Long-Term Effect of Livelihood Promotion Types of Social Security Programmes

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Long-Term Effect of Livelihood Promotion Types of Social Security Programmes
(This study is a part of a group of studies published as *A Compendium of Social Protection Research*)

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ADB	Asian Development Bank
AIDS	Acquired Immune Deficiency Syndrome
APS	Average Propensities to Spend
ATM	Automated Teller Machine
AWDDW	Allowances for the Widow, Deserted and Destitute women
BAU	Business as Usual
BBS	Bangladesh Bureau of Statistics
BCR	Benefit Cost Ratio
BDT	Bangladeshi Taka
BFP	Bolsa Familia Programme
BFPA	Bangladesh Family Planning Association
BIDS	Bangladesh Institute of Development Studies
BIHS	Bangladesh Integrated Household Survey
BMET	Bureau of Manpower, Employment and Training
BMI	Body Mass Index
BRDB	Bangladesh Rural Development Board
BSA	Bangladesh Shishu Academy
CBM	Christian Blind Mission
CBO	Community Based Organization
CBRMP	Community Based Resource Management Project
CBT	Community Based Testing
CCRIIP	Costal Climate Resilient Infrastructure Improvement Programme
CCT	Conditional Cash Transfer
CCTP	Conditional Cash Transfer Programmes
CDC	Child Development Centres
CDD	Centre for Disability in Development
CFPR	Challenging the Frontier of Poverty Reduction
CFS	Child Friendly Spaces
CGAP	Consultative Group to Assist the Poor
CHT	Chittagong Hill Tracts
CLP	Chars Livelihoods Programme
CM	Commodities
CODI	Core Diagnostic Instrument
Cont.	Control
CPD	Centre for Policy Dialogue
CPP	Cyclone Preparedness Programme
CSO	Civil society organizations
CSSB	Child Sensitive Social Protection in Bangladesh
CTP	Co-responsibility Transfer Programmes
CVS	Compliance Verification System
DA	Data Entry
DC	Deputy Commissioner
DFAT	Department of Foreign Affairs and Trade
DFID	Department for International Development
DGFP	Directorate General of Family Planning

DGHS	Directorate General of Health Services
DIC	Drop-in-Centres
DID	Difference in Differences
DiDRR	Disability Inclusive Disaster Risk Reduction
Diff	Difference
DPO	Development Partner Organization
DSF	Diagnostic Study of Demand Side Financing
DSS	Department of Social Services
DSWD	Department of Social Welfare and Development
DT	Demographic Targeting
DWA	Department of Women Affairs
ECCD	Early Childhood Care and Development
EGPP	Employment Generation Programme for the Poorest
ENS	Emergency Night Shelters
EP	Extreme poor
etc.	Etcetera
EU	European Union
FEP	Food for Education Programme
FFA	Food for Asset-creation
FFE	Food for Education
FFW	Food for Work
FGD	Focus Group Discussion
FIES	Family Income and Expenditure Survey
FLS	Food and Livelihood Security
FP	Factors of Production
FSVGD	Food Security Vulnerable Group Development
FTF	Feed the Future
FY	Fiscal Year
FYP	Five Year Plan
GDP	Gross Domestic Products
GED	General Economics Division
GMI	Guaranteed minimum income
GNI	Gross National Income
GoB	Government of Bangladesh
GR	Gratuitous Relief
GRS	Grievance Redress System
GSS	Ghana Statistical Service
GT	Geographical Targeting
HAIL	Haor Area Infrastructure and Livelihood
HDRC	Human Development Resource Center
HFIAS	Household Food Insecurity Access Scale
HH-IO	Households and Other Institutions
HI	Handicap International
HIES	Household Income and Expenditure Survey
HSC	Higher Secondary School Certificate
HSNP	Hunger Safety Net Programme
ICDDRB	International Centre for Diarrheal Disease Research, Bangladesh

ICF	International Classification of Functioning, Disability and Health
ICRPD	International Convention on the Rights of Persons with Disabilities ICRPD
ICT	Information and Communications Technology
IDRA	Insurance Development & Regulatory Authority
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IFS	Integrated Food Security
IGA	Income Generating Activities
IGVGD	Income Generation Vulnerable Group Development
ILO	International Labour Organization
IMCI	Integrated Management of Childhood Nutrition
Intv.	Intervention
ISPA	Inter-Agency Social Protection Assessments
JJS	Jagrata Juba Sangha
JMS	Jatiya Mohila Samity
JPUF	Jatiya Protibondhi Unnoyon Foundation
KHH-OI	Capital Account Households and Other Institutions
KII	Key Informant Interviews
LBP	Land Bank of the Philippines
LCA	Life Cycle Approach
LDC	Least Developed Countries
LEAP	Livelihood Empowerment against Poverty
LFS	Labour Force Survey
LGD	Local Government Division
MDG	Millennium Development Goal
MDGs	Millennium Development Goals
MEFWD	Medical Education and Family Welfare Division
MHVS	Maternal Health Voucher Scheme
MIS	Management information system
MIS	Management Information System
MLE	Maximum likelihood estimation
MNCAH	Maternal Neonatal Child and Adolescent Health
MoCHTA	Ministry of Chittagong Hill Tracts Area
MoDMR	Ministry of Disaster Management and Relief
MoE	Ministry of Education
MoF	Ministry of Food
MoH	Ministry of Health and Family Welfare
MoLE	Ministry of Labour and Employment
MoLGRDC	Ministry of Local Government, Rural Development and Co-operatives
MoLibWarAff	Ministry of Liberation War Affairs
MoP	Ministry of Planning
MoPME	Ministry of Primary and Mass Education
MoSW	Ministry of Social Welfare
MoWCA	Ministry of Women and Children Affairs
MoY&S	Ministry of Youth and Sports
MP	Member of Parliament
MPCDF	Marginal Propensity to Consume Food

MPI	Multidimensional Poverty Index
MS	Micro-simulation
MSM	Micro Simulation Model
MT	Means Testing
MTIR	Mid Term Implementation Review
MTRI	Mid-Term Review Implementation
NC	Not covered
NDD	Neurodevelopmental disability
NDDPT	Neuro-Developmental Disability Protection Trust
NE	Not-eligible
NEET	Not in education, employment or training
NFOWD	National Forum of Organizations Working with the Disabled
NGO	Non-governmental Organization
NGOs	Non-Government Organizations
NHD	National Household Database
NHTS-PR	National Household Targeting System for Poverty Reduction
NID	National Identity Documents
NIPORT	National Institute of Population Research and Training
NJLIP	Notun Jibon Livelihood Improvement Programme
NNHP	National New-born Health Programme
NNS	National Nutrition Services
No.	Number
NSIS	National Social Insurance Scheme
NSP	National Service Programme
NSSF	National Social Security Fund
NSSS	National Social Security Strategy
OAA	Old Age Allowance
OAS	Open Air Street
OECD	The Organization for Economic Co-Operation and Development
OMS	Open Market Sales
OPHI	Oxford Policy and Human Development Initiative
OTUP	The Other Targeted Ultra Poor
OVCs	Orphans and Vulnerable Children
Oxfam	Oxford Committee for Famine Relief
PA	Production Activities
PATH	The Programme for Advancement Through Health and Education
PERC	The Property and Environment Research Center
PESP	Primary Education Stipend Programme
PIO	Project Implementation Officer
PKSF	Palli Karma-Sahayak Foundation
PMO	Prime Minister's Office
PMT	Proxy means test
PMT	Proxy means test
PND	Persons with neurodevelopmental disabilities
PO	Partner organisation
PPP	Purchasing Power Parity
PPRC	Power and Participation Research Centre

PRI	Policy Research Institute
PRSP	Poverty Reduction Strategy Paper
PRSSP	Policy Research and Strategy Support Program
PSM	Propensity Score Matching
PSS	Primary School stipend
PSU	Primary selection units
PTP	Private Training Provider
PVP	Private Voluntary Pension
PWD	Person with Disabilities
PWDs	Persons with Disabilities
RAPID	Research and Policy Integration for Development
RDCD	Rural Development and Co-operatives Division
REOPA	Rural Employment Opportunities for Public Assets
RID	Rural Infrastructure Development
RMG	Ready Made Garment
RMGs	Ready-Made Garments
RMP	Rural Maintenance Programme
ROSC	Reaching Out of School Children
ROW	Rest of the World
SAE	Small Area Estimates
SAM	Social Accounting Matrix
SANEM	South Asian Network on Economic Modelling
SAR	Specific Absorption Rate
SDC	Swiss Agency for Development and Cooperation
SDG	Sustainable Development Goal
SDG-F	Sustainable Development Goals Fund
SDGs	Sustainable Development Goals
SEIP	Skill for Employment Investment Programme
SEPB	Skills and Employment Programme Bangladesh
SEP-B	Skills and Employment Programme Bangladesh
SEQAEP	Secondary Education Quality and Access Enhancement Project
SES	Secondary education stipend
SHIREE	Stimulating Household Improvements Resulting in Economic Empowerment
SID	Statistics and Informatics Division
SIMPLA	Sustainable Integrated Multi-sector PLAnning
SISP	Strategic Information Systems Planning
SME	Small and Medium Enterprise
SNP	Safety Net Programme
SP	Social Protection
SPP	Social protection programmes
SPST	Sharirik Protibondhi Suroksha Trust
Sq	Square
SSC	Secondary School Certificate
SSN	Social Safety Net
SSNP	Social Safety Net Programme
SSP	Social security programme
SSPS	Social Security Protection Support

SSPSS	School Stipend for Primary and Secondary Students
SSSP	Social Security Support Programme
SEQuAS	Specialist Evaluation and Quality Assurance Services
SWAPNO	Strengthening Women's Ability for Productive New Opportunities
SWD	Students with Disabilities
TDD	Total Domestic Demand
TFP	Total Factor Productivity
TFR	Total Fertility Rate
Tk.	Taka
TMRI	Transfer Modality Research Initiative
ToR	Terms of reference
TR	Test Relief
TSS	Total Supply Side
TTC	Technical Training Centre
TUP	Targeting the Ultra Poor Programme
TVET	Technical and vocational Education and Training
UCG	Universal Child Grant
UN	United Nations
UN DESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programmes
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Emergency Fund
UP	Union Parisad
USD	United States Dollar
VfM	Value for Money
VGD	Vulnerable Group Development
VGF	Vulnerable Group Feeding
VWB	Vulnerable Women's Benefit
WB	World Bank
WEAI	Women's Empowerment in Agricultural Index
WF	Workfare
WFM	Work for Money
WFP	World Food Programme
WHO	World Health Organization
ZOI	Zones of Influence

EXECUTIVE SUMMARY

Preface: Bangladesh is in the pathway of attaining Sustainable Development Goals (SDGs). In order to achieve the goals, it is imperative to ensure inclusive development and end poverty and therefore, a concrete livelihood programme or public works model is essential. Public works programmes have been observed as "win-win" by generating employment, creating assets, and more specifically providing welfare transfer. These programmes further help in building new skills as an effective bridge to generate employment for the poor. More specifically, the programme broadly provides support in two ways: (i) governance of social protection and (ii) strengthening of the system, in order to ensure that economic growth is achieved in a more inclusive manner. This will allow economic opportunities to reach rural and urban poor and to protect vulnerable groups against shocks and prevent them from further slipping into poverty. Currently almost all developing countries operate a variety of livelihood programmes with the aim of eradicating poverty. These programmes are found to have significant positive impact on income level as well as their ability to cope with shocks. On the flip side, the basis of the use of cash transfer is highly debatable in the sense that people under cash transfer programme are often found to be 'stuck' in poverty. Henceforth, ideally graduation programmes combined with different social assistance approaches are proven to eradicate poverty and they outweigh other social security programmes. However, these programmes have to be sustainable and the duration of the programmes need to be long-term. Short-term public work projects fail to address the underlying structural factors that cause poverty in the first place. In this context, this study attempts to identify how the Government of Bangladesh's livelihood social security programmes are affecting the long-term welfare of the citizenry, and whether they provide a better value for money over direct cash transfers or not. Moreover, this study particularly aims at finding out whether livelihood graduation programmes have any long-term impact on beneficiaries or not. In doing so, the study predominantly – (i) deploys a survey technique on SWAPNO beneficiaries to compare it with baseline and endline, and (ii) compares between cash transfer and graduation programme using HIES 2016 data.

Relevant Literature: Literature evidence supports that graduation programmes have the ability to upgrade the condition of the poor through income generation and help in sustaining the income level in the post-treatment period. Moreover, literatures on TUP programmes assess the programme's impact on a wide range of monetary and non-monetary measures of wellbeing of treatment group using difference-in-difference (DID) as well as propensity score matching (PSM) methods. Results portray that there is a significant positive long-term impact on food security, per capita food consumption, household assets, savings, outstanding loan, lending and participation in microfinance. Country-wise scenario portrays that the percentage of food insecure households has declined by over 50 percent by the end of the programme in Haiti and per capita income has increased in Ethiopia. Moreover, income as well as assets (land, livestock, poultry, fisheries, tree, etc.) of the beneficiaries' have increased; poverty rate has decreased; food and non-food expenditures (particularly education expenditure) have increased; and beneficiaries' health condition, self-esteem and social status have significantly improved in India, Rwanda, South Africa and Argentina. On the flip side, some debatable issues come into focus regarding the validation between cash transfer and graduation programme. Though, in the short run, a significant positive impact of cash transfer programme in reducing poverty is observed, there is no permanent solution to the low-level equilibrium of poverty trap. On the other hand, graduation programmes are more effective for sustainable livelihood in the sense that within a graduation programme, a participant can accumulate assets, engage with income generating activities, enhance business skills, learn knowledge about health care and basic rights, and increase the ability to care better for his/her children. However, there should be more focus on generating better evidence on cash transfer programme as an alternative approach to better compare it with the graduation programme.

Methodology of the Study: This study identifies two districts (Satkhira and Kurigram), where the social protection graduation programme (SWAPNO) has been implemented. A two-stage stratified sampling technique has been applied to select the 102 sampling households who have completed their project cycle two years ago.

Moreover, 10 KIIs have been organized with relevant officials from related ministries and other relevant institutions to capture the relevant focal persons' concerns, opinion and recommendations in planning a comprehensive analysis. In addition, 5 FGDs have been conducted with a minimum of 8 beneficiaries each who have participated in livelihood social security programmes (SWAPNO) from 2 different districts (Satkhira and Kurigram) of Bangladesh. Another random sampling technique has been deployed using the HIES 2016 data taking one graduation programme and cash transfer programme each. For cash transfer (widow allowance programme) and graduation programme (vulnerable group development) data have been extracted from HIES 2016 to compare whether people under graduation programme are well off compared to someone receiving a smaller, but continuous cash transfer. Both qualitative and quantitative techniques have been deployed in this study to assess the long-term livelihood of social security programmes. However, there are a number of limitations. The sample size used for the study is small, there were time constraints and glitches in conducting the FGDs. A major drawback is since the study has been conducted two years after the completion of the programme it is difficult to assess whether the participants fall back into poverty after the completion of the programme.

Overview of Social Security Programmes in Bangladesh: Before moving on to analysing the livelihood impact, this study first attempts to identify the current picture of existing social security programmes in Bangladesh. It is witnessed that, during the last two decades, the Government of Bangladesh (GoB) has been pursuing a number of social safety net programmes. Currently, there are 113 ongoing programmes under the safety net system financed through the national budget in FY 2018-19. These programmes are closely monitored by 24 ministries. These programmes are classified into five different categories, namely: (i) Cash Transfer (ii) Food Security (iii) Employment Generation (iv) Development Projects and (v) Miscellaneous Funds. It is revealed that, in the last 10 years, the allocation for social protection, both in terms of coverage and beneficiaries, has been increased manifold by the GoB to ensure financial inclusion and welfare of the disadvantaged and vulnerable communities living in the country.

Methods to Clarify Research Objectives: This study typically classifies the research objectives into three stages. At the first stage, long-term impact of the livelihood programme is evaluated using the long-term assessment survey data of SWAPNO project. Subsequently, to answer the second objective, HIES 2016 dataset has been used to compare between cash transfer and graduation programme. In the third stage, propensity score matching method has been deployed to estimate the effect of SSNP on treated households.

First Stage: This study particularly emphasizes on SWAPNO programme that typically attempts to achieve dual objectives since inception i) maintenance of public works and ii) boosting of women self-confidence and self-esteem. SWAPNO analysis finds a substantial increase in income and asset of the beneficiaries. The increase in yearly income of beneficiaries has been calculated to be approximately BDT 14,797 compared to their control counterpart due to SWAPNO intervention. This, as a consequence, reduces both moderate and extreme poverty. Beneficiaries are now food secured and their increase in income resulted in an increase in food and non-food expenditures, particularly education and health expenditures. Beneficiaries reported that they have other sources of income including livestock, personal grant, income from TR, VGD and VGF, handicraft, small business, selling fruits, government grants etc. They have utilized their graduation bonus in purchasing homestead and cultivable land along with starting different small businesses. Moreover, their occupational transition from wage labour to a mix of farmers has enhanced their self-esteem and self-confidence. Comparing the value of BMI, beneficiaries are perceived to have good health than before. A large share of beneficiaries now maintains good food habits which has resulted in improved nutritional status. Moreover, SWAPNO training programme has been successful in creating awareness among the participants about maintaining good health and sanitation status along with coping strategies even during shocks. The programme has also helped them to learn about their inheritance and fundamental rights. As reported, beneficiary women have now better participation in decision-making. With the growing self-confidence, their mobility in the locality has increased. Since this study has been

conducted after two years of completion of their project cycle, it comes up with a better idea of the long-term impact of the intervention in the post-treatment period compared to other studies which have been completed right after the commencement of the programme.

Second Stage: To address the second objective, this study tries to investigate the relative efficacy of the cash transfer and graduation programme. In doing so, HIES 2016 dataset has been used to extract two particular programmes under graduation (VGD) and cash transfer (widow allowance). HIES analysis finds some unidirectional pathways while comparing cash transfer and graduation programme. However, considering the livelihood criteria such as income and expenditure pattern, gross remuneration, level of literacy, involvement in productive activities, and use of loan; graduation programme outweighs cash transfer programme. Though graduation programmes are found to be effective in the post intervention period, there should be more focus on generating better evidence on cash transfer programme as an alternative approach.

Third Stage: Finally, PSM analysis gives an opportunity to evaluate the impact of long-term benefit of any programme intervention. It has been observed that the comparison between the households who received benefits from Social Safety Net Programmes (SSNP) with the ones who did not, is confounded. Overall, the results portray that there is positive impact of SSNP programme in Bangladesh. More specifically, the treatment group receiving the benefits under SSNP have more income and consumption than the untreated/control group. However, both groups consist of households with similar attributes (rural, agricultural occupation and education). Given the cross-sectional settings, PSM approach gives the opportunity to analyse the impact of SSNP programmes in limited scope.

FGD Findings and Policy Prescriptions: On the other hand, from FGDs, the understanding is that, SWAPNO programme has successfully helped to uplift the condition of poor people to graduate from poverty. More specifically, beneficiaries from SWAPNO project can now afford enough food, cloth, and their daily necessities. According to their statement, their social value has increased after their inclusion in the programme. Neighbours and their close relatives have started to value them as they earn money and are able to change their fate as a result of the benefits from the programme. Above all, basic life skill and livelihood training have helped them to boost their confidence, courage, right consciousness and fight against poverty. However, there exist some particular challenges while implementing the programme including unfair selection process due to lack of community oversight, beneficiaries face sexual harassment and teasing from local personnel, problem in project design and implementation, low wage rate and most importantly low coverage of beneficiaries. Nevertheless, insight from FGDs, highly recommend that despite having some drawbacks, it brings positive impact on the livelihood of the people. Moreover, considering the effectiveness of the programme, it should be expanded in other remote areas of Bangladesh.

KII Findings and Policy Prescriptions: This study tries to align the research outcome with the KII findings. KII findings put particular emphasis on the shortcomings in designing effective social security programmes in the sense that there remain weaknesses in selection of beneficiaries, programme design, quality of programme delivery including the capacity of field staff, amount of transfer, the existence of value-added services, level of transparency and efficiency in the administration and types of support the beneficiaries are getting. However, budgetary allocation often falls short along with SSN programmes, are not fully equipped enough to address the full spectrum of objectives. Henceforth, there is a high probability that the participants may fall back into poverty once they exit the programme, because many of these programmes do not have permanent solutions which can guarantee sustainable poverty alleviation - for example, asset creation, creation of sustainable income earning, etc. Moreover, KII findings also shed light on graduation and continuous cash transfer programmes - graduation programme performs better as compared with the continuous cash transfer because people under graduation programme receive different trainings (self-employment, hygiene, awareness building, living standard etc.). However, similar provisions are not present in case of the continuous cash transfer programme. Considering the obstacles, relevant officials suggest some policy prescriptions – enhance capacity of technical staff, establish

partnership with private bodies to redesign business model, proper monitoring and execution of NSSS, allocate adequate fund to speed up administration activities, and more importantly, programme should be designed considering different tiers of poverty.

Overall Policy Option: This paper is an initiative to evaluate the graduation programme to find out its long-term impact in the form of evaluating whether poor people are able to upgrade their living condition or not. Considering the sustainability criteria and achieving long term objective of reducing poverty aligned with SDGs, the following issues should be emphasized carefully – stretching the project period for 24 months similar to the REOPA project, regular monitoring of assets, revisiting the business model regarding bonus payment, arranging different livelihood programmes for the union worker and their role should be revitalized, and project monitoring should take place through community oversight. It is taken for granted that, without government intervention, no development efforts can be implemented successfully especially in developing countries like Bangladesh. Therefore, setting up appropriate monitoring mechanism is the key to success of any public works programme. However, this paper highly argues that if the main aim is to graduate people out of extreme and moderate poverty, a comprehensive social security system should be developed with the adequate engagement of government bodies.

Conclusion: The success of the project does not solely depend on how effectively public work programmes have been implemented rather considering the well-being of the people the dual objective of the programme must be met – public works and poverty alleviation. Since this study has been conducted two years after the completion of the programme, therefore, the long-run impact of the programme can be better apprehended from this study. Currently the beneficiaries are engaged in different IGA and have invested their savings in more productive investment. Secondly, they had the opportunity to improve their standard of living and household status. Thirdly, this programme has boosted up their self-confidence and made them aware about different laws along with basic rights. However, significant loopholes are also witnessed in terms of engaging new income earning activities which in turn create unemployment and thereby reduce income and expenditure as compared with the control counterpart. Therefore, while considering the sustainability perspective, regular monitoring and time to time training session will help beneficiaries to graduate out of poverty. Moreover, the findings from HIES reveal that, graduation programmes perform better when compared to cash transfer programmes especially when considering the indicators which focus on sustainability (i.e. income and expenditure, gross remuneration, engagement in productive activities, level of literacy and use of loans). Therefore; to maintain the extent of longer-term impact, more needs to be done beyond social safety nets i.e. fiscal issues, monetary policies, job creation, wage rates, pricing and in many cases, there is a pressing need for redesigning SP programmes.

LONG-TERM EFFECT OF LIVELIHOOD PROMOTION TYPES OF SOCIAL SECURITY PROGRAMMES[1]

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1. Introduction

Social protection programmes predominantly cover social and economic transfers, access to services, social support and ensures equity and non-discriminatory legislation policies. In countries like Brazil, India, the Philippines, Ethiopia and Uganda these types of social protection programmes are most often supported by governments. This study particularly focuses on livelihood social security programme, more specifically graduation or public works model. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base. In addition, public works programmes have been observed as "win-win" by generating employment, creating assets, and more specifically providing welfare transfer. These programmes further help in building new skills as an effective bridge to generate employment for the poor. On the flip side, the basis of the use of cash transfer is highly debatable in the sense that people under cash transfer programme often find themselves 'stuck' in poverty. Henceforth, ideally graduation programmes combined with different social assistance approaches are a proven contributor in poverty eradication and are said to outweigh any other social security programme. However, these programmes need to be spread over long time periods since short-term public work projects fail to address the underlying structural factors that cause poverty in the first place.

Currently Bangladesh is facing the challenge of attaining the Sustainable Development Goals (SDGs). In order to achieve the goals, it is imperative to ensure inclusive development and end poverty and therefore, having a concrete social protection livelihood programme will be crucial. In Bangladesh, BRAC started off with the vision that a unique set of interventions is needed to bring out those from extreme poverty, known as the 'ultra-poor' people living on less than $1.25 a day. BRAC pioneered the approach in 2002 and named it as the Graduation Approach or Targeting the Ultra Poor (TUP) programme. TUP and graduation are innovative approaches that combine social safety net along with income generating livelihood which 'graduate' households out of extreme poverty. Graduation programmes generally complement small cash transfer or in-kind asset transfer along with several other interventions including savings, training, social integration, and basic health care services. Subsequently, over the last decade Consultative Group to Assist the Poor (CGAP), Ford Foundation and many international donors funded ten pilots across several continents in which 75 percent met the graduation requirement.[2]

Currently almost all developing countries operate a variety of livelihood programmes with the aim of eradicating poverty. These programmes are found to have significant positive impact on income level as well as their ability to cope with shocks (Hagen-Zanker et al., 22011). But the scope of such interventions is very limited and cannot take into account the long-term impact and thereby, fails to ensure permanent solution to the low-level equilibrium trap. The evidence supports that in the short run these programmes fail to lift poor people out of poverty, hence, in the long run graduation model which combines a package of interventions, enhances the ability of the poor people so that they can maintain a high income even in the absence of the project.

In this context, the research examines how the Government of Bangladesh's livelihood social security programmes are impacting the long-term welfare of the citizenry, and whether they provide a better value for money over direct cash transfers or not. This research carefully investigates the aforementioned areas through rigorous literature reviews, provides an overview of social safety net programmes in Bangladesh, conducts an analysis of long-term effect of livelihood programmes with a particular focus on SWAPNO intervention, includes a comparative analysis between cash transfer and graduation programme. Discusses the sustainable impact of livelihood programme using propensity score matching method. The report includes findings from the Focus Group Discussions and Key Informant Interviews and finally concludes with policy recommendations.

[2] Martson and Grady. Tackling ultra-poverty through the graduation approach: Situating sustainable livelihoods in the landscape of social protection and safety nets, (2014).

2. Literature Review

2.1. Addressing the Scenario of Social Safety Net Programme

Historically, social safety net programmes in Bangladesh witnessed significant changes over time. In the last 25 years, there has been a remarkable move away from generalized food transfer to cash and public works programmes. The bulk of social safety net programmes are run by government bodies whereas non-government channels also play a vital role particularly in operating those programmes that ensure sustainable graduation.[3] According to the literature, there are three clusters of social security programmes and they include transfer programme in kind or cash, workfare programme and CCTs. (Figure 4.1):[4]

Figure 0.1: Three Programme Cluster

Source: The World Bank Report, 2008

- **Transfer Programme in Kind or Cash:**

These types of programmes aim at providing support to the beneficiaries so that they can maintain a minimum level of consumption. Some variants of these programmes provide unconditional cash transfer to the household and rest provide rationed or subsidized food. It includes programmes that support mother and children, school-based feeding programmes and transfers.

- **Workfare Programme:**

These types of programmes create low-skill job opportunity for the poor individuals through public work programmes of constructing, repairing and improving local infrastructures. These programmes usually provide a low wage to the poor households willing to work at that particular pay. Such programmes provide the opportunity to graduate out of poverty.

- **CCTs**

These programmes ensure developing human capital through conditional cash transfer in the form of encouraging the use of education and health facilities.

Safety net programmes provide support to the poor households in order to raise their minimum standard of living and prevent them from slipping into poverty again. Safety net programmes are now widely implemented in different parts of the country and have provided coverage of poor individuals. The World Bank report - 'The State of Social Safety Nets 2018' estimates that because of SSN transfer, 36 percent of people have escaped from absolute poverty along with a reduction in poverty gap and income inequality by 45 percent and 2 percent respectively. It also reports that globally, developing and transition countries spend on an average 1.5 percent of GDP on SSN programmes. However, spending varies across countries and regions. According to the report, the spending on SSN by Europe and Central Asia region is 2.2 percent of GDP. More inclusively, the average spending on SSN is 0.9 percent of GDP for South Asian countries, where Bangladeshi Government has financed 2.17 percent of GDP to SSNs in FY 2017-18 (National Budget, FY 2017-18). It is a blessing that several countries including Bangladesh are introducing flagship SSN programmes and are rapidly expanding their coverage.

[3] Rahman and Choudhury: Social Safety Nets in Bangladesh, Ground Realities and Policy Changes- Volume 2, (2012).
[4] Grosch Margaret et al : For Protection and Promotion-The Design and Implementation of Effective Safety Nets, The World Bank, 2008, p.254-334.

According to the report some notable transmission has been witnessed in several countries in terms of their population coverage under different SSNPs. in Tanzania, the population coverage of Productive Safety Net Programme expanded from 2 percent to 10 percent in between 2014 and 2016. In Senegal, the same coverage for National Cash Transfer Programmes expanded from 3 percent to 16 percent in a four-year time period. Moreover, in the Philippines, the Pantawid Conditional Cash Transfer Programme has expanded from 5 percent to 20 percent since 2010.

Social protection ensures substantial coverage of the poor and the vulnerable people to reduce poverty and it is directly related with the comprehensive agenda of the Sustainable Development Goals. Rutkowski (2002) postulates that social protection ensures increasing access to basic services and supports during climate-related extreme events and other economic, social, and environmental shocks and disasters for the poor and vulnerable groups that is aligned with SDG 1: end (extreme) poverty by 2030.

2.2. Livelihood Programme

One of the main objectives of social protection is promoting livelihood. Scoones (1998) defines sustainable livelihood as "A livelihood comprises the capabilities, assets (including both maternal and social resources) and activities required for a means of living: A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base". Social Protection (SP) promotes more sustaining livelihoods in many ways. Samson (2011) mentions three ways of sustainable livelihoods: a) by reducing gender inequalities and unlocking a nation's full economic potential b) by promoting workers' more effective access to the labour market and c) by supporting investments in livelihood activities.

In Bangladesh, there are several livelihood promotion/development types of social security programmes such as Vulnerable Group Development (VGD); Vulnerable Group Feeding (VGF); Rural Employment Opportunity for Public Asset (REOPA); Skills for Employment Investment Programme; Employment Generation Programme for the Poorest (EGPP); SWAPNO; Nuton Jibon; Chars Livelihoods Programme (CLP); (Stimulating Household Improvements Resulting in Economic Empowerment (SHIREE); One House, One Farm; Rural Maintenance Programme; Skill based Training for Livelihood; etc. ongoing to help poor people acquire productive assets and develop their potential skills. According to Watan Foundation (2012), livelihood programmes aim to break the cycle of poverty, meet emergency needs of food and promote economic and social development.

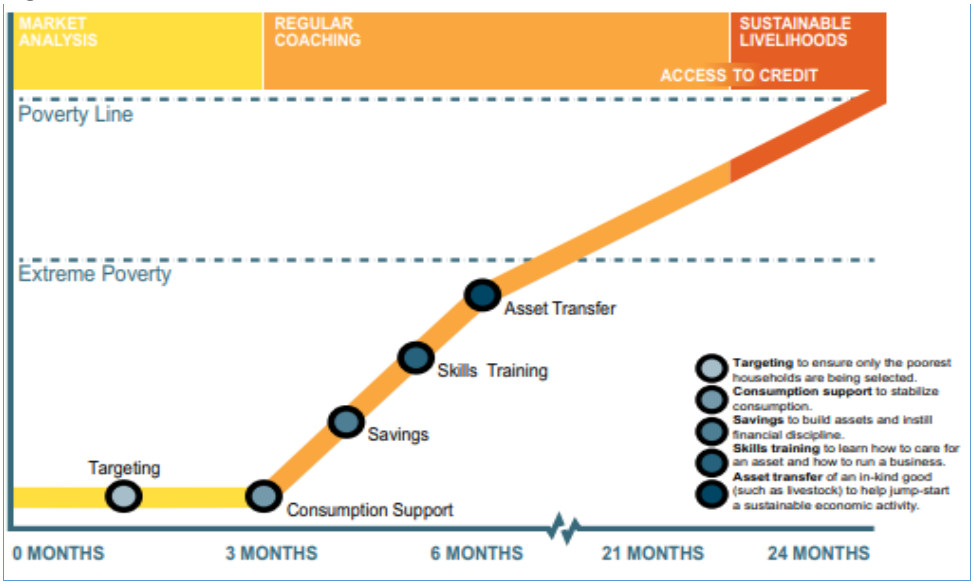
2.3. Livelihood Programme – Graduation Context

The approach by which livelihood programmes fulfilled these objectives is known as the graduation approach. According to Kiddo (2017), graduation approach is a combination of programming interventions including asset transfers, consumption support, savings, enterprise training, hands-on coaching and mentoring and in some cases, health and social integration support to ultra-poor households.

In graduation approach, a beneficiary needs to surpass a defined threshold in order to graduate. One straightforward option for targeting is that if a beneficiary does no longer qualify for the programme, that beneficiary has effectively graduated out of it. The drawback of this approach is that it takes no account of the need to build a degree of resilience. Another way of defining graduation is in terms of crossing an income 'poverty line'. This has the relative advantage to measure, although it requires regular and rigorous means testing of participating households. It also serves as an indicator of programme effectiveness by comparing incomes at baseline with incomes after several months or years of programme implementation. If the programme generates enough income for households to bridge their annual food gap in a sustainable way i.e. through income earned or food harvested independently that will cease household poverty, food insecurity, and vulnerability, only then will a household be considered as ready to graduate.

The final goal of a graduation programme is to bring the participants out of extreme poverty and into sustainable livelihoods. Achieving this goal typically takes between 18 to 36 months. In this context, CGAP has developed a graduation model in 2016 which is structured with the sequence of five core building blocks i.e. targeting, consumption support, savings, skill training, and regular coaching, and asset transfer (see Figure 4.2).

Figure 0.2: The Graduation Model



Source: CGAP, 2016

In order to graduate, a household has to fulfil certain criteria. Moreover, BRAC through its Challenging the Frontier of Poverty Reduction (CFPR) programme elucidates nine graduation criteria for a household i.e. 1) Has livestock or poultry, 2) School-age children are enrolled, 3) Has house with tin roof, 4) Has adopted family planning (eligible couples only), 5) Has sanitary latrine, 6) Drinks tube well water, 7) Has three or more income sources, 8) All household members wear sandals, and 9) Has cash savings.

Subsequently, recognizing the distinction between rural and urban households, BRAC has updated the graduation criteria as follows:

- At least 3 sources of income in every household within two years;
- Nutritious meals twice a day for every member of the household;
- Use of a sanitary latrine and clean drinking water;
- At least 10 ducks/chickens/pigeons/quails owned by the household;
- Households have kitchen gardens with vegetables, lemons and chilli plants; and
- Homes with solid roofs made of corrugated tin (not thatched).

However, graduation criteria have been further defined for the Chars Livelihoods Programme (CLP) in Bangladesh. To graduate, a household must meet any six (or more) criteria within three months of completing its 18-month cycle (See Annex 1.1).[5] Moreover, Livelihood Resource Centre (LRC) has come up with eight livelihood programme indicators with the aim of analysing livelihoods wide – impact to facilitate the design of a quality programme as well as to reinforce the consistency of the projects in livelihood.[6] It includes:

[5] Annual Report – Chars Livelihoods Programmes (2014), p. 7.
[6] Within ERC (Enhance Response Capacity), LRC has developed livelihood outcomes related to standardization of livelihoods indicators.

- Achieve livelihood protection threshold;
- Ownership and access to productive assets;
- Productivity enhancement;
- Increase and/or diversification of income;
- Gain and application of productive knowledge;
- Access to livelihood support service;
- Disaster risk reduction and natural resource management; and
- Livelihood rights, policies and regulations improvement.

2.4. Impact of Graduation Programme

Several literatures are assembled to investigate the impacts of graduation programme. In 1985, BRAC partnered with the GoB and World Food Programme (WFP) added a graduation ladder to an existing national safety net programme that provides the poorest households with a monthly allocation of food-grain for a two-year period. In a subsequent phase, BRAC has added skills training, mandatory savings, and small loans to accelerate livelihoods development with the programme. BRAC estimates that over 75 percent of the beneficiary households are currently food secured and managing sustainable economic activities. There have been a number of studies that investigate BRAC's Targeting the Ultra Poor (TUP) programme in Bangladesh. Sulaiman and Misha (2016) in their study apply sustainable livelihood approach taking different interventions in the form of consumption support, saving, market analysis and asset transfer, technical skill training, life skill training and health support (see Figure 4.3).

Figure 0.3: The Graduation into Sustainable Livelihoods Approach

Source: De Montesquiou et al., (2014)

Niaz and Jinnat (2016) evaluate the long-run impact of the CFPR and TUP programme of BRAC using a four-round household panel data. The programme includes direct transfers of income generating livestock assets and livelihood training and has reached thousands of female beneficiaries in Bangladesh. They assess the programme impact on a wide range of monetary and non-monetary measures of wellbeing of these very poor women using difference-in-difference (DID) as well as propensity score matching methods. They find a significant positive long-term impact on food security, per capita food consumption, household assets, savings, outstanding loan, lending and participation in microfinance. Participant women are less likely to be in distress occupation and more into self-employment. However, the long-term effect is much smaller for most outcomes when compared to short and medium-term impacts.

In 2006, CGAP and the Ford Foundation consider the Fonkoze Chemin Lavi Miyo Programme in Haiti to understand how safety nets, livelihoods support, and microfinance can be sequenced to create pathways for the

poorest out of extreme poverty. The findings portray that the percentage of food insecure households declined by over 50 percent by the end of the programme. The total value of assets owned by participants significantly increase which indicates that participants are able to grow their assets during and after the programme. Women are confident enough with their accumulated asset, their enhanced business skills, and their ability to care better for their children and provide regular meals. The use of health clinics and hospitals increase manifold from 14 percent to 46 percent among programme participants, while the percentage of people who delayed or simply do not access medical care in the face of disease decrease from 24 percent at baseline to 6 percent two years after starting of the programme. In addition, about 30 percent of eligible participants adopt permanent family planning methods over the course of the programme. Children's school attendance increased dramatically.

Samson (2011) describes the effect of social protection on employment generation where he expresses that social protection enables poor workers to participate more effectively in the labour markets, increasing the likelihood of employment. According to him, job search is expensive and risky, and social protection addresses both challenges: providing the resources necessary to facilitate seeking employment and reducing the difficulty of the choice between spending limited financial resources on food for children or on transportation for the job search. Hörmansdörfer (2009) adds that social health insurance and similar mechanisms also improve labour productivity by strengthening people's health, which in turn increases employment prospect.

Kidd (2017) estimates the impacts of graduation programmes on consumption per capita per day. According to the report, the impact of graduation programmes on consumption per capita per day in Bangladesh is USD 0.17 (PPP), while it is USD 0.24 in Ethiopia, USD 0.11 in Ghana, USD 0.20 in India (West Bengal), USD 0.20 in Pakistan and USD 0.20 in Peru.

Iqbal et al. (2017) evaluate the impact of the SWAPNO programme using the difference in differences (DID) method. They find that the income along with assets (land, livestock, poultry, fisheries, tree, etc.) of the beneficiaries has increased which in turn reduces poverty, and food and non-food expenditures (particularly education expenditure) have increased. The beneficiaries are now more food secured and their health condition significantly improved than the control group. During disaster, now they can manage their living standard with their savings in lieu of borrowing from others. The training that they receive within the programme provide them better knowledge on IGA and accounting and help to learn about laws and punishment of polygamy, child marriage, dowry, and divorce. Overall the programme has a tremendous impact on their self-esteem and social status. Such kind of model is widely followed by different other countries including the Productive Safety Net Programme (PSNP) in Ethiopia, The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in India, the vision 2020 Umurenge Programme (VUP) in Rwanda, the Expanded Public Works Programme (EPWP) in South Africa and Programa de Jefes y Jefas de Hogar in Argentina. In the local context, this study particularly focuses on the SWAPNO programme.

2.5. A Close Outlook to Cash Transfer Programme

Apart from graduation programme, cash transfer programmes are very common in all over the world. Cash transfer programmes also have a significant positive impact on the programme beneficiaries. Handa and Park (2014) evaluate the impact of Livelihood Empowerment against Poverty (LEAP) programme. LEAP is a social cash transfer programme in Ghana which provides cash and health insurance to extremely poor households to alleviate short-term poverty and encourage long-term human capital development. Using propensity score matching and DID method, they find that the programme has positive impact on children's schooling and non-food consumption. However, study findings give some unidirectional pathways with no impact on food consumption, mixed impact on health utilization and morbidity, and some productivity impact. They also explore that LEAP appears to have some gender differential impacts on children.

In another study, Samson (2004) witnesses that benefits provided to women have a positive impact on their children's school attendance, especially for girls. UNICEF (2007) adds that if social protection tends to be distributed to women, child survival, nutrition along with educational outcome will increase. Moreover, social protection strengthens women's power in decision making within the household (Help Age International, 2007).

2.6. Are Graduation Programmes Better than Cash Transfer?

Although all types of Social Safety Net programmes have a positive impact on participant's standard of living but graduation programmes are more effective for sustainable livelihood in the sense that within a graduation programme, a participant can accumulate assets, engage with IGA, enhance business skills, learn knowledge about health care and basic rights, and increase the ability to care better for his/her children. Considering the fact, graduation programme should be better structured with five building blocks of graduation model at a well sequencing manner to bring the participants out of extreme poverty and ensure sustainable means of livelihoods. Sulaiman et al. (2016) demonstrate that, among programmes targeting extremely poor people (livelihood development or graduation) and for which there is long-term evidence available, the graduation approach seems to have the greatest impact per dollar, with a positive impact on economic indicators that persists over time.

Therefore; it is revealed that graduation programmes are found to be effective in the post- intervention period. However, there should be more focus on generating better evidence on cash transfer programme as an alternative approach.

3. Tools and Methodologies

3.1. Desk Review

Relevant documents are assessed to collate information and data. Desk review includes the following: a) National Social Security Strategy b) 7th FYP and MTIR of 7FYP c) 6th FYP and Final review of 7th FYP d) Implementation of the National Social Security Strategy (NSSS) e) Reports produced under the MoF project f) Reports produced under the SPPS project g) SWAPNO Project Completion Report (DFID, BIDS and HDRC). The review of reports helps to conduct a stocktaking of the sector. Henceforth, this review is used to analyse the current situation.

3.2. Sampling Technique

Proper sampling design is developed and followed with respect to sample size, allocation and selection of samples. The study identifies two Districts (Satkhira and Kurigram) where the social protection graduation programme (SWAPNO) has been conducted. A two-stage stratified random sampling technique is followed for the selection of sample and the ultimate 102 sampling households (51 from Kurigram and rest from Satkhira) who ended up their project cycle two years ago. Henceforth, applying the randomized technique, three upazilas from Kurigram namely Bhurungamari, Nageshwari and Ulipur and two upazilas from Satkhira namely Kaligonj and Tala has been selected as the study areas. After then using the baseline information and following the baseline sampling share, both intervention and control groups are selected randomly from those respective areas for data collection. Most of our questions are beneficiary specific and we ask quite a good number of questions from the respondents. Moreover, we didn't allow others to answer on behalf of the respondent. To differentiate this survey from the baseline and endline findings, this study named it as '*Livelihood Assessment Survey* (LAS)'.

Another random sampling technique has been deployed using the HIES 2016 data taking one graduation programme and cash transfer programme each. For cash transfer (widow allowance programme) and for graduation programme (vulnerable group development) have been extracted from HIES 2016 data set to compare whether people under graduation programme are more or less well of than someone receiving a smaller, but continuous cash transfer.

3.3. Questionnaire Development

A detailed questionnaire is developed keeping in mind the objectives of the study. The survey is conducted according to the sample design. The study also follows the question types and patterns from HIES, and relevant ministry data sets on beneficiaries.

3.4. Survey Methodology

The study surveys 102 beneficiaries on their experience who have participated in Strengthening Women's Ability for Productive New Opportunities (SWAPNO) programme. Among 102 samples, 68 sample beneficiaries receive SWAPNO support and interpreted as "Intervention Group" and rest are treated as "Control Group" who don't receive any support. The survey holds in 2 different Districts (Satkhira and Kurigram).

3.5. Focus Group Discussion (FGD)

This common tool of qualitative research is utilized to find out the effects, strengths, and barriers of livelihood social security programmes. This study conducts 5 Focus Group Discussions with a minimum of 8 beneficiaries in each FGD who have participated in livelihood social security programme (SWAPNO) from 2 different Districts (Satkhira and Kurigram) of Bangladesh.

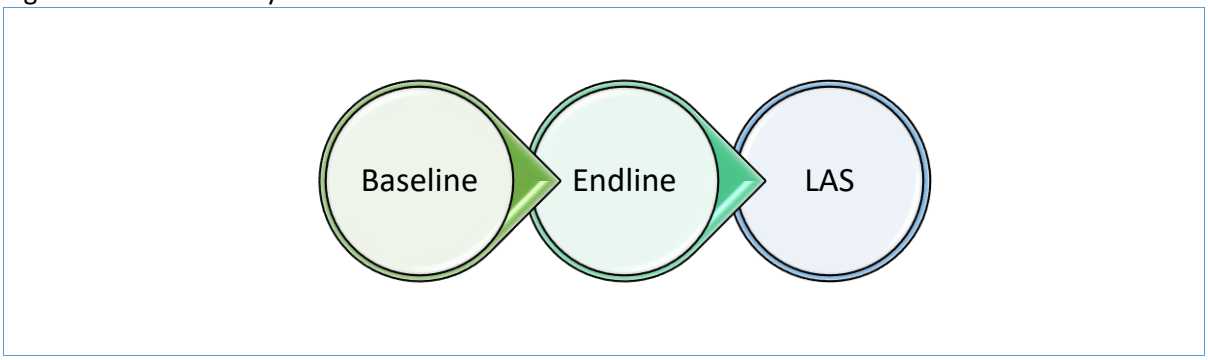
3.6. Key Informant Interview (KII)

10 Key informant interviews are organized with relevant officials from related ministries and other relevant Institutions. The interview is conducted through a certain set of queries/questions as a frame of reference. The idea is to capture the relevant focal persons' concerns, opinion and recommendations in planning a comprehensive analysis. An aggregate finding from these KIIs will provide a certain road map, which eventually helps in the implementation.

3.7. Data/Information Analysis

The primary concern group in this study is SWAPNO beneficiary disadvantaged women. Data have been analysed using STATA and excel software. Locational diversification has been taken into consideration during data analysis. More importantly, this study divides the data analysis process into three stages i.e. baseline data has been analysed to compare it with Livelihood Assessment Survey (LAS) findings and too some extent with Endline study conducted by BIDS just after the ending of the programme. The main motive behind dividing it into three stages include: the Endline survey findings do not address the sustainable impact because it is conducted just after the programme commenced. Therefore, LAS would better represent the result coming from Difference in Differences (DID) approach. The whole cluster is illustrated in Figure 4.4.

Figure 0.4: Three Analyses Cluster



Source: Authors' Compilation, 2019

Moreover, to compare the relative efficacy of cash transfer and graduation programme, HIES 2016 dataset has been used by taking livelihood related indicators. Not only that, similar dataset has been used for an econometric technique i.e. Propensity Score Matching (PSM) to ensure sustainability of social security programmes in Bangladesh.

3.7.1. Qualitative Data Analysis

Following approaches are used for qualitative data analysis:

- ✓ Process and documentation of data
- ✓ Organization of data into concept
- ✓ Observe how one concept is associated with others
- ✓ Evaluate all options and search all possible cases i.e. positive and negative
- ✓ Present the findings

3.7.2. Quantitative Data Analysis

Different analytical techniques including uni-variate analysis, bi-variate analysis and more specifically multi-variate analysis has been used in this study. Measurement unit of all variables are taken into consideration while analysing the data as special statistical techniques are followed for each level. However, some generic statistical tools that are used in this study include:

- ✓ Frequency distribution and graphical presentation
- ✓ Statistics (mean, proportion, percentage etc.)
- ✓ Cross tabulation
- ✓ Comparative analysis (DID and PSM)

3.7.3. Difference in Differences (DID)

To explore how double difference method works, please see Table 4.1.[7] The column below distinguishes between groups with and without the programme. This study differentiates – those who receive the programme (I) and do not receive the programme (C). The row distinguishes baseline and livelihood assessment survey as (0 and 1). Consider for example – income; before joining the programme, one would expect that difference between (I_0 - C_0) is close to zero but after programme intervention (I_1 - C_1) will not be zero. The DID estimates that, by subcontracting between the groups (I_0 - C_0) from the difference after the programme has been implemented (I_1 - C_1) provides the unobservable difference between the two groups, thus giving average programme effects.

Table 0.1: Calculation of the DID Estimate of Average Programme Effect

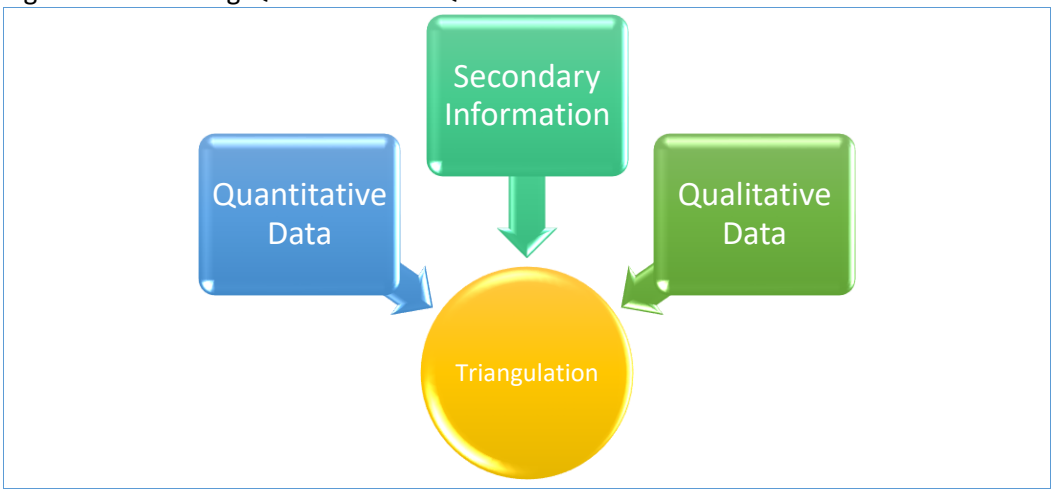
Survey	Intervention Group (I)	Control Group (C)	Difference across Groups
LAS	I_1	C_1	I_1 - C_1
Baseline	I_0	C_0	I_0 - C_0
Difference Across Time	I_1 - I_0	C_1 - C_0	**DID = (I_1 - C_1) - (I_0 - C_0)**

Source: Maluccio and Flores, 2005

3.8. Triangulation

To get rigorous inferences from information, both qualitative and quantitative techniques have been accomplished separately and their corresponding outcomes have been synthesized (Figure 4.5).

Figure 0.5: Blending Qualitative and Quantitative Outcomes



Source: Authors' Compilation, 2019

3.9. Limitations

Research limitations are as a result of constraints in designing the research methodology. The following are some of the drawbacks that have affected the findings and conclusions of this study:

[7] Maluccio JA and Flores R (2005) : Impact evaluation of a conditional cash transfer program. The Nicaraguan Red de Protección Social. Research Report 141. Washington DC: International Food Policy Research Institute.

3.9.1. Lack of Previous Research Studies on the Topic

It is revealed that, SWAPNO is a relatively new intervention and a limited number of studies has been conducted under graduation programmes. Therefore, this study fails to establish concrete evidence in majority of the cases to ensure sustainability of graduation livelihood approach. However, the researchers have tried to overcome the limitations by referring to a number of different published literature sources, in order to establish links with the present study outcome.

3.9.2. Insufficient Sample Size

While conducting a study, it is important to have a minimum sample size, in order to reach a valid conclusion. Hence, a small sample size predominantly limits the reflection of the appropriate population concerned in this study. As a result of budget constraints and short time frame in implementing this study, the study failed to cover a large segment of the population to reach a precise result.

3.9.3. Problems in Identifying Sample Households

During the survey, it was very difficult to find out sampling households as a result of migration and their physical absence in the household. As the survey was conducted during the daytime, majority were engaged in their day labour activities outside their house therefore, enumerators had to wait for a long time to conduct the survey of the designated respondents.

3.9.4. Glitches in Conducting FGDs

While conducting FGDs, there were a number of problems in gathering the SWAPNO beneficiaries as there was a trade-off between participating in the survey and their day labour work. Therefore, it was very difficult for the enumerators and they had to put in a lot of effort and offer a good remuneration to the survey participants as their opportunity cost of leaving work.

3.9.5. Problems in Assessing Intervention of Other Programmes

Due to lack of baseline information of other graduation programmes, this study had no other option other than to choose only one programme i.e. SWAPNO. In that case, it is difficult to measure the impact of other programmes and compare it to the outcomes of SWAPNO intervention.

3.9.6. Time Constraints

The time available for conducting this research and measure the change over time were constrained by the deadline of submitting the report. In that case, we urge to conduct future research in order to better capture the long-term impact.

4. Overview of Social Safety Net Programmes in Bangladesh

The Social Safety Net (SSN) Programmes contribute significantly in fighting against poverty (in terms of protection and promotion), access to education, basic health care, nutrition, and financial services for the people living in the lower strata of the society. During the last two decades, the Government of Bangladesh (GoB) has been pursuing a number of social safety net programmes. Currently, there are 113 ongoing programmes under the safety net system financed through the national budget in FY 2018-19. These programmes are closely monitored by 24 ministries. These safety net programmes give special consideration particularly for the vulnerable groups including old aged people, widowed or deserted women, disabled persons, and other marginalized groups (tea-garden labourers, Harijan, Dalit, bade, small ethnic groups, fisherman community, etc.). The support comes in the form of cash, in-kind (food), asset, wage-employment, training, savings, and community support. These programmes are classified into five different categories, namely: (i) Cash Transfer (ii) Food Security (iii) Employment Generation (iv) Development Projects and (v) Miscellaneous Funds. In the last 10 years, the allocation for social protection, both in terms of coverage and beneficiaries, has been increased manifold by the GoB to ensure financial inclusion and welfare of the disadvantaged and vulnerable communities living in the country.

4.1. Glimpse of Social Security Programmes in FY 2009-10

Over time there have been observed significant changes on the key features and structures of SS programmes. The Key features of the social protection programmes of Bangladesh for FY 2009-10 have been presented in the following Table 4.2.

Table 0.2: Key features of Social Protection for FY 2009-10

Programmes	Schemes		Beneficiaries		Allocation		Monthly Transfer
	No.	%	Million Person	%	Million BDT	%	BDT
Cash Transfer	19	25.33	7.71	23.08	57,252.80	34.27	618.20
Food Transfer	7	9.33	7.96	23.81	49,324.80	29.53	516.30
Employment Generation	8	10.67	9.46	28.31	19,593.20	11.73	172.50
Development Projects	29	38.67	3.41	10.20	20,935.00	12.53	511.50
Miscellaneous Fund	12	16.00	4.88	14.60	19,952.30	11.94	340.40
Total	**75**	**100**	**33.44**	**100**	**1,67,058.10**	**100**	**2,158.77**
Coverage (% of Pop)			***23.06***				
% of GDP					***2.43***		
Population			**145**				
GDP (Nominal)					**68,67,300**		

Source: Authors' Calculation based on MoF Data, 2019

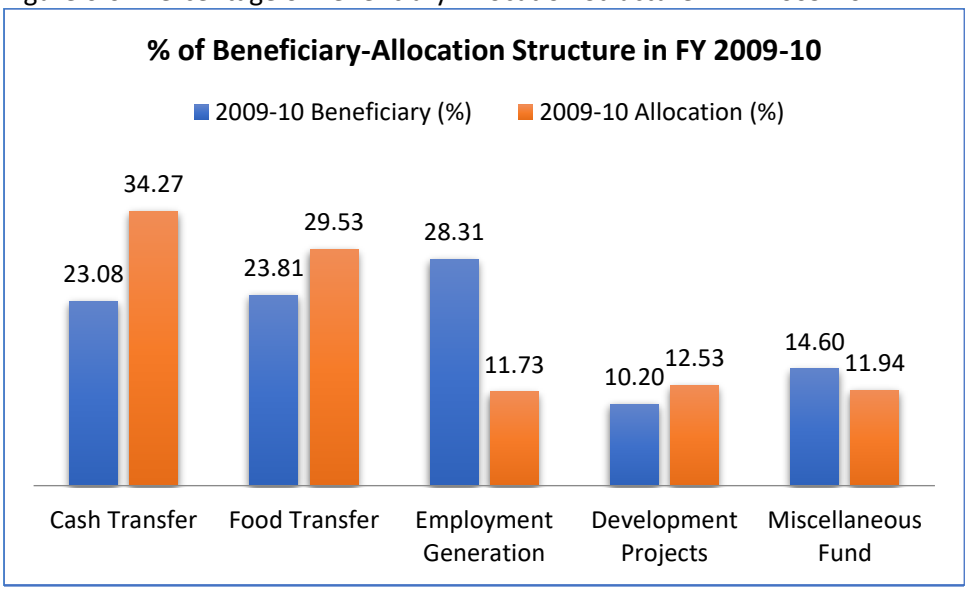
In FY 2009-10, a total of 75 social security schemes are identified for which allocations are provided in the budget. Out of 75 schemes, 19 (or 25.33 percent) schemes are under cash transfer, 7 (or 9.33 percent) schemes under food transfer, 8 (or 10.67 percent) schemes under employment generation, 29 (or 38.67 percent) schemes under development projects and remaining 12 (or 16 percent) schemes are under miscellaneous fund.

Total number beneficiaries are found to be 33.44 million persons in FY 2009-10 envisaging social protection coverage of 23.06 percent of the total population (i.e. 145 million). The number of beneficiaries under employment generation programme takes the highest number (9.46 million or 28.31 percent) of total beneficiaries. The number of beneficiaries under cash transfer, food transfer, development projects, and miscellaneous funds is found to be 7.71 million, 7.96 million, 3.41 million and 4.88 million respectively.

The total allocation for all the 75 schemes is BDT 1,67,058 million which is 2.43 percent of GDP for FY 2009-10 (i.e. 6867.30 million taka). A large part of the SP budget amounting to 57,252.80 million (or 34.27 percent of total allocation) has been allocated for cash transfer schemes. The allocation for food transfer, employment generation, development projects, and miscellaneous fund has been 49,324.80 million (or 29.53 percent of total allocation), 19,593.20 million (or 11.73 percent of total allocation), 20,935.00 million (or 12.53 percent of total allocation) and 19,951.30 million (or 11.94 percent of total allocation) respectively.

It is revealed that, there remain some inconsistency in between allocation and beneficiary structure for each of the concerned programme in FY 2009-10 (see Figure 4.6). For instance, the maximum numbers of beneficiaries are engaged in employment generation programme, but the maximum amount of allocation is allotted on cash transfer.

Figure 0.6: Percentage of Beneficiary-Allocation Structure in FY 2009-10



Source: Authors' Calculation based on MoF Data, 2019

The allocation inconsistencies are higher for employment generation programme, i.e. 11.73 percent of allocation is spent for almost 28.31 percent of the beneficiaries- implying a very small share of transfer among the beneficiaries concerned. On the other hand, for cash transfer, 34.27 percent allocation is spent for only 23.08 percent of the beneficiaries- implying a relatively large amount of transfer under these schemes. Higher allocation for cash transfer scheme is due to the inclusion of the pension scheme of the government employees and freedom fighters' scheme. Moreover, it is witnessed that, more than 60 percent of the budget allocation is allotted for cash and food transfer programme, thereby; there is a trade-off since there is relatively lower allocation in the employment generation, development projects and some other miscellaneous programmes.

4.2. Glimpse of Social Security Programmes in FY 2015-16

The number of social protection schemes has been getting almost double in FY 2015-16 than in FY 2009-10 (with a growth of 8.67 percent). The increase in schemes is also accompanied by changes in beneficiary coverage and budget allocation. The Key features of the social protection schemes of Bangladesh for FY 2015-16 have been presented in the following Table 4.3.

Table 0.3: Key features of Social Protection for FY 2015-16

Programmes	Schemes		Beneficiaries		Allocation		Monthly Transfer
	No.	%	Million Person	%	Million BDT	%	BDT
Cash Transfer	24	17.52	9.12	18.44	1,76,672.90	49.11	1613.98
Food Transfer	7	5.11	6.50	13.13	53,534.10	14.88	686.67
Employment Generation	21	15.33	5.45	11.01	31,209.90	8.68	477.65
Development Projects	73	53.28	27.70	56.00	88,860.80	24.70	267.31
Miscellaneous Fund	12	8.76	0.70	1.42	9,472.80	2.63	1121.31
Total	**137**	**100**	**49.46**	**100**	**3,59,750.50**	**100**	**4166.93**
Coverage (% of Pop)			***30.92***				
% of GDP					***2.10***		
Population			**160**				
GDP (Nominal)					**1,71,67,000**		

Source: Authors' Calculation based on MoF Data, 2019

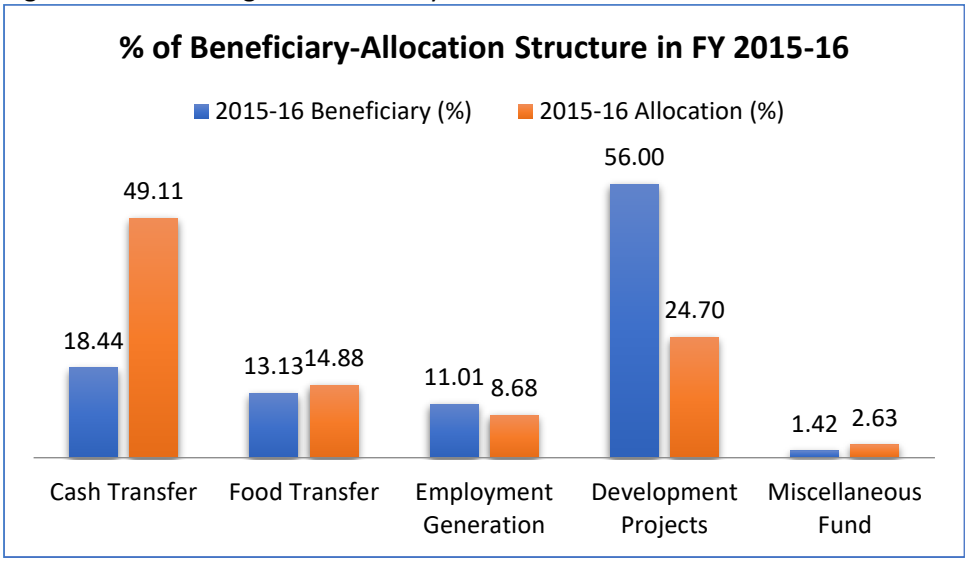
In FY 2015-16, the number of schemes under cash transfer, employment generation, and development projects increased with an addition of 5, 13 and 44 projects respectively as compared with FY 2009-10. There is a significant jump with 151.7 percent growth in development projects between these two periods; whereas the number of schemes under food transfer and miscellaneous funds remain unchanged at 7 and 12 projects respectively.

Total number of beneficiaries covered in the budget of FY 2015-16 equalled 49.46 million persons which is 30.92 percent of total population (i.e. 160 million) in 2016 suggesting a growth of 48 percent compared to FY 2009-10. The highest number of beneficiaries is taken under the development projects which is 27.70 million or 56 percent of total beneficiaries. The number of beneficiaries under cash transfer, food transfer, employment generation, and miscellaneous fund is 9.12 million (or 18.44 percent of total beneficiaries), 6.50 million (or 13.13 percent of total beneficiaries), 5.45 million (or 11.01 percent of total beneficiaries) and 0.70 million (or 1.42 percent of total beneficiaries) respectively. Remarkable changes are witnessed in between FY 2015-16 and FY 2009-10. For instance, in FY 2009-10 the maximum number of beneficiaries were under employment generation but in FY 2015-16 development projects have been associated with maximum numbers of beneficiaries. Moreover, compared with FY 2009-10, there remains scale down of beneficiaries under food transfer, employment generation, and miscellaneous funded projects whereas the share of beneficiaries is escalated under cash transfer and development projects.

The total allocation for all the 137 schemes is BDT 3,59,750.50 million which is 115 percent greater than the total allocation of FY 2009-10. The allocation is 2.10 percent of GDP in FY 2015-16 (i.e. 1,71,67,000 million taka) which was 2.43 percent in FY 2009-10 suggesting a deterioration in SP allocation growth in comparison to GDP expansion. Moreover, in terms of percentage of allocation, SP budget on cash transfer and miscellaneous projects increase but on the flip side, there is a down toward of food transfer, employment generation, and development projects.

Some noticeable imbalances are revealed in between the allocation structure and beneficiaries covered. The following Figure 4.7 highlights this inconsistency between the structures of allocation and beneficiary in FY 2015-16.

Figure 0.7: Percentage of Beneficiary-Allocation Structure in FY 2015-16



Source: Authors' Calculation based on MoF Data, 2019

It is perceived that; the maximum number of beneficiaries is engaged with development projects, but the maximum amount of allocation is allotted to the Cash transfer. The allocation inconsistencies are highly observed in cash transfer schemes - implying relatively large amount transfer under these schemes. On the other hand, for development projects, only 24.70 percent of allocation is spent for 56.00 percent of the beneficiaries- implying a very small amount transfer under these schemes. For cash transfer, food transfer and miscellaneous funds, the percentage of allocation is greater than the percentage of the beneficiaries which are balanced by the relatively lower share in the employment generation programme and development projects.

4.3. Glimpse of Social Security Programmes in FY 2018-19

The number of social projection schemes has been getting reduced in FY 2018-19 with compared to FY 2015-16 (113 schemes in FY 2018-19 which was 137 in FY 2015-16). The change in schemes is also accompanied by changes in beneficiary coverage and budget allocation. The Key features of the social protection schemes of Bangladesh for FY 2018-19 have been presented in Table 4.4.

Table 0.4: Key features of Social Protection for FY 2018-19

Programmes	**Schemes**		**Beneficiaries**		**Allocation**		**Monthly Transfer**
	No.	**%**	**Million Person**	**%**	**Million BDT**	**%**	**BDT**
Cash Transfer	24	21.24	14.17	26.94	3,48,930.10	54.72	2051.39
Food Transfer	7	6.19	6.79	12.91	66,971.60	10.50	821.90
Employment Generation	16	14.16	10.07	19.14	45,275.10	7.10	374.68
Development Projects	49	43.36	20.36	38.70	1,54,764.60	24.27	633.36
Miscellaneous Fund	17	15.04	1.22	2.31	21,718.50	3.41	1488.38
Total	**113**	**100**	**52.61**	**100**	**6,37,659.90**	**100**	**5369.72**
Coverage (% of Pop)			***32.34***				
% of GDP					***2.51***		
Population			**162.7**				
GDP (Nominal)					**2,53,78,000**		

Source: Authors' Calculation based on MoF Data, 2019

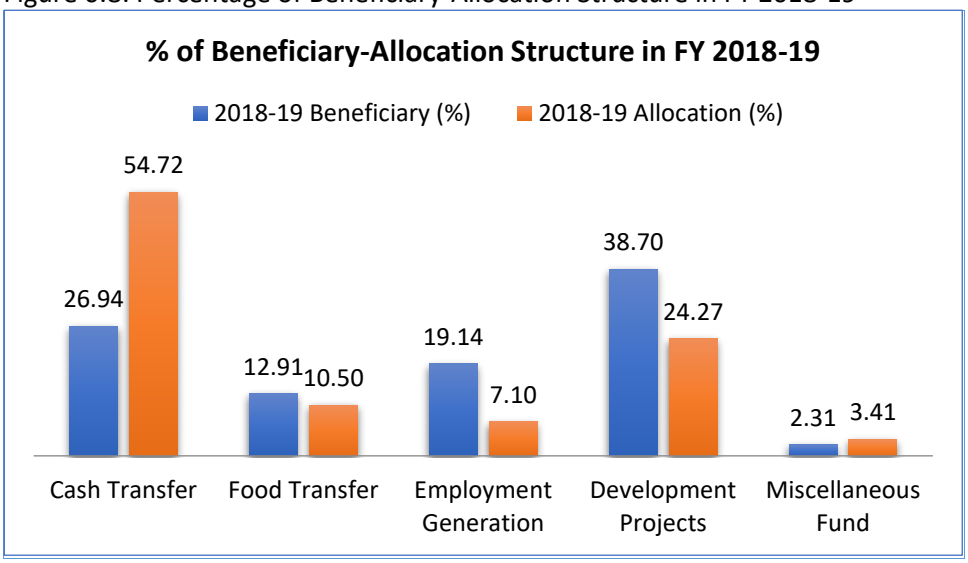
It is perceived that, in FY 2018-19, the number of schemes under employment generation programmes and development projects will decrease whereas, the number of schemes under miscellaneous funds will increase and the number of schemes under cash transfer and food transfer will remain unchanged.

A total of 52.61 million persons are covered in FY 2018-19 suggesting growth in beneficiary coverage by about 6.35 percent over FY 2015-16. A large share of beneficiaries (43.36 percent) is covered under development projects. In terms of beneficiary coverage, there are marked changes between FY 2015-16 and FY 2018-19. Over the time period, there is a scale down of employment generation and development projects however, allocation of cash and food transfer projects are constant with an increase of miscellaneous projects.

The total allocation for all the 113 schemes is BDT 6,37,659.9 million which is 77.25 percent greater than the total allocation of FY 2015-16. The allocation is 2.51 percent of GDP in FY 2018-19 (i.e. 2,53,78,000 million taka) which was 2.10 percent in FY 2015-16 suggesting an improvement in growth of SP allocation in comparison to GDP expansion. It is revealed that, the highest percentage of SP budget is spent on cash transfer schemes and miscellaneous fund whereas, relatively lower share is allotted on food transfer, employment generation, and development projects.

Noticeable imbalances are perceived between the structures of allocation and beneficiary coverage in FY 2018-19. The following Figure 4.8 highlights this inconsistency between the structures of allocation and beneficiary in FY 2018-19.

Figure 0.8: Percentage of Beneficiary-Allocation Structure in FY 2018-19

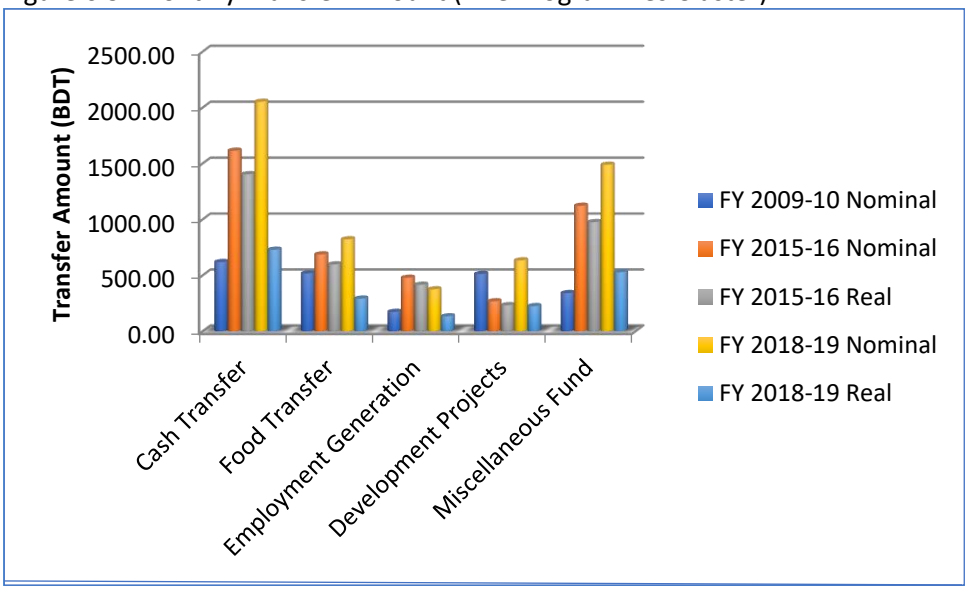


Source: Authors' Calculation based on MoF Data, 2019

Figure 4.8 represents that; the maximum number of beneficiaries are engaged with development projects while the maximum amount of allocation is allotted to cash transfer programmes, but the magnitude of the value is different in FY 2018-19. The magnitude of the difference is higher for cash transfer, i.e. 54.72 percent allocation is spent for only 26.94 percent of the beneficiaries- implying a relatively large transfer under these schemes. On the other hand, for development funded schemes only 24.27 percent of allocation is spent for 38.70 percent of the beneficiaries- implying a very small transfer under these schemes.

This study assesses the monthly transfer amount of each of the five programmes clusters both in nominal and real terms for three fiscal years FY 2009-10, FY 2015-16, and FY 2018-19. In this stage, to capture the real value FY 2009-10 has been taken as a reference point. This is illustrated in Figure 4.9:

Figure 0.9: Monthly Transfer Amount (Five Programmes Cluster)



Source: Authors' Calculation based on MoF Data, 2019

Nominal average monthly transfer amount for cash transfer, food transfer, and miscellaneous fund have increased over time. For food transfer nominal average monthly transfer amount increased in FY 2015-16 but decreased in FY 2018-19 and for development projects nominal average monthly transfer amount decreased in the fiscal year 2015-16 but increased in 2018-19. On the other hand, for cash transfer, food transfer, employment generation, and miscellaneous fund the real average monthly transfer amount increased in FY 2015-16 but decreased in FY 2018-19. In case of development projects, the real average monthly transfer amount decreased over the periods. In short, though the nominal average monthly transfer escalates over time, the real value of money decreased which implies a decline in purchasing power. Therefore; the beneficiaries' need should be taken into consideration under different SP programmes.

The Government of Bangladesh has predominantly emphasized poverty eradication in its development strategy to reduce the poverty rate from 31.5 percent in 2010 to 15 percent by 2021 and zero percent by 2030 in order to align to the SDG target. With the fortune of comprehensive social safety net, millions have been lifted out of the grip of poverty. Mohiuddin, (2016) argues that fiscal constraints and some other loopholes including poor design of the programme inhibit the SSNP's coverage and success to its desired level.[8] That is why; poverty in Bangladesh poverty reductions are lower than expected despite various SNPs coverage. Moreover, the programmes are not fully equipped to address the full spectrum of objectives. In order to achieve these objectives, the country needs to think beyond social safety nets. For example, fiscal issues, monetary policies, job creation, wage rates, pricing and in many cases, there is a crucial need for redesigning SP programmes.

[8] The effectiveness of Social Safety Net Programmes (SNPs) in Poverty Reduction by Sheikh Mohammad Mohiuddin, 2018.

5. Long-term Effect of Livelihood Social Security

Strengthening Women's Ability for Productive New Opportunities (SWAPNO) is a typical public work-based graduation model targeting the distressed and vulnerable rural women. Under this graduation programme, women got selected who were poor; had limited economic opportunities; were widowed, divorced or deserted; were not involved in any income-earning activities; did not have access to sufficient amount of land or other productive assets; and were the primary income earners of their households. The beneficiary women were employed from 16 August 2015 to 15 February 2017 for a tenure of 18 months and each beneficiary received a total of BDT 66,450 as cash wage payments. Besides, the programme had a mandatory savings scheme (BDT 50 per working day) and each participating woman received BDT 22,150 as a graduation bonus at the end of the programme. Along with employment, SWAPNO beneficiaries also received seven basic life skill and livelihood trainings. The SWAPNO project predominantly focused on sustainability of outcomes. Moreover, this programme particularly stressed on lifting the poor out of poverty and ensured resilient livelihood so that beneficiaries become self-sufficient and no longer depend on government aid. At the same time, it emphasized on empowerment and human capital development through different awareness building sessions and training courses. From its inception, SWAPNO programme aimed at achieving dual objectives, i) maintenance of public works and ii) boost up women self-confidence and self-esteem. Considering the sustainability of the outcomes that outweighs the asset transfer programme, both government and development partners are willing to continue this project although there is a high cost of operation. Under SWAPNO programme, beneficiary women participated in different public work programmes. This engagement helped them to grow with confidence and ultimately, achieve the objective of the programme.

This livelihood social security programme highly intends to improve the sustainable mean of livelihood in case of leading an improved and dignified life. However, this study compares between treatment group and control group in order to clarify the effectiveness of this programme and try to find out whether the intervention of this programme has any significant impact on improving the sustainable means of livelihood or not.

In this study, the endline results of SWAPNO project have been compared with the results of LAS, where the DID method has not been applied for all the indicators due to unavailability of baseline information. However, Table 4.5 clarifies the indicators and their possible comparability scenario with the baseline and endline results, where the chronological order has been maintained. The analysis of these indicators helps to gauge the livelihood scenario of the control and intervention group; and investigate whether the participants are ensured with sustainable means of livelihood once they exit the programme or not.

Table 0.5: Possible Comparability of Different Indicators

Indicators	Baseline	Endline	LAS
Demographic Profile			
Education of Household Head	✓		✓
Housing, Fuel and Electricity	✓		✓
Water and Sanitation	✓		✓
Household Size	✓	✓	✓
No. of Income Earners	✓	✓	✓
Dependency Ratio	✓	✓	✓
Economic Activities			
Primary Occupation of Household		✓	✓
HH Income and Expenditure	✓	✓	✓
Other Sources of Income			✓

Ownership of Asset			
Size of Land Holdings	✓	✓	✓
Poverty Index (MPI)			✓
Food Security Index		✓	✓
Health Indicators			
Sickness and Outpatient Cost			✓
BMI Status	✓	✓	✓
Shocks and Coping Strategies			✓
Women Empowerment		✓	✓
Rights and Entitlements			✓
Knowledge about Laws			✓

Source: Authors' Compilation, 2019

5.1. Education of Household Head (Female)

Table 4.6 illustrates that literacy rate of female household heads of the intervention group is around 7 percentage point higher compared to control group in case of reading and writing a letter. Besides, the intervention group is found to be more literate than that of control group in terms of completing primary level of education. Considering the literacy rate, it is seen that 67.65 percent of the intervention group can write a letter and 14.71 percent can both read and write a letter, while they are 76.47 percent and 7.35 percent respectively for control group. On the contrary, 11.76 percent women from the intervention group have passed their class 5 education while this number is only 1.47 percent for the control group. The percentage of female household heads who have failed to complete their primary education is significantly high for both intervention group (85.29 percent) and control group (91.18 percent). However, though the rate of completion is a concern, it can be stated that literacy rate among the participatory women has increased due to different training programmes arranged under SWAPNO project.

Table 0.6: Education of Household Head (Female)

Literacy	LAS (%)		
	Control	Intervention	Diff
Literacy of Female Household Head (%)			
Can read and write a letter	7.35	14.71	7.35
Only can read a letter	5.88	2.94	-2.94
Only can write	76.47	67.65	-8.82
Illiterate	10.29	14.71	4.41
Education of Female Household Head (%)			
No Schooling	1.47	0.00	-1.47
Incomplete Primary	91.18	85.29	-5.88
Class 5 Passed	1.47	11.76	10.29
Class 8 Passed	4.41	2.94	-1.47
SSC	1.47	0.00	-1.47

Source: Authors' Compilation, 2019

5.2. Housing, Fuel and Electricity

Table 4.7 shows the current status of the intervention and control groups by housing, fuel and electricity. It is witnessed that the majority of the beneficiaries have spent their graduation bonus on reconstruction of the

house, shift to wood as a fuel materials and access to electricity. It is noticeable that 17.65 percent of the beneficiaries now stay in the semi-building house, 57.35 percent in tin-shed and 22.06 percent in bamboo made house. Notable transformation is observed in case of using fuel for cooking. For intervention group, 41.18 percent respondents now use wood as one of their primary modes of fuel. The percentage of households with access to electricity has increased for both control and intervention groups. However, applying DID method, the access to electricity for intervention group has increased at a rate higher than that of control group.

Table 0.7: Housing, Fuel and Electricity

Variable	Baseline (%)			LAS (%)			DID
	Control	Intervention	Diff	Control	Intervention	Diff	
% of Household with Different Types of House							
Building	2.94	1.49	-1.45	0	2.94	2.94	4.39
Semi-building	8.82	5.97	-2.85	20.59	17.65	-2.94	-0.09
Tin shed	58.82	44.78	-14.04	64.71	57.35	-7.36	6.68
Bamboo/Straw/Mud	29.41	47.76	18.35	14.71	22.06	7.35	-11
% of Household with Mostly Used Fuel for Cooking							
Wood	8.82	17.91	9.09	44.12	41.18	-2.94	-12.03
Straw/Jute Chalk	79.41	70.15	-9.26	50.00	54.41	4.41	13.67
Kerosene	5.88	10.45	4.57	5.88	4.41	-1.47	-6.04
% of Household with Access to Electricity	11.76	10.29	-1.47	61.76	61.76	0	1.47

Source: Authors' Compilation, 2019

5.3. Water and Sanitation

The LAS reveals that SWAPNO training programme has witnessed contradictory impact in scaling up the awareness in using water and sanitation. Table 4.8 unveils that 88.24 percent of the beneficiaries now use tube well as one of their important sources of drinking water which has decreased by 2.94 percentage point compared with the baseline outcome. Moreover, in case of using toilet, control group outperforms than intervention group in the sense that there is a downturn of using sanitary latrine for the intervention group but for control group they are shifting towards using sanitary latrine from open space or kacha latrine as compared with their baseline outcome.

Table 0.8: Water and Sanitation

Variable	Baseline (%)			LAS (%)			DID
	Control	Intervention	Diff	Control	Intervention	Diff	
Source of Water							
Tube well	97.06	91.18	-5.88	97.06	88.24	-8.82	-2.94
Pond/Water	0	1.47	1.47	0	1.47	1.47	0
Supply	2.94	7.35	4.41	2.94	10.29	7.35	2.94
Type of Toilet Use							
Sanitary	13.04	31.91	18.87	17.65	23.53	5.88	-12.99
Pacca latrine	0.00	2.13	2.13	0	5.88	5.88	3.75
Kacha latrine	82.61	63.83	-18.78	82.35	67.65	-14.7	4.08
Open space/No latrine	4.35	2.13	-2.22	0	2.94	2.94	5.16

Source: Authors' Compilation, 2019

5.4. Household Size and Number of Income Earners

Following Table 4.9 depicts that average size of the household has remained same in both baseline and LAS outcome while the number of income earners have increased. It is witnessed that, control groups possess higher number of income earners with compared to intervention counterpart. Moreover, while comparing the average age, it is quite similar in both of these groups (see Table 4.9).

Table 0.9: Household Size and No. of Income Earners

Variable	Baseline			LAS		
	Control	Intervention	Diff	Control	Intervention	Diff
Average HH Size (no.)	2.76	2.97	0.21	2.91	3.32	0.41
Average No. of Income Earner	1.09	1.12	0.03	1.65	1.57	-0.08
Average Age of Women				42.38	43.37	0.99

Source: Authors' Compilation, 2019

The average size of the household has remained same in the baseline and LAS for both control and intervention group which is about 3 persons per household. However, endline result from BIDS study shows that, there has been a slight decrease of household size in the control group (3.03 to 2.91) person whereas it is increased for the intervention group (2.93 to 3.32) person.[9] Moreover, the average age of the women is found to be quite similar in both cases of the control and intervention group while comparing LAS and endline outcome. It is noticed that, no. of income earners has been increased both in the control and intervention group which is also an indication of rising household income to maintain a good standard of living.

5.5. Dependency Ratio of Household Members

Overall dependency ratio indicates quite same scenario for both of the intervention and control group in LAS. Moreover, young age dependency is found to be higher than old age dependency. District-wise analysis has witnessed that dependency ratio is high in Kurigram than Satkhira.

Table 0.10: Dependency Ratio of Household Members

Dependency Ratio	Endline (%)		Satkhira (LAS %)		Kurigram (LAS %)		Total (LAS %)	
	Cont.	Intv.	Cont.	Intv.	Cont.	Intv.	Cont.	Intv.
Overall dependency ratio	67.00	75.00	42.85	37.5	32.43	38.16	37.50	37.82
Young age (0-14) dependency ratio	52.00	59.00	37.14	33.75	24.32	35.52	30.56	34.62
Old age (65+) dependency ratio	14.00	16.00	5.71	3.75	8.11	2.63	6.94	3.21

Source: Iqbal et al., 2017 & Authors' Compilation, 2019
Note: Cont. (Control) and Intv. (Intervention)

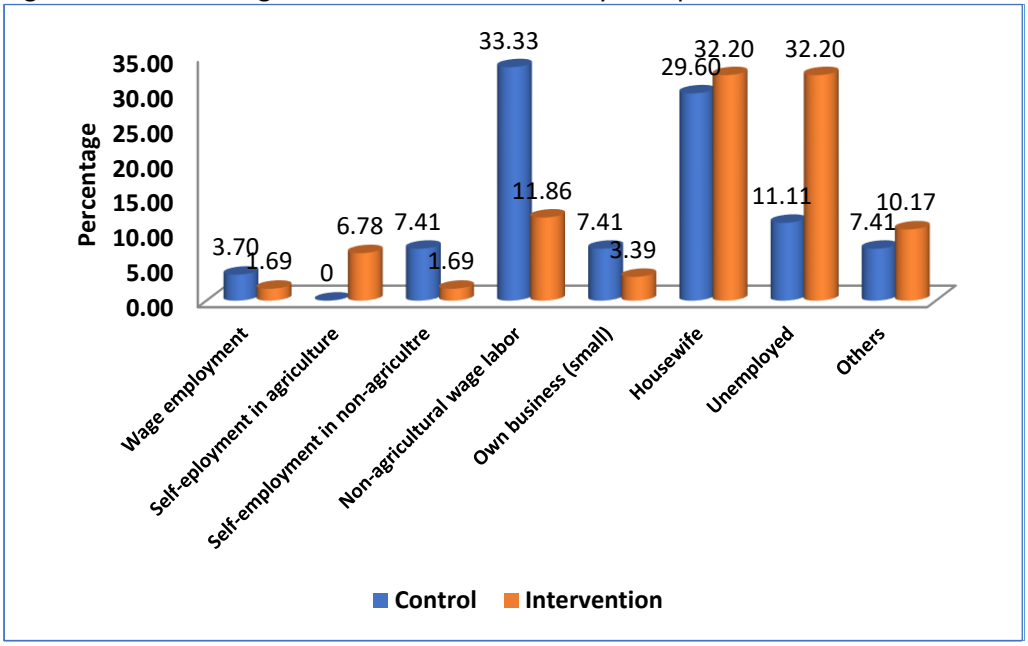
Table 4.10 highlights that overall dependency ratio is 38 percent for both control and intervention group which has decreased by 30 and 37 percentage point respectively with compared to endline result. It is revealed that compared to young age, there is a significant dropout of old age dependency in LAS survey with compared to the endline outcome. According to LAS analysis, young age dependency entails that, a household with 3 members comprise an adult female with two children. Moreover, district-wise scenario postulates that control group in Satkhira have higher young age dependency whereas it is higher for intervention group in Kurigram. On the flip side, old age dependency is higher for the control groups for both Satkhira and Kurigram.

[9] Iqbal et al. (2017). Impact Evaluation of the 1st Phase of 'SWAPNO'. Bangladesh Institute of Development Studies, p. 15.

5.6. Percentage of Household with Primary Occupation

LAS result finds that the highest share (11.86 percent) of the beneficiaries is now involved in the non-agricultural wage labour. From FGDs, it is come to know that, a larger share of beneficiary group now unemployed due to unavailability of work and slack season of agricultural farming so they are mostly engaged in the household chores or remain housewife. Nevertheless, during slack season, they are searching for works in others home, temporary wage labour as well as engage in non-agricultural activities.

Figure 0.10: Percentage of Household with Primary Occupation



Source: Authors' Compilation, 2019

Figure 4.10 illustrates that, of those employed in the intervention group nearly 12 percent of households are involved in non-agricultural activities while this share is 33.33 percent in the control group. Though control group has maintained similar occupation while compared to the endline study, there is a shifting of intervention group from agricultural wage labour to household chores.[10] Even though a large share (40.71 percent) of the household in intervention group remains housewife or unemployed but they utilize their time involving in self-employment non-agricultural activities. Moreover, during the slack period they consume what they have stored during the peak time of the agricultural season.

5.7. Household Income and Expenditure

It is to be remembered that SWAPNO beneficiaries had earned BDT 90,000 taka during their project cycle. With the help of graduation bonus, now beneficiaries have engaged them in different income generating activities. Moreover, FGDs reveal that with the help of SWAPNO training programmes, they are better informed regarding the procedure of starting and operating a small business. In addition, while comparing the economic scenario, there is a simultaneous increase in income and expenditure which is highlighted in the following Table 4.11 below:

[10] Ibid, p.17.

Table 0.11: Household Income and Expenditure

Variable	Baseline			LAS			DID
	Control	Intervention	Diff	Control	Intervention	Diff	
HH average monthly income	1,459.70	1,267.65	-192.05	7,646.00	8,687.00	1,041.00	1,233.05
HH average per capita monthly income	528.88	426.82	-102.06	2,627.49	2,616.57	-10.93	91.13
HH average monthly expenditure	3,348.70	3,181.50	-167.20	4,527.28	5,399.27	871.99	1,039.19
HH average per capita monthly expenditure	1,213.30	1,071.21	-142.08	1,555.77	1,626.29	70.52	212.60
HH average propensity to consume	2.29	2.51	0.22	0.59	0.62	0.03	-0.19

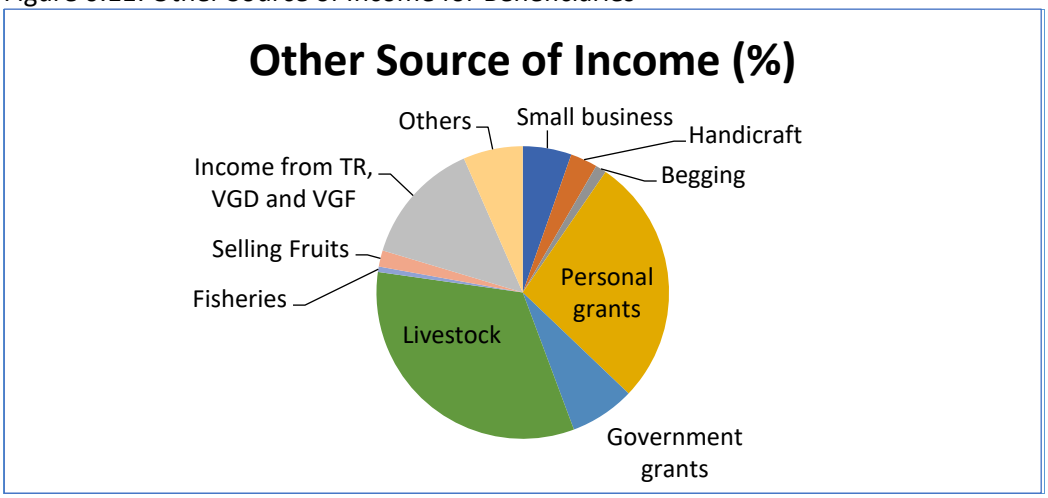
Source: Authors' Compilation, 2019

It is noticed that the average monthly income in the intervention group increases manifold (85 percent) from BDT 1,267.65 to BDT 8,687. Surprisingly, there has been a decrease in income in LAS as compared to endline[11] because; a large portion of women in the intervention group is now engaged in household activities as reported in Figure 4.10. Moreover, average per capita income though increases in the LAS as compared to baseline outcome but their respective difference is getting narrowed while comparing it with the endline result.[12] However, average propensity to consume slightly decreases in the LAS outcome as compared with baseline which is an indication that members of beneficiary member started to save money for ensuring better means of livelihood in the near future. The difference in difference (DID) value implies that SWAPNO contributes about BDT 14,797 yearly household income of the beneficiaries.

5.8. Other Sources of Income for Beneficiaries

Besides income from primary occupation, beneficiaries receive income from different other sources. Of total income, a large share comes from personal and government social safety net supports including TR, VGD and VGF. These additional sources of income highly support them during their unemployment situation by ensuring sustainable means of livelihood. It is demonstrated in the following Figure 4.11:

Figure 0.11: Other Source of Income for Beneficiaries



Source: Authors' Compilation, 2019

[11] Ibid, p. 19.
[12] Ibid, p.22.

It is noticed that about three-fifth of the income come only from three sources including personal grants, government grants and rearing livestock. It is witnessed that, their income generation from crop and non-crop source is negligible. That is why; they are more prone to invest in livestock and small businesses as their major income generating activities.

5.9. Average Size of Own Land Holdings

Table 4.12 illustrates that, there is an observable change in average size of land holdings in the post-treatment period for both of the intervention and control group. The main insight here is that smaller share in land holdings in the baseline is due to the low level of savings to purchase more land.

Table 0.12: Average Size of Own Land Holdings

Type of Land	Baseline			Endline			LAS		
	Cont.	Intv.	Diff	Cont.	Intv.	Diff	Cont.	Intv.	Diff
Homestead land (decimal)	1.34	1.92	0.58	2.04	2.19	0.15	3.09	4.00	0.91
Cultivable land (decimal)	0	0.47	0.47	20.5	18.88	-1.62	22.40	24.44	2.04

Source: Iqbal et al., 2017 & Authors' Compilation, 2019
Note: Cont. (Control) and Intv. (Intervention)

Due to the intervention of SWAPNO programme, the beneficiary group owns more homestead and cultivable lands compared to the control group. DID result implies that, the contribution of the programme brings 0.33 decimal more homesteads and 1.57 decimal more cultivable lands to the beneficiaries while comparing the difference from LAS to baseline. Therefore; result implies that beneficiaries have properly utilized the graduation bonus in purchasing homestead and cultivable lands in the post-treatment period.

5.10. Multidimensional Poverty Index (MPI)

The Oxford Poverty and Human Development Initiative have developed a new international measure of Poverty – Multidimensional Poverty Index (MPI) [13] during the 20th anniversary of United Nations Development Programme's flagship Human Development Report 2010. This method is now widely used and varied from traditional focus incorporating a range of indicators to capture the complexity of poverty. It has primarily assessed the nature and intensity of poverty of poor people who are deprived in many ways, thereby; their extent of poverty is measured. MPI indicators and their corresponding scoring are depicted in Table 4.13 below:

Table 0.13: MPI Indicators and Scoring

Indicators	Score
Education:	
i. No has completed five years of schooling	Yes =1, Otherwise =0
ii. At least one school-age child not enrolled in school	Yes =1, Otherwise =0
Health:	
i. At least one member is malnourished (BMI<18.5)	Yes =1, Otherwise =0
ii. One or more children have died	Yes =1, Otherwise =0
Standard of Living:	
i. No electricity	Yes =1, Otherwise =0
ii. No access to clean drinking water	Yes =1, Otherwise =0
iii. No access to adequate sanitation	Yes =1, Otherwise =0
iv. House has dirty floor	Yes =1, Otherwise =0

[13] Based on Sabina Alkire and Maria Emma Santos (2010). Multidimensional Poverty Index. Oxford Poverty and Human Development Initiative. University of Oxford; Maria Emma Santos and Sabina Alkireb (2011). The Multidimensional Poverty Index (MPI): Training Material for Producing National Human Development Reports (Final Draft).

v. Household uses "dirty" cooking fuel (dung, firewood and charcoal)	Yes =1, Otherwise =0
vi. Household has no car and own at most one bicycle, motorcycle, radio, refrigerator, telephone or television	Yes =1, Otherwise =0

Source: OPHI, 2010

The aforementioned indicators are assessed in this study to find out the relative share of poverty for both of the intervention and control group.

Three indicators (i.e. education, health and standard of living) are primarily assessed in this study to present the overall poverty scenario for both intervention and control group. Sub-indicator of education portrays that deprivation in years of schooling has been decreased for the intervention group compared with the control group in LAS. Moreover, deprivation from sufficient nutrition is 1.47 percent for the intervention group and 85.29 percent respondent in the intervention group doesn't face any child mortality. Moving forward to living standard, it is witnessed that, there have significant improvements in accessing electricity facilities, enjoying good sanitation status and ownership of the specific set of assets for the intervention group but still they are suffering from getting clean water, floor materials, and cooking fuel. It is highlighted in the following Table 4.14 below:

Table 0.14: MPI Indicators

Indicators	(%) of HH in Satkhira		(%) of HH in Kurigram		Total LAS (%) of HH	
	Cont.	Intv.	Cont.	Intv.	Cont.	Intv.
Education						
Deprivation in years of schooling	41.17	34.29	35.29	33.33	38.24	33.82
Deprivation in child school attendance	23.53	20.00	5.88	9.09	14.71	14.71
Health						
Deprivation for child mortality	35.29	28.57	5.88	0.00	20.59	14.71
Deprivation in nutrition	5.88	2.86	0.00	0.00	2.94	1.47
Living Standard						
Deprivation in electricity	17.65	34.29	52.94	66.67	35.29	50.00
Deprivation in adequate sanitation	35.29	42.86	0.00	18.19	17.65	30.88
Deprivation in clean drinking water	70.59	62.86	82.35	69.7	76.47	65.18
Deprivation in floor materials	94.12	85.71	100.00	96.97	97.06	91.18
Deprivation in cooking fuel	100.00	91.43	100.00	100.00	100.00	95.59
Deprivation in specific set of assets	5.88	0.00	35.29	27.27	20.59	13.24

Source: Authors' Compilation, 2019
Note: Cont. (Control) and Intv. (Intervention)

5.11. Food Security[14]

The Household Food Insecurity Access Scale (HFIAS) measures food aid programmes on the access component of household food insecurity. In total nine questions are asked about whether any specific condition is associated with the experience of food insecurity during the previous four weeks (28 days). It is calculated by summing the codes answered for each nine questions. The frequency of all nine questions is recorded as 0 if the corresponding occurrence is never. Here, the maximum attainable value is 27 if all households' response to (often) as coded 3

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

and the minimum score is 0 (if all households respond never as coded 0). The lower the HFIAS score, the better it is in term of food security.

Table 0.15: Percentage Distribution of Households According to HFIAS

HFIAS Scale	Baseline (%)			LAS (%)			DID
	Control	Intervention	Diff	Control	Intervention	Diff	
Food secure	2.94	2.99	0.05	52.94	58.82	5.88	5.83
Mild food insecure	5.88	4.48	-1.4	17.65	16.18	-1.47	-0.07
Moderate food insecure	47.06	41.79	-5.27	29.41	19.12	-10.29	-5.02
Severe food insecure	44.12	50.75	6.63	0	5.88	5.88	-0.75

Source: Authors' Compilation, 2019

Table 4.15 highlights that, SWAPNO programme brings improvement in securing good food habit as well ensuring food security at the household level. The result illustrates that, 59 percent of the respondent from the intervention group now food secured while it is only 53 percent in the control group. Moreover, LAS findings have witnessed a better scenario than that of baseline as the percentage of severe food insecure under the intervention group decreased from 51 percent (baseline) to only 6 percent during this LAS finding. Henceforth, it is justifiable to mention that, beneficiary groups are now highly food secured which is also an indication of maintaining good health and get more strength to engage in different income generating activities.

5.12. Sickness and Average Outpatient Cost

It is witnessed from Table 4.16 that 81 percent respondent from the intervention group and 71 percent from the control group remain ill in the past 30 days. Moreover, it is a good indication that, they spend quite a significant portion of money as per their outpatient cost. It is to be mentioned here that, cost varies according to the severity of disease, therefore; increasing expenditure doesn't indicate whether they are sufficiently spent for their health or not.

Table 0.16: Sickness and Average Outpatient Cost in Past 30 Days

Variable	District (%)		Total LAS (%)		
	Satkhira	Kurigram	Control	Intervention	Diff
Household (%) face sickness in the past 30 days	75.00	80.00	70.59	80.88	10.29
Average outpatient cost	686.35	940.30	940.00	745.81	-194.19

Source: Authors' Compilation, 2019

Despite of facing sickness, it is welcoming that they are maintaining a good Body Mass Index (BMI) as mentioned in the following Table 4.17 which further implies their healthy food consumption behaviour.

5.13. BMI of the Women (kg/meter-squared)

There has been no significant change in BMI in LAS compared with the Baseline. BMI of the women increases both for intervention and control group while comparing it with the endline. Even though, women are involved in physically stringent jobs but still they have reported in FGDs, their health condition increases over the time period and result also exhibits that, women under the intervention group maintain a good BMI over the control group. It implies that, though the improvement is very low but according to their statement, they are maintaining good health even though they are engaged in physically demanding works. It is illustrated in the following Table 4.17 below:

Table 0.17: BMI of the Women (kg/meter-sq.)

BMI Status	Baseline			Endline			LAS		
	Cont.	Intv.	Diff	Cont.	Intv.	Diff	Cont.	Intv.	Diff
BMI	20.34	21.03	0.69	21.21	21.15	-0.06	22.77	23.71	0.94

Source: Authors' Compilation, 2019
Note: Cont. (Control) and Intv. (Intervention)

According to WHO, the cut-off point taken in this paper of BMI is 18.5kg/meter-sq. Women with (<18.5 BMI) are considered to be deprived of basic nutrition.

Table 0.18: BMI Status

BMI Status	Satkhira (%)		Kurigram (%)		Total LAS (%)	
	Control	Intervention	Control	Intervention	Control	Intervention
Malnourished (BMI<18.5)	28.57	71.43	40	60	35.29	64.71
Not Malnourished (BMI>18.5)	33.33	66.67	32.50	67.50	32.94	67.06

Source: Authors' Compilation, 2019

Table 4.18 illustrates that, 67.06 percent of the respondent under the intervention group are not malnourished while this share is only 32.94 percent for the control group. Considering the district-wise scenario, Kurigram performs slightly better than Satkhira in terms of maintaining a good BMI status.

5.14. Shocks and Coping Strategies

One of the important objectives under SWAPNO intervention is that beneficiaries will be more climate change resilient and better aware of coping strategies. The two districts that are taken into consideration are more disaster-prone (Satkhira) and Monga-prone (Kurigram) areas. Therefore, such programme intervention, help beneficiaries learn different coping strategies in order to ensure sustainable means of livelihood.

Table 0.19: Shock and Coping Strategies

Variable	LAS (%)		
	Control	Intervention	Diff
% of Household Face Any Shock in the Past 12 Months	18.18	33.82	15.64
Household (%) with Coping Strategies			
Unconditional help provided by relatives	16.67	13.04	-3.62
Unconditional help provided by local government	16.67	0.00	-16.67
Change cropping practices	16.67	43.48	26.81
Took one or more farm ways employment	0.00	4.35	4.35
Migration of household members	33.33	4.35	-28.99
Relied on savings	16.67	8.70	-7.97
Reduce expenditure on health and education	0.00	26.09	26.09

Source: Authors' Compilation, 2019

Table 4.19 highlights that, 33.82 percent of the respondents under intervention group face shock in the past 12 months whereas this share is only 18.18 percent for the control group. The high share for the intervention group is due to their housing location near disaster prone areas. Moreover, different coping mechanisms are followed by the respondents and beneficiary groups are much ahead in case of taking different coping strategies. Of those strategies, 43.48 percent respondents under intervention group change cropping patterns followed by reducing

their health and educational expense (26.09 percent) and taking unconditional help provided by their relatives (13.04 percent).

5.15. Women Empowerment

In order to capture the women empowerment through self-confidence, LAS asks several questions related to empowerment indicators. LAS completely relies on recall method in the absence of baseline data for both of the intervention and control group. Result is displayed in the following Table 4.20:

Table 0.20: Women Empowerment through Enhancing Self-confidence

Future Plan for Life	Endline (%)			LAS (%)		
	Control	Intervention	Diff	Control	Intervention	Diff
Have future plan for life	64.84	87.13	22.29	78.79	83.33	4.54
How Optimistic are You in Implementing Your Future Plan?						
Not quite optimistic	1.25	0	-1.25	3.70	4.76	1.06
Somewhat optimistic	25.44	12.88	-12.56	48.15	39.68	-8.47
Fairly optimistic	69.83	70.13	0.30	37.04	36.51	-0.53
Very optimistic	3.49	17.00	13.51	11.11	19.05	7.94
In retrospect, do you think the goal you set two years ago are accomplished?						
Accomplished	5.32	8.27	2.95	0	4.92	4.92
Somewhat accomplished	45.21	79.14	33.93	77.42	90.16	12.74
Nothing accomplished	49.47	12.59	-36.88	22.58	4.92	-17.66

Source: Iqbal et al., 2017 & Authors' Compilation, 2019

It is generally granted that, women with high self-efficacy would definitely view goal as a challenge whereas with low self-efficacy the same goal is beyond achievable. Result demonstrates that a large percentage (83.33 percent) of women under intervention group have a future plan for life and of them about 36.51 percent are fairly optimistic to implement their future plan. Moreover, while comparing with endline, 90 percent of women in the intervention group somewhat accomplished their goal that they set two years ago whereas for control group it is 77 percent. That implies that - women are now more confident enough than two years ago to successfully implement their goal as a better means of livelihood.

5.16. Rights and Entitlements

The knowledge of the respondent is tested through their awareness of rights and entitlements. About 97.06 percent of the beneficiary group has knowledge on inheritance rights followed by citizen's rights (86.76 percent). It is witnessed that, more than 50 percent of the respondents have knowledge on (food, shelter, right to vote and right to receive service from UP and Upazila). Table 4.21 highlights that, the intervention of SWAPNO training programme successfully enhances the knowledge of the beneficiary group over the control group.

Table 0.21: Rights and Entitlements

Variable Name	Response	Control (%)	Intervention (%)
Aware of inheritance rights	Yes	96.97	97.06
Aware of citizen's rights	Yes	70.79	86.76
Frequency of each Aspect of Citizens' Rights			
Food	Yes	55.88	58.82
Cloth	Yes	29.41	36.76
Shelter	Yes	44.12	51.47

Education	Yes	20.59	29.41
Healthcare services	Yes	38.24	47.06
Right to vote	Yes	41.18	52.94
Right to receive service from UP and Upazila	Yes	44.12	55.88

Source: Authors' Compilation, 2019

5.17. Knowledge about Laws

Respondents are highly aware of certain laws related to child marriage and dowry. Results portray that, intervention groups are more aware of laws compared to the control group. It is illustrated in the following Table 4.22 below:

Table 0.22: Knowledge about Laws

Variable Name	Response	Control (%)	Intervention (%)
Child Marriage Law			
Aware about child marriage law	Yes	94.12	98.53
	Don't Know	5.88	1.47
Reported minimum wage for marriage of girl child (years)	12	3.03	0
	15	3.03	1.47
	16	3.03	0
	18	87.88	95.59
	20	3.03	2.94
Have paid or will pay dowry in daughter's marriage	Yes	35.29	25.00
Have taken or will take dowry in son's marriage	Yes	23.53	14.93
Aware that receiving or paying dowry is a punishable offense	Yes	93.94	97.01

Source: Authors' Compilation, 2019

Table demonstrates that 98.53 percent of the beneficiaries are better aware of child marriage while it is 94.12 percent for the control group. Almost all of the respondents both in control (87.88 percent) and intervention group (95.59 percent) postulate that, the minimum age for marriage of a child is 18 years. Even though, some of the respondents still take/provide dowry during their son's/daughter's marriage but the majority of the respondents (97.01 percent in the intervention group and 93.94 percent in the control group) are well aware that this is a punishable offense.

The aforementioned explanations certainly exhibit that, SWAPNO intervention has positive impact on the livelihood of the programme beneficiaries in terms of improving housing condition, generating and diversifying more income generating activities, maintaining good hygiene and sanitation, BMI status and enhancing diverse knowledge and rights. Above all, while comparing the post-treatment scenario with baseline, in majority cases intervention groups outperform over control group in securing better livelihood status. Therefore, it is justified that SWAPNO intervention has a positive impact in successfully uplift the condition of the poor people to come out of poverty trap. In that respect, considering its importance, this programme should be expanded in other disaster prone and poverty intensive areas so to ensure sustainable means of livelihood of the poverty-stricken people.

6. Graduation and Cash Transfer Debate – A Comparative Exploration

Bangladesh now stands at the crossroads of maintaining the momentum of high economic growth and dealing with rising inequality. Social protection measures can play an instrumental role in narrowing inequality through the distribution of some of the social entitlements among those who are left behind (Fahmida and Saadat, 2018).[15] To establish a social protection system that is inclusive and mitigates lifecycle risks, GoB has already enacted National Social Security Strategy (NSSS). Under this strategy, several safety net programmes are operated. But the existing Social Safety Net is hampered by fragmentation, poor targeting, inefficiency, and leakage.

This section tries to investigate the relative efficacy of the cash transfer and graduation programme. In doing so, HIES 2016 dataset has been used to extract two particular programmes under graduation and cash transfer. For graduation, VGD and for cash transfer widow allowance programme has been used in this study. The sole motive behind taking those two programmes is their similarity in nature in terms of particular importance on deserted women and eligibility criteria to be included in this programme. Indicators are chosen and analysed to compare changes in their livelihood scenario keeping in consideration of the following objective: are individuals more or less well-off than someone receiving smaller, but continuous cash transfer?

Before moving on, this study tries to investigate the national picture of these particular two programmes in terms of beneficiary coverage, amount of budget allocation and percentage of total budget distribution in these two programmes. A short description of these two programmes is demonstrated below:

6.1. Cash Transfer Programmes in Bangladesh

Cash transfers are one form of social transfer. It is defined by the World Bank (WB) - as the provision of assistance in the form of cash to the poor or to those who face a probable risk of falling into poverty in the absence of the transfer. The main objective of these programmes is to increase real income of the poor and vulnerable households. Cash transfers can take a variety of forms, including pensions, child benefits, poverty-targeted transfers, and seasonal transfers. The effect of such transfers on poverty reduction has received great attention in national and global policy debate. Several cash transfer programmes are currently operating in Bangladesh. Allowance for the Widow Deserted and Destitute Women, Old Age Allowance (OAA), Allowance for the financially Insolvent Disabled, Honorarium for Freedom Fighter, Secondary and Higher Secondary Stipend, primary School Stipend, Agriculture Rehabilitation, etc. are some of them. This study particularly focuses on Allowance for the Widow, Deserted and Destitute Women programme. A short description of this program is highlighted below:

6.1.1. Allowance for the Widow, Deserted and Destitute Women

In Bangladesh, Allowance for the Widow, Deserted and Destitute Women programme started in the fiscal year 1998-99 under the Ministry of Social Welfare (MoSW). The main objective of the programme includes: a) Ensure socio-economic development and social security for the Widow and Husband's Deserted Destitute Women, b) Increase the dignity of Widow and Husband's Deserted Destitute Women within family and community, c) Strengthen mental health through grant to Widow and Husband's Deserted Destitute Women and d) Grant for Medicare and increase of Nutritional support. In the selection process, the priority is given to the senior most widow/deserted destitute person, economically distressed families, asset-less migrated and landless. While concerning social condition, women having no belongings and separated from family get priority accordingly. The programme started with taking 4.03 lakh beneficiaries with a total budget of 4.03 crore taka, where each person gets cash 100 taka once in a year, and after then both the number of beneficiaries and total allocation per person gradually increases. In the fiscal year 2018-19, the number of beneficiaries reaches at 14 lakhs with

[15] Towards a Social Protection Strategy for Bangladesh, CPD Working Paper 117, Fahmida Khatun and Syed Yusuf Saadat, 2018.

a total budget allocation of 840 crore taka and simultaneously per head monthly allowance reaches at BDT 500. Table 4.23 represents the gradual development of the programme over the last 10 years.

Table 0.23: Allowance for the Widow, Deserted and Destitute Woman

Fiscal Year	Number of Beneficiary (Lakh)	As % of Total SS Beneficiary	Per head per month Allowance (BDT)	Amount of Budget (Core Taka)	As % of Total SS Budget
2008-09	9.00	0.94	250.00	270.00	1.95
2009-10	9.20	1.08	300.00	331.20	1.98
2010-11	9.20	0.85	300.00	331.20	1.59
2011-12	9.20	0.94	300.00	331.20	1.51
2012-13	9.20	1.01	300.00	331.20	1.43
2013-14	10.12	0.15	300.00	364.32	1.37
2014-15	10.12	0.14	400.00	485.76	1.59
2015-16	11.13	0.17	400.00	534.34	1.49
2016-17	11.50	0.21	500.00	690.00	1.69
2017-18	12.65	0.17	500.00	759.00	1.56
2018-19	14.00		500.00	840.00	

Source: GED, 2019

6.2. Graduation Programmes in Bangladesh

Graduation programmes are other types of Social Protection (SP) which focuses on sustainability. The main objectives of these programmes are to break the cycle of poverty, meet emergency needs of food, and promote economic and social development. Several types of graduation programmes are currently operating all over the world which basically targeted ultra-poor community to bring a sustainable improvement on their livelihood. Vulnerable Group Development (VGD), Vulnerable Group Feeding (VGF), Rural Employment Opportunity for Public Asset (REOPA), Skills for Employment Investment Programme, Employment Generation Programme for the Poorest (EGPP), SWAPNO, Nuton Jibon, Chars Livelihoods Programme (CLP), SHIREE (Stimulating Household Improvements resulting in Economic Empowerment), One House, One Farm, Rural Maintenance Programme, etc. are some of the top graduation programmes currently operating in Bangladesh. A short description of VGD programme is highlighted below:

6.2.1. Vulnerable Group Development (VGD)

VGD is the 7th largest social safety net programme in Bangladesh in terms of both budget and number of beneficiaries in the fiscal year 2017-18. It is operated by the Ministry of Women and Child Affairs (MoWCA) and assisted by the World Food Programme (WFP) and BRAC. The main objective of the programme is to improve the quality of life and enhance the productive income-generating opportunities for poor and vulnerable women. It is a cycle of two years programme that provides in-kind transfer associated with some livelihood training on Income Generating Activities (IGA), Nutrition, Primary Health, Human Rights, AIDs, Reproductive Health, Gender, and Environment issues. There are two different forms of VGD: Income Generating Vulnerable Group Development (IGVGD) and Food Security Vulnerable Group Development (FSVGD). IGVGD participants are provided with a monthly food ration of 30 kilograms of wheat/rice or 25 kilograms of fortified flour (*atta*) along with IGA training while FSVGD participants are provided with cash support of BDT 100 along with 15 kilograms' flour. The IGVGD participants also have access to saving scheme and two micro-finance loans to be repaid within the programme cycle. To be eligible for VGD, a potential beneficiary must meet four of the following criteria:

a) Widowed, separated/deserted/divorced or has a husband who is unable to work;
b) Has severe food insecurity;
c) Landless or owns less than 0.5 acre of land;

d) Has very low and irregular family income or works as casual labour;
e) A household headed by a woman;

Besides these, to be eligible, a woman cannot get benefit simultaneously from other development programmes. In the last 10 years, the allocation for VGD, both in terms of coverage and amount, has been increased manifold by the government. The budget allocation in FY 2018-19 is BDT 1,685.07 crore which was BDT 730.85 crore in FY 2008-09. Moreover, the number of beneficiaries in FY 2017-18 was 139.81 lakh which was 88.33 lakh in FY 2008-09. Table 4.24 represents the gradual development of the programme over the last 10 years.

Table 0.24: Gradual Development of VGD

Fiscal Year	Number of Beneficiary (Lakh)	As % of Total SS Beneficiary	Amount of Budget (Core Taka)	As % of Total SS Budget
2008-09	88.33	9.22	730.85	5.28
2009-10	88.33	10.36	595.17	3.56
2010-11	88.33	8.18	729.92	3.49
2011-12	88.33	9.01	781.02	3.55
2012-13	90.33	9.95	858.86	3.72
2013-14	91.33	1.36	836.77	3.14
2014-15	91.33	1.23	886.92	2.90
2015-16	91.33	1.40	989.94	2.75
2016-17	120.00	2.23	1,191.85	2.92
2017-18	139.81	1.86	1,605.70	3.31
2018-19			1,685.07	

Source: GED, 2019

The aforementioned scenario clearly indicates that, GoB places particular importance of enhancing the current operation of graduation programmes in Bangladesh both in terms of beneficiary coverage and amount of budget allocation. The recent success of BRAC's TUP programmes significantly raises the importance of greater investment in graduation programme which not only uplift the poor people out of extreme poverty but also enhance the public works programme in Bangladesh.

6.3. Cash Transfer and Graduation Programme – Cross-Cutting Analysis

This study particularly focuses on these two programmes to compare sustainability in reducing poverty and prevent people from slipping into the poverty trap. The vital reason behind choosing these two programmes is to analyse whether graduation programme stands above cash transfer and withstand as a sustainable social transfer programme or not. It is elaborately analysed below:

6.3.1. Socio-economic Scenario

Table 4.25 demonstrates the result of socio-economic scenario that is extracted from HIES dataset. This table illustrates the current socio-economic stance of cash transfer and graduation programme in terms of the education and health expense, ownership of operating land, daily wage and food and non-food expense.

Table 0.25: Socio-economic Scenario

Particulars	HIES 2016	
	Continuous Cash Transfer Programme	Graduation Programme
Average Age (Years)	29	31
Avg. Educational Expense (BDT)	8,736	7,615

Avg. Hospital Cost (BDT)	1,644	1,316
Avg. Operating Land (Decimal)	48	59
Avg. Daily Wage (BDT)	353	346
Avg. Gross Remuneration per Month (BDT)	11,585	11,523
Avg. Daily Food Expense (BDT)	35	31
Avg. Monthly Non-Food Expense (BDT)	150	128

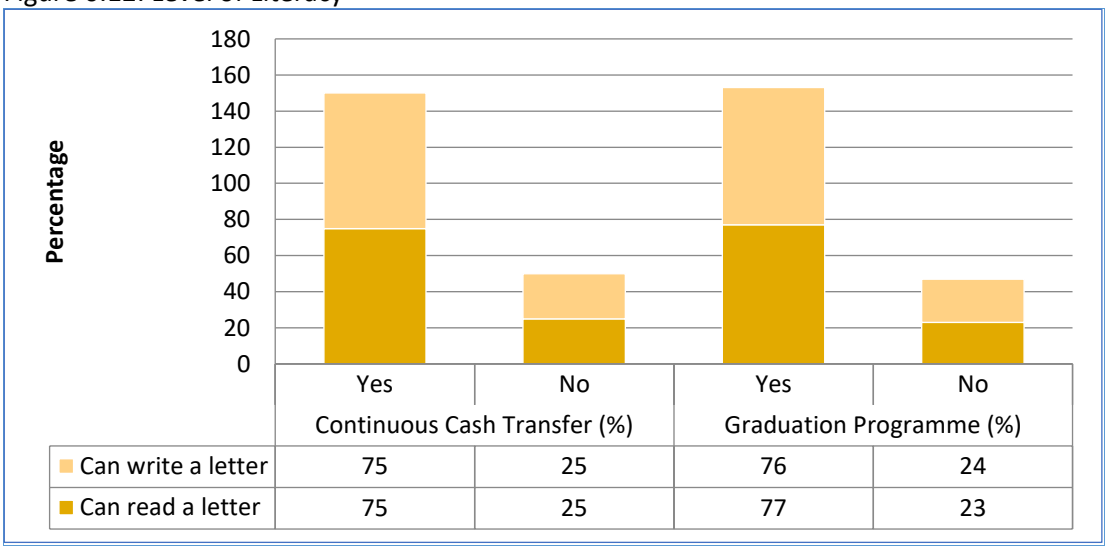
Source: Authors' Compilation, 2019

Result illustrates that, people under continuous cash transfer programme spend slightly more on education, food and non-food items than people under graduation programme. But people under graduation programme hold more operating land on average than people under continuous cash transfer programme. The insight here is that, graduation programme provides more attention to sustainable livelihood and a participant can accumulate assets during and after the programme. The result also shows that, the average daily wage of both types of programmes are almost same but it is obligatory to mention here that, in graduation programme the participants get different incentive i.e. training on income generating activities, knowledge on health hygiene along with basic rights which are absent in the cash transfer programme.

6.3.2. Level of Literacy

Under the literacy broad head, two particular sub-indicators are taken into consideration. Literacy matters most especially for the low-income group getting social safety net support to gauge whether they understand their rights as well as get proper privileges from the programme concerned or not. Figure 4.12 illustrates the level of literacy observed in the HIES 2016 data set.

Figure 0.12: Level of Literacy



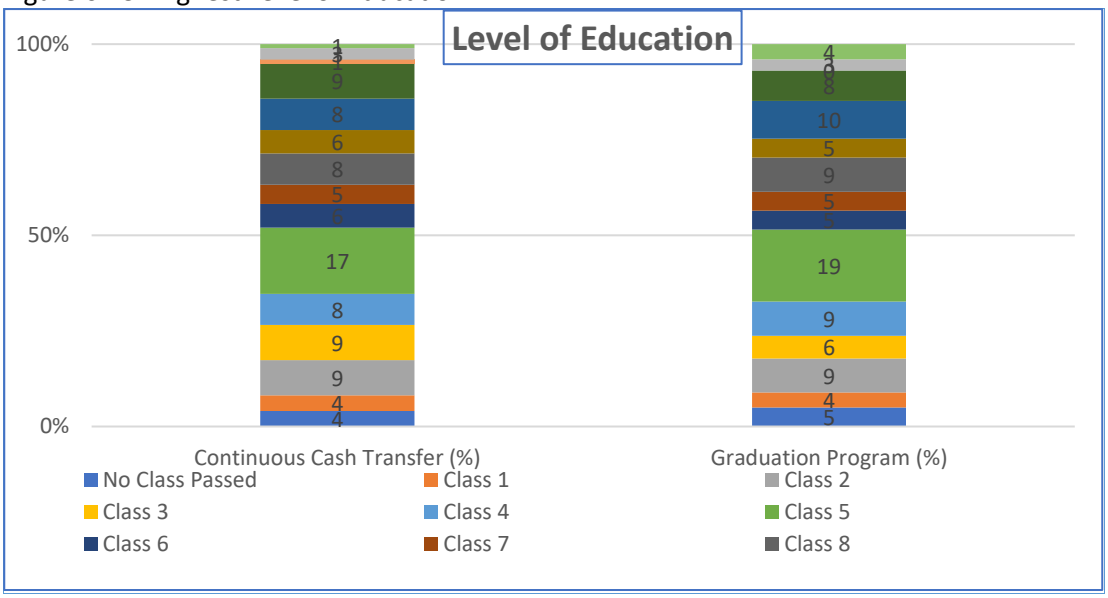
Source: Authors' Compilation, 2019

It is observed that, the difference between continuous cash transfer and graduation programme are narrow in terms of literacy rate but the result is transparent that people under graduation programme are more literate than someone receiving continuous cash transfer programme. The reason is that, within graduation programme, the participants get preliminary training on reading and writing which is absent in continuous cash transfer programme.

6.3.3. Highest Level of Education

Figure 4.13 illustrates the level of education of the children under both types of programmes. The vertical axis of the figure shows percentage of total school going children and the horizontal axis shows the education level.

Figure 0.13: Highest Level of Education



Source: Authors' Compilation, 2019

It is observed that, the number of illiterate (no class passed) children under continuous cash transfer and graduation programme are 4 and 5 percent respectively which was 85 and 82 percent in HIES 2010 data which imply that people now understand the necessities of providing education to their children. Training under different social safety net programmes pave the way of misunderstanding towards - expense of education is just a waste of money. Figure 4.13 also explores that, under continuous cash transfer, 64 percent of children complete their primary education (pass at least class 5) and under graduation programme the percentage is 68. Again, under continuous cash transfer, 22 percent of children passed at least SSC level education and whereas it is 24 percent under graduation programme. Therefore; the insight here is that the highest level of education under graduation programme is slightly better than cash transfer programme. This result implies that - people are literate enough to demand their rights as well as starting their own business utilizing their education and training.

6.3.4. Type of Latrine Used, Drinking Water and Electricity Connection

Attending different training programmes and an increase in income significantly bring positive attitudes in maintaining good hygiene. Moreover, the source of drinking water is getting narrowed now and concentrated towards tube-well water. A large portion of people are now taking water from arsenic free tube-well. Different information dissemination programme run by the government and NGOs play a vital role to make people aware of using hygiene toilet as well as drinking fresh water. On the other hand, as electricity connection remains the vital input for conducting different income generating activities at the household level, therefore; government takes fruitful steps in ensuring electricity facilities at the village level to improve the living standard of the people. It is illustrated in the following Table 4.26 below:

Table 0.26: Type of Latrine Used, Drinking Water and Electricity Connection

Particulars	**HIES 2016**	
	Continuous Cash Transfer (%)	**Graduation Programme (%)**
Type of Latrine Used		
Sanitary Latrine	42	38
Pacca Latrine (Water Seal)	15	15
Pacca Latrine (Pit)	22	21
Kacha Latrine (permanent)	9	8

Kacha Latrine (temporary)	12	17
Others	0	2
Total	**100**	**100**
Source of Drinking Water		
Supply Water	5	6
Tube well	90	86
Pond/river	5	6
Others	1	2
Total	**100**	**100**
Availability of Electricity Connection		
Yes	55	54
No	45	46
Total	**100**	**100**

Source: Authors' Compilation, 2019

Result portrays that, 79 percent of households under continuous cash transfer use hygienic types Sanitary, Pacca (Water Seal), Pacca (Pit) latrine while it is 74 percent for the graduation programme. Again, 90 percent of people under cash transfer programme and 88 percent under graduation programme take water from tube-well that is arsenic free. Meanwhile, the result is quite blessing that, there is a greater reduction in dependency on taking water from unhygienic sources like pond or river. The availability of electricity status shows that 55 percent of households under cash transfer programme have electricity connection whereas it is 54 percent under graduation programme but the essence here is that, there will be a growing demand of it in near future as the coverage of the programme is increased. Three indicators concerned in the aforementioned table i.e. latrine type, drinking water source, and electricity connection witnessed that continuous cash transfer programme is slightly better than graduation programme, but the difference between them is so small.

6.3.5. Type of Illness and Treatment Received

These two indicators explain whether the people under these two programmes sufficiently improve their health status or not. It is universal that to become productive one needs to be healthy first. Meanwhile, as these programmes mainly targeted towards poor people, therefore; it is obligatory to gauge their health and treatment status to identify changes in their livelihood scenario.

Table 0.27: Type of Illness and Treatment Received

Particulars	**HIES 2016**	
	Continuous Cash Transfer (%)	**Graduation Programme (%)**
Face any Chronic Illness in the Last 12 Months		
Yes	21	24
No	79	76
Total	**100**	**100**
Medical Treatment		
Yes	74	76
No	26	24
Total	**100**	**100**

Source: Authors' Compilation, 2019

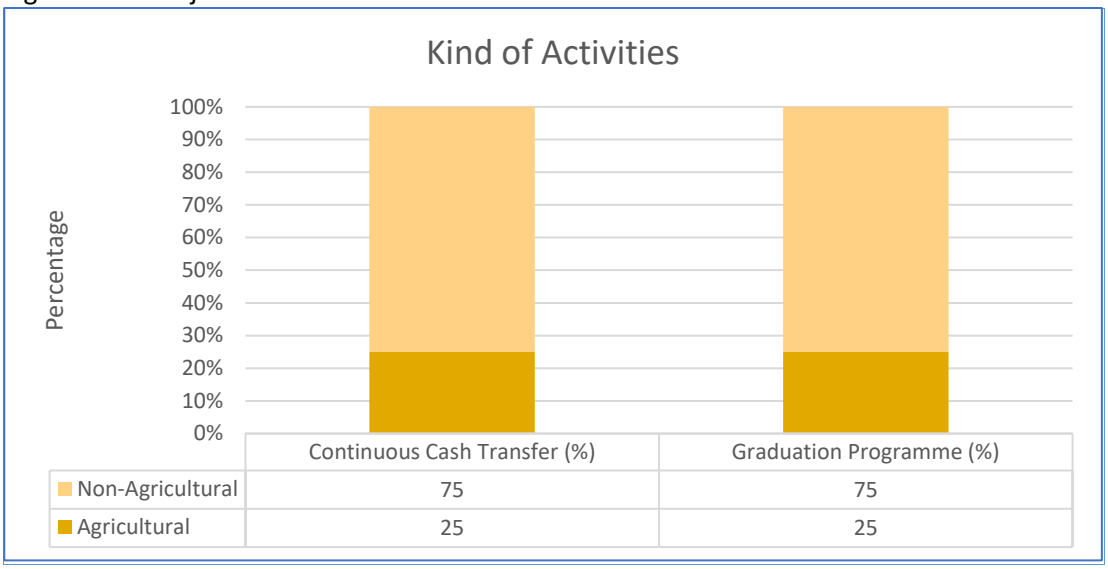
Table 4.27 illustrates that; 79 percent of people do not face any chronic disease over the last 12 months under cash transfer programme whereas it is 76 percent for cash transfer programme. On the flip side, it is observed

that, 76 percent of people under graduation programme take treatment during illness whereas it is only 74 percent for cash transfer programme. Actually, there is mere significant difference between these two programmes, but it is quite blessing that with the intervention of different training and knowledge sharing mechanisms, the probability of facing diseases gradually decrease which is also a positive insight of maintaining good health and physical strength.

6.3.6. Major Field of Economic Activities

Non-agricultural professions play a predominant role over the agricultural profession. This is due to the fact that lack of ownership of agricultural land, inability to purchase agricultural input, lack of knowledge, disaster prone area, lack of market knowledge and lack of knowledge on risk coping strategies. Result is shortly elaborated in the following Figure 4.14:

Figure 0.14: Major Field of Economic Activities



Source: Authors' Compilation, 2019

It is observed that, a significant number of people (75 percent) involved in non-agricultural activities compared to agricultural activities (25 percent only). Though there are not any significant differences but the essence here is that, in both programmes people are highly relying on non-agricultural activities, therefore, subsidy from government might encourage people to involve in agricultural activities.

6.3.7. Crop Production, Consumption, Selling and Stock Information

The following Table 4.28 demonstrates particularly agricultural activities regarding crop production, consumption, selling and stocking information. There is a diverse scenario while comparing the aforementioned cases due to varying programme in nature. However, noticeable fact here is that, crop production and other scenario highly indicate the effectiveness of the graduation programme in ensuring the better livelihood of the people.

Table 0.28: Crop Production, Consumption, Selling and Stock Information

Agricultural Activities	**HIES 2016**	
	Continuous Cash Transfer (%)	**Graduation Programme (%)**
Involve in Crop Production		
Yes	14	22
No	86	78
Total	**100**	**100**

Average Crop Production in Last 12 Months (Kg.)	427	443
Average Crop Consumed in Last 12 Months (Kg.)	356	354
Average Crop Sold in Last 12 Months (Kg.)	10	19
Average Crop Stock in Last 12 Months (Kg.)	7	11

Source: Authors' Compilation, 2019

It is seen that 25 percent of people under both graduation and cash transfer programme are engaged in the agricultural sector. Among them, 22 percent of people produce crops under graduation programme and only 14 percent of people produce crops under cash transfer programme. Comparing between these two programmes, it is observed that average crop production, crop selling and crop stocking in the last 12 months is higher for graduation programme. But in terms of average crop consumption people under graduation programme consume slightly lower than people under continuous cash transfer programme. The scenario implies that with the help of different training programmes people under graduation programme produce more rice and ensure food security as a better livelihood strategy.

6.3.8. Non-agricultural Activities

It is observed that, a large share of people in both programmes involved in non-agricultural sector and performed their activities outside their house both in fixed and variable location whereas a few numbers of people work in government sector. Generally, the nature of non-agricultural activities varies in term of operation of activity, the source of financing as well as the problems in running a business. It is illustrated in the following Table 4.29 below:

Table 0.29: Non-Agricultural Activities

Particulars	**HIES 2016**	
	Continuous Cash Transfer (%)	**Graduation Programme (%)**
Operation of Activity		
Own house	13	8
Rented house	20	18
Govt. land	2	2
Fixed location/outside house	37	42
Variable location	29	29
Total	**100**	**100**
Source of Finance for Setting up Business		
Inherited/through gift	7	14
Own savings	57	56
Borrowing from relatives	6	11
Commercial bank	2	1
Grameen bank	6	4
Other financial institution	5	2
NGO	8	7
Sale of assets	0	2
Suppliers credit	2	1
Others	6	1
Total	**100**	**100**
Problems Faced in Running Business		
No Problem	61	70

Inadequate capital	26	25
Lack of expertise	1	0
High cost of running enterprise	1	0
Problem with equipment	1	0
Govt. regulations	3	1
Lack of customers	5	0
Transport problems	1	2
Others	2	1
Total	**100**	**100**
Average Net Revenue in the Past 12 Months		
Average Net Revenue	1,00,086	1,11,551

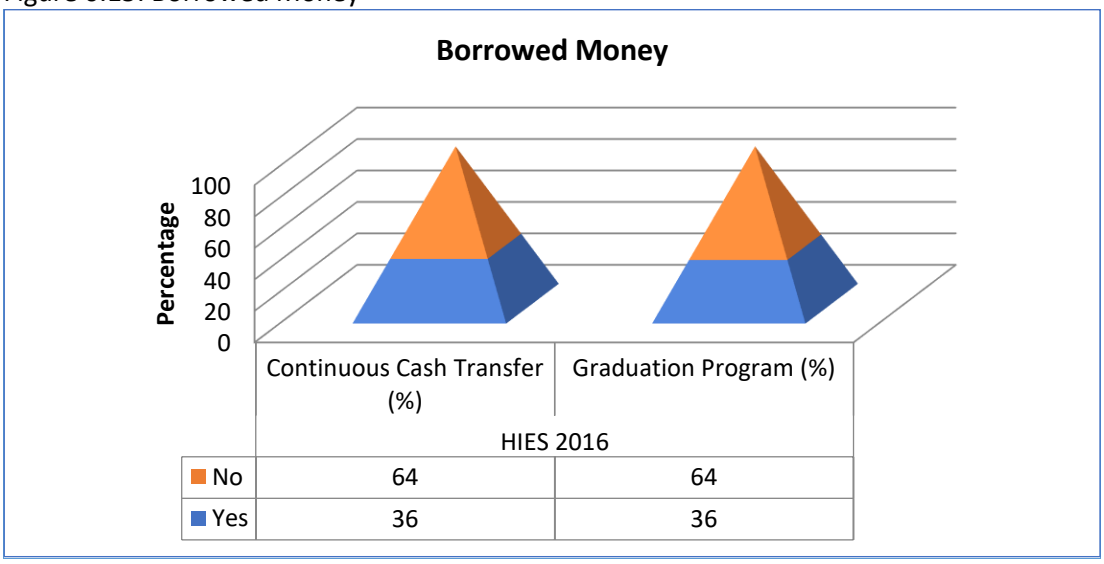
Source: Authors' Compilation, 2019

It is observed that that people under graduation programme operate less in their own house and more in the outside house (fixed location) than people under cash transfer programme. From the second part of the table, it is witnessed that, the majority portion of business financing are coming from personal savings which is 57 percent for cash transfer programme and 56 percent for graduation programme which implies that saving behaviour of the people are quite satisfactory. The interesting thing is, to finance for setting up business only 2 percent of people sell their asset under graduation programme and it is nil for people under cash transfer programme. However, there exist significant drawbacks in running the business due to inadequate capital which falls short of their savings. It is also witnessed that, the average net revenue from non-agricultural activities in the past 12 months is higher for people under graduation programme than cash transfer programme.

6.3.9. Borrowed Money Information

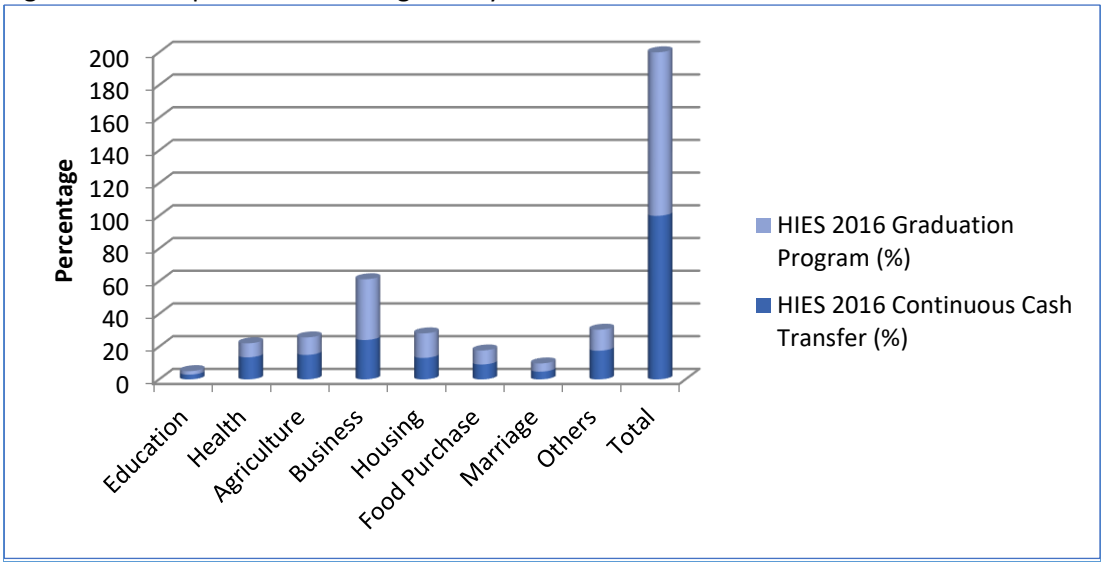
People have to borrow money either to purchase inputs for agricultural activities or sometimes raw materials for non-agricultural activities. Sometimes, people borrow to bear previous liabilities or sometimes consume it for household purposes. It is illustrated in the following Figure 4.15 and 4.16 below:

Figure 0.15: Borrowed Money



Source: Authors' Compilation, 2019

Figure 0.16: Purpose of Borrowing Money

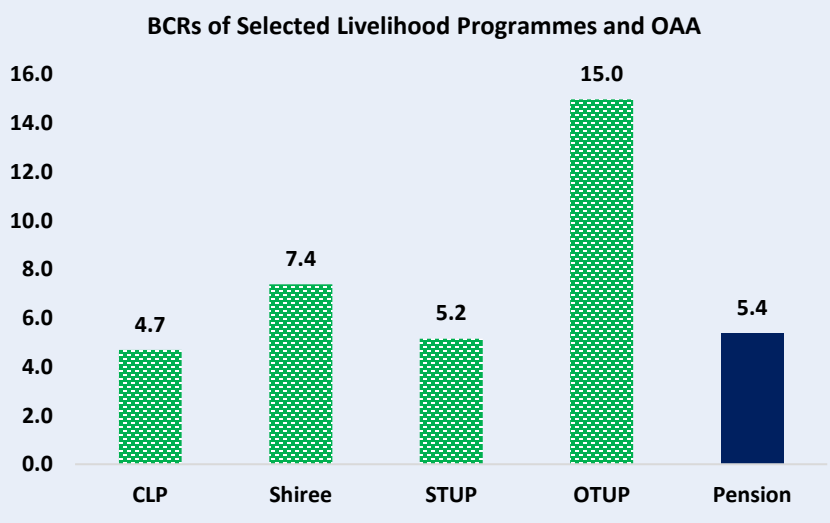


Source: Authors' Compilation, 2019

It is observed that, 36 percent of people under both types of programmes borrowed money for various purposes and the remaining 64 percent do not borrow any money. The main purpose of borrowing money is for business setup in both of these concerned programmes. Result shows that the people under graduation programme take more loans for business and housing purposes and take fewer loans for health and agricultural purposes than people under cash transfer programme. This implies that people under graduation programme spend their large share of loan into productive purposes.

Box 0.1: Value for Money Assessment for Selected Programmes

In a study on assessing the 'Cost Effectiveness of Selected Livelihoods Interventions in Bangladesh' Emily et al (2015) conducted a value for money analysis between the selected livelihood programmes and Old Age Allowance (OAA). It has been carried out to determine whether there is significant difference on the outcomes of the livelihood programmes in comparison to a cash transfer scheme – OAA. The overall value for money assessment boils down to the benefit/cost ratios, as provided in chart below. These ratios are based on the discounted stream of costs and benefits over the full 15-year time period of the analysis (i.e. 2007/8 t0 2022.23). A discount rate of 7.5 percent has been used. The BCR of OAA at 5.4 percent compares well with the livelihood programmes. The BCR of the OAA is higher than that of CLP (4.7%) and STUP (5.2%). It is, however, lower than Shiree (7.4%) and OTUP (15%). The very high level for OTUP may be the result of the fact that cost is quite low in this programme, as they do not include assets.



Source: Emily et al (2105)

According to the findings from the analysis, it is observed that slight differences observed in most of the indicators for both continuous cash transfer and graduation programme. Although most of the results significantly distinguish between these two programmes, the result is unidirectional in the sense that in some cases cash transfer programme and in other cases graduation programme withhold a good result. But if we consider the indicators which focuses on sustainability (i.e. income and expenditure, gross remuneration, engagement in productive activities, level of literacy and use of loan), it is observed that graduation programme performs better that continuous cash transfer. Thus, we can conclude that, in terms of sustainable means of livelihoods, graduation programme illustrates exemplary success than cash transfer programme. However, there should be more focus on generating better evidence on cash transfer programme as an alternative approach.

7. PSM Evidence on the Impact of SSNPs

Establishing the impact of any government intervention becomes hard to estimate mainly due to the fact that targeted population are often not randomly chosen. In the case of Social Safety Net Programmes (SSNP) in Bangladesh, it is not any different. There are a number of criteria that have been used over the years to select households who are eligible for being selected to receive benefits under SSNP. Major causal measurement problem in Econometrics in these cases is that we do not have exact counterfactual to compare normally in these scenarios; we measure the impact of any interventions comparing the treated households versus the non-treated households. However, we will show that if the underlying conditions violate few assumptions, these measures might be biased. The best bet to overcome situation similar to this is to apply propensity score matching (PSM) to minimize the biases and come up with causal estimates.

7.1. Estimating Methods

Let there be N number of households who are under any kind of SSNP, W is the number of households who are not under any SSNP. Let Y_{i1} be the potential outcome for the households who are treated, and Y_{i0} is the outcome for the households who are not treated. Here, treated: $T_i = 1$ if the household is under SSNP, and $T_i = 0$, if the household is not under SSNP, so the latter group represents the control. The observed outcome then becomes:

$$Y_i = T_i Y_{i1} + T_i Y_{i0}$$

Thus, the treatment effect could be written as:

$$\tau_i = Y_{i1} - Y_{i0}$$

In an experimental setting, where treatment and control groups are coming from same population, the average treatment effect becomes:

$$\tau = E(Y_{i1}) - E(Y_{i0})$$

Under randomization, potential outcomes are independent of treatment status:

$$Y_{i1}, Y_{i0} \perp T_i$$

So, the treatment effect,

$$\tau = E(Y_{i1} \mid T_i = 1) - E(Y_{i0} \mid T_i = 0)$$
$$\tau = E(Y_i \mid T_i = 1) - E(Y_i \mid T_i = 0)$$

The above average treatment effect (ATE), τ is readily estimable (Dehejia and Waaba 2002). However, most of the impact evaluation studies are not experimental. Observational studies, like the one that we are dealing here needs different strategies to come up with causal estimates. Selection for SSNP is not random. There are different conditions for different SSNP a household needs to satisfy to be selected. That is the reason, we cannot expect the control group, which are the households who are not under SSNP to be a perfect counterfactual of the treatment, thus the ATE would be biased. The meaningful treatment effects in this scenario are going to be the average treatment of the treated (ATT):

$$\tau \mid T = 1 = E(Y_{i1} \mid T_i = 1) - E(Y_{i0} \mid T_i = 0)$$

However, this is not measurable directly either, as we cannot observe Y_{i0} for the households who are treated (Dehejia and Waaba 2002). To overcome this situation, we have to apply selection on the observable: X (Rubin 1977). Selection on observable gives us the following:

$$E(Y_{ij} \mid X_i, T_i = 1) = E(Y_{ij} \mid T_i = 0) = E(Y_{ij} \mid T_i = j),$$

for j = 0, 1 Due to the conditioning on the observable, X, there should not be any pre-treatment differences between the household who are under SSNP and those who are not. Thus, the following measure will give us the average treatment on the treated (ATT):

$$\tau|T=1 = E(Y_i|X_i, T_i = 1) = E(Y_i|T_i = 0)$$

Using PSM strategy, we will be able to estimate the ATT/ATE of the SSNP on the treated households, using the selection on the observable methods. There are two assumptions that we are making for the identification strategy (Imbens et al 2002) under propensity score matching estimation:

Assumption 1: Unconfoundedness

$T_i \perp Y_{i0}, Y_{i1}|X$

Where T_i is the treatment status and X is the vector of observable.

Assumption2: Overlapping: If $p(X_i)$ is the probability of household i to be under SSNP, then

$$p(X_i) = Pr(T_i = 1|X) = E(T_i|X_i)$$

So,

$$0 < p(X_i) < 1$$

For all X_i

7.2. PSM Algorithm

We are using propensity score, defined as the probability p(X) of receiving treatment under SSNP conditional on the covariates. This helps us to reduce dimensionality to avoid the bias induced in the treatment effects by comparing treatment and control directly. According to the propensity score, the weight is calculated to put on the comparison group to find the treatment effects (Dehija and Wahab 2002). We are going to estimate the following coefficient:

$$\hat{\tau}|T_{=1} = \frac{1}{|N|}\sum_{i\subset n}(Y_i - \frac{1}{|J|}\sum_{j\subset W} Y_j)$$

Here |N| is the number of treated units, and |J| is the number of units matched from the control group |W| with the treated unit i. $\tau|T=1$ is going to give us the estimated average treatment effect on the treated.

7.3. Data and Summary Statistics

We are going to use data from HIES 2016 to implement the PSM strategy to estimate the effect of SSNP on the treated households. The following table shows the difference in means of the households under SSNP (Treatment) versus the households who are not (Control). Clearly there are differences in averages among all the variables, as a linear difference suggests that the treated households are indeed impoverished households who are receiving SSNP (see Table 4.30).

Table 0.30: Summary Statistics of Variables

Variables	Control Households	Treated Households	Differences
Monthly Consumption	14,936.16	11,634.75	3,301.409
Monthly Income	14,890.00	12,256.03	2,633.969
Yearly Consumption	1,96,163.70	1,55,495.00	40,668.68

Yearly Income	1,78,680.00	1,47,072.40	31,607.63
Poverty Rate Lower	0.06	0.11	-0.05
Poverty Rate Upper	0.15	0.25	-0.09
Rural	0.58	0.67	-0.09
Agriculture	0.32	0.39	-0.07
Years of Education	6.46	5.15	1.30
Household Size	4.09	3.98	0.10
Observations	40,968.00	5,419.00	

Source: Authors' Compilation, 2019
Note: Consumption and Income are measured in Taka. Rural, Agriculture, Poverty rates are in percentages.

The first six variables are the potential outcome variables (Y_i) that we are going to use for the PSM regressions. The other variables are the observable (X_i) that would be used for dimension reduction using propensity scores. Rural is defined whether the household lives in rural area compared to urban. Households under SSNP tend to be live more in rural areas. Similarly, variable Agriculture is defined as whether the household main occupation is in Agriculture or not. Poverty rates are in percentages. It is evident from the table that households under SSNP are lagging behind compared to the controls in most of the categories. Comparing the two groups directly will give us biased estimates. We are going to use above mentioned observable characteristics to apply PSM.

7.4. Estimated Results

7.4.1. Main Specification

The following four tables present the main results of the treatment effects of SSNP using PSM. The three main variables that are used to measure propensity scores are - Rural: Households living in rural areas of Bangladesh, Agriculture: Household head's main occupation is in Agriculture, Education: Years of education of the household heads (Rahman, 2005). These are the main three variables that closely relates to the pre-intervention criterion that does not vary significantly. By using the controlled household in a close neighbourhood of the variables within a treated household, the estimation has been conducted. In each of the tables, four results are presented in the form of - Unmatched: Without using propensity scores, ATT: average treatment effects on the treated, ATU: average treatment effects on the untreated (control), ATE: Average treatment effects. Table 4.31 shows that without applying PSM, the unmatched result indicates that the households under SSNP are yearly consuming 41,162 Taka less than the households who are not under SSNP. Similarly, if we see the ATE result that also indicates similar direction and level. For our purpose, the most important estimate is the ATT. The ATT result of the Table 4.31 suggests that households under SSNP are actually consuming 15,911 Taka more than the control households. This result is as close as we can get to have a causal impact of SSNP. This suggests that households who are very similar into the three dimensions (Rural, Agriculture and Education), those who have received benefits under SSNP are having more consumption than the untreated households. However, we have to be a bit cautious about the statistical significance here. Due to the large sample size here, a full non-parametric estimation could not be done due to computational difficulty. Though, we can see that the sign of the impact of the intervention under SSNP completely changes when we consider the ATT results compared to the unmatched and ATE effects. The overall results remain similar in the following three tables.

Table 0.31: PSM Regression Result: Dependent Variable - Yearly Consumption

Yearly Consumption	Treated	Controls	Difference	S.E.	T-stat
Unmatched	1,71,421.68	2,12,583.85	-41,162.17	3,006.60	-13.69
ATT	1,71,421.68	1,55,509.78	15,911.89	23,912.72	0.67
ATU	2,12,583.85	1,60,516.81	-52,067.04	.	

ATE	.	.	-44,837.70		
Observations	3,120.00	26,218.00			

Source: Authors' Compilation, 2019
Note: S.E. does not take into account that the propensity score is estimated.

Table 4.32 uses yearly income as the dependent variable. It also shows that results changes in comparison of the ATT and ATE. Without the matching, clearly treated households earning is less than the control group. However, under PSM, ATT result suggests that these households have positive impact on their earnings, though it is not significantly higher.

Table 0.32: PSM Regression Result: Dependent Variable - Yearly Income

Yearly Income	Treated	Controls	Difference	S.E.	T-stat
Unmatched	1,65,373.58	1,96,241.89	-30,868.31	11,171.48	-2.76
ATT	1,65,373.58	1,60,521.08	4,852.50	44,633.06	0.11
ATU	1,96,241.89	1,33,678.75	-62,563.14	.	.
ATE		.	-55,393.71		
Observations	3,120.00	26,218.00			

Source: Authors' Compilation, 2019
Note: S.E. does not take into account that the propensity score is estimated.

Following two tables use lower and upper poverty rates as the dependent variables. The effects are also persistent over here. In the unmatched sample, poverty rate is higher by 5.3% in the treated groups. However, in the matching sample, ATT result shows that actually poverty rate has declined in the treated group, although, when we use the upper poverty line, the treated households are still having higher poverty rate than the comparison group. It is illustrated in the following Table 4.33 and 4.34:

Table 0.33: PSM Regression Result: Dependent Variable- Poverty Rate: LPL

Poverty Rate - Lower	Treated	Controls	Difference	S.E.	T-stat
Unmatched	0.10	0.05	0.05	0.00	12.12
ATT	0.10	0.16	-0.06	0.05	-1.07
ATU	0.05	0.15	0.10	.	.
ATE		.	0.08		
Observations	3,136.00	26,338.00			

Source: Authors' Compilation, 2019
Note: S.E. does not take into account that the propensity score is estimated.

Table 0.34: PSM Regression Result: Dependent Variable - Poverty Rate: UPL

Poverty Rate - Upper	Treated	Controls	Difference	S.E.	T-stat
Unmatched	0.26	0.13	0.13	0.01	18.98
ATT	0.26	0.19	0.06	0.07	0.93
ATU	0.13	0.25	0.12	.	.
ATE		.	0.11		
Observations	3,136.00	26,338.00			

Source: Authors' Compilation, 2019
Note: S.E. does not take into account that the propensity score is estimated.

7.4.2. Validity Checks

In this section, we use more restricted matching process. We include two more variables for dimension reduction and create new propensity score for estimation. The other two variables are - Age: age of the household head and Household size - number of members in a household. However, like the other three variables, we cannot be sure about the fact that these two variables are not influencing the decision of a household to be selected for any SSNP. Table 4.35 and Table 4.36 present the results of the restricted models, where dependent variables are yearly consumption and yearly income, respectively. Interestingly, over here now even the ATT shows negative impact, meaning that the yearly consumption is less for the treated households (Table 4.35). Though the magnitude is far less compared to the unmatched and ATE estimates.

Table 0.35: Restricted Model I

Yearly Consumption	Treated	Controls	Difference	S.E.	T-stat
Unmatched	1,71,421.68	2,12,585.20	-41,163.52	3,006.65	-13.69
ATT	1,71,421.68	1,97,568.48	-26,146.80	3,728.31	-7.01
ATU	2,12,585.20	1,78,482.48	-34,102.73	.	.
ATE		.	-33,256.61		
Observations	3,120.00	26,217.00			

Source: Authors' Compilation, 2019
Note: S.E. does not take into account that the propensity score is estimated.

Table 4.36 shows similar pattern that we have found in the main specification. In unmatched sample, yearly income of treated households is around 30,861 Taka less. But the ATT result shows that the income of the treated households is marginally higher.

Table 0.36: Restricted Model II

Yearly Income	Treated	Controls	Difference	S.E.	T-stat
Unmatched	1,65,373.58	1,96,235.13	-30,861.54	11,171.68	-2.76
ATT	1,65,373.58	1,63,956.41	1,417.18	18,878.84	0.08
ATU	1,96,235.12	1,78,776.63	-17,458.50	.	.
ATE		.	-15,451.07		
Observations	3,120.00	26,217.00			

Source: Authors' Compilation, 2019
Note: S.E. does not take into account that the propensity score is estimated.

For observational studies, PSM gives an opportunity to evaluate the impact of any intervention. Over here, we have seen that without using PSM, the comparison between the households who received benefits from SSNP with the ones who did not, is confounded. Overall result suggests that there is positive impact of SSNP programme in Bangladesh. However, we also have to be cautious interpreting the estimates at its face-value. Still biases coming from reverse causality and selection bias. Since we do not have information on the treated and control households prior to intervention, therefore; we cannot confidently establish causal estimation. Given the cross-sectional setting, using PSM estimation method gives us the opportunity to analyse the impact of SSNP programmes with limited scope.

8. Lesson from FGD and KII

8.1. FGD Findings

To find the effects, strengths and the barriers of livelihood types of social security programmes, five Focus Groups Discussions (FGDs) were conducted. Each FGD had 8 beneficiaries. All the beneficiaries were from SWAPNO project. Two FGDs were conducted at Nunkhoa and Bamondanga Union of Nageshwari Upazila in Kurigram district and another three were conducted at Nagarhata and Kumira union of Tala Upazila in Shatkhira district as the initial phase of the SWAPNO programme was conducted in these two districts.

8.1.1. Contextual Information on Study Areas

The people from respective Upazilas of Kurigram and Shatkhira districts are mostly poor. Moreover, climate change, geographic remoteness, incidence of poverty, riverbank erosion, and natural disasters make these people vulnerable. The main occupations of the people are agriculture, livestock farming, small business and day labour in both Kurigram and Satkhira districts. Women of these areas are predominantly engaged in agriculture-based work, but a part of women are engaged in tailoring, working on other's house, working in brick-fields and livestock farming. Extreme poverty, unemployment, flood, river erosion are very common features of these areas. Most of the people of these areas cannot fulfil their basic needs and thereby school dropout, early marriage, and dowry are common phenomena in these areas. In addition, people in these areas do not have enough knowledge about basic rights, health and environmental issues.

Findings from FGDs show that the beneficiaries of SWAPNO project led a tough life before they were engaged in the programme. It was quite impossible for them to take meal three times a day. Most of the days they had to go for starvation as there were not enough food in the house. They were unable to avail the basic necessities of life. They had to sleep on the ground due to the absence of any bed to sleep. Their social value was very demoralized. Neighbours and even their close relatives used to despise them. In short, they were very helpless.

8.1.2. Impacts of SWAPNO Project on Livelihood

After getting engaged in the programme, the livelihood of the beneficiaries saw a transition. Getting wage from SWAPNO project helped them to afford enough food, cloth, and their daily necessities. According to the beneficiaries, their social value has increased after their inclusion in the programme. Neighbours and their close relatives have started to value them as they have started to earn money and change their fate with the blessing of the programme. Above all, basic life skill and livelihood trainings have helped them to uplift their confidence, courage, consciousness of rights, moral strength, and self-confidence. The livelihood training and graduation bonus have helped them to get engaged in different income generating activities (IGA) such as cow/goat/sheep farming, tailoring, small business, and cultivation. This programme has helped the beneficiaries to improve their relationship with their closest relatives. Beneficiaries' social value, control over social decision and participation in the social organizations have increased. On the other side, SWAPNO training programmes have supported to enhance the knowledge of resilience strategies of beneficiaries so that they can understand their roles and responsibilities in the pre, during and post natural disasters. The aforementioned scenario portrays that the trainings and benefits received from SWAPNO project have affected the socio-economic status of the beneficiaries positively. They have come out of extreme poverty and continued to live a better life, which implies that the outcome of the SWAPNO project is sustainable.

8.1.3. Current Challenges

Although the SWAPNO project is an effective Social Safety Net Programme, there exist some challenges too. Tackling sensitive issues such as sexual harassment and teasing is the main challenge. Sometimes, SWAPNO women were sexually harassed by the supervisors and other UP members and teased by other people of the society while working outside. Although the respondents from FGDs have revealed that the selection procedure was fair enough, some local people have disclosed that bribe and lobbying have played important role in

selection due to the lack of proper supervision. According to the respondents, if per day savings is increased from BDT 50 to BDT 70/80, they will get more money as graduation bonus and as a result, they can establish their business or can get engaged in more income generating activities. They have also suggested that if the graduation bonus is paid at the middle of the programme, they can utilize it more effectively with the help of the supervisors. Above all, beneficiaries have shown their dissatisfaction about the programme duration, wage rate and low number of beneficiaries covered in the programme. From the FGDs, the beneficiaries have not tasted the poverty again just after ending the programme. The main reason is that the participants have not faced any serious shocks within last two years. Henceforth, there is high possibility that some participants may fall back into poverty if they face any shock.

8.1.4. Recommendation from FGD Findings

Considering the outcomes and the existing challenges, the study comes up with some specific recommendations.

- 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.
- The SWAPNO authority, especially the union workers, should monitor the workplace properly to tackle sexual harassment and teasing.
- Per day savings can be increased from BDT 50 to BDT 70 so that the participants can get more as graduation bonus at the end of the programme and get involved in different IGAs.
- Graduation bonus can be paid at the middle of the programme so that they can utilize it for IGAs.
- Duration of the programme can be increased so that they can properly implement their learning into productive activities.
- The participants can improve their living standard if the wage rate is slightly high. Therefore, revision of wage rate can be reconsidered.

From the aforementioned discussion, the insight is that SWAPNO programme has successfully helped to uplift the condition of beneficiaries and graduate from poverty despite having some drawbacks in designing and implementing the project. On the other hand, it is evident from the FGDs that this programme has enhanced the livelihood of the poor beneficiaries in the concerned study areas but considering the SDG on reducing extreme poverty at the grass root level, the coverage of this programme should be expanded.

8.2. KII Findings

Ten KIIs have been conducted from different government ministries, development partners and government-related organizations to realize their opinion on the long-term effect of livelihood programmes. The study emphasized on identifying beneficiary selection criteria, the sustainable impact of livelihood programmes i.e. SWAPNO, geographic targeting in implementing programmes, current challenges and solution mechanism to monitor the programmes properly.

8.3. Effectiveness of Social Safety Net Programmes

The main objectives of implementing social security programmes are reducing poverty rate, improving health status, reducing income inequality, enhancing employment, etc. Many of the programmes are designed to address short-term challenges or provide immediate relief like disaster response, seasonality of agricultural employment etc. They do not primarily focus on long term goals such as poverty reduction or job creation. According to the KII responses, social security programmes in Bangladesh are not fully equipped to address these striving targets both in terms of coverage and beneficiaries' selection. Despite having some positive notion, in most cases the opportunities are rather limited in reducing poverty rate and income inequality; improving health care; and generating employment opportunities. The vital reasons are mentioned below.

- **Programme design not based on long term planning**: Project planning is often motivated by benefiting the political elite rather than poor citizens. Hence, programmes are designed based on short term planning.
- **Weak administration capacity (MIS, staff, and monitoring):** Administrative complexity; weak implementation and monitoring mechanism; corruption; and a smaller number of government staffs are common norms.
- **Political influence, targeting**: Nepotism always results in mistargeting. Schemes do not always reach to the poor since LEB/officials select beneficiaries from a pool of people rather than following the guideline. Duplication and resource misuse occur throughout the process.
- Absence of evidence for effective advocacy and long-term planning.

The budgetary allocation for social security programmes is very limited. Eventually, the estimation of long-term impact is not effective enough. The programmes are not fully equipped to address the full spectrum of objectives. If we want to achieve those objectives, more needs to be done beyond social safety nets. For example, fiscal issues, monetary policies, job creation, wage rates, pricing and in many cases, there is a crucial need for redesigning SSN programmes.

8.4. Are Participants Better-off After Exiting the Programme?

There is growing evidence that social security programmes such as SWAPNO, VGD, EGPP, etc. help to uplift the economic well-being of poor participants. But as per KII discussion, there is a high probability that the participants may fall back into poverty once they exit the programme since many of these programmes do not have solutions which can guarantee sustainable poverty elevation. For example, sometimes, asset creation, creation of sustainable income earning, etc. do not guarantee that the poor will not slip into poverty again. Besides, the participants who are more conservative may not fully utilize the opportunities/supports provided by these IGA programmes and thus, there is risk of falling back into poverty once they exit the programme. Natural shocks like floods, cyclones, etc. often take lives and destroy assets including the means of livelihood. These significantly increase people's vulnerability to poverty, especially in the absence of a robust insurance mechanism. In addition, health shocks make many families off-guard due to the limited access to public healthcare and high out-of-pocket healthcare expenses. Such health shocks significantly erode household savings and reduce household income if the affected person is the sole income earner. Therefore, for ensuring sustainable development and alleviating poverty, there is still a room for improvements.

8.5. Livelihood Programme - Geographic Consideration Matters

The location and geographical needs should be given utmost priority while implementing any programme. For instance, many regions have high migration rate (internal and international) and are highly prone to natural disasters, while some are poverty-stricken regions. Therefore, the effectiveness and impact of livelihood programmes are significantly affected by geography. It needs to be kept in mind that depending on geographical context - institutional settings and rewards vary. Consequently, income and livelihood aspect of beneficiaries vastly depend on geographic condition.

In the context of Bangladesh, most of the livelihood programmes are implemented with less concentration of geographic targeting based on poverty. Moreover, genuine poor people sometimes may remain unnoticed if the programmes are designed by considering geographic consideration. If this is the case, the major objective of improving livelihood condition remains unfulfilled. Gender implications are also important and need to be considered which are often missing while implementing a programme i.e. Sylhet is a wealthy division but because of its conservative norms, its female labour force participation rate is poor.

8.6. Impact versus Sustainability

Whether a programme will be sustainable in the long run highly depends on the selection of beneficiaries, effective programme design, quality of delivery including the capacity of field staffs, amount of transfer, existence of value-added services, level of transparency and efficiency in the administration and types of support the beneficiaries are getting. If there is a built-in support mechanism for the beneficiaries that will ensure long term sustainability in the form of asset creation, sustainable income generation etc., beneficiaries might enjoy a comparative advantage in the long run with compared to non-beneficiaries. On the other hand, beneficiaries' living standard will not increase in the long run if mistargeting continues.

8.7. Efficacy of Cash Transfer versus Graduation Programme

The design and implementation of a programme particularly vary because of a range of demographic factors like *age* i.e. livelihood programmes are not effective for the older population; *gender* i.e. Bangladesh continues to have constraints in female labour force participation due to social norms, skills, and educational issues; and also, *geographical poverty* i.e. people from poor areas or disaster-prone regions may appreciate immediate cash in hand rather than working over a longer period. Moreover, risk-taking tendency of individual beneficiary sometimes outweigh age and gender consideration. KII findings illustrate that graduation programme performs better as compared with the continuous cash transfer because people under graduation programme receive different trainings (self-employment, hygiene, awareness building, living standard etc.) but there is no such type of provision exists in the continuous cash transfer programme. On the flip side, some officials reveal that cash transfer would be effective if only it is done after providing proper skill development training so that the cash can be invested in a planned manner.

8.8. Institutional Challenges Currently Persist

The current livelihood programmes disclose various challenges. From the KIIs, the following challenges have been identified.

- Selection of beneficiaries – in most cases those who are able-bodied and young, tend to find work through migration or other means are selected as beneficiaries through nepotism or speed money to the UP chairman. On the flip side, those who are unable to work are usually the ones left behind from the livelihood programmes. Moreover, there is often found to be ill-functioning of the beneficiary selection committee.
- Lack of presence of skilled government staff – livelihood programmes demand significant handholding and facilitation of beneficiary training and engagement. Dependency on the third party makes the initiatives more expensive, unsustainable and difficult to monitor.
- Human resources deployed to administer these types of programmes sometimes found to be less skilled as per the demand of the programme context.
- MP's influence in allocating programmes
- Week monitoring system
- Lack of inter-ministry coordination.
- Poor programme design and delivery mechanism

8.9. Policy Prescription from KIIs Findings

Some solutions have been suggested to mitigate the institutional challenges and implement livelihood programmes successfully.

- Enhance the number of technical staffs positioned at the field level.
- Enhance the capacity of field level staffs to deliver livelihoods support and market linkage facilitation.
- Establish strong partnership with the private bodies to develop inclusive business models aligned with private sector's business interest to invest on the poor.

- Revitalize the selection committee at UP level.
- Increase monitoring mechanism through the line agency officials.
- Proper execution of National Social Security Strategy (NSSS) through sectorial action plan.
- Develop an understanding about local contextualization related issues.
- Provide adequate training to the local employees of the livelihood programmes.
- Adequate funding for administration activities to speed up the process of executing the programme.
- Design the programme in accordance to the geographic targeting both in rural and urban areas.
- Undertake apt policies to implement programme considering different tiers of poverty i.e. extreme poverty, people just above the poverty line and absolute poor.

9. Concluding Remarks

This paper is an initiative to evaluate the graduation programme to find out its long-term impact in the form of assessing whether poor people are able to upgrade their living condition or not. In the first stage, this paper hovers around particularly public works model (SWAPNO). In the latter stage, this study compares between cash transfer and graduation programme which highlights that people under graduation programme performs better in the form of generating more asset, cash savings, food security and greater self-confidence than those receiving continuous cash in a smaller volume. However, considering the graduation context, this paper tries to shed lights and provide possible solutions to the shortcomings reported by the beneficiaries during the survey and FGDs. Considering the sustainability criteria and achieving long term objective of reducing poverty aligned with SDG, the following issues should be emphasized carefully:

9.1. Advocacy of Long Tenure Period

It is generally granted that the longer the time frame, the greater the impact of the project. However, there exists some trade-offs between government spending and the tenure period of the project as there is resource constrained. Stretching the project period means fewer women will be targeted under this project. One thing to be noted here that REOPA project continued up to 24 months.

From FGDs, beneficiaries have opined that this project should continue up to 2 years otherwise it will be difficult for them to sustain. Generally, it takes first year to repay the debt and after then six months period is not long enough for them 'to stand on their feet'. Therefore, the project tenure period should be increased and should consider maximum number of women who are eligible for this programme. Moreover, it has come to light that women worked on a full-time basis in the first year and for the next 6 months, they worked on a part-time basis. It makes the task of sustaining the income level difficult for them. Hence, an alternative mechanism could be adopted to redesign the project in the next phase.

9.2. Monitoring of Asset and Early Payment of Graduation Bonus

As the graduation bonus is paid at the end of the project, the union workers have less opportunity to look after how beneficiaries utilize their bonus. Moreover, only 5 days training programme doesn't teach them properly as some works need close monitoring and technical knowledge which is somehow missing in the project implementation and training phase. One suggestion would be that if the graduation bonus is paid just after one year of the project cycle, beneficiaries can utilize their money in a better way by starting their own business. Henceforth, dual objectives will be attained. First is having not much public works left to do, they can spend time on their own income generating activities and the second one is that union workers better guide them through training and close monitoring of their assets. Therefore, their saving amount would be then much higher than the graduation bonus paid.

9.3. Revisiting the Graduation Model

Beneficiaries should learn in advance regarding what they will do with their graduation bonus and how they achieve success in their IGA just after ending the project. It should be the duty of the union worker to make women aware regarding overseeing the future. For example, if the women are earning BDT 5,000 per month from this project and BDT 2,000 before joining the project then what procedures they need to adapt to get BDT 3,000 just after ending the project.

It has been propounded by beneficiaries that the per day wage amount should be increased. Considering the resource constrained and a big chunk of eligible people, some other incentives could be provided by the government or development partners to bring some changes in their daily livelihood. One example can be provision of vegetable seeds as a trade-off of providing an additional wage.

Moreover, savings is the sole component of achieving the objective of this programme. Therefore, beneficiaries think that the savings amount should be increased up to seventy to eighty takas because it will help them to have more working capital in future. Hence, there is a need to revisit the project implementation phase.

9.4. Proper Monitoring in the Workplace – Role of Union Workers

Union workers plays a vital role in this project. FGDs findings clarify that follow up visit of the union workers adds value in terms of providing knowledge and valuable suggestions in starting different income generating activities. Beneficiaries urge to have one to one meeting with the union workers so that they can revitalize their training knowledge in taking different decisions on their IGA. In that case, the number of union workers should be increased per union to closely monitor the need of the beneficiaries at the end of the project cycle.

Another vital issue that beneficiaries faced during their working tenure is getting sexually harassed or dishonour from the locality. In that case, UP chairman should be better informed with the help of the union workers so that it doesn't hamper their moral values and beneficiaries can work with proper confidence and security in their workplace.

9.5. Revisiting Livelihood Training Programme

From FGDs, it has come to know that the content of the training programmes is overlapping and to some extent union workers do not have that much capability to deliver technical knowledge among the beneficiaries. In that case, it will be required to engage education specialist to redesign the course curriculum. Moreover, development partners and NGO specialists can be invited to deliver technical knowledge among the beneficiaries so that they can better grab the lesson and utilize it in their income generating activities.

9.6. Sustainable Impact of SWAPNO Programme

Sustainability is a debatable issue. Though, PSM findings postulate that social security programmes have long run impact but due to the absence of prior intervention data, it is difficult to establish any causal estimation. Moreover, while comparing the SWAPNO LAS data with baseline, some mix up results have been witnessed analysing the indicators to assess the long-term impact. However, it is evident that, in most aspects i.e. income, expenditure, MPI, food security, housing condition and knowledge on different rights along with confidence level, this programme has performed well while considering the sustainable impact. However, loophole is also witnessed in terms of engaging new income earning activities which in turn create unemployment and thereby reduce income and expenditure as compared with the control counterpart. Therefore, while considering the sustainability perspective, regular monitoring and time to time training session help beneficiaries to graduate out of poverty. However, as this study is conducted two years after ending the project cycle, indication towards positive outcome of livelihood indicators imply that beneficiaries are now confident enough and leading a better life and they will do so even in the absence of the project.

9.7. Project Monitoring and Implementation

Setting up appropriate monitoring mechanism is the key to success of any public works programme. Community oversight can also be a good way to increase monitoring and ensure the decentralization of the programme design. Especially while considering the SWAPNO programme, it doesn't directly include community participation while selecting the beneficiaries. There are several ways through community can directly participate such as beneficiary selection, selection of public projects, monitor project, track progress, raising fund, etc. While designing a project, success stories of other programmes i.e. REOPA, TUP etc. might be followed as an important tool to ensure proper implementation of the project.

9.8. Graduation and Cash Transfer Debate

Graduation programme exhibits significant positive impact and outweighs cash transfer programme by several indicators. Both HIES analysis and particular observation from public works model (SWAPNO) reveal exemplary success on beneficiaries under graduation context. According to literature, though cash transfer intervention brings temporary support, there is probability that the poor people will slip into poverty again in the long run. The evidence supports that graduation or public works model include a package of interventions aiming to upgrade the ability of the beneficiaries so that they can maintain a certain level of income even in the absence of the project. Moreover, this paper highly argues that, if the main aim is to graduate people out of extreme and moderate poverty, a comprehensive social security system should be developed with the adequate engagement of government bodies.

References

Abadie, A., & Imbens, G. (2002). Simple and bias-corrected matching estimators for average treatment effects.

Adapting the Graduation Approach for People with Disabilities. (2016). Retrieved from https://www.cgap.org/blog/adapting-graduation-approach-people-disabilities

Ahmed, I. (2013). Social safety nets in Bangladesh. Institute of South Asian Studies, National University of Singapore.

Asadullah, M. N., & Ara, J. (2016). Evaluating the long-run impact of an innovative anti-poverty programme: evidence using household panel data. Applied Economics, 48(2), 107-120.

Barkat-e-Khuda. (2011). Social safety net programmes in Bangladesh: A review. *The Bangladesh Development Studies*, 87-108.

Begum, I., Alam, M., & Haque, M. (2015). *Productive Impacts of Cash Transfer and Conditional Cash Transfer Programs in Bangladesh: Propensity Score Matching Analysis* (No. 1008-2016-80297).

CLP (2014). Annual report – Chars Livelihoods Programme (CLP). 7. Retrieved from http://clp-bangladesh.org/wp-content/uploads/2014/08/CLP-Annual-Report201320141.pdf.

De Montesquiou, A., Sheldon, T., Degiovanni, F., & Hashemi, S. (2014). From extreme poverty to sustainable livelihoods: A technical guide to the graduation approach. *CGAP and Ford Foundation*.

De Montesquiou, A., Sheldon, T., Degiovanni, F., & Hashemi, S. (2014). From extreme poverty to sustainable livelihoods: A technical guide to the graduation approach. *CGAP and Ford Foundation*.

Dehejia, R. H., & Wahba, S. (1999). Causal effects in nonexperimental studies: Revaluating the evaluation of training programs. *Journal of the American statistical Association*, *94*(448), 1053-1062.

Dehejia, R. H., & Wahba, S. (2002). Propensity score-matching methods for nonexperimental causal studies. *Review of Economics and statistics*, *84*(1), 151-161.

Devereux, S. (2016). Social protection for rural poverty reduction. Rural Transformation Technical Papers Series, 1.

Ehrenpreis, D. (2006). *Social protection-the role of cash transfers* (No. 8). International Policy Centre for Inclusive Growth.

Grosh, M. E., Del Ninno, C., Tesliuc, E., & Ouerghi, A. (2008). *For protection and promotion: The design and implementation of effective safety nets*. The World Bank.

Handa, S., Park, M., Darko, R. O., Osei-Akoto, I., Davis, B., & Daidone, S. (2013). Livelihood empowerment against poverty program impact evaluation. *Chapel Hill: University of North Carolina, Carolina Population Center. Available at: http://www. unicef. org/ghana/gh_resources_LEAP_Quant_impact_evaluation_FINAL_OCT _2013. pdf*.

Hashemi, S., & De Montesquiou, A. (2011). Reaching the poorest: Lessons from the graduation model. *focus note*, *69*, 1-15.

Hörmansdörfer, C. (2009). Health and Social Protection'teoksessa Promoting Pro-Poor Growth: Social Protection.

Hulme, D. (2014). Consolidating Nets and Promoting Ladders in Bangladesh: From Social Safety Net Programmes to a National Social Protection System In HZ Rahman, D. Hulme, M. Maitrot & LP Rango. *Social Protection in Bangladesh: Building Effective Social Safety Nets and Ladders Out of Poverty*.

Iqbal, K., Mahmud, M., Chowdhury, T. T., Roy, P. K., & Hasib, A. B. (2017). Impact Evaluation of the 1st Phase of 'SWAPNO'.

Khatun, F., & Saadat, S. Y. (2018). Towards a Social Protection Strategy for Bangladesh.

Kidd, Stephen. (2017). The Effectiveness of the Graduation Approach: what does the evidence tell us?

Livelihood Resource Center (2016). Livelihood Indicators Guide. Retrieved from http://www.livelihoodscentre.org/key-indicators.

Maluccio, J., & Flores, R. (2005). *Impact evaluation of a conditional cash transfer program: The Nicaraguan Red de Protección Social*. Intl Food Policy Res Inst.

Maniruzzaman, M. (2009). Management of Selected social safety net programmes in the vulnerable charlands of Bangladesh. *Dhaka: Center for Agriresearch and Sustainable Environment & Entrepreneurship Development and Cinishpur Dipsikha Mohila Somiti*.

Mohiuddin, S. M. (2008). Effectiveness of Social Safety Net Programmes (SSNPs) in Poverty Reduction.

Ragno, L. (2014). *LINKING PROTECTION AND PROMOTION IN POOR HOUSEHOLDS: SOCIAL PENSION SCHEME AND POVERTY REDUCTION IN URBAN BANGLADESH* (Doctoral dissertation, University of Manchester).

Ragno, L. P. (2014). *Social Protection in Bangladesh: Building Effective Social Safety Nets and Ladders Out of Poverty*. H. Z. Rahman, D. Hulme, & M. Maitrot (Eds.). University Press Limited.

Rahman, M. M. (2012). Estimating the effects of social safety net programmes in Bangladesh on calorie consumption of poor households. *The Bangladesh Development Studies*, 67-85.

Rahman, Z.H., & Choudhury, A.L. (2012). Social safety nets in Bangladesh: A PPRC-UNDP Research Initiative. Ground Realities and Policy Changes Volume 2.

Rubin, D. B. (1973). The use of matched sampling and regression adjustment to remove bias in observational studies. *Biometrics*, 185-203.

Rutkowski, M. (2002). Pensions in Europe: Paradigmatic and Parametric Reforms in EU Accession Countries in the Context of EU Pension Systems Changes. *Emergo. Journal of Transforming Economies and Societies*, *9*(1), 2-26.

Samson, M. (2015). Exit or developmental impact? The role of 'graduation' in social protection programmes. *IDS Bulletin*, *46*(2), 13-24.

Samson, M., Lee, U., Ndlebe, A., MacQueen, K., van Niekerk, I., Ghandhi, V., ... & Abraham, C. (2004). Final report executive summary: the social and economic impact of South Africa's social security system. *Cape Town: EPRI*.

Scoones, I. (1998). Sustainable rural livelihoods: a framework for analysis.

Slater, R. (2011). Cash transfers, social protection and poverty reduction. *International Journal of Social Welfare*, *20*(3), 250-259.

Sulaiman, M., & Misha, F. (2016). Comparative Cost–Benefit Analysis of Programs for the Ultra-Poor in Bangladesh. *Bangladesh Priorities*.

Sulaiman, M., Goldberg, N., Karlan, D., & de Montesquiou, A. (2016). Eliminating extreme poverty: Comparing the cost-effectiveness of livelihood, cash transfer, and graduation approaches. In *Forum. Washington, DC: CGAP. C*.

UNICEF. (2007). The state of the world's children 2008: Child survival (Vol. 8). UNICEF.

WATAN, E., & Food. (2012). Food Security & Livelihood Program. Retrieved from https://watan.foundation/EXPERTISE/Fsl_PROGRAM?lang=en

World Bank. (2006). Social safety nets in Bangladesh: An assessment. *Bangladesh Development Series No. 9*.

Annex 1: Graduation and Sustainability Indicator

Dimension of graduation	Criteria
Income/ expenditure/ consumption	1. Household has had more than one source of income during the last 30 days 2. Household eats three meals a day and consumes five or more food groups in the past week
Nutrition	3. Household has access to improved water 4. Household has access to a sanitary latrine with an unbroken water seal 5. Presence of ash/ soap near to water point or latrine
Asset base	6. Productive assets worth more than BDT 30,000
Status of females	7. Participant is able to influence household decisions regarding sale/ purchase of large investments e.g. cattle
Vulnerability	8. Homestead is above known flood level 9. Household has cash savings of more than BDT 3,000
Access to services	10. Household has membership of social group

Source: CLP, 2014

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