such a deprivation. Secondly, the nutritional indicator (BMI adequacy for adults, and a two standard deviation interval for children) was only available for women and children within the survey data. Although limiting, this still produced a relatively large sub-sample and this was judged sufficiently representative. Therefore no further action was taken. It is not clear if this presents any systematic biases; while surveys have tended to show poor families place the greatest emphasis on feeding children, women typically rank below men for the distribution of food. Thus the sampling effects of excluding men run in both directions.

Finally, the MPI is calculated as follows

$$MPI = H \times A$$

Where, H denotes percentage of people who are MPI poor (incidence of poverty) and A stands for average intensity of MPI poverty across the poor (%).

Methodological Notes on Food Consumption Score (FCS) Calculation

Calculation of the Food Consumption Score (FCS) and Food Consumption Groups (FCGs)

Definition: The frequency weighted diet diversity score or "Food consumption score" is a score calculated using the frequency of consumption of different food groups consumed by a household/individual during the 7 days before the survey.

Calculation steps:

I. Using standard VAM 7-day food frequency data group all the food items into specific food groups (see groups in table below).

II. Sum all the consumption frequencies of food items of the same group, and recode the value of each group above 7 as 7.

III. Multiply the value obtained for each food group by its weight (see food group weights in table below) and creates new weighted food group scores.

IV. Sum the weighed food group scores, thus creating the food consumption score (FCS).

V. Using the appropriate thresholds (see below), recode the variable food consumption score, from a continuous variable to a categorical variable.

These are the standard Food Groups and current standard weights used in all analyses. The food items listed are an example from the ODJ region.

	FOOD ITEMS (*examples*)	**Food groups (definitive)**	**Weight (definitive)**
1	Maize , maize porridge, rice, sorghum, millet pasta, bread and other cereals	Main staples	2
	Cassava, potatoes and sweet potatoes, other tubers, plantains		
2	Beans. Peas, groundnuts and cashew nuts	Pulses	3
3	Vegetables, relish and leaves	Vegetables	1
4	Fruits	Fruit	1
5	Beef, goat, poultry, pork, eggs and fish	Meat and fish	4
6	Milk yogurt and other diary	Milk	4
7	Sugar and sugar products	Sugar	0.5
8	Oils, fats and butter	Oil	0.5
9	spices, salt, fish power, small amounts of milk for tea.	Condiments	0

WFP's corporate FCS thresholds

Once the food consumption score is calculated, the thresholds for the FCGs should be determined based on the frequency of the scores and the knowledge of the consumption behavior in that country/region.

The typical thresholds are:

FCS	Profiles
0-21	Poor
21.5-35	Borderline
> 35	Acceptable

Two standard thresholds have been identified by WFP to distinguish different food consumption level. A score of 21 was set as the minimum food consumption composed by an expected daily consumption of staple (frequency * weight, 7 * 2 = 14) and vegetables (7 * 1 = 7).

- A score below 21, implies that the household is expected NOT to eat at least staple and vegetables on a daily basis and therefore considered to have "poor food consumption".
- The second threshold was set at 35, composed by daily consumption of staple and vegetables complemented by a frequent (4 day/week) consumption of oil and pulses (staple*weight + vegetables*weight + oil*weight + pulses*weight = 7*2+7*1+4*0.5+4*3=35). With a FCS between 21 and 35, a household is assumed to have "borderline food consumption".
- Households that score above 35 are estimated to have "acceptable food consumption".

However, as discussed in this paper, these thresholds need to be tested and possibly modified based on the context and dietary patterns of the population in question.

Bangladesh specific FCS thresholds

Given the importance of oil and fish in the diet of the Bangladeshi people, these thresholds were elevated. As a result, FCS thresholds were revised for Bangladesh and four food consumption groups were created:

- Poor consumption (≤28),
- Borderline Consumption (>28 and ≤42),
- Acceptable Consumption (>42).
- An additional threshold was introduce to distinguish the acceptable households between acceptable low (43-52) and acceptable high (>52).

Annex 2: Household Survey Questionnaire

Local Government Division (LGD) - United Nations Development Program (UNDP)

Strengthening Women's Ability for Productive New Opportunities (SWAPNO) Project

Questionnaire ID:	

Household Survey Questionnaire

Date of Interview:

Time of starting Interview:

1. General information of the Respondent

1.1 Name of the Respondent: .....
1.2 Village Name: .....
1.3 Union Name: .....
1.4 Ward Name:.....
1.5 Upazila Name: .....
1.6 District Name: .....
1.7 Mobile No.....

Undertaking

Under the Local Government Division of Bangladesh government with financial support of UNDP, SWAPNO Project is being implemented by the Union Parishad for socio-economic development of your household members. Some information i.e. income, expenditure, loan, savings, food habit, residence and social status including weight and height of your household members will be sought and gathered in order to operate the activities of this project. All information will be utilised for present status and progress assessment of the project in future. The interview will require about one hour time. All information provided by you will be preserved with highest privacy and it will not be disclosed anywhere other than the project requirement.

I,....., do hereby give my consent to provide information.

Signature/LTI of the Respondent:

2. Household Information

Member No.	**Name** (Start with the name of HH head)	Relation to HH Head	Sex	*Age		Marital Status	Education	Literacy	Prime Occupation	Second Occupation	Main Earner (1= yes, 0 =no)	Beneficiary/ Respondent (1= yes, 0 = no)
				In year	In Month (under five)							
	1	2	3	4	5	6	7	8	9			
1												
2												
3												
4												
5												
6												

Note: *Round off the age in years for the individuals who are 5 years and above and write age in months for under 5 children

Code: Relation to HH Head	**Code: Sex**	**Code: Marital status**	**Code: Education**	**Code: Occupation**
Self ..... 1 Spouse .....2 Son/Daughter ..... 3 Father/ Mother .....4 Grand Son/Daughter .... 5 Son/Daughter in law ..... 6 Uncle/ Aunt ..... 7 Brother/ Sister ..... 8 Father/ Mother in law ... 9 Others (Specify..)..... 88	Male ..... .1 Female ..... .2 Others 88	Divorced .....1 Separated .....2 Married .....3 Unmarried .....4 Widowed .....5 **Code: Literacy** Can read & write a letter...1 Can read a letter only.....2 Can sign only.....3 Illiterate.....4	Illiterate.....77 Nursery .....0 Class I.....1 Class II.....2 Class III.....3 Class IV..... .4 Class V.....5 Class VI..... 6 Class VII.....7 Class VIII.....8 Class IX..... 9 Class X/SSC..10 HSC.....12 BSC/B.Com/B.A... .....14 Hon's.....15 Masters.....16 N/A..... 99	Paddy Husking..... 1 Puffed/Flat rice .....2 Work in other's house.....3 Agriculture labour..... 4 Sewing Kantha..... 5 Handicrafts ..... 6 Poultry/Duck rearing.....7 Goat/Cow rearing.....8 Small business.....9 Begging.....10 HH Work .....11 Non Agriculture labour..... 12 Student.....13 Unemployed..... 14 Don't know.....15 Rickshaw/van puller.....16 Others ..... 88 N/A..... . 99

3. Education of children

Member No.		Child 1	Child 2	Child 3	Child 4
1	Do your school aged children (5-16 yrs) enrol in the school?(1=yes 0=no)				
2	If enrol, do your school aged children (5-16 yrs) attend school? (1=Regular, 2=Irregular, 3=Not at all)				
3	If the school aged children do not go to school or irregularly attend school mention three main reasons behind it: Reason 1. ☐ Reason 2. ☐ Reason 3. ☐				

Code			
1 Busy with household work	2 Work to supplement family income	3 No interest to read and write	
4 Lack of safety	5 Not attentive	6 Cannot bear the educational cost	88 Others

4. Asset

4.1	**Social Asset**		
4.1.1	Do you participate in any formal or non-formal organization except SWAPNO?		Yes.....1 No 2
4.1.2	If participated, name of that organization/project		

4.1.3 Mention the level of socio-economic institution that you participated

Organization/Institution	Purpose of involvement			Level of involvement
Bank				
NGO				
Village court				
Shalish (Arbitration)				
Social functions				
Political party				
Union Parishad				
Other (specify)……				

Code - Purpose of involvement		Code - Level involvement	
To be honoured……	1	general member ……	1
Public relations……	2	Member of executive body…….	2
To get credit/Financial facilities……	3	Client/beneficiary……	3
To avail service provided by govt./NCO……	4	Arbitrator……	4
To dominate others ……	5	Invited……	5
To create voice for destitute women……	6	Observer……	6
To establish poor rights……	7	N/A……	99
To deposit money ……	8		
Other (specify……)……	88		

4.2 Advantages to receive various govt. and non-govt. services

4.2.1 Access to menu of UP and Upazila services	Response (1=yes 0=no)	Government	Non-government
Agriculture			
Livestock			
Fisheries			
Health Services			
Information and technology services			

4.2.2 Access to Financial services		Savings Facilities	Loans	Insurance	
Agriculture	Scheduled bank Micro finance providing organization				yes.....1 no.....0
Livestock	Scheduled bank Micro finance providing organization				
Fisheries	Scheduled bank Micro finance providing organization				

Health Services	Scheduled bank Micro finance providing organization				
Others (specify)	Scheduled bank Micro finance providing organization				

4.2.3 Access to Public Assets	Response (1=yes 0=no)	Distance from home (in m/km)	Level of Satisfaction
Road			
Market			
School			
Health Centre			
Others (specify)			

Code (Level of satisfaction)

1 Highly satisfied 2 Satisfied 3 Moderate 4 Quite satisfied 5 Not at all

4.3 Household Assets	Quantity	Asset Value (Market Price) in Tk.
TV		
Radio		
Mobile phone		
Bicycle		
Freeze		
Motor Cycle		
Sewing Machine		
Cot/Chawki		
Rickshaw/ Van		
Table/ Chair		
Almirah/Showcase/Other Furniture		
Gold		
Silver		
Copper		
Utensils		
Agricultural Instrument/s		
Tree		
Bamboo bunch		
Cow/ Buffalo		
Goat/ Sheep		
Poultry/ Duck/ Pigeon/birds		
Other Assets (specify)		
Total Value of assets in Tk.		

4.4 Particulars of HH Land

Type of Land	Own	Mortgage/ Lease in	Mortgage/ Lease out	Share in	Share out	Khas land	Other's land/sheltered
	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity
4.4.1 Homestead land (Dec)							
4.4.2 Cultivable land (Dec)							
4.4.3 Ponds (Dec)							
4.4.4 Fellow land (Dec)							

4.5 Housing Condition

4.5.1 Ownership	4.5.2 Type of House	4.5.3 Housing materials			4.5.4 Fuel material for cooking
		Roof:	**Wall:**	**Floor:**	

Ownership	Type of house	materials	Fuel material
Own ……1 Rent …… 2 Relatives …… 3 Other house…… 4 Others ……..88	Pukka ……1 Semi Pukka ……..2 Tin shed house ……3 Kachcha/ bamboo/ straw.4	Brick-cement……1 Tin……2 Tali……3 **Earth/sand/cow dung….4** bamboo/ straw **……5** Others……..88	**Wood……1** **Coal……..2** **Straw……..3** **Gas……4** **Electricity……5** **Solar power……6** **Cow dung……7** Others ……88

4.5.5 Is there electricity in your HH? ☐ **(**Yes =1 No = 0)

5 Incomes, Expenditure Savings & Loan

5.1 Income earner of the HH

5.1.1	How many members are in your family?	☐	Person (Number)
5.1.2	How many earning members are in your family?	☐	Person (Number)
5.1.3	Who is the main income earner in your family?	☐	

Code

Self- 1 Sons – 2 Daughters - 3 Father - 4 Mother - 5 Brother- 6
Sister -7 Fathers-in-law- 8 Husbands – 9 Others - 88

5.2 Loan Statement:

Source	Loan receiving		Amount of loan received	Outstanding	Monthly Instalment (in Tk.)	
	Month	Year			Number of monthly instalment	Total amount in each instalment

5.3 Description of income, Expenditure and Savings of your household:

5.3.1 Income of HH	
Source of income	**Amount (Tk.)**
Crops (Yearly)	
Agriculture labour (Monthly)	
Non agriculture labour (Monthly)	
Petty business (Monthly)	
Institutional grant (Yearly)	
Personal donation/gift	
Relief/ Assistance (Yearly)	
Livestock (Yearly)	
Poultry (Yearly)	
Rickshaw/ Van (Monthly)	
Handicrafts (Monthly)	
Begging (Monthly)	
IGA of other project (Yearly)	
IGA (Yearly)	
Job (Monthly)	
VGD (Yearly)	
Others (Specify)…….	
5.3.2 Expenditure of HH	
Food(Monthly)	
Education(Yearly)	
Treatment(Yearly)	
Attire(Yearly)	
House construction and repairing (Yearly)	
House rent(Monthly)	
Donation/gift(Yearly)	
Sanitation(Yearly)	

Mobile (Monthly)	
Cosmetics/ betel leaf/Biri (Monthly)	
Loan payment(Yearly)	
Livestock(Yearly)	
Others (Specify)……	
5.3.3 Voluntary Personal Savings (Excluding SWAPNO Project)	
Type of savings	
Bank	
Association/Organization	
Cash savings	
Non-institutional group savings	

5.3.4 Respondents Training on IGA and Personal ILO Skills

5.3.4.1	Do you have any IGAs?		Yes -1/No – 0
5.3.4.2	Did you receive any training on IGAs?		Yes-1/No – 0
5.3.4.3	If received training then specify the name of the area		
5.3.4.4	Who organized the training?		
5.3.4.5	What skill do you have?		
5.3.4.6	Did you receive any training on ILO skill development?		Yes -1/No – 0
5.3.4.7	If yes, then which organization provided the training?		
5.3.4.8	Duration of training …… (days)		
5.3.4.9	Year of training……..		

Code (Area of received training)				
1 Livestock	2 Poultry	3 Handicrafts	4 Business	5 Fish cultivation

5.4 Respondents/ Personal Income

If you have any IGA, specify the source of income:

Code	Type of Activity	Capital	Source of Capital (multiple response)			Monthly income
1	Livestock					
2	Poultry/duck/ birds					
3	Handicrafts					
4	Business ((Specify)					
5	Day labourer					
6	Job ((Specify)					
7	Other: name ……					
Code: Source of Capital						
Own savings 1 Borrowed from NGO 2 Relative 3 Bank 4 Others capital 5						

5.5 How do you spend your income?

Purpose	Priority

6. Crisis Coping

6.1 What kind(s) of crisis did you experience in last 12 months and how did you cope with this?

Type of Crisis	Yes (1) / No (0)	Majorly in which month	Coping Strategy			
6.1.1 Combined crisis						
Flood/ Drought/Excessive rainfall/ Cyclone						
River erosion/loss of land						
Poor production						
Crisis of employment						
Salinity						
Shortage of drinking water						
Shortage of food						
Others (Specify)						
6.1.2 Personal crisis						
Illness						
Death of HH member						
Arrest of HH member						
Divorce/ Separation/ Abandonment						
Loss of job						
Theft						
Eviction/ Influential snatched away the assets						
Loss in business						
Conflict inter/intra community						
Loss of land						
Loss of livestock and poultry						
Dowry/ Wedding						
Funeral						
Accident of HH member						
Others (Specify)……						

Code for coping strategy:

Code	Coping strategies	Code	Coping strategies
1	Loan received from neighbour/ relatives	12	Adjustment of meals
2	Loan received from money lender	13	Farmland mortgage
3	Loan received from NGOs	14	Receiving relief
4	Grain loan received from relatives	15	Begging
5	Cash loan received from merchants	16	Temporarily migration
6	Loan received from bank	17	Sale of physical labour/ Sale of labour in advance
7	Sale of HH productive assets	18	Sale of HH materials/ accessories
8	Sale of business capital	19	Utilizing savings money
9	Sale of tree/s	20	Collected leftover grain from paddy field
10	Sale of Jewellery	21	Couldn't be possible to cope by any means
11	Child labour	22	Receiving legal aid
		23	Personal/relatives donation
		88	Other, specify

7. Nutrition and Food Security

7.1 Description of HH food

Food	How many days you ate food item in last week?		Source of food	
	0 = Not eaten **1=** 1 day **2**= 2 days **3**= 3 days	**4**= 4 days **5**= 5 days **6**= 6 days **7**= 7 days	**Primary**	**Alternative**
Rice	|__|			
Bread made of flour	|__|			
Cake	|__|			
Puffed/Flattened rice	|__|			
Potatoes/Sweet potatoes	|__|			
Vegetables	|__|			
Pulses (Masur, Khesari etc.)	|__|			
Edible oil	|__|			
Meat, poultry egg	|__|			
Milk & milk products	|__|			
Fish/Dry Fish	|__|			
Spices	|__|			
Fruits	|__|			
Sugar, molasses (Gur)	|__|			
Miscellaneous (tea, soft drinks, bread, biscuit, fast food, betel leaf, betel nut)	|__|			

Note: Do not count small quantities (less than 1 tea spoon or 100 gram)

Code (Source of Food)				
1 Buy	2 Own Production	3 Business	4 Loan	5 Gift
6 Food assistance	88 others			

7.2 Food deficit

7.2.1	How many days did face food shortage for the past 12 months?		Days
7.2.2	Majorly in which months?		
7.2.3	What was the status of food availability for the past 12 months?		Surplus .....1 Occasional deficit.....2 Always deficit.....3

7.3 Food Security (HFAIS)	**Yes (1)/ No (0)**	**If yes how did this happen? (mention the code)**
7.3.1 In the past four weeks, did you worry that household would not have enough food?		
7.3.2 In the past four weeks, were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?		
7.3.3 In the past four weeks, did you or any household member have to eat a limited variety of foods due to a lack of resources?		
7.3.4 In the past four weeks, did you or any household member have to eat some foods that you really did not want to eat because of a lack of other types of food?		
7.3.5 In the past four weeks, did you or any household member have to eat a smaller meal than you felt need because there was not enough food?		
7.3.6 In the past four weeks, did you or any household member have to eat 2/1 times fewer meals in a day because there was not enough food?		
7.3.7 In the past four weeks, did you or any household member ever not get any kind of food because of lack of affordability?		
7.3.8 In the past four weeks, had you or any household member to sleep in starvation because there was not enough food?		
7.3.9 In the past four weeks, had you or any household member to go a whole day and night without eating anything because there was not enough food?		

Code (How did this happen)
Rarely (once or twice in the past four weeks).....1
Sometimes (three to ten times in the past four weeks).....2
Often (more than ten time s in the past four weeks).....3

8. Health

8.1	During the last 12 months, how often had you been sick?		Frequently.....1 Occasionally.....2 Hardly.....3
8.2	During the last 12 months, how often had any member of your family been sick?		Frequently.....1 Occasionally.....2 Hardly.....3
8.3	Is there is any homeopathy physician/village doctor/ MBBS doctor in your locality?		Yes.....1 No.....2
8.4	During the last 12 months, from where did you receive treatment:		
8.5	If yes (8.3=1 & 8.4=3/4), why didn't you receive treatment from him/her?		

Code: Treatment	Code: Reason of 8.5
Not taken treatment.....1	Not comfortable.....1
Self-treatment 2	Too costly treatment.....2
MBBS Doctor.....3	Too far from the household.....3
Village Doctor 4	Doctor was not present in workstation.....4
Kabiraj.....5	Social restriction and fear about treatment.....5
Moulavi/ Monk/ Ojha..... 6	Others 88
Quack.....7	
Pharmacy 8	
Others.(specify) 88	

8.6 How was your health for the last six months?

1=Very poor, 2=poor, 3=average, 4= Good

8.7	What is your source of drinking water?		Tube well..... 1 Well ..... 2 Pond ..... 3 River ..... 4 Others (specify) 88
8.8	Is drinking water arsenic free?		Yes.....1 No .....0 Don't know.....2
8.9	Is there any latrine in your HH? If yes, what type of latrine?		Yes.....1 No 0

8.10	If yes, what type of latrine?		Pit Latrine ..... 1 Slab Latrine..... 2 Water Sealed slab.....3 Hanging Latrine ..... 4 Others.(specify).....88
8.11	Where do you defecate?		Pit Latrine ..... 1 Slab Latrine..... 2 Open Space (field)..... 3 Water Sealed slab.....4 Septic Tank.....5 Hanging Latrine ..... 6 Others.(specify).....88

9. Death related

9.1	Whether any member of your HH died in last 5 years?		Yes .....1 No 0
9.2	If yes, relationship with the deceased		Father ... 1 Mother 2 Brother 3 Sister 4 Son 5 Daughter 6 Husband 7 Others (specify) 88
9.3	Age		
9.4	Year of death		
9.5	Cause of death		

10. BMI of respondents

Height (cm)	Weight (kg)

10.1 Immunization and nutritional status of children aged 0-59 months (less than five year)

HH Member #	Date of Birth	Height (in cm)	Weight (in kg)	Immunization Status (1.....yes 0.....no)							
				Diphtheria	Pertussis	Tetanus	*Polio*	*Measles*	*Tuberculosis*	Typhoid	Pneumonia

11. Violence, Harassment, Empowerment and Participation in decision making

11.1 Violence	**Response**	**Code**
11.1.1 In last 12 months whether you or anyone of your family member faced any violence?		Yes.....1 No 0
11.1.2 If yes, which member of the household faced violence?		Beneficiary.....1 Male member.....2 Female member.....3
11.1.3 If yes (11.1.1 =1), type of violence?		Physical abuse.....1 Sexual oppression.....2 Others (specify).....88
11.1.4 Whether they know where to make complaint if victimised?		Yes.....1 No 0
11.1.5 If yes, where to make complaint?		Union Parishad……1 Police/personnel of law enforcing agencies……2 Hospital……3 Court……4 Victim Support Centre.5 Others (specify).....88
11.1.6 Did you make complaint against any violence?		Shalish (Arbitration)..1 Village Court…….2

		Police Station/ Court...3 Nowhere…….4
11.2 **Harassment**	**Response**	**Code**
11.2.1 In last 12 months whether you or anyone of your family member faced any harassment?		Yes.....1 No 0
11.2.2 If yes (11.2.1 =1), which type of harassment was faced?		Litigation……..1 Falsely cheating……2 Misbehave……3
11.2.3 If yes (11.2.1 =1), who (member of your household) faced harassment?		Beneficiary.....1 Male member.....2 Female member.....3 Others (specify).....88
11.2.4 If yes (11.2.1 =1), in what place such harassment is faced by the household member?		Own family.....1 Public place.....2 Government institutes...3 Social institutes.....4
11.2.5 Which type of people (persons/influential) got involved with harassment?		Political leader.....1 Terrorist.....2 Representatives of local government.....3 Government Officials.....4 Police/ personnel of law enforcing agencies.....5 Member of own family…6 Members of in law's family…… .7 Other (specify).....88

11.2.6 Did you make complaint against any of those harassments?		Shalish (Arbitration).....1 Village Court.....2 Police Station /formal Court.....3 Nowhere.....4

11.3 Control over asset

Level		Response Yes 1; no 0	
11.3.1 Personal	Own income		
	Own savings		
	Immovable property		
	Others (specify……..)		
11.3.2 HH	Income and savings		
	Land		
	Immovable property		
	Others (specify……..)		

11.4 Capacity for Mobility

11.4.1	Mobility outside community (para/village)		Alone ..... 1 Together with a male ..... 2 Accompanied by other (in a group)……..3 No 4
11.4.2	Mobility within the Union territory		Alone ..... 1 Together with a male ..... 2 Accompanied by other (in a group)……..3 No 4
11.4.3	Mobility within the Upazila territory		Alone ..... 1 Together with a male ..... 2 Accompanied by other (in a group)……..3 No 4
11.4.4	Mobility within district or Divisional city		Alone ..... 1 Together with a male ..... 2 Accompanied by other (in a group)……..3 No 4

11.5 D**ecision making**

Indicators	Level		Response (mention the code)
		New income earning activities	

Participation in decision making	11.5.1 Personal	Availing services (treatment, recreation) Education/training Participation in meeting/rallies	
	11.5.2 Family	Buying and selling assets (land, furniture)	
		Buying and selling ornaments	
		Buying and selling livestock and poultry	
		Buying and selling vegetables, fruits, trees	
		House construction and repair	
		Children education	
		Children marriage	
		Children health care	
		Others (specify……..)	
	11.5.3 Social	School Management Committee	
		Village court/ *shalish*	
		Casting vote in last election	
		Others (Specify……)	

Response Code:

Alone 1
Together with a husband/male 2
Informed during/ before decision taken by others 3
No participation..... 4

11.6 Knowledge and information

Level		**Response** (Yes 1/ no 0/N/A.. 99)
11.6.1 Rights	Inherited rights	
	Basic Citizen rights	
	Control over body	
11.6.2 Service & Laws	Aware and informed about legal services	
	Aware and informed about health service and family planning	
	Aware and informed about livelihood related government services	
	Aware and informed about laws regarding child marriage	
	Others (specify ……)	
11.6.3 Life skill management	Future plan	
	Marriage of minor child	
	Whether husband will accept after his returning back	
	Whether get married in future	
	Whether marry off son/daughter with receiving or paying dowry	

12. Knowledge and access to initiatives/programmes of local government institutes (UP & Upazila level)

Programme	Knowledge Yes.....1 No 0	Access Yes.....1 No 0	Level of satisfaction (mention the code)
Food for Work (FFW)			
Gratuities Relief (GR) and Test Relief (TR)			
VGD			
VGF			
Allowance for Widows			
Honorarium for Freedom fighters			
Old age Allowances			
Primary Education Stipend Project (PESP)			
Open Budget Meeting			
Ward Meeting			
Getting Tube-well			
Getting Hygiene latrine			
Others (specify ……)			

Code (Level of satisfaction)				
1 Highly satisfied	2 Satisfied	3 Moderate	4 Quite satisfied	5 Not at all

Time of closing the interview:

Name of the interviewer: **Checked By:**

Signature: **Signature:**