

# **Report for the Study on “Conducting End-line Survey of SWAPNO 3<sup>rd</sup> Cycle”**

**Submitted to:**

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

**United Nations Development Programme (UNDP)**

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## Table of Contents

Table of Contents.....	3
1. INTRODUCTION.....	10
1.1 Poverty Trap and the S-Curve .....	11
1.2 The S-Curve and the Mini Big-Push: Nudging Escape from Poverty .....	12
1.3 The Idea of Mini Big-Push .....	13
1.4 Commitment Device for Fostering Savings.....	14
1.5 Description of the Intervention .....	15
2. STUDY OBJECTIVES AND METHODS.....	17
2.1 Evaluation, Scope and Objectives of the Study: .....	17
2.2 Evaluation Approach and Methods .....	17
2.3 Study Locations .....	18
2.4 Study setting and sampling .....	18
2.5 Estimation strategy .....	18
2.6 Difference-in-Difference (DID) Method .....	19
2.7 Propensity Score Matching (PSM) .....	19
2.8 Gender and Human Rights-based Approach .....	21
2.9 Ethical Consideration .....	21
2.10–Data Collection Procedures and Instruments .....	21
2.11 Data Processing and data analysis .....	22
2.12 Structure of the Report.....	22
3. MAJOR FINDINGS .....	23
3.1 Sectoral Breakdown of SWAPNO Income .....	23
3.2 Training on IGAs and social awareness.....	23
4. WELL-BEING COMPARISONS BETWEEN BENEFICIARY AND CONTROL GROUPS .....	25
4.1 Income, expenditure asset and savings.....	25
4.2 Household food security and dietary diversity .....	26
4.3 Adult and child Nutrition .....	28
4.4 Subjective Wellbeing.....	30
4.5 Women Empowerment.....	33
4.6 Social Asset .....	34
4.7 Financial Services .....	35
5. IMPACT ASSESSMENT THROUGH PROPENSITY SCORE METHOD (PSM) AND DIFFERENCE-IN- DIFFERENCE (DID) METHOD.....	36
The PSM Approach.....	36
The Difference in Difference (DID) Method.....	38

6. DEALING WITH COVID-19.....	41
6.1 COVID-19 Symptoms and vaccination status:.....	41
6.2 Food security during COVID-19 lockdown period:.....	42
6.3 Major coping strategies: .....	43
7. An Insight of Qualitative Assessment of SWAPNO .....	44
8. CONCLUSIONS .....	46
8.1.1 Relevance .....	48
8.1.2 Effectiveness .....	48
8.1.3 Efficiency .....	50
8.1.4 Sustainability .....	50
8.1.5 Coherence .....	51
8.1.6 Gender Equality: .....	51
8.2 Recommendations .....	52
Lessons Learned.....	76
References .....	77
Annexure (Additional Documents) .....	78

## List of Tables

<i>Table 2.1 Endline evaluation sample across sampling union .....</i>	<i>18</i>
<i>Table 3.1 Proportion of Households Using SWAPNO Transfer on Particular Items.....</i>	<i>23</i>
<i>Table 3.2 Proportion of household having training on IGA .....</i>	<i>24</i>
<i>Table 3.3 Proportion of households having IGA training.....</i>	<i>24</i>
<i>Table 3.4 Proportion of households having training on child health, education and child marriage .....</i>	<i>24</i>
<i>Table 4.1 Annual household Income (BDT) among SWAPNO beneficiary and Control households .....</i>	<i>25</i>
<i>Table 4.2 Income among Control and Beneficiaries of the SWAPNO 3rd cycle households.....</i>	<i>25</i>
<i>Table 4.3 Monthly expenditure among SWAPNO beneficiary and Control households .....</i>	<i>26</i>
<i>Table 4.4 Assets among Control and Beneficiaries of the SWAPNO 3rd cycle households .....</i>	<i>26</i>
<i>Table 4.5 Savings per month (BDT) among SWAPNO Beneficiary vs. Control households .....</i>	<i>26</i>
<i>Table 4.6 Median dietary diversity score among SWAPNO 3rd cycle households .....</i>	<i>27</i>
<i>Table 4.7 Proportion of SWAPNO 3rd cycle households having median and above dietary diversity .....</i>	<i>27</i>
<i>Table 4.8 Proportion of SWAPNO 3rd Cycle Households Having Median and above Women Dietary Diversity.....</i>	<i>28</i>
<i>Table 4.9 Food Insecurity Access Scale among SWAPNO 3rd Cycle Households .....</i>	<i>28</i>
<i>Table 4.10 Male Adult BMI of the SWAPNO 3rd Cycle Households .....</i>	<i>29</i>
<i>Table 4.11 Female Adult BMI of the SWAPNO 3rd Cycle Households .....</i>	<i>29</i>
<i>Table 4.12 : Prevalence of Stunted, Wasted and Underweight Children (below 5) among SWAPNO 3<sup>rd</sup> Cycle Households.....</i>	<i>30</i>
<i>Table 4.13 : Health status of the women in last 6 months .....</i>	<i>30</i>

<i>Table 4.14: Aspirations about the Future of 3<sup>rd</sup> Cycle Households</i>	31
<i>Table 4.15 :Aspirations about children of the 3<sup>rd</sup> Cycle Households</i>	31
<i>Table 4.16 :Present subjective food condition of the 3rd Cycle Households</i>	32
<i>Table 4.17 :Present Economic Condition of the 3rd Cycle Households</i>	32
<i>Table 4.18 : Present of Women Having Mobility Outside Home</i>	33
<i>Table 4.19 : Percentage of Women Participating in the Household Decision Making</i>	33
<i>Table 4.20 Attaining Union and Upazila Social Services</i>	34
<i>Table 4.21 Attaining of government owned properties/ institutions</i>	35
<i>Table 4.22 Percentage of women having bank account</i>	35
<i>Table 4.23 Percentage of Women having an account in mobile financial services (bKash, Nagad Rocket, etc.)</i>	35
<i>Table 5.1 Logistic Regression used for the Propensity Score Model: Comparison between Project Beneficiary and Control Members</i>	36
<i>Table 5.2 Propensity Score Matching Results for the End-line Survey: Comparison of Income, Expenditure and Non-Land Assets between Project Members and Control Households</i>	38
<i>Table 5.3 Difference-in-difference (DID) in income, expenditure, and non-land asset</i>	39
<i>Table 5.4 Project Impacts on Income, Expenditure, and Non-Land Asset Using Pooled OLS Regression with Time-Beneficiary Interaction</i>	39
<i>Table 5.5 Absolute Difference between Beneficiaries and Control Groups: OLS regression vs. DID estimation</i>	40
<i>Table 6.1 COVID -19 symptoms and vaccination status</i>	42
<i>Table 6.2 Food security during lockdown due to COVID-19</i>	42
<i>Table 6.3.1 Percentage of HHs Faced income/employment crisis during COVID-19</i>	43
<i>Table 6.3.2 Major coping strategies during COVID-19</i>	43

## List of Figures

<i>Figure 1.1.1: The Poverty Trap and S-Shape Curve</i>	11
<i>Figure 8.1 Absolute Difference between Beneficiaries and Control Groups: OLS regression vs. DID estimation</i>	46
<i>Figure 8.2: Socio-economic empowerment model of SWAPNO</i>	49

## Appendix Tables

### List Acronyms and Abbreviations

AE	Adult Equivalent
BDT	Bangladeshi Taka
BIDS	Bangladesh Institute of Development Studies
BDHS	Bangladesh Demography and Health Survey
BMI	Body Mass Index
DDS	Dietary Diversity Score
DID	Difference-in-Difference
FANTA	Food and Nutrition Technical Assistance Project
FAO	Food and Agriculture Organization
FDR	Fixed Deposit Return
FGD	Focused Group Discussions
HAZ	Height-for-Age Z-score
HDDS	Household Dietary Diversity Score
HFIAS	Household Food Insecurity Access Scale
HH	Household
HIES	Household Income and Expenditure Survey
IGA	Income Generating activity
KII	Key Informant Interviews
LGD	Local Government Division
LH	Life-History Interviews
MFS	Mobile Financial Services
OLS	Ordinary Least Squares
PC	Per Capita
PSM	Propensity Score Matching
RCT	Randomized Control Trial
REOPA	Rural Employment Opportunities for Public Assets
ROSCA	Rotating Savings and Credit Association
SD	Standard Deviations
SSC	Secondary School Certificate
SWAPNO	Strengthening Women's Ability for Productive New Opportunities
TV	Television
UNDP	United Nations Development Programme
UP	Union Parishad
VGD	Vulnerable Group Development
WAZ	Weight-for-Age Z-score
WHO	World Health Organization
WHZ	Weight-for-Height Z-score

## Executive Summary

### *About SWAPNO*

Strengthening Women's Ability for Productive New Opportunities (SWAPNO) is a transfer-based poverty graduation project aimed towards rural ultra-poor women who are divorced, widowed, abandoned or left with disabled husbands. SWAPNO offers sizable benefits compared with many other conventional social protection projects. During the 15-months duration of SWAPNO project, beneficiaries get several kinds of benefits. They work from 8am to 2pm for 24 days per month and they have 150 BDT daily wage income. The actual per day wage is 200 BDT where 50 BDT is the compulsory savings which they can return after completion of the project. After completion of the project, beneficiaries get back the compulsory savings as an aggregate amount which is around 18,500 BDT. Altogether, each SWAPNO beneficiary has a transfer of BDT 72,000 over a cycle of 15 months. Along with the wage employment and compulsory savings schemes, SWAPNO project also enables their beneficiaries to participate in the Rotating Savings and Credit Association (ROSCA).

### *Objectives of the Study*

The main objective of the present study is to assess the impact of the project SWAPNO 3<sup>rd</sup> cycle on beneficiaries' wellbeing, including income, expenditure and asset accumulation through rigorous methods of project evaluation. The other likely effects of the project on employment, health status, nutrition, food security, education, aspiration (subjective well-being), women's empowerment and COVID-19 coping strategies are also captured. We focus on the beneficiaries of the SWAPNO 3<sup>rd</sup> cycle (2020-21) who just completed 2020-21 cycle for measuring the effects of the project. The baseline study of SWAPNO 3<sup>rd</sup> cycle (2020-21) beneficiary was conducted in February, 2020 on 884 households, including 442 project and 442 control households. We conducted the end-line survey in December 2021 on the same set of households. Due to attrition, however, we finally got 447 beneficiary households and 437 control households.

As per UNDP standard evaluation criteria, this evaluation focused on four major key lines of inquiry:

1. Relevance: The extent to which the objective, purpose, and outcomes of the intervention are consistent with the needs and interests of the people and the country's needs.
2. Effectiveness: Extent to which the outcomes of the development intervention have been achieved.
3. Efficiency: Extent to which resources/inputs (funds, time, human resources, etc.) have been turned into results.
4. Sustainability: Probability of the benefits of the intervention continuing in the long term

(refer overview of the findings of Relevance, Effectiveness, Efficiency, Sustainability and Gender Equality in section 8.1)

### *Methodology of the Study*

We have 2 kinds of cohorts in both baseline and end line—the control group and beneficiary group, yielding four groups of households to work with- baseline control, baseline treatment, end line control, and end line treatment. Accordingly, the methodology of the proposed study has two main components: (a) comparing the change in the welfare status of the project beneficiaries over time with that of non-beneficiaries that were surveyed in the baseline by utilizing the framework of panel data and deploying the quasi-experimental methods such as the so-called difference-in-difference (DID) technique; (b) comparing the current welfare status of the project beneficiaries with that of the former beneficiaries



within the set of “matched households” (to reduce selection bias) by deploying the so-called Propensity Score Methods (PSM).

### *Main Results of the Study*

Five main conclusions emerge from our study. First, in respect of all major indicators of economic well-being, the SWAPNO beneficiaries graduating from the current cycle of 2020-21 outperformed the control group households. We focused on income per capita, consumption expenditure per capita and non-land assets per capita as three key economic indicators determining long-term income growth and economic well-being. This conclusion is upheld by all methods: simple OLS exploring the observed current differences in welfare, Propensity Score Matching (PSM) and the Difference-in-Difference (DID) methods.

The evaluation study observed that SWAPNO beneficiary have on average 131.13% higher yearly per capita income than the control counterparts. The difference in respect of per capita consumption expenditure is understandably less (because of the heightened emphasis on savings in beneficiary households) but still considerable. According to the Propensity Score Matching (PSM) methods, SWAPNO beneficiaries have, on average, 42.24% higher per capita consumption expenditure than the control group. The most striking difference is observed in terms of capital accumulation. The SWAPNO beneficiary group has 1.4 times higher non-land assets than that observed for the control group. The Difference-in-Difference (DID) in income, spending and asset between SWAPNO beneficiary and control households shows that on an average, current recipient households had BDT 610 more per capita monthly income, BDT 614 more per capita monthly expenditure, and BDT 8070 more per capita value of assets than control households. Control households, on the other hand, fared marginally better in two of the three variables during the baseline survey period.

The benefits from the SWAPNO project are not just noticeable in terms of major economic indicators but also reflected in terms of dietary diversity and “subjective measures” of well-being. Among the beneficiary households, 53% percent have median or above bear dietary diversity, which is around 31% for the control households indicating significantly higher dietary diversity for SWAPNO beneficiary households. Around 20% of the beneficiary households reported about food surplus while only 4.82% of the control households mentioned that they had surplus food in their house. They also tend to be more ambitious marked with higher aspiration for themselves (20.22% as against 6.03%) and for their children (45.70% vs. 31.87%). We observed that, the prevalence of underweight children is comparatively lower SWAPNO beneficiary group (2.23% as against 5.15%) than the children from control households. The same trends emerge in case of stunted children (3.57% vs. 7.38%). We have to keep in mind the malnutrition status in terms of stunting, wasting and underweight was found extremely lower than national estimation according to Bangladesh Demographic and Health Survey (BDHS). This may happen due to the lower sample size of this study which is not country representative. Therefore, it is not comparable to nationwide childhood malnutrition status. It will require a much bigger sample to generate representative estimates for child under-nutrition. However, the issue of adult anthropometry needs to be paid more attention in SWAPNO projects, as no clear-cut advantage is discernible in beneficiary vs. control household comparison.

The evaluation study documented that women having decision making power in terms of new earn rising activity (91.05% vs. 75.69%) and women’s participation in meetings and committees (60% vs. 21%) are significantly higher for SWAPNO beneficiary households than that of the control households. In summary, women from the beneficiary households have more physical mobility and greater decision making power than the control households. The project also had a significant impact on its beneficiary during the COVID pandemic era. We observed the SWAPNO beneficiary households faced less crisis

than those of the control households (19% vs. 29%) during COVID-19 pandemic. We observed that almost 77% of the control groups reported they had eaten less food than their need while it was only 45% for the SWAPNO beneficiary which indicates that SWAPNO intervention tackled the food security issues in some manner.

### *Policy Implications of the Study*

Several policy implications are noteworthy. First, there are issues of project delivery that needs to be re-visited. For instance, a recurring observation emerging from the FGDs is the factor of institutional delays on disbursing wage income—due to bureaucratic hassles—which often increase beneficiary indebtedness and even result in incurring higher costs of food and non-food household expenditure items. However, this issue merits greater examination. If the concern is true, then one way-out could be to arrange interim financing from the partner NGOs or any other third source of institutional finance to make wage funds readily available. A counter-argument is that partner NGOs may be constrained by financial resources. In view of this, it is important to ensure that all cash transfer commitments to the recipients must be institutionally available at the outset. Second, there are issues relating to “second-chance” and more “intensive monitoring” that are required to make not-so-successful project participants viable over time. This may include more hand-holding of the less entrepreneurial sections of the poorest women by way of extra-doses of livelihood training, skill formation, job search and confidence-building measures. Third, the SWAPNO project shows that, with injection of threshold amount of external resources, the persistent poverty trap syndrome can be overcome. This is in contrast to the tokenism that characterizes the conventional social protection projects. While this is a big success for the SWAPNO type of Mini Big-Push intervention, the issue of sustainability of the project impact has not been settled for good. The changing economic fortunes of the former beneficiaries is a case in point: they need to get some attention from the SWAPNO project to ensure long-term graduation from the poverty trap by enhancing their resilience capacity to bounce back when setbacks occur (they are bound to occur). The main big message of the study is that escaping extreme poverty over a short period is not only possible, but also desirable given the alternative scenario of largely spoon-feeding nature of the current social protection projects implemented over a longer period.

## 1. INTRODUCTION

Strengthening Women's Ability for Productive New Opportunities (SWAPNO) is a social transfer-based poverty graduation project aimed towards rural ultra-poor women who are divorced, widowed, abandoned or left with disabled husbands. The main objectives of this project are to give financial support to disadvantaged women through savings building, livelihood training and employment. It also targets so that "economic growth is achieved in a more inclusive manner, with economic opportunities reaching rural poor women, and vulnerable groups are protected against shocks". Therefore, it is necessary to assess the effectiveness of such a project so that it can set some lessons for future models.

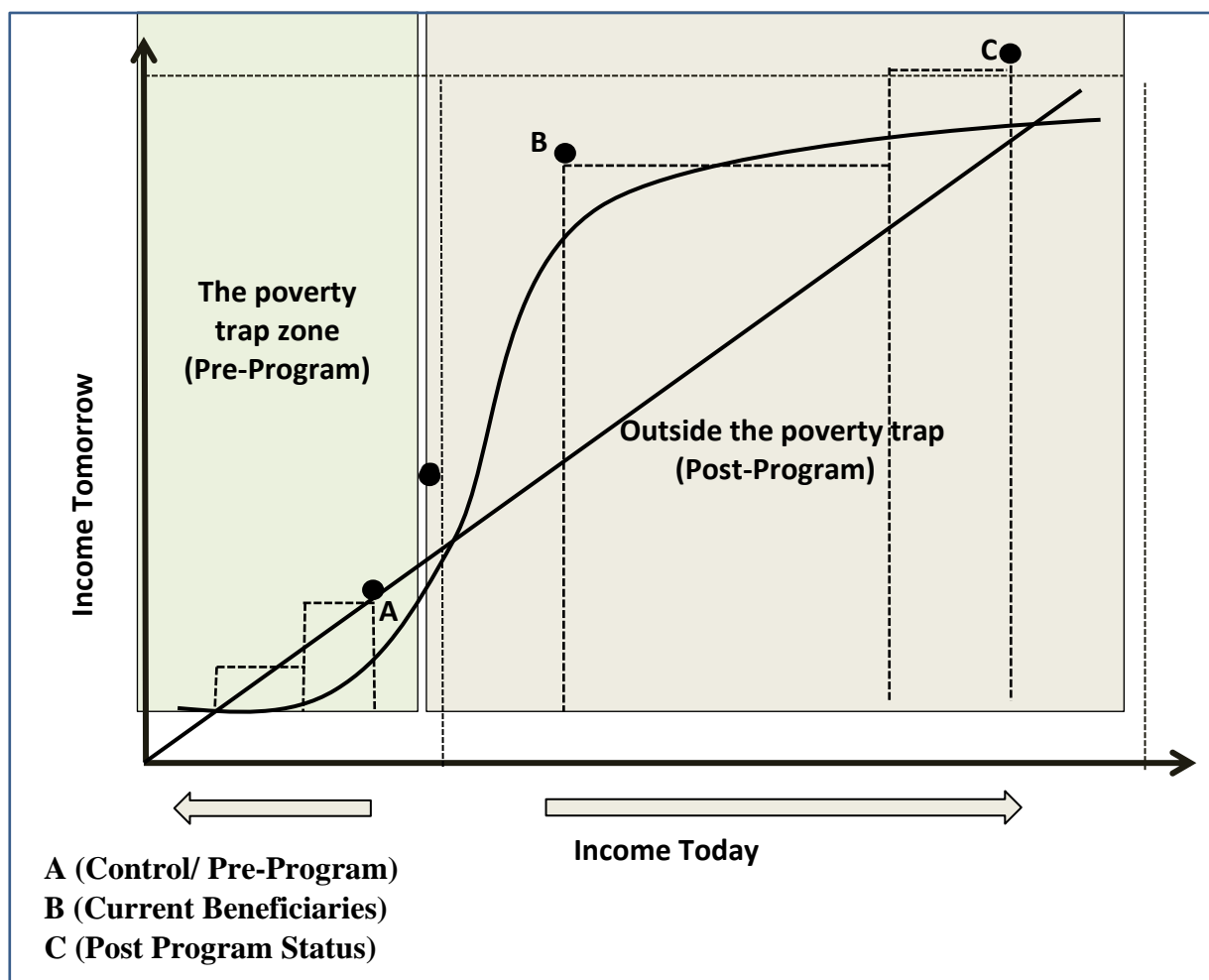
The project (SWAPNO) builds on UNDP's experience with the Rural Employment Opportunities for Public Assets (REOPA) project intervention, which was implemented by the Local Government Division (LGD) of MoLGRD&C from 2007 to 2011. Informed by the successes of the REOPA project, the SWAPNO project is designed as a follow-up programme in partnership with LGD, comprising public works type safety net employment of extreme poor women in the most vulnerable districts.

Previously, there were two cycles of SWAPNO project: SWAPNO 1<sup>st</sup> round and 2<sup>nd</sup> round. Later, the third phase of SWAPNO project was implemented in 37 Union Parishads (UP) of Lalmonirhat district, 17 Union Parishads of Gaibandha district and 45 Union Parishads of Jamalpur district. About 36 disadvantaged women were selected by SWAPNO in each UP as the primary beneficiaries, totaling 3,564 beneficiary households for the project. Since the final beneficiaries of SWAPNO were selected randomly from the list of eligible households, there were eligible non-beneficiary households in each target union. Lists of eligible households (beneficiary as well as non-beneficiary) were available from Union workers of SWAPNO. A baseline study of the SWAPNO 3<sup>rd</sup> Cycle beneficiary was conducted in May 2020. A total of 884 households were selected for the baseline period, including 442 SWAPNO intervention and 442 control households. The Randomized Control Trial (RCT) at the *beneficiary level* has been adopted to get a proper counterfactual which will eventually help do an impact evaluation of the project. In light of this baseline study, the SWAPNO 3<sup>rd</sup> cycle end-line evaluation study was conducted at the end of year 2021. This report is highlighted the major findings of the end-line evaluation study of SWAPNO.

## 1.1 Poverty Trap and the S-Curve

The idea of poverty trap stipulates a world-view that the poor's *income today* is so little that it does not produce enough efforts to enhance *income tomorrow*<sup>1</sup>.

*Figure 1.1.1: The Poverty Trap and S-Shape Curve*



**Source:** Adopted from Banerjee and Duflo (2011) for SWAPNO Impact Evaluation.

Not only that, below certain threshold level of income or asset, the future income continues to decrease, thus making ascent from poverty even more difficult with the passage of time. Only when the poor's income exceeds a "threshold level" things begin to change dramatically. This is famously shown by the generic S-Curve used by Banerjee and Duflo (2011).

Change in the welfare situation of the SWAPNO beneficiaries can be graphically represented as an "S-shaped" curve. Before joining the SWAPNO project, they were living on the left side of the graph below the diagonal line (**Point A** in the curve): in this zone, future income is lower than present income, and it continues to decrease over time. This is because their savings is so meagre, they might not want to save it at all and would rather consume it, thereby reducing prospects of future income even further. As

<sup>1</sup> This section and diagram is adapted from Sen, B., & Uddin, M. R. (2019)

a result, one calls it the zone of poverty trap. This is arguably the situation of the control members surveyed for the present paper. The control members are those who did not participate in the project, but in theory could have participated in it but for the outcomes of lottery used in the beneficiary selection process. Note that at the point of intersection of the S-curve with the diagonal ‘income today’ equals ‘future income’ (**Point O** in the curve). When the SWAPNO intervention was made—with a package of *mini Big-Push* and a nudge in the form of *commitment device* to savings—the situation started to change dramatically. Those who were previously below the 45-degree line started to move above the 45-degree line wherein future income is higher than the present income, thus escaping the poverty trap situation (**Point B** in the curve). As the income of the SWAPNO beneficiaries grew, the diminishing marginal returns to factors of production set in, as a result income growth declines (**Point C** in the curve). This may resemble the case with the post program status of the beneficiaries of the SWAPNO project in absence of additional instruments of SWAPNO intervention.<sup>2</sup>

Although the curve adopted below is shown for present/ future income for the SWAPNO beneficiaries, it is equally applicable for understanding the *other causes* of poverty traps. For instance, if today’s savings is too low, it will not have desired effects on tomorrow’s savings. In fact, it may have a reverse effect. Faced with a meagre savings scenario, the extreme poor may not opt for saving at all and decide to consume the entire amount. After all, which conventional savings institution will be willing take the miniscule savings of an extreme poor person? In short, the poverty trap has many faces, including savings, asset, nutrition and aspiration related traps that are equally potent and equally ubiquitous in the economic lives of the extreme poor. The question that springs up is: how to take the extreme poor from point A to point B on the S-Curve? This is where the idea of mini Big-Push becomes relevant.

### ***1.2 The S-Curve and the Mini Big-Push: Nudging Escape from Poverty***

This paper is about how small changes can induce large differences in the economic lives of the extreme poor. It highlights the need for “nudging” to initiate a virtual cycle of savings, accumulation and growth.<sup>3</sup> Such “small changes” can be achieved through a variety of means. In case of SWAPNO—the project under the present review—it is achieved through the combination of *Mini Big-Push* transfers and *credible commitment* to savings.

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<sup>2</sup> It may be noted that the SWAPNO project is geared towards the current cycle of beneficiaries: once they graduate there is no formal mechanism of interaction between the SWAPNO projects and the economic lives of the former beneficiaries. This may reduce the sustainability of the project impact beyond the tenure of the project.

<sup>3</sup> We are using the term “nudge” in the broad etymological sense of “coaxing or gently encouraging someone to do something”. Drawing on behavioral economics, the nudge is more generally applied to influence behavior and needs to be distinguished from the pure income-effects of transfer involved in the anti-poverty programs. In the present case, we argue that SWAPNO project is likely to have both transfer effects (influencing current consumption through wage income and long-term investment through the compulsory savings) and nudging effects (through encouraging additional savings-investment activities via ROSCA and other group activities during the cycle of the project).

Why is nudging warranted for escaping extreme poverty? This is because contrary to the assumption of “poor, but efficient” theory popularized by Schultz (1964), the very poor households remain engulfed with chronic poverty because their economic circumstances do not allow them to think like an “efficient economic agent” and behave like an “utility-maximizing rational individual” implied by the framework of *homo economicus*. The extreme poor often makes sub-optimal decisions and irrational choices that run contrary to their long-term best self-interests. As Duflo (2006) points it succinctly, the epithet of rationality cannot be used in relation to the extreme poor without much qualifications and hence the epithet with a question mark “Poor but Rational?” in her influential essay. In this hopeless scenario only the better among the very poor have the chance—or the willingness—to move out of extreme poverty. The difference between the poorest and the better among the poor is small yet significant in explaining the divergent paths out of poverty. This is captured in the idea of poverty trap. The idea need not be conceptualized as income-trap alone; it can be food-trap, savings-trap, or aspiration-trap, or all of them acting together. However, the traps can be overcome by conditioning a mini Big-Push—providing the poor with *just enough* resources—to nudge them to embark on a better savings-aspiration-income path. This is what SWAPNO project seems to have attempted to accomplish over successive cycles. It is an experimental approach—with *randomized selection* of beneficiaries through the “lottery method” -- with varying packages tried over time. There is much to be learnt from this experience both in terms of what works and what does not in case of escape from poverty.

Before outlining the main theoretical approach for this paper, it is important to introduce the SWAPNO project to the unfamiliar reader. After all, Bangladesh has witnessed a plethora of successful (and not-so-successful) projects that one additional pilot project even with a long history of existence can easily be missed out in the policy discourse. Such an amnesia would be most unwarranted as the SWAPNO genuinely provides a way-out of removing the stubbornest face of rural extreme poverty in the *shortest* possible time.

### ***1.3 The Idea of Mini Big-Push***

The idea of big push originated in the foreign aid literature. Because of initial low national income developing countries typically had low domestic savings and investment ratios, thus creating a vicious cycle of low income-low savings-low growth-low income. International aid helps to break this pernicious cycle in two ways: first, it augments domestic savings by placing at the disposal of recipient countries an additional amount of foreign savings; second, since foreign savings come not just as savings but typically in the form of foreign currency it can be used to finance import needs of the recipient country without deteriorating the country’s current account deficit. Thus, aid is often seen to have beneficial effects on the “twin deficits” of a recipient country—budget deficit and current account deficit. Something similar may happen to anti-poverty transfers at the households as well. Beneficiaries of social protection projects are typically income-deficit households: they have low income as a result

they can save little from their income. Additional transfers may augment their household savings, provided the transfer amount is adequate to supplement the household's efforts to reach the "threshold amount" of household savings (to move above the diagonal line described in the figure 1). Such transfers often come in the form of acquisition of technology, marketable skills, and know-how to do business in quick-return activities--typically in *tradable* goods--that are more income-augmenting and debt reducing. The problem is that often the transfers received by the beneficiaries are too little too late and unable to make any dent on poverty. In the parlance of S-Curve, such token transfers fail to move the extreme poor from Point A to Point B. Token transfer matters little for raising the savings or the income level of the extreme poor. As a result, they are likely to be used for current consumption purposes, causing "adverse nudging" from the long-run welfare point of view.

#### ***1.4 Commitment Device for Fostering Savings***

Another important intervention that merits equal attention is SWAPNO's efforts to address the "self-control" problems of the very poor. As Mullainathan (2006) has pointed out, not all choices are active conscious choices: some choices are made in a passive manner--essentially due lack of self-control. Despite facing food deficit, the poor may spend some of the scarce resources in the passive manner such as on gambling, consuming tobacco, festivities or other distractions. Integration of the insights of psychology with economics can lead to many new directions of policies. The emphasis on fostering credible commitment device for savings is a case in point.

As mentioned earlier, the saving behaviour of the extreme poor also displays the pattern of the S-Curve. Under the condition of poverty trap, the poor save so little from their meagre income that they often do not attach adequate importance to savings. Since one-time transfer by way of forced savings from their daily wage income is receivable only at the end of the SWAPNO cycle it cannot act as an incentive to save during the cycle. In fact, the prospects of getting sizable lump-sum transfer at the end of cycle may even discourage savings during the cycle. In order to prevent that happening, there is a need for developing a credible commitment device to encourage savings during the cycle. One of the innovations of the SWAPNO project was to *inculcate the saving habit* among the beneficiaries through the introduction of the model of Rotating Savings and Credit Association (ROSCA). In collaboration with the local government, SWAPNO organizers select 36 members for each union who are further subdivided into 3 groups, each consisting of 12 members. This team of 12 members constitute the ROSCA group.<sup>4</sup> The advantage of ROSCA is that it offers a "commitment device": the pressure to put money aside regularly help them to save, which might have been difficult for many of them given the lack of self-control in the face of many competing spending demands. Mullainathan (2006) cites some ROSCA

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<sup>4</sup> In a ROSCA group, members meet at regular intervals and at each meeting, they contribute a pre-determined amount. The sum of these funds (the "pot") is then given to one group member often on a lottery basis. Each member gets her turn eventually.

participants saying that “you can’t save alone”. Although ROSCA do not offer interest on deposit, it has triple benefits as the ROSCA experience in SWAPNO project suggest. First, it may allow to save considerable amount while still in the project and thus enable the SWAPNO members to initiate income-generating activities at an early stage of the cycle. Second, it may cement the social bonding among the SWAPNO members, which may prove to be a useful platform in times of shocks. As a result, many of the SWAPNO groups have continued even after the termination of the cycle. Third, it may encourage more saving habit at the individual level—including an awareness of the virtues of financial savings whether in formal banks or quasi-formal MFIs at the local level—even after graduating from the project. All this are likely to be beneficial for the long-term economic mobility of the SWAPNO members.

The other important issue is the role of skill training and “learning-by-doing”. Without imparting skills to the beneficiaries, it is very difficult to ensure proper utilization of any kinds of savings whether it is in the form of one-time grant by way of forced savings or in the form of voluntary savings by way of ROSCA. While qualitative evidence for SWAPNO is suggestive of critical importance of skill formation as a factor inducing successful business ventures, our evaluation design was not adequately set up to explore this issue satisfactorily in a quantitative manner. Simple cross-sectional differences between those who received training and those who didn’t, are not revealing enough to elucidate the intrinsic worth of livelihood training and estimate the “returns to training”. More in-depth study is needed in this regard.

### ***1.5 Description of the Intervention***

SWAPNO (Strengthening Women’s Ability for Productive New Opportunities) is a gender based social security project targeting ultra-poor rural women of 18-50 years of age who are widowed/divorced/abandoned or left with a disabled husband. SWAPNO is implemented by the Local Government Division (LGD) and UNDP under the auspices of National Social Security Strategy (NSSS) of the Government of Bangladesh. The overall objective is “Economic growth is achieved in a more inclusive manner, with economic opportunities reaching rural poor women, and vulnerable groups are protected against shocks”. The SWAPNO intervention builds on providing access to decent employment, ensuring a discrimination-free environment in the public workplace, supporting adaptive livelihoods & access to financial services for sustainable graduation from extreme poverty, and developing capacity of the local government. The idea is that the set of skills learned from training will help ultra-poor rural women invest savings for productive purposes, which would yield a stream of income in years to come, bringing them personal dignity, mobility, and social inclusion. In addition to self-employment, SWAPNO also facilitates market linkages and access to services for these women and helps place them in local Small and Medium Enterprises (SMEs) and private sector companies in the formal and informal sectors.



### ***Monetary Transfer from SWAPNO***

During the 15-month duration of SWAPNO project, beneficiaries get several kinds of benefits. They work from 8am to 2pm for 24 days each month, implying that they can use the remaining hours of the working day for some income-earning activities. The work they do is usually for the maintenance of the public and community assets for which they work from 8am to 2pm for 24 days per month and earn a daily wage income of BDT 150, which provides a secure food-nutritional platform for the extreme poor struggling to meet both ends. This daily wage income also supported them to start and broaden some Income Generating Activities (IGAs). The actual daily wage is, however, higher: it is BDT 200 where there is a component of BDT 50, known as the “compulsory savings”, which they can access only after the completion of the project. This compulsory savings component turns out to be BDT 18,500 (in current prices) at the end of the 15-month cycle. If we annualize this compulsory savings amount it translates into BDT 15,000. This is equivalent to 8.5% of total annual household income and 13% of total annual expenditure reported by the SWAPNO beneficiaries during our end line survey. Considering the daily wage and compulsory savings components, the average yearly transfer received by a SWAPNO beneficiary amounts to BDT 57,600 (Box-1 in the annex). This, however, does not consider the return to investments made from the lump-sum monetary benefits from participating in the ROSCA that the SWAPNO members engage in during the tenure of their membership.

All the SWAPNO beneficiaries have yearly project income around 57,600 BDT (Box 2 in the annex). Along with the wage employment, SWAPNO project also enables their beneficiaries to start Rotating Savings and Credit Association (ROSCA).

Beneficiaries form a group of 12 persons from 3 wards of a union (thus 3 associations from each Union). Each member must deposit 300 BDT and the lottery winner gets 3600 BDT. Each member has received the winning money from ROSCA 3-4 times during the whole project depending on the frequency of the draw happens. So, each beneficiary received 3600 BDT of small amounts 3-4 times in the project duration which helped them to invest in small income generating activities.

## 2. STUDY OBJECTIVES AND METHODS

### *2.1 Evaluation, Scope and Objectives of the Study:*

The main objective of the study is to assess the ***impact of the SWAPNO project*** on beneficiaries' wellbeing, including income, expenditure and asset accumulation through rigorous methods of project evaluation. The other likely effects of the project on employment, health status, nutrition, food security, education, and aspiration (subjective well-being), women's empowerment and COVID-19 coping strategies are also indicated by comparing the SWAPNO beneficiary and control groups. We have focused on the beneficiaries of the SWAPNO 3<sup>rd</sup> cycle (2020-21) who just completed 2020-21 cycle for measuring the effects of the project. We have conducted the end-line survey from August to 2021 to May 2022.

### **Scope of the Work**

The study team performed a series of activities for SWAPNO 3rd Cycle project evaluation such as, prepared a literature review of the graduation models, participated in meetings with relevant staffs of SWAPNO, LGD, and UNDP and reviewed relevant project documents to understand the project design, particularly the interventions, delivery mechanism, and incentive structure, submitted an inception report to the SWAPNO project, including detailed methodology notes. After completing these steps, the team submitted a detailed work plan to SWAPNO along with timeframe and responsible parties for this assignment and finalized survey methodology including data collection methods, data collection tools (questionnaire, checklist), guidelines and analysis framework. The survey team conducted the pre-test (field test) and finalization of tools, checklist and techniques for the survey and analysis. Later, BIDS organized training sessions for the enumerators and supervisors followed by field practice and collected data from the respondents as per sampling list, using final tools, checklist and following quantitative and qualitative techniques. After finalizing data analysis, the team has prepared a summary matrix as per results and resource framework's indicators. A comparative analysis of control and treatment groups are also done based on the major indicators .(referred table A48 in the annex)

### *2.2 Evaluation Approach and Methods*

The methodology of the proposed study rests on three components: (a) comparing the change in the welfare status of the project beneficiaries over time with that of non-beneficiaries that were surveyed in the baseline by utilizing the framework of panel data and deploying the quasi-experimental methods such as the so-called difference-in-difference (DID) technique used in standard impact evaluations (see, Gertler et al 2016); (b) comparing the current welfare status of the project beneficiaries with that of non-beneficiaries within the set of "matched households" (to reduce selection bias) by deploying the so-called Propensity Score Methods (PSM) (see, Bai and Clark 2018). This method is deployed in this

study as an additional check on the project impact, as panel analysis based on baseline and end-line surveys conducted by two different agencies (which is the case here) may be susceptible to non-sampling measurement errors; and (c) comparing the current welfare status of the project beneficiaries with that of former beneficiaries (graduates of the previous cycle of SWAPNO) with a view to assessing the sustainability of the project intervention (Ravallion 2001).

### **2.3 Study Locations**

The study was conducted in three districts (Lalmonirhat, Gaibandha and Jamalpur) dispersed in two different administrative divisions of the country. The above mentioned three districts include 99 Union Parishads of SWAPNO working area.

### **2.4 Study setting and sampling**

The third phase of SWAPNO project is being implemented in 37 Union Parishads (UP) of Lalmonirhat district, 17 Union Parishads of Gaibandha district and 45 Union Parishads of Jamalpur district. About 36 disadvantaged women were selected by SWAPNO in each UP as the primary beneficiaries. Therefore, a total of 3,564 households acted as a beneficiary for the SWAPNO project. Since the final beneficiaries of SWAPNO were selected randomly from the list of eligible households, there were eligible non-beneficiary households in each target union.

The baseline study of SWAPNO 3<sup>rd</sup> cycle (2020-21) beneficiary was conducted in February, 2020 including 442 project beneficiary and 442 control households. We have conducted the final evaluation at the end of year 2021. The following table shows the endline evaluation sampling strategies.

**Table 2.1 Endline evaluation sample across sampling union**

<b>District</b>	<b>Sample Respondents</b>			<b>Sample Union</b>
	<b>Intervention</b>	<b>Control</b>	<b>Total</b>	
<b>Lalmonirhat</b>	170	167	337	13
<b>Gaibandha</b>	78	74	152	06
<b>Jamalpur</b>	199	196	395	15
<b>Total</b>	447	437	884	34

### **2.5 Estimation strategy**

The methodology of this evaluation is comprised of two major sections. The first one deals with comparing the overtime change in the welfare status of the program beneficiaries with that of non-beneficiaries that were surveyed in the baseline by utilizing a panel data framework and deploying a quasi-experimental method, i.e., difference-in-difference (DID) technique, a widely used technique in

standard impact evaluation practices (Gertler et al 2016). The second one pertains to comparing the current welfare status of the program beneficiaries with that of non-beneficiaries within the set of “matched households” (to reduce selection bias) by applying the Propensity Score Methods (PSM) (Caliendo et al., 2005; Bai and Clark 2018). This method is useful as an additional inspection on the program impact, as panel analysis based on baseline and end-line surveys.

## 2.6 Difference-in-Difference (DID) Method

Difference-in-difference (DID) methods is used to find the changes from baseline to end line of the project. In this method, there are two differences to be considered: a) Before and after the treatment and b) the control and treatment group at the same time point, in our case, two households having participants of ‘SWAPNO’ and not having any participants of ‘SWAPNO’.

The following econometric model is used:

$$Outcome_{i,t} = \beta_0 + \beta_1 after + \beta_2 SHWAPNO + \beta_3 (SWAPNO * after) + \epsilon_{i,t}$$

Where the dependent variable Outcome is income, asset, health, education, etc. of household i at time t which could be either baseline or end-line. ‘after’ is a dummy variable which takes on 1 if the data comes from end-line and zero otherwise. ‘SWAPNO’ is also a dummy variable which assumes 1 if the household is a participant of ‘SWAPNO’ and zero otherwise. The interaction term (SWAPNO\*after) captures the treatment effect or the difference-in-difference estimates. We observed this in the table below.

	Control groups	Treated groups (SWAPNO Participants)	Difference
Before ‘SWAPNO’	$\beta_0$	$\beta_0 + \beta_1$	$\beta_1$
After ‘SWAPNO’	$\beta_0 + \beta_2$	$\beta_0 + \beta_1 + \beta_2 + \beta_3$	$\beta_2 + \beta_3$
Difference	$\beta_2$	$\beta_2 + \beta_3$	$\beta_3$

## 2.7 Propensity Score Matching (PSM)

To compare the current welfare status of the program beneficiaries with that of non-beneficiaries within the set of “matched households” (to reduce selection bias) by Propensity Score Matching (PSM) method is used. While evaluating the welfare impact of participating in ‘SWAPNO’, we got answer a question like: would the value of the outcomes increased if they never participated in it? In the econometric literature, this difference between participants' outcomes with and without treatment is known as the counterfactual outcome. However, in reality, the counterfactual outcomes are not feasible because it is difficult to observe both the outcomes with and without treatment for the same household simultaneously. One unavoidable feature of the counterfactuals being unobservable creates the problem

of 'selection bias due to the observables. Propensity Score Matching (PSM) mitigates this problem if it is possible to find several non-recipient groups equal to the number of treatment groups (Tucker, 2010). As we know, it is possible to compare the difference of the outcomes for participants to non-participants if the observables pre-treatment characteristics of these two groups are approximately similar (Caliendo et al., 2005). If that is possible, the difference can be regarded as the sole contribution of the treatment, i.e., the participation. The Matching between the two groups is done based on the propensity score (the probability of participating in the treatment), which is estimated using a logit or probit model. Usually, the matching between the treatment and the control is done by applying matching algorithms such as Nearest-Neighbor, Radius, Kernel, Stratification, etc. Finally, the impact of the treatment on the outcomes given by the average treatment effect on the treated (ATT) is calculated and their statistical significance and obtain the standard errors based on the matched samples.

let  $Y_i$  be the outcome variable for  $i$  households. Then,  $I=Y_{i1}$  if the household is a beneficiary of the 'SWAPNO' and  $Y_{i0}$  otherwise and  $\delta_i$  is the difference between these two outcomes of control and treatment groups which is nothing but the effect of the participation i.e.  $\delta_i=Y_{i1}-Y_{i0}$ . Therefore, following Heinrich et al. (2010) the average treatment effect on the treated (ATT) is given by:

$$ATT = E(Y_{i1} - Y_{i0} | D = 1) \dots \dots \dots (1)$$

which is written as:

$$ATT = E(Y_{i1}|D = 1) - E(Y_{i0}|D = 1) \dots \dots \dots (2)$$

The second term in upper equations the unobserved counterfactual outcomes of the households.

Thus, we can calculate:

$$\Delta = E(Y_1 | D = 1) - E(Y_0 | D = 0) \dots \dots \dots (3)$$

Estimation using the expected outcome of the control households will result in 'self-selection bias'. This bias occurs because the treatment decision can be influenced by the same variables, which affect the outcome variable as well.

Since the same variables that affect the treatment can also impact the outcome variable in estimating it using the expected outcome of the non-recipient group, it would be impossible to compare the outcomes of recipients and non-recipients even in the absence of treatment. Now, a brief derivation from equation gives,

$$\Delta = E(Y_1 | D = 1) - E(Y_0 | D = 1) + E(Y_0 | D = 1) - E(Y_0 | D = 0)$$

$$\Delta = ATT + E(Y_0 | D = 1) - E(Y_0 | D = 0)$$

$$\Delta = ATT + \beta \dots \dots \dots (4)$$

Here, the term  $\beta$  captures the selection bias i.e., the difference the counterfactual and observed outcome. To properly estimate the ATT two conditions, i.e. conditional independence and common support condition, must be fulfilled. Conditional independence condition ensures the participation in the

treatment group being independent of the outcome and the common support condition suffices enough common characteristics between the groups to make the comparison.

## ***2.8 Gender and Human Rights-based Approach***

As part of the requirement, the end line evaluation was followed using gender equality perspectives and rights-based approach in the light of UNEG's Guidance on 'Integrating Human Rights and Gender Equality in Evaluation'. The study findings were disaggregated by sex, ethnicity, age, etc. Detailed analysis on disaggregated data was undertaken as part of evaluation from which findings are consolidated to make recommendations and identify lessons learned for enhanced gender-responsive and rights-based approach of the project. These evaluation approach and methodology was considered different types of groups in the SWAPNO project intervention – women, youth, untouchable minorities, persons with disability (PwD) and vulnerable groups.

## ***2.9 Ethical Consideration***

In this survey, all ethical agreements/issues of social-science research (e.g. voluntary participation, no harm to participants, deceiving subjects, informed consent, unbiased analysis and reporting, anonymity and confidentiality, professional code of ethics) were maintained properly, including

- The purpose and objective of the study was explained to the respondent/participant;
- The respondent was informed that his/her identity would be kept confidential
- The permission of the respondent was taken prior to the interview;
- All gender-sensitive relevant topics (for example, anthropometric measures of women, issues related to violence against women and alike) were dealt with by female enumerators to ensure both privacy and respect to cultural norms.
- The interviews were conducted in a recommended place by the respective interviewee.

## ***2.10–Data Collection Procedures and Instruments***

For quantitative survey, we used the same questionnaire (with modification as required to address all indicators in the project's Result and Resource Framework) as used for a baseline study on the SWAPNO 3<sup>rd</sup> Cycle beneficiary to assess the impact of the SWAPNO project on beneficiaries' wellbeing, including income, employment, asset accumulation, health status, nutrition, food security, education, and empowerment. The evaluation questionnaire and checklists are shared along with this evaluation report as annexTo achieve the study objectives in the survey collected the following information from the respondent households:

- Profile of the socioeconomic characteristics of the household members of the respondent, including education, occupation
- Access to social assets and public institutions

- Household asset ownership, household income and expenditure, housing conditions etc.;
- Households exposure to natural, health and personal shocks, the severity of the shocks and the coping mechanisms
- Nutrition, health status of and the food security of household
- Experiences of violence and harassment of the household members;

Qualitative methods searched for a deeper understanding of the respondent's/participant's answers or responses of a phenomenon. Moreover, qualitative techniques allowed data/information collection process free from predetermined categories of analysis. Qualitative information was collected by administering KIIs and FGDs. Several case studies or success stories are documented to observe the insightful of the SWAPNO project. In this regards, a total of 11 Key Informant Interviews (KIIs), 8 FGDs and 9 case studies were conducted in the SWAPNO catchment areas (Qualitative details findings are stated in the annex).

### ***2.11 Data Processing and data analysis***

The data processing involves two important steps. The first step was to categorize the household and the second step was to allocate individual answers to them. The set of coding frames covering all the information was extracted from the questionnaires. Another step of data processing was to enter data into the computer using the software designed for this purpose. Once the edited data were entered into a computer, the data were put together in pre-designed one-way, two-way and multi-way tables and required statistical analysis like Difference in Difference (DID) and Propensity Score Matching (PSM) were performed. Microsoft Office and STATA V-14 was used to perform the data analysis.

### ***2.12 Structure of the Report***

The report is divided into six sections. The first introductory section describes about the SWAPNO intervention and the analytical approach to the study. Objectives of the evaluations and methodological approach are described in Section 2. The study findings start at from the third section. The third section conducts major findings on training and social awareness related issues. Welfare comparisons between the current beneficiaries and the control group members was discussed in section 4. The section 5 presents the main quantitative results on the effects of project on the current beneficiaries compared with the control group members obtained by using PSM and DID methods. Covid-19 pandemic related issues were briefly reported in the sixth section. The seventh section highlighted the summary of the qualitative findings. Conclusions and the policy implications have been captured in the section 8.

### 3. MAJOR FINDINGS

The major findings of the SWAPNO 3<sup>rd</sup> cycle end-line evaluation are summarized below:

#### 3.1 Sectoral Breakdown of SWAPNO Income

SWAPNO beneficiaries have three SWAPNO related income as discussed before; regular income, compulsory savings and ROSCA income. So, it is interesting to see how they make their budgets depending on the sources of SWAPNO income.

*Table 3.1 Proportion of Households Using SWAPNO Transfer on Particular Items*

	Regular income	Compulsory savings	ROSCA
Food products	94.63%	39.60%	48.10%
Treatment	42.95%	19.02%	22.37%
Children's Education	39.15%	10.96%	12.53%
Savings	55.03%	3.58%	19.91%
Savings: Other Source	35.79%	25.73%	14.42%
Loan payment	10.96%	5.82%	8.28%
Land lease	0.22%	0.45%	0.67%
Free up leased land	6.49%	0.45%	6.49%
Buying land	1.79%	10.96%	1.57%
Animal rearing	43.18%	38.26%	54.81%
Business capital	8.95%	5.82%	10.74%
Rickshaw / van / boat	0.22%	0.67%	0.22%
TV / refrigerator	0.89%	0.87%	0.89%
Children's marriage	2.46%	2.91%	3.58%
House Repair	12.30%	11.41%	12.98%
Others	15.88%	10.29%	14.54%

Table 3.1 shows the proportion of expenditure that a household spends on different sectors using the SWAPNO cash transfer (regular income, compulsory savings, ROSCA). Highest proportion of beneficiaries have reported that they spent their regular income on food items (94.63%), which is followed by savings (55.03%), animal rearing (43.18%), medical treatment (42.95%) etc. Highest proportion of beneficiaries have reported that they spent their ROSCA income on animal rearing (54%), which is followed by food items (48.10%), business capital (22%), medical treatment (22.37%) etc.

#### 3.2 Training on IGAs and social awareness

Along with wage employment and ROSCA, SWAPNO project facilitates their beneficiaries training on income generating activities (IGAs) and social awareness. These trainings help them to gain skill on their income, livelihood, and change their outlook.



**Table 3.2 Proportion of household having training on IGA**

Having at least on training on IGA	Beneficiary, N (%)	Control, N (%)
Yes	439 (98.21%)	7 (1.6%)
No	8 (1.79%)	430 (98.4%)
Total	447 (100)	437 (100)

Table 3.2 observed the various trainings received by SWAPNO beneficiaries. The evaluation report revealed that 98.21% beneficiaries got training on income generating activities while 1.79% of the beneficiaries reported of not getting any IGA training. On the other hand, 1.6% of the control households reported to get training on IGA which they might get from some other program or activities.

Table 3.3 stated trainings related to different IGAs, the vegetable cultivation (98.2%) was the most desired trainings followed by trainings on livestock (51.3%), small business management (33.2%) and poultry rearing (13.5%) by SWAPNO beneficiaries.

**Table 3.3 Proportion of households having IGA training**

Type of training	SWAPNO beneficiary (%)
Livestock (cow rearing & beef fattening and goat/sheep farming)	51.5
Poultry and bird farming	13.5
Small business management	33.2
Vegetable cultivation (Kitchen gardening)	98.2

Table 3.4 revealed that SWAPNO beneficiaries have training on social awareness like child health, education, child marriage etc. while the control groups it was hardly seen (only 1%). The proportion of household having at least one training on any of the child health or education or child marriage.

**Table 3.4 Proportion of households having training on child health, education and child marriage**

	Beneficiary	Control
Yes	98.17%	1.07%
No	1.83%	98.93%

**Table 3.5 Proportion of women having any income generating activities**

Women having any income generating activities	Beneficiary	Control
Yes	439	128
	98.21	36.16
No	8	226
	1.79	63.84

Table 3.5 shows that almost 98.21% of the beneficiaries are involved in IGA activities when only 36% of the control households have earnings from any such IGAs.

## 4. WELL-BEING COMPARISONS BETWEEN BENEFICIARY AND CONTROL GROUPS

In this chapter, we are going to compare economic, social and nutritional indicators between beneficiary households and control households of the SWAPNO 3<sup>rd</sup> cycle. These comparisons will help to identify the effectiveness of the project to improve economic and social conditions of the beneficiary households.

### 4.1 Income, expenditure asset and savings

Three most important indicators to judge the economic stability of any household are income, expenditure and asset. In that section we would like to compare per capita household income, per capita household expenditure and per capita household non-land asset across beneficiary and control households.

**Table 4.1 Annual household Income (BDT) among SWAPNO beneficiary and Control households**

		Farm	Non-farm	Annual Transfer Income	Total Annual Income
<b>Beneficiary</b>	Mean	104,666.3	57,884.17	14,836.72	177,387.2
	Median	63,800	36,900	5,800	126,200
	SD	120586	74782.43	37862.86	153,260.9
<b>Control</b>	Mean	51,656.02	34,466.94	14,501.23	100,624.2
	Median	24,000	12,000	4,000	65500
	SD	80733.92	50227.72	41386.32	107833

Table 4.1 illustrates the household income of SWAPNO beneficiary and control group. It is clear from this table that, most of the income come from farm income for both beneficiary and current control group. Although we observed that annual income transfer is almost same among SWAPNO and control households, however, total annual income was better among SWAPNO beneficiary groups than control.

**Table 4.2 Income among Control and Beneficiaries of the SWAPNO 3rd cycle households**

Baseline			
Type	Income PC	Expenditure PC	Asset PC
<b>Beneficiary</b>	1401.7	2168.339	6771.872
<b>Control</b>	1478.232	1934.432	3605.19
<b>Difference</b>	-76.532	233.907	3166.682
End-line			
Type	Income PC	Expenditure PC	Asset PC
<b>Beneficiary</b>	2492.316	3714.42	16974.19
<b>Control</b>	1957.897	2866.365	5737.737
<b>Difference</b>	534.419	848.055	11236.45
<b>Difference in Difference</b>	610.951	614.148	8069.771

There is a huge difference in per capita income among current beneficiary and control households (Table 4.2). SWAPNO households always in better position in terms of per capita income, per capita expenditure and even for per capita asset which indicated a better position than control groups.

**Table 4.3 Monthly expenditure among SWAPNO beneficiary and Control households**

		<b>Monthly Food Expenditure (BDT)</b>	<b>Monthly Non-Food Expenditure (BDT)</b>	<b>Monthly Total Expenditure (BDT)</b>
<b>Beneficiary</b>	Mean	7306.86	2520.87	9827.73
	Median	6200	1815	8248.666
	SD	4034.94	2411.52	5243.46
<b>Control</b>	Mean	5957.67	2140.37	8098.03
	Median	5332	1228.33	7084.167
	SD	3470.00	2618.74	4986.06

Table 4.3 delineates the mean values and standard deviations (SD) of household expenditure across beneficiary and control groups. Overall, household expenditure of current beneficiary is far higher than the current control group. More specifically, beneficiary group spend more on food (7306.86) rather than non-food expenditure (2520.87). The control group, similarly, spends more money on food expenditure and less on non-foods yet total expenditure is lower than the current beneficiary group.

**Table 4.4 Assets among Control and Beneficiaries of the SWAPNO 3rd cycle households**

<b>Type of households</b>		<b>Consumer Durables</b>	<b>Productive Assets</b>	<b>Other Assets</b>	<b>Total Assets</b>
<b>Beneficiary</b>	Mean	9293.50	160299.3	2206.94	171799.7
	Median	5500	91100	0	99800
	SD	11444.94	236232.6	24200.46	240760.1
<b>Control</b>	Mean	5554.18	101907.6	734.55	109475.7
	Median	4300	43000	0	50200
	SD	9136.09	172361.7	6037.20	175020.3

\*other asset includes financial asset

Table 4.4 represents the mean value of household current asset value and standard deviation (SD) of current beneficiary and current control groups.

**Table 4.5 Savings per month (BDT) among SWAPNO Beneficiary vs. Control households**

	<b>Observations</b>	<b>Mean</b>	<b>SD</b>
<b>Beneficiary</b>	447	1132.251	2029.022
<b>Control</b>	437	142.1058	574.4461

Table 4.5 shows the amount of savings per month among SWAPNO beneficiary and control groups. We observed that average savings per month per SWAPNO beneficiary was BDT 1132 while it was only BDT 142 for control group.

#### **4.2 Household food security and dietary diversity**

To explain the food availability of households and quality of food they consume, we have used Household Dietary Diversity Score (HDDS), Dietary Diversity (DDS) Score for women and Household

Food Insecurity Access Scale (HFIAS<sup>5</sup>). However, in terms of dietary diversity score, weekly consumption recall is used in HDDS and 24-hour recall is used for DDS women. The method of HDDS and HFIAS are given below:

**Household Dietary Diversity Score (HDDS) and Women Dietary Diversity Score:** In measuring dietary diversity for households and women, the number of different food groups consumed are calculated rather than the number of different foods consumed. This assumes that a household's consumption from six different food groups is better than the consumption of six different foods from the same food group, for example: consumption of different types of cereals. According to the U.N. Food and Agriculture Organization (FAO), there are twelve food groups. The following food groups are used to calculate the HDDS: Cereals, Roots and tubers, Vegetables and Leafy Vegetables, Fruits, Meat and poultry, Eggs, Fish and seafood, Pulses/nuts, Milk and milk products, Oil/fats, Sugar and honey, and Miscellaneous. The value of HDDS varies from 0 to 12; 12 means maximum diversity and 0 means no diversity.

**Household Food Insecurity Access Scale:** HFIAS measures the scale of household food insecurity based on nine questions regarding the state of food security in the last four weeks. All the nine questions are related to the availability of food in the household during the referred period of four weeks.

*Table 4.6 Median dietary diversity score among SWAPNO 3rd cycle households*

Type	HDDS	HDDS Women	Observations
Beneficiary	8	7	447
Control	7	7	437

Table 4.6 delineates the distribution of the median dietary diversity score SWAPNO 3<sup>rd</sup> cycle among current beneficiary and current control group. It shows that, median of HDDS of current beneficiary is 8 which is higher than the current control group (7).

*Table 4.7 Proportion of SWAPNO 3rd cycle households having median and above dietary diversity*

Median and above dietary diversity	Beneficiary	Control
No	211	301
(percent)	47.2	68.88
Yes	236	136
(percent)	52.8	31.2

Table 4.7 demonstrates total number and percentage of households having median and above dietary diversity scores. Among the current beneficiary households, 52.8 percent have median or above bear dietary diversity, which is nearly twice more than the current control group (31.2%) indicating significantly higher dietary diversity for beneficiary households.

<sup>5</sup> Household Food Insecurity Access Scale (HFIAS) for Measurement of Food Access: Indicator Guide, VERSION 3, FAO-2007

**Table 4.8 Proportion of SWAPNO 3rd Cycle Households Having Median and above Women Dietary Diversity**

<b>Median and above dietary diversity</b>	<b>Beneficiary</b>	<b>Control</b>
<b>No</b>	253	334
(percent)	56.6	76.43
<b>Yes</b>	194	103
(percent)	43.4	23.57

Enumerating the number of households having median and above women dietary diversity score, Table 4.8 also illustrates the percentage difference of the SWAPNO beneficiary and control group. Among the beneficiary households, 43% women attained median and above dietary diversity, while it is 24% for the control households.

**Table 4.9 Food Insecurity Access Scale among SWAPNO 3rd Cycle Households**

	<b>Beneficiary</b>	<b>Control</b>
<b>Food Secure Access</b>	237	115
	53.02	26.32
<b>Mildly food insecure access</b>	68	67
	15.21	15.33
<b>Moderately Food insecure Access</b>	108	159
	24.16	36.38
<b>Severe Food Insecure Access</b>	34	96
	7.61	21.97
<b>Total</b>	447	437
	100	100

**Note:** First row has *frequencies* and second row has *percentages*.

Enumerating the Household food insecurity access scale, table 4.9 represents several food insecure categories of current beneficiary and control groups. Percentage of beneficiary of food secure access (53.02%) is almost two-fold higher than the control group food secure access (26%). On the other hand, percentage of mildly, moderate and severe food insecure access are almost similar and higher for control group. In the severe food insecure access category, percentage of control group (21.97%) is exactly three times higher than the beneficiary group (7.61) indicating more insecure access to food.

#### **4.3 Adult and child Nutrition**

Child and adult nutrition are used to observe the outcome of the economic and social wellbeing. Therefore, in our case, when an intervention happened to beneficiary households, they might be better off in terms of adult and child nutrition. However, adult body mass index (BMI) might not change in the short term of the project intervention. We have used child height-for-age z-score (HAZ), weight-for-height z-score (WHZ) and weight-for-age z-score (WAZ) to measure the stunting, wasting and underweight respectively. To measure the nutrition category, we have used WHO 2006 cut offs which

are globally used. However, to measure adult nutrition, we have used standard Body Mass Index (BMI<sup>6</sup>).

**Table 4.10 Male Adult BMI of the SWAPNO 3rd Cycle Households**

BMI indicators	Beneficiary	Control
<b>Severe underweight</b>	75	95
	31.65	35.32
<b>Underweight</b>	57	68
	24.05	25.28
<b>Normal</b>	95	88
	40.08	32.71
<b>Overweight</b>	7	13
	2.95	4.83
<b>Obese</b>	3	5
	1.27	1.86

**Note:** First row has *frequencies* and second row has *percentages*.

Table 4.10 delineates the BMI of male adult of the beneficiary and control group where raw of the table represents the different state of BMI. At first, current control group has higher severe underweight adult than the current beneficiary group (4% higher). Current beneficiary households have around 1.3% less underweight than the control group. We found that SWAPNO beneficiary households have around 8% more normal weight (40.08%) than those of the control households (32.71%). We found both of the overweight (4.83% vs 2.95%) and obese individual (1.86 vs. 1.27%) were high in control households than those of the SWAPNO beneficiary households.

**Table 4.11 Female Adult BMI of the SWAPNO 3rd Cycle Households**

BMI indicators	Beneficiary	Control
<b>Severe underweight</b>	97	102
	13.92	15.41
<b>Underweight</b>	146	137
	20.95	20.69
<b>Normal</b>	366	332
	52.51	50.15
<b>Overweight</b>	68	68
	9.76	10.27
<b>Obese</b>	20	23
	2.87	3.47

**Note:** First row has *frequencies* and second row has *column percentages*.

Table 4.11 demonstrates the BMI of adult women. We observed that severe underweight was high in control households (15.41%) than beneficiary households (13.9%), while the underweight status is almost similar in two groups. The normal weight is relatively higher for the SWAPNO beneficiary groups (52.51%) than control households (50.15%). In terms of both overweight (10.27%) and obesity

<sup>6</sup> The definition adopted is as follows: BMI= weight in kg/ (height in meter) <sup>2</sup>, severe under-weight if BMI<16, underweight if 16<=BMI<18.5, normal if 18.5<=BMI<25, overweight if 25<=BMI<30, and obese if BMI>=30.

status (3.47%) was slightly higher among the control households than SWAPNO beneficiary groups (overweight=9.76% and obesity= 2.87%).

**Table 4.12 : Prevalence of Stunted, Wasted and Underweight Children (below 5) among SWAPNO 3<sup>rd</sup> Cycle Households**

Nutritional status	Beneficiary, n (%)	Control n (%)
<b>Stunted</b>	16 (3.57)	33 (7.38)
<b>Wasted</b>	9 (2.01)	7 (1.57)
<b>Underweight</b>	10 (2.23)	23 (5.15)

Table 4.12 represents the children's malnutrition status (stunting, wasting and underweight) of the SWAPNO beneficiary and control groups. We have to keep in mind the malnutrition status in terms of stunting, wasting and underweight was found extremely lower than national estimation according to Bangladesh Demographic and Health Survey (BDHS). This may happen due to the lower sample size of this study which is not country representative. Therefore, it is not comparable to nationwide childhood malnutrition status. It will require a much bigger sample to generate representative estimates for child under-nutrition. We observed that both stunted (7.38%) and underweight children (5.15%) were more prevalent among the control households than SWAPNO beneficiary household (3.57% and 2.23%). However, opposite outcome was found in terms of wasted children among SWAPNO beneficiary groups. We found the wasted under-five children was slightly lower (0.5%) among control groups. It may be noted that, wasted indicator is often misleading due to short term health shock's effect on weight of the children. Children of the beneficiary household might have suffered of illness which may have deteriorated their weight-for-height z-score.

**Table 4.13 : Health status of the women in last 6 months**

	Beneficiary	Control
Too bad	5	8
	1.16	1.93
Bad	25	17
	5.81	4.1
Average	135	185
	31.4	44.58
Good	261	201
	60.7	48.43

Table 4.13 shows the health status of the women in last 6 months which indicates that the beneficiaries are having comparatively better health status than those of the control households.

#### **4.4 Subjective Wellbeing**

Table 4.14 enumerates the aspiration status of the respondents in several categorical aspects.

**Table 4.14: Aspirations about the Future of 3<sup>rd</sup> Cycle Households**

Status of optimist	Beneficiary	Control
Not optimist at all	2	37
	0.45	8.58
Slightly optimist	78	93
	17.53	21.58
Optimist	95	135
	21.35	31.32
Moderately optimist	180	140
	40.45	32.48
Strongly optimist	90	26
	20.22	6.03
<b>Total, n (%)</b>	<b>445 (100%)</b>	<b>431 (100%)</b>

**Note:** First row has *frequencies* and second row has *row percentages*.

Overall, the SWAPNO beneficiary households were far more optimistic than the control groups. The percentage of ‘not at all optimistic’ level of control group is remarkably higher (8.58%), where beneficiary group showed a percentage which is next to nothing (0.45%). The SWAPNO beneficiary group showed more than twice level of status in terms of strongly optimistic category which is a good sign for such intervention.

**Table 4.15 :Aspirations about children of the 3<sup>rd</sup> Cycle Households**

Status of optimist	Beneficiary	Control
Not optimist at all	2	37
	0.45	8.58
Slightly optimist	78	93
	17.53	21.58
Optimist	95	135
	21.35	31.32
Moderately optimist	180	140
	40.45	32.48
Strongly optimist	90	26
	45.70	31.87
<b>Total, n (%)</b>	<b>445 (100%)</b>	<b>431 (100%)</b>

**Note:** First row has *frequencies* and second row has *row percentages*.

Enlisting several optimistic categories, table 4.15 delineates the aspiration about the children of beneficiary and control groups. This table shows that the SWAPNO beneficiaries are mostly responsive at moderately optimistic (40.45%) and strongly optimistic (45.7%) level. We found that a greater percentage of control groups (8.58%) reported they were not optimistic at all about their children’s future while it was only 0.45% for beneficiary households.



**Table 4.16 :Present subjective food condition of the 3rd Cycle Households**

Status of food condition	Present		Previous (5 years ago)	
	Beneficiary	Control	Beneficiary	Control
<b>Deficit all the time</b>	6	70	284	210
	1.34	16.06	66.13	50.24
<b>Deficit sometimes</b>	107	204	120	129
	23.94	46.79	27.84	30.86
<b>No shortage or no surplus</b>	246	141	17	64
	55.03	32.34	3.94	15.31
<b>Surplus</b>	88	21	9	15
	19.69	4.82	2.09	3.59
<b>Total, n (%)</b>	447 (100)	436 (100)	431 (100%)	418 (100%)

**Note:** First row has *frequencies* and second row has *column percentages*.

Table 4.16 represents the present subjective food condition for both beneficiary and control groups and the previous (5 years ago) subjective food condition of both beneficiary and control groups. About 16% of the control households reported that all the time they were suffering from food deficiency while it was only 1.34% for SWAPNO beneficiary groups. However, a greater percentage of SWAPNO beneficiary households (20%) reported regarding the food surplus while it was only around 5% for control group. Nevertheless, a substantive amount households reported that foods are neither deficit nor surplus but, in this regard, SWAPNO beneficiary group are more responsive (55%) than the control group (32.34%).

If we look about 5 years ago, foods were always in deficit in both groups. However, the SWAPNO beneficiary groups were facing more deficiency (66.13%) than control groups (50.24%). Similarly, around 28% of the SWAPNO beneficiaries believed that they faced foods deficiency occasionally while only 2% of them reported the food were surplus during that time.

**Table 4.17 :Present Economic Condition of the 3rd Cycle Households**

Status of economic condition	Beneficiary	Control
<b>Rich</b>	2	5
	0.45	1.15
<b>High middleclass</b>	5	7
	1.12	1.61
<b>Middleclass</b>	29	14
	6.49	3.21
<b>Low middleclass</b>	76	36
	17.00	8.26
<b>Poor</b>	276	160
	61.74	36.70
<b>Extreme poor</b>	59	214
	13.20	49.08
<b>Total, n (%)</b>	447 (100)	436 (100)

**Note:** First row has *frequencies* and second row has *column percentages*.

Table 4.16 represents the economic condition of both beneficiary and control group. If we look the extreme poor economic condition status, we observed that 49% of the control households suffered while only 13% of SWAPNO beneficiary groups were exposed to extreme poverty. However, SWAPNO beneficiary group is fall in middle class (6.49%) and low middle class (17%) compared to control groups.

#### 4.5 Women Empowerment

In this section we are assessing how women empowerment has changed over time between the two groups of households. The latter can be variously defined; in this study, we adopted a restricted definition in terms of (a) physical mobility of women and (b) ability to participate in the household decision making. In this exercise, we define empowerment as the ability to physically move alone outside the sphere of domesticity.

**Table 4.18 : Present of Women Having Mobility Outside Home**

Status of women empowerment	Beneficiary	Control
Moving out of the area (Area/ village)	99.33	97.71
Moving in the union	97.76	94.27
Moving in the upazila	80.09	63.53
Moving in the district/division	37.81	24.54
<b>Total</b>	<b>100</b>	<b>100</b>

Table 4.18 presents the results. In terms of ‘mobility within upazila’ and ‘mobility within divisional city’ the difference between beneficiary and control households is particularly pronounced, suggesting favorable project effects. Similar level of attainment in respect of other mobility indicators across project and control groups is indicative of broad gains in female physical mobility achieved in general in rural Bangladesh.

**Table 4.19 : Percentage of Women Participating in the Household Decision Making**

Household Decision Making	Beneficiary	Control
New earn rising activity	407	330
	91.05	75.69
Receipt of service (Treatment facility, entertainment)	400	342
	89.49	78.44
Education/training	369	161
	82.55	37.01
Participation in meetings and committees	267	92
	59.73	21.20
Wealth buy/sell	204	126
	45.64	28.90
Ornament buy/sell	146	111
	32.74	25.46
Domestic animal buy/sell	317	190

Household Decision Making	Beneficiary	Control
	71.92	43.58
Vegetables, fruit, tree buy/sell	323	238
	72.26	54.59
Construction and repair of houses	254	163
	56.82	37.39
Children's education	322	243
	72.20	55.86
Children's Marriage	188	133
	42.06	30.57
Children's Treatment	287	219
	64.93	50.58
Others (personal)	49	24
	20.94	10.76
School Management Committee	62	34
	13.96	7.80
Village Court/arbitration	57	26
	12.78	5.98
Voting in the last election	374	329
	84.04	75.98
Others (social)	44	23
	18.97	10.80

**Note:** First row has *frequencies* and second row has *row percentages*.

Table 4.19 compares women's decision making power across beneficiary and control households. In all the cases, percentage of the women having decision making power are significantly higher for beneficiary households than that of the control households. In summary, women from the beneficiary households have more physical mobility and greater decision making power than the control households.

#### 4.6 Social Asset

In this section, we compare the social asset position across beneficiary and control households. Here, we have defined participation in the socio-economic institution and Government or Non-Government social services as social asset.

**Table 4.20 Attaining Union and Upazila Social Services**

Activities	Beneficiary	Control
<b>Agriculture</b>	42.28	1.37
<b>Animal Husbandry</b>	40.27	4.12
<b>Fish culture</b>	4.70	0.46
<b>Health services (Child and mother related)</b>	61.97	43.94
<b>IT related services (Computer, e-payment, Bkash, Rocket etc.)</b>	95.30	54.92

Table 4.20 shows the comparison in the attainment of Union and Upazila social services. In all the five categories of social services, attainment of the beneficiary households is greater than that of the control

households which is quite impressive. These results showed that the program has played a significant role attaining various social services including health services.

**Table 4.21 Attaining of government owned properties/ institutions**

Usage of main road of the union	Beneficiary	Control
	447	436
(Percent)	100	99.77

As the main road of the union is a common public good, so the usage of it is almost common among both the beneficiary and control groups.

#### **4.7 Financial Services**

We used here two indicators. First, we looked into the overall possession of bank account as an indicator for access to financial services. Secondly, we assessed their access to digital financial services.

**Table 4.22 Percentage of women having bank account**

Having a bank account	Beneficiary	Control
Yes	12.33	5.1
No	87.67	94.9

Table 4.22 suggests that around 12% of the beneficiaries hold at least one bank account when it is 5.1% for the control households.

**Table 4.23 Percentage of Women having an account in mobile financial services (bKash, Nagad Rocket, etc.)**

Women having an account in mobile financial services (bKash,Nagad, Rocket, etc.)	Beneficiary	Control
Yes	445	267
(Percent)	99.64	62.97
No	2	157
(Percent)	0.36	37.03

The cash transfer of SWAPNO project to its beneficiaries were done through bKash/Nagad and as a result our study shows that 99.6% of the total beneficiaries had an account in mobile financial services which is again higher compared to those of the control women. This can be considered as spillover effect as even after completion of this project, it will still be there and they will continue to have monetary transactions through these digital financing services. The project documents revealed that 100% of the beneficiaries have bKash/Nagad account of their own, the distortion 0.35% of result might happen due to recall bias during field data collection in the evaluation.

## 5. IMPACT ASSESSMENT THROUGH PROPENSITY SCORE METHOD (PSM) AND DIFFERENCE-IN-DIFFERENCE (DID) METHOD

We looked at the descriptive statistics of income, consumption-expenditure, and non-land assets in the previous section, as well as the potential effects of project involvement. However, because the measurement of cross-sectional variance in outcome indicators was limited to the current round, it is prone to selection biases, which may have confounding effects on interpreting welfare comparisons between recipient and control groups. We may have been comparing "apples" and "oranges" in our previous statements. To solve this issue, we employ the Propensity Score Method (PSM) to choose a sub-sample of project and control groups based on key characteristics that are exogenous to SWAPNO participation.

### *The PSM Approach*

The advantage of the PSM technique is that it allows for the identification of a set of control households that are identical to the project households in every way except project participation. It's crucial to keep two things in mind when it comes to matching. First, matching must be done using "background characteristics," and second, the matching process is only as good as the matching markers, therefore having a large number of background characteristics is critical. To match the two project and control samples, we must pool them and determine the probability that everyone will participate in the project based on the survey's characteristics. Given that the participation is expressed in a binary outcome (1 for participation, and 0 for non-participation) we use the logistic regression for generating the propensity score. The basic logistic regression runs for generating the propensity score are captured in Table 5.1.

**Table 5.1 Logistic Regression used for the Propensity Score Model: Comparison between Project Beneficiary and Control Members**

Variables	Beneficiary (1) vs. Control
Age of the HH Head	-0.0319 (0.0484)
Age Squared	0.000616 (0.000537)
Household having any children under 6 years (Yes==1)	-0.233 (0.212)
Household having any elderly member above age 60 (Yes=1)	-0.0310 (0.241)
Marital Status ( Married= reference category)	
Divorced	1.593*** (0.417)
Abandoned	1.329*** (0.310)

Variables	Beneficiary (1) vs. Control
Widow	0.585** (0.282)
Unmarried	1.627 (1.267)
Female Headed Household (Yes=1)	0.641** (0.313)
Education of the HH head (‘ No formal Education is the reference category)	
Below Primary	0.296 (0.248)
Below SSC	0.421 (0.375)
SSC and above	0.481 (0.464)
Literacy ( ‘Cannot Sign’= Reference Category)	
Can Only Sign	1.021*** (0.295)
Can read and write	0.632 (0.422)
Whether Main earner	-0.784*** (0.257)
Previous asset per capita	7.34e-05*** (1.41e-05)
Mobile Phone dummy (Yes=1)	2.825*** (0.450)
Household Size	0.271*** (0.0770)
Having combined shock	-0.368** (0.177)
Having individual shock	-0.238 (0.164)
Constant	-4.579*** (1.269)
Observations	877

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Based on this model, we estimate the income, expenditure, and non-land assets differences between the PSM-matched sample of the project beneficiaries and control groups' households. The robustness of the results has been checked by using different calipers (Table 5.2).

**Table 5.2 Propensity Score Matching Results for the End-line Survey: Comparison of Income, Expenditure and Non-Land Assets between Project Members and Control Households**

Type	Expenditure PC(BDT) (Caliper 0.25)	Expenditure PC (BDT) (Caliper 0.0005)	Yearly Income PC (BDT) (Caliper 0.25)	Yearly Income PC (BDT) (Caliper 0.0005)	Asset PC (BDT) (Caliper 0.25)	Asset PC (BDT) (Caliper 0.0005)
Beneficiary	3702.60	3409.43	64497.43	63805.07	16670.54	18076.35
Control	2603.00	2729.25	27905.73	28603.20	7069.854	6966.39
<b>Difference</b>	<b>1099.60</b>	<b>680.18</b>	<b>36591.70</b>	<b>35201.86</b>	<b>9600.68</b>	<b>11109.96</b>
T-stat	5.25	2.78	8.34	6.81	8.15	7.28

In all three areas, the project members have a big edge over the control group, as shown in Table 5.2. For caliper 0.25, the income discrepancy between members and non-members is 131.13 percent, while the equivalent difference in consumer expenditure is 42.24 percent. In the case of asset disparity, this figure is roughly 136.71 percent. These differences are unaffected by the calipers used or the precise propensity matching algorithms used. By any metric, there is a significant impact of project intervention on recipients.

The PSM technique has the limitation of the assumption that there are no systematic changes in unobserved characteristics between the treatment and control groups that could impact the observed outcome. As Gertler et al. (2011) put it, “Since we cannot prove that no such unobserved characteristics that affect both participation and outcomes exist, we have to assume that non-exist. This is usually a very strong assumption...and most problematic, it cannot be tested.”

#### ***The Difference in Difference (DID) Method***

The difference in differences (DID) method compares the pre-and post-treatment differences in the result of a treatment and a control group to determine treatment effects. Income, expenditure, asset, food security, nutrition, or any other variable of interest may be considered as an outcome. The matching difference in current income, consumption expenditure, and non-land assets of program households as compared to the level at the beginning of the SWAPNO project is evaluated here (compared to the corresponding difference in the control group). While estimating the DID and OLS, we used the per capita monthly income of December 2019 and 2020.

**Table 5.3 Difference-in-difference (DID) in income, expenditure, and non-land asset**

	Monthly Income PC (BDT)	Monthly Expenditure PC (BDT)	Non-Land Asset PC (BDT)
<b>End year- Base Year</b>	479.7***	931.9***	2,133***
	(98.77)	(132.4)	(748.6)
<b>Beneficiary- Control (At base year)</b>	-76.53	233.9*	3,167***
	(98.21)	(131.7)	(744.4)
<b>Difference in Difference (DID)</b>	<b>610.9***</b>	<b>614.1***</b>	<b>8,070***</b>
	(138.9)	(186.2)	(1,053)
<b>Constant</b>	1,478***	1,934***	3,605***
	(69.84)	(93.62)	(529.3)
<b>Observations</b>	1,768	1,768	1,768
<b>R-squared</b>	0.083	0.112	0.179

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The “difference-in-difference” in income, spending and asset between SWAPNO third cycle beneficiary and control households is shown in Table 5.3. On average, current recipient households had 610 BDT more per capita monthly income, 614 BDT more per capita monthly expenditure, and 8070 BDT more per capita value of assets than control households. Control households, on the other hand, fared marginally better in two of the three variables during the baseline survey period. However, in a panel data set, difference-in-difference does not account for unobserved heterogeneity in time-invariant characteristics, nor does it account for changes in factors that are exogenous to project participation that can be observed. This necessitates the employment of a multivariate framework.

**Table 5.4 Project Impacts on Income, Expenditure, and Non-Land Asset Using Pooled OLS Regression with Time-Beneficiary Interaction**

	Monthly Income PC	Monthly Expenditure PC	Asset PC
<b>Time dummy ( End-line=1)</b>	479.7***	931.9***	2,133***
	(114.8)	(128.4)	(354.2)
<b>Beneficiary dummy (Yes=1)</b>	-158.9	135.9	523.7*
	(115.8)	(84.37)	(291.8)
<b>Time and Beneficiary Interaction</b>	<b>609.1***</b>	<b>604.7***</b>	<b>8,058***</b>
	(132.9)	(174.8)	(855.7)
<b>Age of the HH head</b>	9.267	14.41*	-16.48
	(6.380)	(7.845)	(24.40)
<b>Size of the Household</b>	-315.5***	-438.7***	-1,970***
	(18.43)	(32.21)	(196.8)
<b>Head’s level of Education (base: No formal Schooling)</b>			



1. Less than primary	-83.34	91.66	133.7
	(86.84)	(100.8)	(527.4)
2. Below SSC	-53.19	210.0*	747.5
	(100.6)	(124.2)	(635.3)
3.SSC completed	531.2***	1,315***	10.13
	(167.1)	(214.0)	(1,462)
Previous Asset	0.00726***	0.00789***	0.272***
	(0.00161)	(0.00198)	(0.0223)
Faced covariate Shock(Yes=1)	-43.98	-166.3	-609.7
	(106.0)	(103.4)	(391.0)
Faced Individual Shock(Yes=1)	145.5	536.2***	-776.9*
	(96.42)	(90.13)	(453.5)
Constant	1,963***	2,316***	8,130***
	(382.3)	(347.5)	(1,256)
Observations	1,766	1,766	1,766
R-squared	0.172	0.221	0.452

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 5.4 shows the findings of combining the indicators from the baseline and end-line surveys to create a pooled regression of the beneficiary and control households. The project's impact on beneficiary households is shown by the coefficient on the "time and beneficiary interaction" variable. Between the baseline and end-line surveys, it shows that beneficiary households' average monthly income per capita increased by BDT 609, average expenditure per capita increased by BDT 604, and average asset per capita increased by BDT 8,058, as compared to control households. The covariate shocks exhibit negative effects on all three outcome variables, among the other explanatory variables. Initial non-land assets and the age of the household head, high level of education of the household head, on the other hand, have beneficial effects. In comparison to the control group, the participants benefited from the SWAPNO intervention.

**Table 5.5 Absolute Difference between Beneficiaries and Control Groups: OLS regression vs. DID estimation**

Indicators	OLS Regression	Difference in Difference (DID) estimation
<b>Monthly Income PC (BDT)</b>	609.1	610.9
<b>Monthly Expenditure PC (BDT)</b>	604.7	614.1
<b>Asset PC (BDT)</b>	8,058	8,070

The results summarized in Table 5.5, compare average income, expenditure, and non-land assets per capita using two methods: (a) Least Squares (OLS) and (b) Difference-in-Differences (DID). These methods show that despite having roughly similar edges over the control group other than the participation in SWAPNO, the SWAPNO beneficiary households had a higher monthly income per capita of BDT 609-610, a monthly expenditure per capita of BDT 604-614, and a current asset per capita of BDT 8058-8070. For the projection of absolute difference between beneficiary and control Groups from 2nd cycle, please check the annex (table 5.5.1). This, together with the earlier findings on the subjective well-being indices, gives us confidence in the SWAPNO project's significant positive benefits.

## 6. DEALING WITH COVID-19

### COVID – 19 Response

Bangladesh has reported the first confirmed COVID-19 case on March 08, 2020, and ever since, the number of cases count has been increasing steadily in all areas including the catchment area of SWAPNO intervention. As of 11 March 2020, the World Health Organization (WHO) declared COVID-19 as a global pandemic. Since the unanticipated outbreak of COVID-19 in Bangladesh, the whole country has come to a halt. Due to the countrywide lockdown, the movement of people was stopped which directly impacted important traits of life – health, livelihood, communication, education, etc. Bangladesh is a densely populated country where illiteracy and lack of hygiene practices are commonly seen, community transmission became a major threat, particularly in remote villages. SWAPNO took several initiatives for wider community people and beneficiaries to cope with pandemic-induced shocks.

The project reached out to the beneficiaries and community people in its working areas and disseminated WHO-recommended messages through awareness development sessions and hand-washing demonstrations on COVID-19. Hygiene kits including soap bars, face masks, and hand sanitizers were distributed among the beneficiaries. Following WHO advisories, the project quickly developed, printed, and distributed 94,500 posters and leaflets with visual and Bangla manifestation. Posters were pasted at District, Upazila and Union level important places like school-college, hat-bazar (local market), pharmacies, restaurants, hospital compounds, and mosques. Leaflets were distributed to a wider community, SWAPNO beneficiaries, Imams and Muazzins of local mosques, District and Upazila parishads and Union parishads. The project also organized wider dissemination of pre-recorded messages through loudspeakers. The community Radio Sharabela in Gaibandha district and the community radio of Chilmari in Kurigram district were contracted to broadcast COVID-19 messages - five times a day for two weeks during the first wave of the pandemic in 2020. The project also provided food baskets containing rice, flour, potatoes, sugar, salt, soybean oil and flattened rice (chira) and cash grants to the beneficiaries. These initiatives enhanced the capacity of the project beneficiaries to cope with the pandemic situation.

#### **6.1 COVID-19 Symptoms and vaccination status:**

The survey also captured the COVID-19 illness history and vaccination status of the respondents (Table 6.1). All information collected during the survey was self-reported. We observed that SWAPNO beneficiaries displayed COVID-19 symptoms more (4.92%) than control groups (2.75%) as we believed that SWAPNO beneficiaries groups were more active during the lockdown period and thus there was a possibility of a higher risk of COVID-19 infections. In terms of COVID-19 vaccination, the SWAPNO

beneficiaries were more vaccinated (89%) than the control groups (80%) which indicated that SWAPNO beneficiary groups were more concerned about for protecting their health condition. However, the control households were more prone to COVID 19 crisis (29.5%) than SWAPNO beneficiaries (19%).

**Table 6.1 COVID -19 symptoms and vaccination status**

Variables	Beneficiary		Control	
	Yes	No	Yes	No
Covid-19 symptoms	22 (4.92)	425 (95.08)	12 (2.75)	425 (97.25)
Vaccination status	397 (88.81)	50 (11.29)	351 (80.32)	86 (19.68)
Households facing COVID-19 crisis	85 (19.02)	362 (80.98)	129 (29.52)	308 (70.48)

## **6.2 Food security during COVID-19 lockdown period:**

Following the sharp rise in COVID-19 cases, the government announced a lockdown period and redistricted daily activities. During this time, the economy slowed down in the face of closure of public and private offices, businesses and factories and other related works including day labor activities. However, whether people strictly observed quarantine measures or not, the economy did come to a near halt and poor and marginalized people suffered various obstacles including food security. Our intention was to capture the food security issues among SWAPNO beneficiaries and control groups that summaries in Table 6.2. We found that all most all of the households (93%) in the control groups were worried for their food consumption as they have no enough food for tackling lockdown while only 68% of SWAPNO beneficiary households worried in this regards. In terms of eating favorite food 83% of control groups reported that they did not eaten their preferred food while it was 58% for the beneficiary groups. We observed that 45% of SWAPNO beneficiary groups reported that they had eaten less food than their need because they have no enough food during this lockdown while almost 77% of the control groups reported they had eaten less food than their need which indicated that SWAPNO intervention tackled the food security issues in some manner.

**Table 6.2 Food security during lockdown due to COVID-19**

Related Questions	Yes, N (%)	
	Beneficiary	Control
Did you have to worry about having not enough food in the house during lockdown?	305 (68.23)	409 (92.91)
Did you or your family members not eat your favorite food at the lockdown?	261 (58.39)	361 (82.61)
Did you or your family members have to eat less food than you or the family members needed because of the inability to lockdown?	223 (49.89)	350 (80.09)
Did you or your family members have to eat less food than you need in the lockdown because there is not enough food?	204 (45.64)	334 (76.43)

### 6.3 Major coping strategies:

Table 6.3.1 below shows that only 19% of the SWAPNO beneficiary households Faced income/employment crisis during COVID-19 when it was around 33% among the control households.

**Table 6.3.1 Percentage of HHs Faced income/employment crisis during COVID-19**

<b>% of HHs Faced income/employment crisis during COVID-19</b>	<b>Beneficiary</b>	<b>Control</b>
(Percent)	19.02	32.95

Coping strategies was defined in terms of people's ability to face the lockdown successfully in terms of meeting their basic requirements for food and other necessities. Generally, the pattern that emerges quite clearly is that household ability to face long lockdown is closely related to income and employment most strikingly, while other factors also have some effect, especially age and household size.

Table 6.3.2 below, shows that difference of major coping strategies among SWAPNO beneficiaries and control households. We observed that control groups were tended to suffer lower food consumption and depend on loan, borrowing and donation than SWAPNO beneficiaries group. On the contrary, SWAPNO beneficiaries were more depend on savings, money received from SWAPNO and from ROSCA which was the unique characteristics of SWAPNO intervention. Although we observed that SWAPNO has a clear role for tackling COVID-19 issues for its members, however, it cannot really be argued that beneficiary groups were coping better.

**Table 6.4.2 Major coping strategies during COVID-19**

<b>Major coping strategies</b>	<b>Beneficiary</b>	<b>Control</b>
Adjustment through food	21.03	36.16
Use of savings	20.81	17.85
Neighbor / Relative Loan	10.74	19.45
Relative Grain Loan	3.58	9.15
Money from SWAPNO project	15.44	-
NGO Loan	2.24	5.26
Money from ROSCA	3.58	-
Borrowing from friend	7.16	11.44
Physical labor / sale of advance labor	2.24	2.29
Personal / relative donation	4.47	15.33
Cash Loan	1.12	3.2
Borrowing or borrowing from any other member of SWAPNO	0.89	-
Bank Loan	-	0.69
Child labor	-	0.46
Receipt of relief	1.34	1.6

## 7. An Insight of Qualitative Assessment of SWAPNO

This chapter is presented from two opposite perspectives for better understanding of the impacts of ‘Strengthening Women’s Ability for Productive New Opportunities (SWAPNO)’, project in two sections. The first section is on the perspectives of the project beneficiaries in the intervention group followed by the second one that highlights the difficulties of the lives and livelihoods of the non-beneficiaries in the control group. In the first case, assessment was done on the basis of several Focus Group Discussions (FGDs) (n=8) and life histories of the sampled women beneficiaries (n=10), which were carried out during the survey in the project areas. Besides, Key Informant Interviews (KIIs) (n=13) with the Deputy Directors of the respective districts, and Chairmen and members of the respective Union Parishads (UPs) were also conducted to incorporate the necessary views from other platforms. The second case, on the other hand, relied on the life histories of the selected women non-beneficiaries in the same above areas. Qualitative details findings is referred in the annex.

### **Key Insights: SWAPNO beneficiaries**

- Before joining SWAPNO project, beneficiaries were previously treated with absolute neglect and disgrace, because of their living in extreme poverty, desertion, and dependence on others. The project enabled them to run various relevant IGAs with trained skills, which have created the opportunities for most of them in the pursuit of breaking the extreme poverty trap. Specially, the gender equality training was very effective to build self-confidence and strong motivation to win over the inner psychological and outer societal barriers of the women. In case of disaster preparedness and climate change adaptation skills training, UPs also great motivational roles in the application and spread of the relevant skills in the respective areas. Some UP chairmen confirmed that many beneficiaries raised their homestead lands above the usual flood levels and regarding climate resilient cropping practices, many beneficiaries in the project intervention areas also went for gourd, beans and pumpkin with required fertilizers based on sack method.
- In the group-discussions it was also revealed that many were able to initiate and manage small businesses with the income savings from wage and ROSCA.
- Beneficiaries employed in formal sector presently earn Tk. 9000 per month and with overtime one can also earn as high as Tk.14,000. With this money they now can live in separate rented houses. they can now feed their children well and also send money to home for the children’s education through mobile banking (Bkash, Nogod).
- The local community people much appreciated the public assets repair and maintenance work of the women groups with quality.
- After receiving the training on Violence Against Women (VAW), they now know how to act against including reporting to the Union Council and local police stations as well as calling to the hotline number ‘999’ for support

- Awareness campaign on COVID-19 had significant motivational impacts on the local neighborhoods and society at large.

### **Key Insights: Non-Beneficiaries**

Non-beneficiaries or Control group participants expressed their continuous struggle to manage their family expenses. Lack of financial and technical support is the main reason behind this. While asked for a comparison between them and the SWAPNO beneficiaries, they replied SWAPNO beneficiaries were very fortunate to have won the lottery during the selection. It enabled them to earn and live three times better compared to them at present, as the beneficiaries were supported to develop and operate a number of IGAs of their own. Sheuli, one of the control group participants regretted by saying,

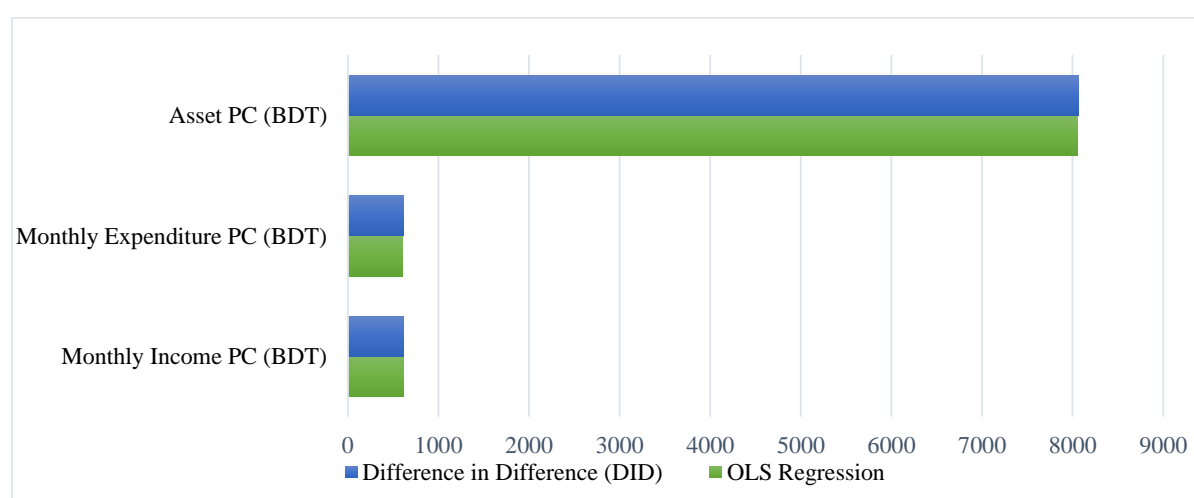
***‘... if joined I had the opportunity to live better and repay the loans like the SWAPNO beneficiaries, who live much better than me and are very fortunate!’***

Most of the participants appreciated the Public works initiative as it ensures regular income. Due to financial insolvency, they can only eat twice a day which results in malnutrition. They hardly get any government support or relief at any time, including during the COVID-19 pandemic. However, during the countrywide lockdown they didn’t face any additional shocks, and also any adverse impacts, so far, due to the pandemic.

## 8. CONCLUSIONS

Five main conclusions emerge from the preceding analysis. First, in respect of all major indicators of economic wellbeing, the SWAPNO 3<sup>rd</sup> cycle beneficiaries outperformed the control group households. For long-term income growth and economic well-being, we focused on income per capita, consumption expenditure per capita and non-assets per capita as three key economic indicators determining. This conclusion is supported by both Propensity Score Matching (PSM) and the Difference-in-Difference (DID) methods. According to the PSM method, the project participants have on average 131.13% higher yearly per capita income than the control counterparts. The difference in respect of per capita consumption expenditure is understandably less (because of the heightened emphasis on savings in beneficiary households) but still considerable. The project participants have, on average, have 42.24% higher per capita consumption expenditure than the control group (as per PSM). The most striking difference is observed in terms of capital accumulation. The PSM method indicate that the treatment group has respectively 1.4 times higher non-land assets than that observed for the control group. Furthermore, the recipient households had a higher monthly income per capita of BDT 609-610, a monthly expenditure per capita of BDT 604-614, and a current asset per capita of BDT 8058-8070, according to the OLS and DID estimates (Figure: 8.1)

**Figure 8.1 Absolute Difference between Beneficiaries and Control Groups: OLS regression vs. DID estimation**



Second, benefits from the SWAPNO project are not just noticeable in terms of major economic indicators but also reflected in terms of dietary diversity and “subjective measures” of well-being. Among the beneficiary households, 53% percent have median or above bear dietary diversity, which is around 31% for the control households indicating significantly higher dietary diversity for SWAPNO beneficiary households. Among the beneficiary households, 43.4% women attained median and above dietary diversity, while it is 23.57% for the control households. In terms of subjective food-poverty, only 1.34% of the beneficiaries in the 3rd cycle report food-deficit all the time compared to 16.06% for the control households. Around 20% of the beneficiary households reported about food surplus while

only 4.82% of the control households mentioned that they had surplus food in their house. They also tend to be strong optimism for themselves (20.22% as against 6.03%) and for their children (45.70% vs. 31.87%).

Third, only a small fraction of both the beneficiary and control households have under-five children (167 in the end-line survey). It will require a much bigger sample to generate representative estimates for child under-nutrition. We observed that, the prevalence of underweight children is comparatively lower SWAPNO beneficiary group (2.23% as against 5.15%) than the children from control households. The same trends emerge in case of stunted children (3.57% vs. 7.38%). In case of adult nutritional status, SWAPNO beneficiary households slightly better than the control households which was observed from our study findings. On that note, the issue of adult anthropometry needs to be paid more attention in SWAPNO projects, as no clear-cut advantage is discernible in beneficiary vs. control household comparison.

Fourth, in all the cases, women having decision making power in terms of new earn rising activity (91.05% vs. 75.69%) and women's participation in meetings and committees (60% vs. 21%) are significantly higher for SWAPNO beneficiary households than that of the control households. In summary, women from the beneficiary households have more physical mobility and greater decision making power than the control households. During COVID-19 pandemic, the SWAPNO beneficiary households faced less crisis than those of the control households (19% vs. 29%). We observed that almost 77% of the control groups reported they had eaten less food than their need while it was only 45% for the SWAPNO beneficiary which indicates that SWAPNO intervention tackled the food security issues in some manner.



## 8.1 Overview of the findings

### 8.1.1 Relevance

With the primary aim of ensuring sustainable livelihood and food security among the extreme poor and vulnerable rural women, the SWAPNO project is highly relevant to the Sustainable Development Goals (SDG) no.1, 2,3,5, 10 and 11 of ensuring zero poverty, zero hunger, good health, gender equality, no inequality and sustainability respectively. This could be justified by comparing various well-being indicators like change in income, expenditure, assets, dietary improvement and status of nutrition, empowerment, etc. over time across the beneficiary and control groups. Among all kinds of existing tokenism, this program stands out to be a different one with a larger promise of graduating the poor, vulnerable village women from the poverty trap. Our study findings strongly support this statement as well. In terms of per capita income, consumption expenditure, and asset holding, the SWAPNO project beneficiaries are ahead of the control households (see section 4.1). Besides, we have witnessed increased food security and diverse household dietary intake among the beneficiaries compared to the control group. The training on Income Generating Activities (IGA) is also a part of the process to strengthen the beneficiaries with higher skills to sustain in the long run. SWAPNO has focused on each of the goals individually and has made significant differences which are reflected in our project findings. The beneficiaries of SWAPNO 3<sup>rd</sup> cycle have shown increased participation as well as contribution in the society they live in with lesser harassment and violence compared to those of the control households. Not only that, but the project beneficiaries have also coped with the COVID-19 crisis in every aspect. Also, by targeting disadvantaged women, this project is in line with the national development priorities.

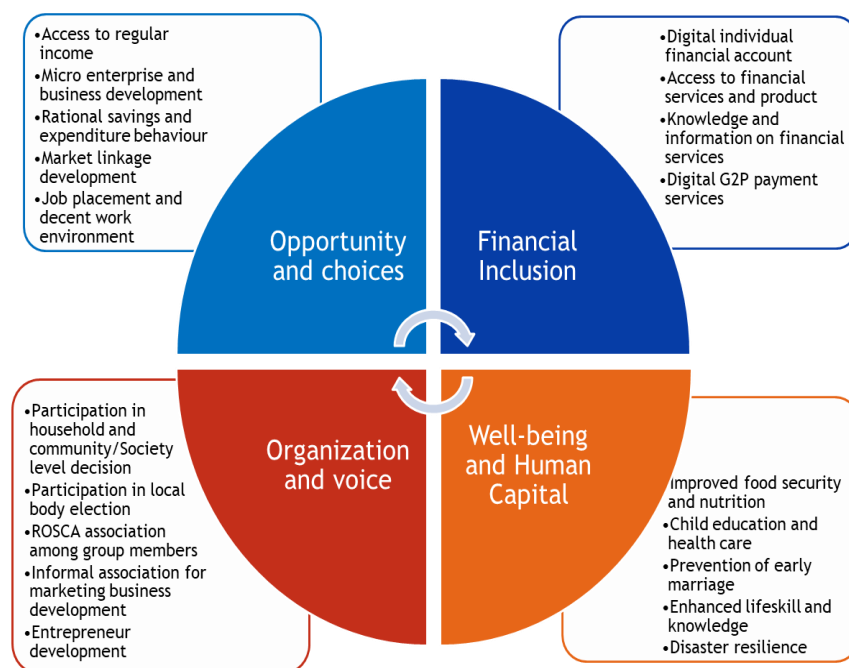
### 8.1.2 Effectiveness

From our findings, it is quite evident that this project is quite effective in fulfilling its prime objectives. The results from the propensity score matching (Table 5.2) indicate that the income discrepancy between beneficiary and control is 131.13 percent, while the equivalent difference in consumer expenditure is 42.24 percent. In the case of asset disparity, this figure is roughly 136.71 percent. Among the current beneficiary households, 52.8% have a median or above bear dietary diversity, which is nearly twice more than the current control group (31.2%) indicating significantly higher dietary diversity for beneficiary households. The food secure households among the beneficiary groups (53%) are almost twice as much as that of the control groups (26.32%). Similar success has also been reflected in terms of present adult nutrition, attainment of union and upazila social services, access to knowledge etc. and thus proving the high effectiveness of the project. It can be a matter of argument that the investment of this project is quite a bit higher but considering its impact on the marginalized women, we can say that the project has outdone all the debates.

In line with the National Social Security Strategy (NSSS), this social protection program leverages public works to train vulnerable women in vocational skills, place them in productive employment and

support them to move out of poverty. At the same time, the project design factors in key causes affecting multidimensional poverty among women in Bangladesh; address the cross-cutting vulnerabilities, and support women's empowerment in the country. SWAPNO contributes to Bangladesh's national and global commitment. On the national level, it promotes an inclusive and equal opportunity workforce, including increasing women's labor force participation. On the global level, the project mainly reflects Bangladesh's commitments to eradicating extreme poverty as part of the Sustainable Development Goals (SDGs). To attain the goals and objectives of SWAPNO, the following socio-economic empowerment model was followed:

**Figure 8.2: Socio-economic empowerment model of SWAPNO**



The socio-economic model mentioned above has been implemented along with intervention areas described below –

- Government and community involvement
- Correct targeting
- Public asset maintenance and wage disbursement
- Opportunity and choices
- Entrepreneurship development and Formal sector employment
- Financial Inclusion
- Well-being and Human capital
- Women Empowerment
- Partnership development
- Micro-health Insurance
- Disaster adaptive livelihoods development:
- Grievance redressal and reciprocal accountability

The project has consciously invested in “Ownership Building” with Local Government Division, District and Upazila Administration and the Union Parishad (UP) in various ways. These include extensive reporting, briefing and meetings, involve them in decision making, accounts operation and day to day management of project operation. The Central account is operated jointly by the National Project Director (NPD) and the National Project Manager (NPM), the district account is jointly operated by the Deputy Director Local Government (DDLG) and District Manager (DM) while the UP Account is operated by three signatories: the UP Chair, Chairperson of the concerned Standing Committee-a female member of UP and the Secretary.

### ***8.1.3 Efficiency***

Currently, around 125 social safety net programs are operating in Bangladesh ensuring gender equality and women’s economic empowerment including access to social services, formal sector employment, increasing the decision-making power of women, reducing domestic violence and many more. Strengthening Women’s Ability for Productive New Opportunities (SWAPNO) is one of a kind project that specifically focuses on future employability by ensuring women’s economic empowerment. There can be two sorts of discussions on the efficiency of this project. Firstly, from our previous discussion, it is quite apparent that this project is relevant and effective, however, a question remains whether this is the most efficient program out there. A further comparative assessment might give us an answer. Secondly, two factors need to be assessed: the duration and the amount of token money. Currently, the beneficiaries received the token money for 15 months. It needs to be assessed that whether this is the optimal duration. What if we get almost similar results within a year? Based on review of the 2<sup>nd</sup> cycle endline evaluation report of SWAPNO we know that the sustainability of the impact of the program might be increased by increasing the duration. A similar argument can be posed for the amount of token money. So, both of these discussions are highly relevant while discussing the efficiency of the SWAPNO. However, the study finding shows that 98.21% of the beneficiaries were covered with IGA trainings those are having income generating activities (see section 3.1). Increased of household income, savings, expenditure and productive assets, mobility and decision-making power revealed that SWAPNO project is in the right track of the theory change, project’s inputs and activities were managed efficiently that contribute to achieve the intended results (refer result framework indicators in the annex).

### ***8.1.4 Sustainability***

Earlier literature by Sen and Uddin (2019) pointed us that there is a sustainability issue in the sense that the former beneficiaries are doing quite well in terms of maintaining their individual and collective income generating activities. Beneficiaries employed in formal sector are also sustained their jobs with garments factories. The formation of the cooperatives by the beneficiaries and registration with the government bodies have given a new dimension in local job creation and sustainable graduation. Also,

from this 3<sup>rd</sup> cycle end-line survey, we've found that despite having the short duration of the project (15 months) compared to previous cycles (18 months) beneficiaries are actively involved with more than two types of income generating activities. However, to measure the sustainability aspect of 3<sup>rd</sup> cycle beneficiaries, at least 2-3 years more time is required. Moreover, the indicators regarding aspiration and optimism suggest that this is going to be much more sustainable. The level of aspiration about their own and their children's future have significantly been increased compared to the control households within these 1.5 years and with this level of self-confidence which boosts the keenness of fighting with poverty, it is expected that they would continue to grow and develop more in future.

#### ***8.1.5 Coherence***

As SWAPNO project is designed to support the disadvantaged women through engaging them in various public asset works which contributes to a greater awareness at the community level. From the lottery of the selection process to the attainment and awareness building sessions, the local institutions come under visibility and thus implying a high degree of coherence. This project also has impact on local institution as it enlivens these local institutions.

SWAPNO has embedded this process from the right beginning to fully encourage the government counterparts to implement SSNPs on their own by ensuring correct targeting and maintaining transparency and accountability. The UP prepared a list of public assets/works that the community widely uses or ones that can reduce disaster and climate risks. The project involved stakeholders at all levels from the start to mitigate the risks of violence that women may face by participating in this initiative. The project involved the community throughout all processes and helped build local government ownership to ensure that the women receive support and protection from the Union Parishad. The project also worked with social leaders and male members of local communities to promote their role as social agents and protect women from violence in domestic and public spheres.

Community involvement is embedded in the project through contribution of road maintenance materials such as soil gathered from homesteads, protection, and monitoring of SWAPNO women at work in public places, and supervision of the beneficiary selection process. This kind of involvement builds community ownership and helps establish reciprocal accountability and participatory monitoring process. The project developed capacity of Union Parishad and concerned Standing Committee (SC) to undertake such selection process.

#### ***8.1.6 Gender Equality:***

As most of the project beneficiaries are mostly widowed or husband-deserted women, so the notion of 'gender equality' could be an overstatement. However, a higher percentage of beneficiaries have reported of being able to move alone in the area and within the union, upazila etc. Not only that, almost 91% of the beneficiaries have the right to decide on new income-generating activities of the households.

This higher percentage prevails the same in case of treatment facility, education, participation in meetings or committees etc. compared to those of the control households. It is revealed that increased income, expenditure, savings, and asset accumulation have overall enhanced the self-confidence and self-esteem of the beneficiary women when compared to the control households. As they become confident, women can move out on their own for business and other needs.

## ***8.2 Recommendations***

Several points are noteworthy. First, there are issues of project delivery that need to be re-visited. For instance, a recurring observation emerging from the FGDs is the factor of institutional delays in disbursing wage income—due to bureaucratic hassles—which often increase beneficiary indebtedness and even result in incurring higher costs of food and non-food household expenditure items. However, this issue merits greater examination. If the concern is true, then one way out could be to arrange interim financing from the partner NGOs or any other third source of institutional finance to make wage funds readily available. A counter-argument is that partner NGOs may be constrained by financial resources. Given this, it is important to ensure that all cash transfer commitments to the recipients must be institutionally available at the outset.

Second, there are issues relating to “second-chance” and more “intensive monitoring” that are required to make not-so-successful project participants viable over time. This may include more hand-holding of the less entrepreneurial sections of the poorest women by way of extra doses of livelihood training, skill formation, job search and confidence-building measures.

Third, the SWAPNO project shows that, with an injection of a threshold amount of external resources, the persistent poverty trap syndrome can be overcome. This is in contrast to the tokenism that characterizes conventional social protection projects. While this is a big success for the SWAPNO type of Mini Big-Push intervention, the issue of sustainability of the project impact has not been settled for good. The changing economic fortunes of the former beneficiaries are a case in point: they need to get some attention from the SWAPNO project to ensure long-term graduation from the poverty trap by enhancing their resilience capacity to bounce back when setbacks occur (they are bound to occur).

Fourth, one needs to ask as well about the optimal use of SWAPNO resources, i.e., whether the same project effects could have been generated with lower costs under alternative assistance packages. The current monthly transfer amount may be deemed too high (higher than the threshold amount) or just about right (closer to the threshold amount) depending on the argument. This debate cannot be resolved without experimenting with varying assistance packages, again in the spirit of randomized control trial (RCT), elements of which SWAPNO has been already practicing. In addition, what is a need now could be tracer studies to capture long-term impact and resilience capacity in the face of inevitable shocks.

### **Box 1: SWAPNO project Limitations and Recommendations<sup>7</sup>**

#### **❖ SWAPNO project limitations:**

- Small number of beneficiaries were enrolled while there was a huge number of very poor widowed/separated/divorcee women in each ward
- SWAPNO Beneficiaries were worried regarding the duration of the SWAPNO project which is short in duration and could be longer
- Allowances provided by SWAPNO for IGA or other training are comparatively lower than the current market price
- Fewer monitoring from SWAPNO officers after completion of the project cycle

#### **❖ Recommendations for the future:**

- Considering the effectiveness of the programme, it should be implemented in other remote areas of Bangladesh so that people can come out of extreme poverty. SWAPNO model can also be replicated in urban areas of the poverty-stricken districts.
- To accommodate more penurious women under the SWAPNO coverage, the number of beneficiaries in each ward can be increased.
- In line with the present market rate and cost of living, per day wages can be increased so that the beneficiaries can invest more money in their regular IGAs as well as avail improved living standard.
- The daily compulsory savings amount can also be set to higher limit so that the beneficiaries can save more and secure their future need.
- The follow-up period of the project can be extended from 6 months to 1 year after completion of the public works cycle.
- The follow-up monitoring after completion of the project cycle should be kept.

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<sup>7</sup> Evidence from FGDs, KIIs and Life History Interviews. The summary points from the FGDs, KIIs and Life History Interviews—as captured above—are only highlighted when they are reported by the majority of respondents participating in the qualitative surveys. The full text of these discussions are available in Bengali as a separate document (not enclosed herewith).

## **Detail Insight of Qualitative Assessment of SWAPNO:**

This chapter is presented the details of Qualitative Assessment Findings for better understanding of the impacts of ‘Strengthening Women’s Ability for Productive New Opportunities (SWAPNO)’. It is stated in two broad sections. The first section is on the perspectives of the project beneficiaries in the intervention group followed by the second one that highlights the difficulties of the lives and livelihoods of the non-beneficiaries in the control group. In the first case, assessment was done on the basis of several Focus Group Discussions (FGDs) (n=8) and life histories of the sampled women beneficiaries (n=10), which were carried out during the survey in the project areas. Besides, Key Informant Interviews (KIIs) (n=13) with the Deputy Directors of the respective districts, and Chairmen and members of the respective Union Parishads (UPs) were also conducted to incorporate the necessary views from other platforms. The second case, on the other hand, relied on the life histories of the selected women non-beneficiaries in the same above areas.

### **1. Assessment of the Beneficiaries**

The women beneficiaries were engaged in the maintenance/repair of the important public assets and other public works in the sampled Union Parishads of Melandaha upazila in Jamalpur district, Saghata upazila in Gaibandah district, and Head Quarter upazila in Lalmonirhat district.

The assessment is presented in a structured manner under the following sub-sections with titles:

1.1: Life and Livelihoods before SWAPNO Membership

1.2: Enrollment Process

1.3: SWAPNO Life Skills and Livelihoods Training

1.4: Family Wellbeing and Sustainability - The Role of Rotating Savings and Credit Association (ROSCA) and End-tenure Bonus

1.5: Social Capital Formation

1.6: SWAPNO – a Turning Point in Life

1.7: Social Empowerment and Impacts on Society

1.8: Coping with COVID 19

1.9: Projecting on Future

Following the above a separate section is also dedicated in this chapter entitled ‘Life and Livelihood Difficulties of the Non-beneficiaries’ to make a comparison of this control group women with the above intervention group. The control group women were left out in the long screening process of beneficiary selection to limit the number within the given resources. This section is, indeed, based on the three life histories in the selected project areas.

### **1.1: Life and Livelihood Before SWAPNO Membership**

SWAPNO beneficiaries were selected adhering to the stringent selection criteria, which rendered homogeneity of them in terms of age, skill, household food security and other basic parameters of socio-economic status, notably, aged between 18-45 years, widowed, divorced<sup>8</sup> separated/deserted or married to a husband unable to earn an income with one or multiple disabilities, unable to provide three balanced meals a day, capable to access vocational training, with a few or no assets being forced to beg or accept low wage-employment and so on.

No cognizable exception of the above was found across the findings of the assessment at different stakeholders' levels i.e., FGD and beneficiary-life-history and KII with respect to the life and livelihoods of the beneficiaries at the entry point. It is for this reason the selection was very unique, but at the same time with no wonder when it is done from a huge number of similar extremely deprived and distressed womenfolk across the areas.

It was revealed that most of the beneficiaries were the victims of child marriage, which the beneficiaries didn't normally disclose during the interviews seemingly to avoid taking the false blame on them, and not because of being captive of the situations that prevailed. However, there were some exceptions without hesitations. On the other hand, across the board, none of the beneficiaries were able to live with their husbands' maximum for more than 17 years or so only in some instances without major upheavals. Such cases were found only when the husbands had no alternatives but to rely on the wives because of prolonged illness leading finally to death or complete disability or their sudden demise due to various physical or other reasons. However, in most of the cases, the relationships broke down much earlier, which started with separation to finally ended up with complete desertion along with marriages of the husbands again elsewhere without any intimation or consent of the present wives. The saddest part here has been that at the time of desertion, the children were at their infancy or aged some months or even during pregnancies of many mothers. The worst victims of such realities were again the girl children, who bore the same fates as their mothers, which are still very poorly registered, heard and challenged in many local contexts, including in the SWAPNO intervention areas. Another disturbing concern is the incidence of 'dowry' during the daughters' weddings, which is normally not disclosed by the mothers, as being a normal social norm or custom, and not a curse to talk and make a complaint about. Anyway, being more relevant in the study, the implications of desertion in terms of its serious implications for the affected family-members in terms of food insecurity, malnutrition, hardship and

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<sup>8</sup> In fact, in most of the cases there is no formal divorce per se with any document to be legally challenged or repelled, which is also true during marriage that happens without any formal registration or legally bound documents. So, divorce should not be understood in its true sense with strong legal implications. Practically, divorce is essentially a desertion that mostly lies in the domain of the husbands to be primarily exercised in the peculiar context dealt with in this study.



family violence or violence against women (VAW) must be highlighted, as attempted below with concrete illustrations.

It is well understood that the incidents of desertion are the results of various situations. In Nayanagar union of Melandaha upazila of Jamalpur district one beneficiary in FGD reported as saying ‘...my married life was for 7-8 years. I was mentally not on match with the husband, and he and his mother, brother, aunt, neighbors used to abuse me physically. I still bear the marks of torture on my body. My husband married again and lives in a different area with his new family. I brought up my children on my own, and he didn't pay a single taka for their education or clothes for the last 13 years since he abandoned me. Nobody in that family came forward in my support and provided help except for one uncle, who is also obstructed in doing so.’ Another woman in the same group mentioned “... after my marriage, besides my husband, all my in-laws including the mother, father and brothers abused me physically. I returned to my parents’ home after three years, as I could not tolerate it anymore, with my three-year old child and two months of pregnancy. Meanwhile, my husband got married to another woman in Islampur without any intimation. Then I went to Islampur with six months of pregnancy; and he hid when saw me back, and tried to hit me with an iron-rod as I entered the house. His newly married wife and mother-in-law saved me, but he uttered bad words at me. Thereafter, he brought me to my parents’ home, and left for Dhaka. Since then I have no information about him.” In another instance the torments were too severe for Salma from Dewangonj upazila, which resulted in losing her child to miscarriage and severing relationship with the husband.

Some other insightful findings in respect of the above can also be briefly illustrated here based on the life histories of the beneficiaries in West Bhurunga union in Melandaha upazila of Jamalpur district, Mohendranagar union in Lalmonirhat headquarter upazila, and Bharatkhalī union from Saghatā upzila of Gaibandha district.

**First**, about Majeda Begum from Melandaha, presently aged 54 years, who got married at the age of less than 17 when her husband was above 25 years old. He was a rickshaw-puller by profession in Narayanganj and died in a road accident there having a relationship with Majeda for about 18 years. She lived in the village on a small piece of land of her cousin in a ramshackle hut with her two little daughters during those days. Her husband spent most of his daily income for drinking local liquors being an alcoholic. He used to visit the village quite infrequently a year without letting know and usually stayed with her for 10-15 days or sometimes more at a time to leave, without also any notice. He never maintained any communications with during his long away. However, whenever he came to village, always quarreled with Majeda and also assaulted physically. Her husband didn't support the family at all with cash or kind throughout the years except for some days when he stayed at the village. These days also he only bought some rice, vegetables, lentils and other items only for maximum 4-5 days; and no fish, meat or anything like these. Naturally, with those items it was not at all possible to feed the family well, sometimes for only twice a day. Hence, Majeda had to depend on her mother for foods

with whatever she could provide in her also very little capacity, at least twice a day, to live with the daughters. Responding to a question about how those days were for her, she replied as saying, 'I survived these days only eating vegetables'. To cope with this untenable situation Majeda wanted to work as domestic worker in the neighborhood; but her husband never let her do such job in the area during his lifetime. At one point it became very difficult for her old mother to support Majeda's family any longer; and she had to move to Dhaka, whilst her husband was still alive, to work as domestic worker bringing with her younger daughter on the lap. She left her elder daughter, aged 2, at her elder brother's care, as he didn't have any kids of his own. The brother took good care of the daughter with an opportunity to study at school to have passed grade V. In Dhaka she used to work at 2-3 houses on part-time to earn between Tk. 5,000/- and Tk.6,000/- per month. During the period she with her growing younger daughter lived well, abled to eat improved diets thrice a day, and lived at slum with a room better than her own at village; but always missed her elder daughter staying at village. During this period her husband died, when her elder daughter was only 9 years old and the younger one only 3 years. Majeda came back home after working in Dhaka for about 11 years, renovated the old house, and gave marriage to her elder daughter at 13 years of age with a boy of 17 years, who ears income through selling honey locally. In a couple of years afterward she also gave marriage to her younger daughter at also 13 years of age with a boy of 18 years old, who is a rickshaw-puller living in Dhaka with her daughter. To give marriages to her daughters, Majeda spent most of her income-savings working in Dhaka, and also borrowed Tk. 30,000/- from a close relative without interest. After her daughters' marriage, Majeda passed three years without any work before joining SWAPNO.

**Secondly,** Fatema Begum from Mohendranager union of Lalmonirhat, presently aged 38, who studied up to grade III, can read well and write a little. She was given marriage at her 13 years of age with a rickshaw-puller living in Dhaka, about 10 years older than her. She lived with her husband for about 16 years from 2001-2017 intermittently, and finally he left for good on staying 40 days after his mother's death leaving her alone at village with the only son 40 days old, and the eldest and youngest daughters 6 and 4 years old respectively in an uncertain future. Previously, her husband used to send Tk.500/- per week very irregularly, which was very little for the family to have meals for even once a day. Mostly, she and her children were fed with collected wild potatoes or kachu and broken or Mali rice ( '*Khud*' ); and sometimes starved all the day. In fact, during the period Fatema's husband got married to another woman in Dhaka in secret. To cope with this situation, meanwhile, she began doing piecework time to time at local residences providing only foods for the family. However, another very serious aspect of her life at the time of desertion was that her husband also sold his piece of homestead land in secret to his nephew together with the house she used to live in with the kids. Besides, he sold the land where she cultivated vegetables and grew betel-nut trees over the years with her own labor and care. Hence, her husband deserted with no livelihood assets left behind to become a destitute - nowhere to live with the kids. She went to her father, where too couldn't stay. She walked door-to-door of the local residents

asking for a shelter and food in return of some household work, say, coating the earth floor or other activities. Little afterward she started to work as full-time domestic worker in some local residents without any cash payment. The employers only provided her two meals a day and sometimes only the rice, as requested, to eat with the kids twice a day. An employer also let them to stay at a detached room on the homestead land. This opportunity didn't last for long, as the employer at one point didn't like her to stay with the kids. She again became shelter-less and moved to another house; and this way passed the days for more than two years in desperation. All these happened after husband deserted her, which Fatema described, wiping her tears, as saying "... lived these years in such a distressed condition that I cannot not express in words". At this time a 'village grandmother' came forward in her support with a hope. The grandmother asked Fatema to share the room she got from the government 'Ashrayan Project'. After some days of living and working together, her grandmother went to Rangpur to live with her son there leaving her room for Fatema to live with the kids. Since then she lives there, incidentally, next to her parents' room in the same project. She continued to work as domestic worker for only rice this time, and sometimes also lentil for diets twice a day with other foods bought with the money she managed from partially selling the rice. During the period, her elder daughter on completion of her previous study in a BRAC school got admitted to a mainstream school, and was married at the age of about 13 years with an orphan boy 15 years of old studying in a madrasa at Savar in Dhaka.

**Thirdly,** Jesmin Akhter, presently aged 20, could only pass grade five and was given marriage by her father, an agriculture wage-worker, against her will at the age less than 15 years with a mason 30 years old. She left her husband and came back to parents' home after one and half months of marriage, as her husband was sick with physical disability. She again started to live with the parents and a younger sister, recently passed secondary school certificate (SSC) examination and also likes to continue her study at the intermediate level. Her elder sister lives with her husband elsewhere, and also two brothers live with their wives - the elder one in Mymensingh and younger one in Dhaka. At parents' home, Jesmin helped her mother in household work and also reared their poultry, duck, goats and cow. During this period all they could usually have meals twice and sometimes thrice a day. At breakfast they ate rice, vegetable, mashed potato and lentil; lunch the same as breakfast; and dinner sometimes cooked fish in addition to the above items left over after the lunch. Beef or mutton could only eat during Eid al Adha.

Jesmin joined SWAPNO overcoming a particular hurdle of ophthalmological 'Apraxia Lid Opening (ALO). She was initially discarded, but seeing her need, physical strength and ability to see everything very clearly like others; she was lastly enrolled in the project. It happened after three years of her coming back to parents' home, thenceforth, the livelihoods of the household changed significantly. This would be highlighted in the relevant sub-section below.

At the KII level, perspectives of the beneficiaries were also confirmed specifically pointing to the fact that the selected beneficiaries didn't have any gainful employment opportunities before joining SWAPNO in order to support their lives and livelihoods. SWAPNO enabled them to run various

relevant IGAs with trained skills, which have created the opportunities for most of them in the pursuit of breaking the extreme poverty trap eventually along with strengthening other social empowerment spheres.

## **1.2: Enrollment Process**

Beneficiary selection in SWAPNO followed a stringent screening process in phases, which has been clearly articulated in the project implementation manual. This selection process was strictly followed across the project areas with no exceptions, and LGD, being the highest authority at the central level, oversaw and ensured the process with direct involvement of the its local setup i.e., district office of the Deputy Director of LGD, as per the prescribed rules and procedures. However, at the decentralized primary levels, UPs governed the project implementation with the active support and participation of the UNDP project personnel, under the technical assistance, to monitor the process and also suggest concrete steps in observing the selection criteria with neutrality in transparent manner. The grassroots support in whole this exercise was provided by the union workers of the implementing partner-NGOs i.e., ESDO in Jamalpur and Lalmonirhat, and GUK in Gaibandha. The impressions on the enrollment process are presented here based on the investigation.

The beneficiaries spoke about the above standard selection process for membership highlighting that 50 to more than 100 women living in similar socio-economic conditions from different wards of a union, in response to the public announcement, were gathered in a cue. A preliminary selection of beneficiaries was done followed by further screening to finally select only 12 women out of more in a group comprising three wards in a union. To maintain the highest order of neutrality the final selection was made through 'lottery'. Similarly, altogether 36 beneficiaries were selected from the nine wards in of each of the unions of the selected upazilas of the district. It took nearly 10 days and somewhere more to finish the selection process for follow up activities at the beneficiary level of SWAPNO.

The details of the above enrollment process were quite known to the UP chairmen across the areas. All of them, generally, supported the process, as being very transparent and unbiased, which was also observed and confirmed by the UNPDP project personnel in each area and local concerned government officials. However, some UP chairmen also pointed out the need of every woman stood on the line for the enrollment, which was not possible amid resource constraint to be seen as missing opportunity and a limitation of the process.

## **1.3: SWAPNO Life Skills and Livelihoods Training**

Immediate after the enrollment, each beneficiary was first oriented towards acquiring practical skills on maintenance work of various public assets and other public works e.g., how to identify and perform the jobs skillfully under a package of 7 life and livelihood skills training, notably, social awareness on gender equality entitled 'Aamrao Pari' ('we can also do'), profitable micro business management, vegetable gardening, disaster preparedness, climate change adaptation etc. Besides, special trade

training for each beneficiary was also imparted in consideration of the individual choice and aptitude for such training for relevant IGAs, namely, livestock (goat and cow) and poultry (chicken and duck) rearing, petty-trade (grocery shop), tailoring/garments, leather goods etc. It is to be noted the skills training for the beneficiaries was conducted in phases in batches, as part of their wage employment concurrently with full payment.

The beneficiaries very much appreciated various training courses conducted during the SWAPNO tenure, which helped acquire relevant knowledge and practical skills outlined in the training modules. Acquiring skills on maintenance work was first seemed to be very difficult for everyone, which most of them never did before with the implements. Moreover, for many it was like breaking a ‘social taboo’ that earthwork is not a job for the women and disgracing too. Every woman was able to repel initial hesitations and gradually learned doing the job freely in the selected sites based on the acquired skills. Eventually, local people seeing and getting the benefits of the good work, started to look at the women groups with honor and respect. In fact, the UPs were seen very enthusiastic about providing various public assets maintenance work to SWAPNO women groups for much better deliveries than others traditionally engaged for such work. An important point needs to be highlighted here that the gender equality training for the women groups was also very effective to build self-confidence and strong motivation to win over the inner psychological and outer societal barriers of the women in carrying out the hard maintenance work with success and reputation. This kind of empowerment should also have far-reaching impacts on accelerating the destitute women’s active participation in the local routine development work with social support and recognition.

Similar impacts of the gender equality training were also vividly witnessed in other situations, basically, highlighting the will and commitment of the destitute women, constituting a big segment of our society, to establish their individual rights, as part of large group-members, in the distant local contexts in the pursuit of better living through hard physical labor together with honor, dignity and social recognition. It was strongly manifested in the understanding and knowledge of the women in the groups and at individual levels, across the areas, notably, to act against all forms of gender violence at home and outside through institutional support of UPs and legal means, if needed. This is further explained in social empowerment section below with illustrations.

Regarding training in other areas, those helped the beneficiaries significantly in terms of better performance and increase of livelihood income in different IGAs. For example, livestock training not only contributed to upgrade the traditional knowledge and skills in practice, notably, proper vaccination, housing and feeding for healthy growth; it also helped many to refresh those acquired under the women empowerment program activities at local levels, sponsored by the relevant government departments (women affairs department and LGD) and NGOs (i.e., BRAC) in the past. However, poultry training skills were not so keenly observed except for gaining knowledge about proper vaccinations by

themselves or with the help local veterinary doctors sometimes, as most of the women use to rear the local breeds.

Evidently, many beneficiaries largely depend on goat and cow rearing IGA, across the project areas, based on the application of improved knowledge and skills acquired during the training. This is further explained in terms of wellbeing of the beneficiaries in the relevant section below. Another success story also worth mentioning in the same section with regard skills training in petty trade that covered various important aspects, notably, selection of specific trade, marketing and basic cost and profit accounts.

As regards, disaster preparedness and climate change adaptation skills training, UPs had also great motivational roles in the application and spread of the relevant skills in the respective areas. Some UP chairmen confirmed that many beneficiaries raised their homestead lands above the usual flood levels and regarding climate resilient cropping practices, many beneficiaries in the project intervention areas also went for gourd, beans and pumpkin with required fertilizers based on sack method to protect the yields against flood damages. A UP chairman in this regard also mentioned climate resilient farming practices benefitted only the beneficiaries in Saghata and Fulchuri upazilas of Gaibandha district where the project was implemented, but in other upazilas of the district many still face loss of crops and incomes due to floods. According to him, to make a demonstratively significant contribution, the climate or disaster resilient farming practices must be extended to cover all other upazilas of Gaibandha district gradually.

With respect to the skills training on leather goods, chairman of Gozaria union of Gaibandha district played a great role in motivating and encouraging the women to travel to Dhaka to have the required training. At first, women were afraid of traveling to Dhaka, but the chairman took all the initiatives to encourage them, and also assured those to bear all the responsibilities in case of any untoward incidents that might happen in this kind of initiative beneficial for the women. The latter was proved to be the fact, as the trained women were subsequently placed with relevant job in the factory. The same was true in case of garments sector job placement for the beneficiaries based required skill training, many of them were recruited from Lalmonirhat.

In the group-discussions it was also revealed that many were to able apply training skills in micro/small business management and initiate and manage small businesses with the income savings from wage and ROSCA lotteries as well as to initiate different IGAs i.e., making compost fertilizer and bamboo mats, and growing betel leaves and nuts. Moreover, previously, no one knew about nutritional and balanced food intake for the family, notably, for the children to grow in good health. Everyone now knows about the food values of green vegetables, and how to prepare low-cost balanced nutritious foods.

#### **1.4: Family Wellbeing and Sustainability – The Role of Wage-Income, ROSCA Lottery and End-Tenure Bonus**

At the outset it should be made clear that the family economic wellbeing of the beneficiaries was contingent upon the financial supports from three different sources of SWAPNO funds<sup>9</sup> for the beneficiaries: (a) periodic payment of wages for the maintenance/repair of important public assets and other public works through minor earthwork; (b) ROSCA<sup>10</sup> lottery money; and (c) onetime end-tenure bonus<sup>11</sup>. These three sources, periodic payment of wages being the primary source, are interlinked with each other to deliver supports at the above corresponding three levels at each separate group in a union with specific purpose. Hence, wages were meant to cover the regular family/household expenses of the group members, whilst ROSCA was for some intermediate expenses - either to undertake an IGA (investment) or meet other needs not possible to meet with the wage income. Lastly, the end-tenure bonus, as outlined, was the last offshoot of wage, which was accumulated with ‘forced savings’ to the amount of Tk.50/- at source out of total Tk.200/- wage per working day per beneficiary. The bonus was paid at the end of SWAPNO tenure, primarily, was intended to help the beneficiary undertake a new IGA and/or investing more in the ongoing IGA(s) for greater returns than being enjoyed bringing with growth potentials in future.

It is to be noted beneficiaries were supposed to get the wage every fortnightly, but practically it was made with a gap of between 40 and 60 days with no standards across the areas. Faced with this situation, the beneficiaries adjusted their monthly household expenditure plan every time. However, most of the groups maintained the fortnight ROSCA roster for the savings as well as lottery money worth Tk.3,600/- for each beneficiary by rotation in the group, as stipulated in the scheme. On the other hand, end-tenure bonus was estimated to be, more or less, Tk. 18,000/- per beneficiary.

Based on the above introductory description of the financial incentive package, the following paragraphs highlight correlation between the incentives and wellbeing of the beneficiaries during and beyond the SWAPNO tenure in the study area. This has been done based on the relevant illustrations from the life histories, and FGD focusing on the SWAPNO positive impacts on the lives of the beneficiaries throughout the tenure, which also created a foundation for sustainability of the same being observed in the study areas on various indicators with future potentials.

**First**, the life history of Momota from Melandaha, Jamalpur, presently aged 45 years. She was able to win three ROSCA lotteries. With the first lottery-money she bought 4 chicken-layers to rear for eggs

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<sup>9</sup> This is the fund entirely provided by the Government of Bangladesh, as one of the deliveries under the umbrella of National Social Safety Net Program, for the targeted women beneficiaries in SWAPNO with the technical support of UNDP.

<sup>10</sup> Briefly, ROSCA is a group savings mobilization and financial support mechanism, which is developed and operated by each of the 12-member groups ‘purely voluntarily’ to provide each member with financial support by ‘rotation’ through lottery over a ‘ROSCA Cycle’ span over six months. Further, each time ROSCA lottery was held immediate after the wage payment over the tenure.

<sup>11</sup> Considering the financial benefit package, one-time end-tenure bonus seemingly played a major role in the so-called ‘mini big-push’ approach in terms of its potential to break the extreme poverty-trap in the foreseeable future. The latter can only be expected in absence of any sudden shocks to destroy the dreams (SWAPNO) of the beneficiaries at any point in time in future.

based on previous practical experience together with the improved knowledge she gained from seeing the pictorial flip charts distributed to other group members. With the subsequent lottery-money she also bought ducks and goats owning at present all together 7 chickens, 2 ducks and 2 goats (male and female), added with one more bought previously. The goats gave birth thrice, so far. First time, the only calf was gifted to the elder daughter, and second time from amongst two calves, son kept one and another was sold at Tk. 3,500/- after six months. Two more new-born calves will be sold after a couple of months at the above rate or more. Momota has another household-income that her only son contributes through catching and selling fishes in the local market worth Tk.6,000/- per month, on average.

The bonus also played a significant role in Momota's wellbeing. With a view to start a profitable business of fabric selling for women's dresses at a mini scale from home, she borrowed Tk. 7,000/- for investment two months before end of the tenure. After the receipt of Tk.18,000/- as 'bonus', the above borrowing was repaid, and the remainder was invested to expand her retail fabric business. From this business Momota presently earns Tk.3,000/- per month, which is added with an additional income from poultry rearing of Tk. 2,500/month. Further, goat rearing is also another source that can potentially generate Tk.7,000/- income per month by the middle of current year after maturities of the existing breeds. Moreover, with the multiplications at least twice a year, more would be born and get matured after a year to generate more income, subject to their safe rearing. Because of these IGA-incomes, savings out of wage-income, and income of her son from fish trade, Momota had left her previous lifeline income source of working as domestic worker recently for good, which she continued for several years after the death of her husband 14 years back.

**Second**, about Majeda from Melandaha again that after joining SWAPNO she went through the skills training on goat rearing alongside maintenance work. She bought three goat calves with the ROSCA lottery-money three times over the tenure; in addition to two more she had earlier for rearing. Besides, with the wage income savings bought fabrics for women dresses from the wholesale market in Jamlapur and retailed those to the individual customers in the late afternoon, after the maintenance work, 20 days a month in the neighborhood and outside. She is still in this business, and does not run any other IGA.

Meanwhile, Majeda sold the previous two goats with a total price of more than Tk.6,000/-. The three others, bought with ROSCA money, are reared to sell each of them after 18 months of age. During the period each will give birth twice, thereafter, she expects to sell the three mother goats with a total price of more than Tk.18,000/-. Despite her willingness, Majeda cannot expand her goat rearing activity with more calves for more income, as she has very limited homestead land to keep them safely and healthily. According to Majeda depending on the present scale of her goat rearing with the above-expected annual income would be too small for her to live well throughout the year. Further, since the growth period of a calf to sell on a reasonable price is at least six months, therefore, given her present situation, Majeda added as saying, 'How can I survive for 6-7 months during this period?'



As regards fabric business, she used to sale fabrics worth Tk.200/- and on festivals or special occasions as high as Tk.500/- per day out of an investment of Tk.3000/- at a time the during SWAPNO tenure. It normally provided a profit of Tk.125/- per day, on average. However, recently, the business profit has largely fallen down due to increasingly tough competition with many newcomers, and saturation of the local market. Therefore, she has decided to close down this business, as the remaining stock is finished in a short period.

With the end-cycle bonus of Tk. 17,000/- Majeda was able to partly share repayment of the interest free loan, as stated above, for the daughters' marriages. The remainder Tk. 5,000/- was added with a savings of Tk. 5000/- from wage income in SWAPNO. She wishes to purchase a 0.4 decimal of land (already seen) with the savings money within a year or two to build her own house. The need of buying the piece of land to build her house is the most critical concern at present, since her cousin asked her to vacate the land where she was permitted to live for many years since marriage. If she cannot buy the land she had to shift to her sister's (disserted by her husband) house to stay. It is yet quite unknown to what future is waiting for her!

Since Majeda's present status is not as good as during the tenure in terms of the wellbeing based on regular wage income and different IGAs, she was repeatedly pointing on the need for more rounds of SWAPNO for them. Otherwise, as she already did for some months after the tenure, working as domestic worker like previously in the neighborhood in a house of a government employee. She might continue to do the same, even at a low salary (since many in the area cannot afford) for a living in future, but one thing she has firmly decided not to go to Dhaka again in any circumstances.

Majeda's life history is concluded here with her some critical views regarding the success of SWAPNO. As explained, she joined SWAPNO with a great expectation of living better together with improved knowledge and skills for potential IGAs. Much of which were fulfilled and expressed her indebtedness to SWAPNO for being able to achieve a much better living with higher income at present compared to the past. In this respect she specifically noted SWAPNO's contribution in respect of enabling her 'to repay the loans she took for her daughters' marriage with the savings out of wage-income over the tenure'. At this point she also put a question, as saying, 'Is it possible to think that only with 15 months' support SWAPNO will make us self-reliant, as expected, and the program will become successful? She also uttered strongly 'Why SWAPNO should not involve us again?'

**Third**, the life history of Zobeda Begum from Bharatkali union of Saghata upazila in Gaibandha can be cited here. After joining SWAPNO, at the outset, she firmly decided to spend only Tk. 1,000/- for food items other than rice, provided by her stepmother, and Tk. 300/- for ROSCA lottery per month out of wage-money, and keep the remainder as savings. Thus, after the receipt of first time wage-money of Tk. 9,000/- a saving of Tk. 3,000/- was added with the surplus from twice ROSCA lottery money, and with this amount she started a retail vegetable and all other kinds such as water gourd, banana, patal,

potato etc. in a small shop she had taken on rent with the support of one of her step-brothers, nearly a year back. She used to sit in the shop and do business from 4 pm until around 7 pm alone. This business subsequently became the main source of income making a profit between Tk.200/- and Tk.250/- per day, and sometimes much more out of an investment of Tk.3,000/- in a lot. With ROSCA money, she could also buy and add 7 more chickens, 8 ducks, and two goats with the fewer previous ones. She got special training on goat rearing, which greatly helped her in applying the enhanced knowledge and skills, including proper and timely vaccination, for better yield. She hopes to sell the goats after 18 months between Tk. 6,000/- and Tk. 7,000/each.

With the bonus of Tk.18,000/-, adding with it wage-income savings of Tk.12,000/- and Tk.10,000/- contribution of her stepbrothers, Zobeda mortgaged a 13 decimal land with Tk.40,000/-. Initially, the land is being cultivated for only two rice crops i.e., Aman and Boro a year. With the help of her brothers, also owning the adjacent lands, she could produce in the last season more than 240 kgs of Aman rice. As encouraged by her brothers and others, Zobeda also wanted to grow Boro paddy in the season, and expected to get a yield of more than 520 kgs with irrigation, which would be twice the yield of Aman rice.

**Fourth**, the life history of Morjina Begum from Panchagram union of Lalmonirhat upazila is also worth mentioning here. Before joining SWAPNO, Morjina had a small toyshop for about a year in front of her house. During this period, the total value of the all the items in the shop was slightly above only Tk.2,000/- that only provided a daily profit never above Tk. 200/-. On the receipt of first wage money, Morjina spent it for food and invested the remainder in the shop with a target to reorganize and expand the business gradually and steadily over time. Since then, Morjina left her job as domestic worker to earn income.

Morjina won the ROSCA lottery three times over the tenure. First ROSCA money she invested again in the shop in full plus some saved wage-money; second lottery money she spent for buying two female goats, and the remainder with more saved wage money invested in the shop again. The third time she did exactly the same to emphasize the shop business on top of all IGAs. Over the period, the goats gave births to three calves making all together five calves at present. In the next six months or so she would sell only the calves after their maturity to have good returns.

Experiencing rising profits following each of the earlier investments, Morjina again decided to invest a handsome part of the bonus of Tk. 18,000/-. As she calculated, she invested a total of Tk. 40,000/- out of the financial benefits of SWAPNO during the tenure.

At present, in less than two years, once the tiny toyshop turned into a grocery with many different items with more space and fancy than initially. This business has also become the only major source of Morjian's livelihood with a daily profit between Tk.600/- and Tk. 700/-. Morjina herself runs the shop only in the first half of the day, and does the household activities including cooking the late breakfast,

lunch and dinner as well as rearing the goats. Her only son aged now 18 years runs the shop in the second half until it is closed down at night. It was learned, later on, that the son recently has passed HSC with GPA 4+.

Looking at the future, Morjina is confident enough to be able to protect and flourish her accumulated assets and income opportunities, which she could build during SWAPNO, and she does not need SWAPNO in her assistance any more. Moreover, experiencing the initial success of the fistful rice activity<sup>12</sup>, the beneficiaries in her group would try to protect it under an institutional umbrella i.e., registering the group as cooperative in the near future.

**Lastly**, as indicated above, illustrations are made here about Jesmin Akter from Saghata, Gaibandha. With the first time ROSCA money Jesmin bought one goat that, meanwhile, gave birth to two calves in addition to supporting the family expenditures. The subsequent lottery money was used to buy the poultry and ducks, and support the family, including, bearing younger sister's education cost, treatment of her father etc., and also saved money to continue ROSCA. With the bonus of Tk. 18,000/-, Jesmin added Tk. 22,000/- out of the wage-income savings, to buy a female cow worth Tk. 40,000/- for income generation.

Since SWAPNO is over for many months, the family at present depends on the potential income from cow and 3 goats and sales of some eggs from duck and chickens purchased with the ROSCA money. Besides, Jesmin started cultivation of vegetables with her parents and sister on 16.5 decimals of fallow land that she took on mortgage at Tk. 12,000/- with the saved wage-income. Jesmin together with her mother and sister sale the vegetables from home, whereas her father sales at local haat/bazaar with a profit margin of Tk. 100-150/- per day. Further, based on partially investing her wage-income, Jesmin also started 'Kalai' (a cereal in the lentil group) powder sales at local market daily by 8-10 kgs at Tk.120/kg, providing a daily profit of Tk.200-Tk.300/-. Out of this profit, Jesmin tries to save Tk. 100/- Tk. 150/- daily, after contributing to family expenses, to be able to give marriage of her younger sister in future. Jesmin, indeed, manages these family businesses with the help of her mother and sister since her father hardly has any time after work to get involved in these matters. The household members can

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<sup>12</sup> Fistful rice savings generation is a major action of SWAPNO Graduation Model or approach vis-à-vis ROSCA, being piloted in Lalmonirhat, with an aim to facilitate beneficiary's savings enhancement and investment without any external assistance. It started after six months of the inception of SWAPNO, which is still continuing even after formal closure of SWAPNO on 11 April 2021. Under this approach every beneficiary saves a handful of rice in pot at cooking time, which after each fortnight is measured in the group, which must weight equal for all members for simple accounting during this piloting phase. The total quantity of fistful rice i.e., savings in kind/commodity is then sold in the market and monetized. This is absolutely a group-based voluntary operation, and the members make every decision unanimously. During the period the beneficiaries already started various IGAs using the uniformly distributed sales money of the rice to every group member by rotation without lottery but selection, as per the group decision. This savings generation and investment promotion approach is currently in practice without major setbacks. It has the potential for replication in other areas in future to promote a purely self-help mechanism without any external support.

now eat meals thrice a day with a mixture of vegetables, fish, lentil, potato, and broiler chicken (once a month).

In the group discussions with the former SWAPNO beneficiaries presently working in the garments factory, it was reported that they presently earn Tk. 9000/- per month and with overtime one can also earn as high as Tk.14,000/-. With this money they now live in separate rented houses, but at the time of arrival they used to live all together with the initial two-months financial support of UNDP. Besides, they can now feed them well and also send money to home for the children's education through mobile banking (Bkash, Nogod). Further, they spend Tk.500-Tk.700/- a month to refill the cellphones to keep in touch with the children and others regularly at home to stay always close to them as before. It was also revealed in such meeting that many of their husbands presently communicate with them to insist rebuilding the relationship, as they now earn stable income; but none was found willingly to return ever, because once the husbands deserted them and got married elsewhere breaking the trust.

Another sustainability issue, reported in the FGDs, relates to the fact that the group-members still practice the ROSCA<sup>13</sup> with no dropout; however, each with a reduced deposit of Tk. 100/- to draw Tk. 1,200/- in a lottery in some instances. The members liked to continue ROSCA uniting the group-members to work together in bondage for common interests. It also happened that sometimes someone was unable to deposit in the ROSCA fund on time, when others deposited her share to be refunded later on. It was for this reason everybody was committed to continue such practice in the periodically held group meetings, as long as they live in the area. Notably, the meetings were also used as platform to share the views and experiences of the members regarding various benefits and difficulties they face in everyday life, and provide assistance to each other, in need, in the spirit of group solidarity and cohesiveness.

### **1.5: Social Capital Formation**

FGDs They also share the techniques of cooking low cost balanced nutritional foods with the neighborhood women, as they prepare for their own family members to eat.

Morjina started vegetable cultivation in the homestead land, as she was encouraged during the training, which she didn't do before. She shared her knowledge and skills about vegetable cultivation with other women in the neighborhood. However, as men cultivate the vegetables in the field where their wives are not encouraged to participate, and also the same for homestead cultivation despite many were encouraged to so.

Another instance is that a man in the neighborhood also started grocery shop business looking at her achievements, which he never did before. Unfortunately, no women came forward to get involved in this business.

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<sup>13</sup> Apart from fistful rice activity, popularly being practiced in Lalmonirhat.

It is encouraging to note that Zobeda shared her acquired skills on goat rearing with some female neighbors, who newly started this IGA and also improved their caring, notably, vaccinating their existing ones. Besides, she tries often to consult with them regarding other easy to learn simple technicalities for improved yields and better income. Vegetable cultivation was also another field of such sharing of relevant skills and knowledge even on a small piece of homestead land, at least for household consumption round the year, and entrepreneurship development skills as well as social sensitization and rights issues during community interactions.

Momota shared the knowledge and skills she acquired in SWAPNO with other 10-12 poor, which have benefited them also based on practicing the similar IGAs to earn better living than before. For instance, a neighborhood woman has been able to raise and rear 10-12 ducks currently, which is five times more than her.

As indicated, Majeda used to rear goat before joining SWAPNO based on the improved knowledge and skill acquired through a training organized by BRAC many years back. Those included knowing about various deadly diseases and timely vaccination to safeguard against diseases, and rearing goats on the mounted cage etc. After so many years the recent such training organized by SWAPNO was, indeed, very effective to recollect and refresh many of her acquired knowledge and skills forgotten, meanwhile, with more updates benefitting her in terms of healthy growth of the existing goats. She shared all the benefits of training for practical and right solutions of many unknown aspects of good rearing of the goats with the close neighbors, who also rear goats, but use the traditional experiential knowledge and skills. However, most of them are now guided by the improved knowledge shared by her, notably, timely vaccination against deadly diseases, rear goats on the mounted cages instead of directly on the ground and other important practices.

The knowledge and skills Jesmin acquire during the training were shared with other non-members in the neighborhood, including her two aunts and two cousins. They now cultivate vegetables in the homestead and also cows, which they didn't do before as they do now because of lack of knowledge. Not only that sometimes they also consult with her in case of a need.

### **1.6: SWAPNO – a Turning Point in Life**

SWAPNO was a turning point in life for many beneficiaries. For instance, Momota mentioned SWAPNO created an opportunity for her to earn and lead a much better livelihood at present, not all comparable with pre-SWAPNO condition on any accounts. Most importantly, she can now eat rice with vegetables, lentils and eggs in almost every day in the breakfast, and fish and meat (either chicken, beef or mutton) in addition to other items (vegetable and lentils) twice a week during lunch and dinner. She also renovated and extended her old one-room ramshackle hut by another room on the small piece of land, donated by her father-in-law, for herself and his son's family to live.

According to Zobeda, SWAPNO has made a major breakthrough in her life to leave behind the uncertainty of life with perpetual dependency on others with the adopted child-son and ailing husband unable to work and earn. There was no hope despite her continuous search and endeavor for better living independently with courage before joining SWAPNO. SWAPNO was a window of hope and opportunities extending need-based supports to earn a livelihood based on material and organizational strength for a sustainable future out of the extreme poverty. Zobeda concludes as saying 'I can now live and prosper on my own, even if SWAPNO does not come for me again. I can firmly protect whatever I have achieved during the period with the assets SWAPNO helped to build.' She continued on saying ".... never ever again I will be back to my previous situation, as SWAPNO has changed my life'.

Pointing to the contribution of SWAPNO in her life Jesmin said that 'I would ever remain indebted to SWAPNO for what it has done for me; our family can now earn minimum Tk. 500/- per day, which was never possible before. Even if the condition of our family deteriorates, it will never fall down to the earlier level, as long as I work hard to consolidate the already achieved levels and explore other new avenues of income with courage. All these were possible thanks to all the supports of SWAPNO'.

Jesmin went on saying '... in my past when got married I was a little girl and had no means to do something on my own and earn. I was solely dependent on my parents for all decisions influencing my life, but the situation has now changed totally, and no one, including my parents, can impose anything on me against my will, which I would simply ignore, including regarding my marriage may be someday in the future; but now I do not have such thought, as my work is much more important to earn and live better than getting married'.

At this stage, she was very outspoken to say, 'I do not want SWAPNO to come again in my support, rather, I want SWAPNO, if comes again, to come for those other girls, who are in dire need of mental, moral and material supports, like me in the past, to lead a decent life with courage and dignity, like I have now. No longer hear humiliating words of my parents and neighbors for being a dependent girl with no work and income now, as I heard before'.

In response to a question if she is in a poorer condition than other former SWAPNO beneficiaries, Jesmin is quoted as saying 'I am not, as I am happy with what I was able to achieve during the SWAPNO tenure, otherwise my life was ruined. Most importantly, in addition to covering regular household expenses during the period, I could also build the family income generating assets with my savings from different sources to support our livelihoods in future too. I also earned the ability to bear the cost of my sister's education. For all these reasons, I do not compare with others. Nonetheless, if a comparison were drawn, I would say others might have less dependent family-members compared to us or have the members with some income opportunities to supplement the family income, as opposed to us. Frankly, I have no savings left with me for my future; but I could stand by my parents, which I value the most, above all!

In the FGDs in Melandaha everyone unanimously spoke about how important was the contribution of SWAPNO in transforming their lives in terms of the achieved prosperity and happiness over the period, triggered through involvement in SWAPNO activities. It is all the more important that their children would be growing with hopes and promises that were never in imagination of their generation.

### **1.7: Social Empowerment and Impacts on Society**

This is a very important aspect that the outsiders would be amazed and overwhelmed to see, feel, appreciate and register as well as very much attracted to listening to various aspects of the SWAPNO women beneficiaries before and after, along with other various relevant issues, which were expressed in the FGDs and life histories. As reported, all these women in society were previously treated with absolute neglect and disgrace, because of their living in extreme poverty, desertion and dependence on others. As observed, most of them were subject to early marriage against their will by the parents, which was also well accepted in local society, as if, they were the family burdens to get rid-off, as early as possible.

The above situation was dramatically changed following SWAPNO intervention. The initial breakthrough was women's participation in the wage employment traditionally occupied by the male wage-laborers. As reported, first the beneficiaries were to subdue their fears and hesitations in doing the maintenance work openly in various distant dispersed locations from home. It was really difficult for many, but since they were to work in groups with strong solidarity backed by the UPs, the initial hurdles or shocks were gradually receded, and all carried out the designated tasks normally and enthusiastically. The local community people much appreciated the public assets repair and maintenance work of the women groups with quality. All were benefitted for such work that restored easy internal earthen road communications, damaged mainly by the floods, for all purposes and convenient access to various other public assets (graveyard, schools, mosques, temples etc.). It so happened that some UPs wanted to engage the SWAPNO women groups always in local routine public assets maintenance work in future.

The social awareness and women citizen rights training, notably, on the gender equality immensely contributed to the above. The women became quite aware of violence against women (VAW), and in case of any such incidents they now know how to act against including reporting to the Union Council and local police stations as well as calling to the hotline number '999' for support. This was proved to be very effective in resisting the VAW in the area together with encouraging the local people and the victims to inform them for seeking help of the appropriate local authorities. Most of them generally know about the services Union Parishads (UPs) provide, which they can access, in need, notably, action against child marriage, birth certificate, government various safety net supports etc.

The women during the interviews talked about gaining self-confidence to freely converse with others and share the views in their efforts to register and address those by the local institutions and authorities

i.e., UP Chairman and others for welfare of the group members. This bravery of voicing their needs and expectations in the local context were quite unthinkable in the past. Local people now look at them with respect and value their opinions that had also some spillover impacts on improving the women's status at the family and societal levels.

### **1.8: Coping with COVID 19**

Almost all women participated in the FGDs, including in the garments sector, and interviewed in the life history mentioned about high negative effects on their children's education due to COVID 19 pandemic. Because of closure of the schools, they had to bear additional expenses for keeping private tutors to cover the loss, and/or, if possible, for accessing the online classes and also examinations in many schools via smart phones or Internet facilities. It also happened that many children lost their interest in further continuing their education. Other than this, none of them faced significant problems affecting their normal livelihoods, notably, during the countrywide lockdowns<sup>14</sup>. It was because of the continuity of wage-payments by the project during the whole period for the work continued in the field and ongoing skills training without interruptions. This was also true even during the lockdown with no work and training, as per the government declaration to support the marginalized people to cope with the crisis. In addition, UNDP from its own contingency plan also came forward to provide every beneficiary twice with the various other supports, including cash, kind (rice, potato, lentil, edible oil etc.) and hygiene or protective materials (soap, hand-sanitizer, masks etc.) supports. First time, during the first lockdown and, second time, in the post tenure follow-up phase, whereas the amount of cash support was Tk.1,500/- and Tk.2,000/- respectively. The beneficiaries reported on getting no more support from any other sources, as those were diverted to other non-beneficiaries in the areas. Concurrently, large awareness campaign was also conducted by the project to stay safe with all precautionary measures, including social distancing; wearing masks, hand washing and keeping the household environment always clean and safe. This had also significant motivational impacts on the local neighborhoods and society at large.

Apart from the above, there were also reports about some beneficiaries, who were to reduce the number and quantity of meals; and also borrowed personal loans from neighbors or relatives without any interest to cover unusual household expenses during the period, which were repaid, later on, from SWAPNO income. The opposite cases were also registered where beneficiaries didn't borrow from other, but depended on own savings in case of unusual expenditures. Almost all reported of taking three doses of vaccine, as motivated by the project staff.

### **1.9: Projecting on Future**

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<sup>14</sup> In fact, during the tenure beneficiaries faced lockdown only once.



Most of the women beneficiaries expressed their views that no more SWAPNO support they need in future, as they will be able to retain and further consolidate the wellbeing already achieved during the tenure. It is more important for many that their children would be growing with a promising future that was never possible or even in the dream of their generation. Hence, they strongly advocated for those majority women, who were left out in the first chance to get enrollment in future in the existing areas. Moreover, they raised this issue also for the same other group of womenfolk in the concentrated areas throughout the country. According to them, the only way to act on this line was to continue and scale up the SWAPNO project in the existing areas together with a plan for its gradual expansion in the above-mentioned areas. In fact, during the conversations the beneficiaries laid down an impression of not to see a division or distance within or between the same groups of people e.g., one with both assets and opportunities (beneficiary) and others (non-beneficiary) neither at all. This is also a principle issue from the perspective of the evaluator relating to finally demonstrate the practical relevance of the SWAPNO project that entitles all the target population to equally access its deliveries. It is, indeed, not intended to create discrimination amongst the same population, as a result of one-time fragmented coverage in a local area in any geographic location. Hence, there is a need to place and emphasize this issue in the development priorities of the country.

In conclusion of this last sub-section a couple of summary recommendations, as made by the beneficiaries at various levels, is presented below in bullets.

The program should be extended for minimum 2 or 3 years, depending on the geographic variations.

Daily wage rate should be increased to Tk.300/- from the existing rate of Tk.200/- for the potential new beneficiaries so that they were able to achieve much better wellbeing than the formers. Out of the increased wage Tk. 150/- should be kept at source for the provision of increased bonus at the end.

The above recommendations with the background were also, in general, echoed at the KII level comprising the chairmen and members of the selected UPs as well as local government LGD officials e.g., Deputy Directors of LGD in the respective districts.

## **2: Difficulties of Life and Livelihoods of Non-Beneficiaries in Control Group**

As mentioned above, this section is based on the three following life histories drawn from the three survey areas.

**First**, Anowara Begum from Melandaha, Jamalpur, presently aged over 43 years, became orphan at her childhood and got married at below 13 years of age with a fisherman over 50 years old. Her husband had his first wife currently living in a separate house nearby. She had her first child-daughter when she 14 years old, who died of an unknown disease within a year. She gave birth to her second daughter next year, who is now 12 years old and studying in a ‘Madrassa’ free of cost. In the subsequent years she

also gave birth her first and second sons, who are presently 10 and 9 years old respectively. She wanted to provide the sons education in schools, but due to lack of money, it was not being possible, so far.

Keeping three children at their childhood, her husband died about 16 years back when he was over 65 years old, after suffering from multiple diseases with no earning in the last year of his life. However, when her husband was in good health could earn enough to support the family with two wives and six children (the elder wife also with one daughter and two sons). All they could eat thrice a day. Anowara's struggle for survival with three kids turned to a critical stage soon after her husband's death, as she had no money or means to survive, which her husband left behind. Hence, she began to work as domestic worker in 2-3 houses in the neighborhood, almost every day, to earn a monthly income of Tk. 7,000/- and more round the year. Besides, her elder son also contributes roughly between Tk.3,000/- and Tk.4,500/- per month through selling of fish-catches locally. Out of the total family-income she saves Tk.500/-Tk.600/- per month, which enabled her to rebuild, meanwhile, her ramshackle house on a piece of land (0.2-0.3 decimal), donated by her husband's first wife ('Shotin'), to live with her kids. She was also able to buy a female cow-calf with the savings, which she is rearing for the last three years hoping to sell it in the next year. Other than this, she has no enough cash savings to invest in other IGAs. She and her children, presently, can eat twice a day with cooked rice soaked and fermented in water ('Panta Bhat') together with mashed-potatoes, eggplant, and lentil during the day and at night. The excess is kept for the day's one meal, and no fish or meat in any days. Sometimes during the day her elder son eats left over foods from the local hotels. This is the life she now leads, says Anowara, with the grace of Allah!

While asked for a comparison between her and the other fellow women, who are former SWAPNO beneficiaries, she replied they were very fortunate to have won the lottery during the selection. It enabled them to earn and live triple times better compared to her at present, as they were supported to develop and operate a number of IGAs of their own.

In the end Anowara says, 'I would also want a job like earthwork or whatever the income opportunities are made available to her, as I always aspire for a better living working hard to earn more to buy more cows, and also goats, chickens, ducks for income generation and/or run other IGAs that I cannot do presently for not having any money'.

**Second,** Sheuli Begum from Saghata, Gaibandha, presently aged over 43 years, was given marriage at her age below 15 years to an agriculture wageworker with 25 years of age. The husband died 3 years back at the age of around 50 years after suffering from Jaundice that led to kidney failure ultimately. Sheuli has three daughters and one son. The eldest daughter was given marriage at about 13 of years of age to an agricultural worker with nearly 20 years of age, and living separately. The second daughter was also given marriage at the same age like her elder sister to a brick kiln worker, and also lives with her husband. The only son, presently aged 18 years, also got married more than a year back. The son

works as a mason and also during the season as brick kiln worker, and earns between Tk. 10,000/- and Tk. 12,000/- per month. The youngest daughter lives with her mother, aged over 12 years, and studies at grade VIII will be given marriage soon like her elder sisters.

Sheuli presently lives together with her son, daughter in-law and the youngest daughter. When her husband was alive, they could live somehow depending on the husband's income with an earning of Tk.200/- Tk.250/- per day, only when he worked. Apart from her husband's income, Sheuli used to work as part-time domestic worker at 2/3 houses in the neighborhood to earn a monthly income of Tk.5,000/-, which she still does with the same amount of monthly income.

The most important and expensive events in Sheuli's life, so far, were giving marriage to her two elder daughters when her husband was still alive. They had to pay a dowry of Tk. 25,000/- in the wedding of her first daughter, which was borrowed from a traditional moneylender at a very high compound rate of interest of Tk. 20,000/- per Tk. 50,000/- per year. During her second daughter's marriage, she again borrowed Tk. 50,000/- to pay the dowry. On these two occasions, also borrowed additional money for other expenses and reasons. For all these borrowings she, together with her son, was able to pay until the date only the interests over the last more than three years. Altogether, the outstanding loan-amount stands at Tk.200,000/- that she must repay gradually in future; she absolutely has no idea how many years ahead she would be paying the installments to repay the full loan amount with the interests. Another similar painful event is also approaching fast during her youngest daughter marriage. It is feared that time the dowry amount would increase by minimum four times compared to the last time i.e., Tk. 200,000/-, being the prevalent rate in the local area.

Regarding the assets, Sheuli owns only a piece of land less than 2.5 decimals, inherited from her husband, where she lives with all others together in a house renovated with her son's income, and also with the above-mentioned borrowed money after the son got married. It has three small rooms leaving no land to cultivate vegetables, and rear chickens, cow or goat.

Sheuli was not at all affected during the COVID 19 lockdowns like all others living in the village. In fact, the lives of the villagers went on normally as usual without a break throughout the period. Sheuli was also able to work and earn income regularly, the employers never asked her to give a break, and continued seeking her support all through with no alternative; even during the pick when the countrywide lockdowns were enforced.

**In the end**, Sheuli expressed her unhappiness for not being able to join SWAPNO, as she says '.... if joined I had the opportunity to live better and repay the loans like the SWAPNO beneficiaries, who live much better than me and are very fortunate!'

**Lastly**, Rahima Begum from Lalmonirhat, presently aged above 32 years, first married when she was only 15 years old with a rickshaw-van puller with about 35 years old. She gave birth to her first child-daughter on the first year, and lived with the husband for about three years until his death in a road

accident. She came back to her parents' house, and after 3 years of staying, at the age of 21 years; she was again married with an agriculture wageworker of 60 years old after the death of his first wife leaving 2 daughters and 2 sons. Her second husband also died after 7 years of marriage out of jaundice related health complications 5 years back. Thereafter, she again came back to her parents' house; and on the following year her father also died. She currently lives with her old mother by sharing her father's property of 3-4 decimals of land with her brother. Rahima gave birth to her only son with her second husband when she also lived together with his husband's first wife's one son and one daughter. Her own son is presently 11 years, and very recently she the son to a local madrassa cum orphan home only very recently, located in the adjacent union, to have study and food free of cost. As she says, '...previously, people in the neighborhood helped her son to have food or sometimes gave money to buy foods as being an orphan boy'.

Rahima gave marriage to her only daughter 8 years back at the age of 14 years with a 20 years old agriculture wageworker, where she has a granddaughter of 5 years old. She had to pay 'Dowry' to the amount of Tk. 70,000/- in her daughter's marriage; major part of it was collected as donations of the neighbors and the remainder her father provided. An additional Tk.20,000/- was also borrowed and spent for the entertainment and other associated expenses. The borrowed money she repaid gradually in 3-4 years in cash, which turned out to be Tk. 35,000/- at the end. She managed this amount from the savings out of her small earnings from agricultural employment, as narrated below.

Rahima works as an agriculture worker from 8 am to 5 pm with an hour lunch break during *Kharip* and *Rabi* seasons to harvest and thresh paddies, and she also works at the time of planting and harvesting the potatoes, just before and during the winter season. Altogether, she can work maximum 3 months a year for these fixed activities. Apart from these, she is also sometimes asked to do some miscellaneous activities, including de-weeding, during cultivation of different crops throughout the year. When she does these activities can earn Tk. 250/- to Tk.300/- as wage per day.

Rahima also cultivates with the old mother in the 12 decimals of land, owned by her mother. She distributes the working hours, as much as possible, to work in both the lands, including their own and others, during the above two seasons. This cultivation helps them to get some rice to eat for some other time over the year. However, during the time of no income she and her mother have to live in severe hardship. She does not also have the opportunity to work as domestic worker, as households in the neighborhood cannot afford.

Apart from the above, Rahima together with her mother also rear one goat and one cow of others under a quite similar arrangement in crop sharing<sup>15</sup>. Rahima wants to have her own cow and goat to rear some day when she will have to afford.

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<sup>15</sup> The only difference is land is an immovable property and livestock are movable property.

Rahima and her mother can eat only twice a day in most of the period a year, including only breakfast and lunch with rice, vegetables, mashed-potato and also wild potatoes collected from around. Sometimes, the neighbors provide some vegetables, and also buy lentil to eat. They try to eat thrice only during the little lasting crop seasons. However, as the interview went on, the evaluator observed her suffering from malnutrition and anemia.

Rahima and her mother hardly get any government support or relief at any time, including during the ongoing pandemic, and also do not get NGO support, as they not the members. During the CORONO lockdowns they didn't face any additional shocks, and also any adverse impacts, so far, due to the pandemic.

When asked if she lives in a much poorer condition than other women enrolled as SWAPNO beneficiaries. In reply, she mentioned not to have an idea about it, since none of the SWAPNO beneficiaries live nearby. Anyway, she will live and struggle to survive with what she has now.

In conclusion, pointing to any potential in future to have joined SWAPNO, Rahima told she would be always willing to come out of her extreme poverty, and lead a better life together with her mother and the only son. She is quite able to do earthwork or any other work matched with her existing knowledge and skills. In a last question she confirmed that 'Never again in her life she will get married at any pressure or lure'.

## **Lessons Learned**

The SWAPNO project shows that, with injection of threshold amount of external resources, the persistent poverty trap syndrome can be overcome. This is in contrast to the tokenism that characterizes the conventional social protection projects. While this is a big success for the SWAPNO type of Mini Big-Push intervention, the issue of sustainability of the project impact has not been settled for good. The changing economic fortunes of the beneficiaries are a case in point: they need to get some attention from the SWAPNO project, especially during the COVID-19 crisis, to ensure long-term graduation from the poverty trap by enhancing their resilience capacity to bounce back when setbacks occur.

## References

- Barkat, A., M Ahamed, F., & Hasan Mamun, M. (2020). Report on Baseline Survey of SWAPNO II. (May).
- Bai, H. and M. H. Clark (2018). *Propensity Score Methods and Applications*, Sage Publications.
- Banerjee, A. V. and E. Duflo (2011). *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*, Public Affairs, New York.
- Duflo, E. (2006). “Poor but Rational?” in A. V. Banerjee, R. Benabou, and D. Mookherjee (2006), Eds., *Understanding Poverty*, Oxford University Press, New York, pp. 367-378.
- Food and Agriculture Organization (2011). *Guidelines for measuring household and individual dietary diversity*. Rome: Food and Agriculture Organization. Available at <http://www.fao.org/docrep/014/i1983e/i1983e00.htm>
- Food and Nutrition Technical Assistance Project-II (FANTA-II) (2007). *Household Food Insecurity Access Scale (HFIAS) for Measurement of Food Access: Indicator Guide, VERSION 3*.
- Mullainathan, S. (2006). “Better Choices to Reduce Poverty” in A. V. Banerjee, R. Benabou, and D. Mookherjee (2006), Eds., *Understanding Poverty*, Oxford University Press, New York, pp. 379-388.
- Ravallion, M. (2001). “The Mystery of the Vanishing Benefits: An Introduction to Impact Evaluation”, *The World Bank Economic Review*, Vol. 15, Issue 1, June, pp. 115-140.
- Sen, B., & Uddin, M. R. (2019). Nudging Escape from Poverty: Role of Mini Big-Push and Commitment Device in SWAPNO project Report for the Study on “*Conducting End-line Survey of SWAPNO 2nd Cycle*.” 72 (November), 1–16.