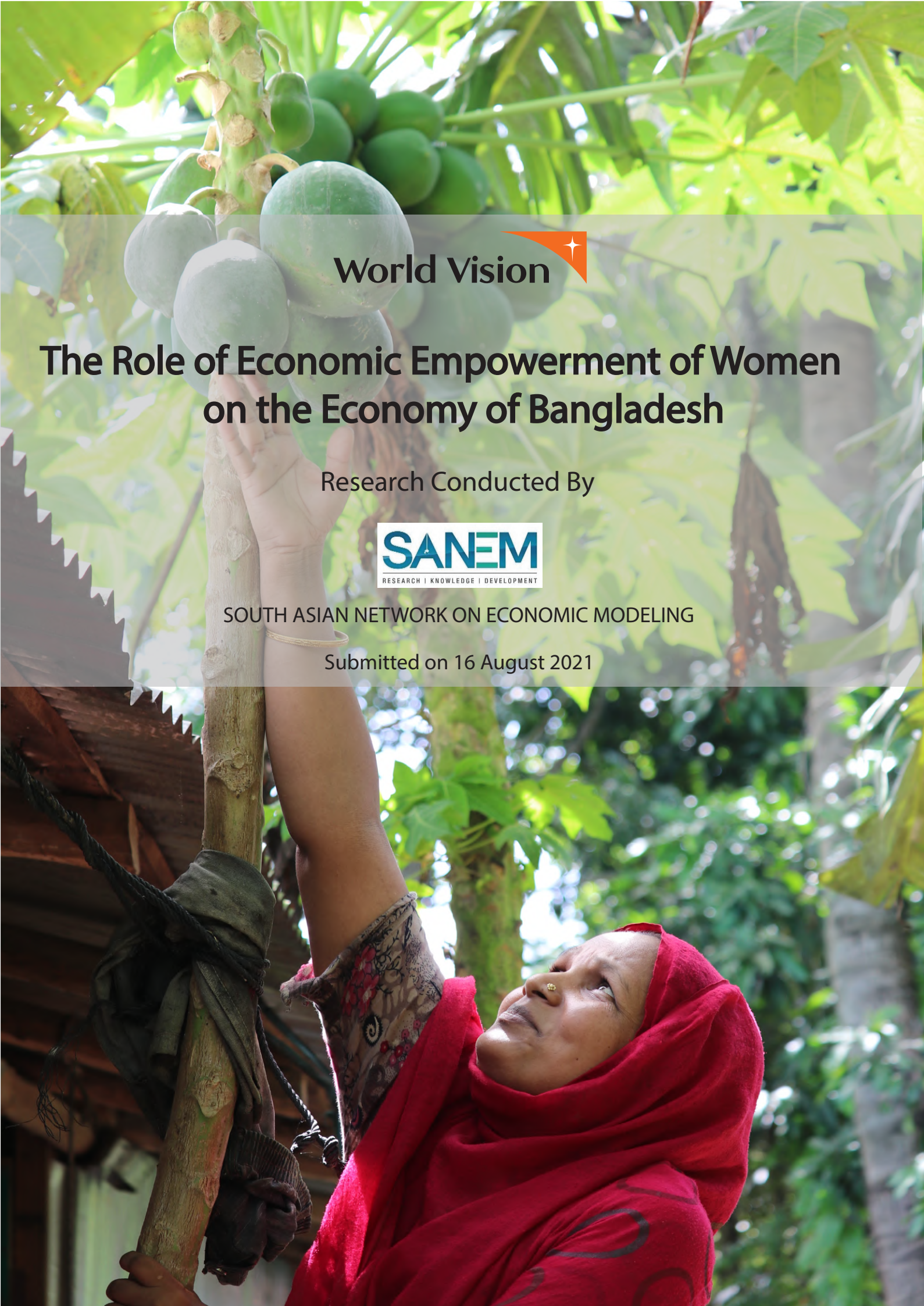

World Vision

The Role of Economic Empowerment of Women on the Economy of Bangladesh

Research Conducted By

SANEM
RESEARCH | KNOWLEDGE | DEVELOPMENT

SOUTH ASIAN NETWORK ON ECONOMIC MODELING

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List of Acronyms

ADB	*Asian Development Bank.*
ADF	*Augmented Dickey-Fuller Test*
AIC	*Akaike Information Criteria*
BBS	*Bangladesh Bureau of Statistics*
CCT	*Conditional Cash Transfer*
CLA	*Collaboration, Learning and Adaptation*
COVID-19	*Coronavirus disease 2019.*
CV	*Curriculum Vitae*
DFAT	*Department of Foreign Affairs and Trade, Australia*
FCDO	*Foreign Commonwealth & Development Office*
FFP	*Food for Peace*
FGD	*Focus Group Discussions*
FPE	*Factor Price equalization*
GDP	*Gross Domestic Product.*
GED	*General Economics Division*
HSC	*Higher Secondary Certificate*
ICT	*Information and Communication Technologies*
IFC	*The International Finance Corporation*
IGA	*Income-Generating Activities*
ILOSTAT	*The International Labor Organization STAT*
IMF	*International Monetary Fund*
INGO	*International non-governmental organization*
KII	*Key Informant Interviews*
LPG	*Liquefied Petroleum Gases*
MICS	*Mobile Integrated Communications System*
NGO	*Non-governmental organization*
NSA	*Nutrition sensitive agriculture*
NSVC	*Nutrition-Sensitive Value Chains*
PWT	*Penn World Table*
RMG	*Ready-made garment*
SANEM	*South Asian Network on Economic Modeling*
SDG	*Sustainable Development Goals*
SIC	*Standard Industrial Classification*
SIDO	*Swedish International Development Cooperation Agency*
SWOT	*Strength, Weakness, Opportunities, and Threat*
UCLA	*The University of California, Los Angeles*
UN	*United Nation*
UN Women	*United Nation Women*
UN Women Bangladesh	*United Nation Women Bangladesh*
UPG	*Ultra-Poor Graduation*
USAID	*United States Agency for International Development*
VAR	*Vector Auto Regressive*
VEC	*Volunteer Examiner Coordinator*
VECM	*Vector Error Correction Model*
VSLA	*Village Savings and Lending Associations*
WASH	*Water, Sanitation and Hygiene*
WEE	*Women's economic empowerment.*
WEF	*World Economic Forum*
WVB	*World Vision Bangladesh*

Executive Summary

Over the last one decade, the economy of Bangladesh has made remarkable stride on different socio-economic indicators such as the consistent economic growth, poverty reduction, school enrolment and neonatal and maternal health, etc. However, women's economic participation as measured by the female labour force participation has been stagnant around 35 per cent since 2010. Moreover, women's practice of rights and participation in household decision making has always remained a grey area, often less emphasised in policy frameworks. The issue of female empowerment is more pertinent for two reasons. First, as Bangladesh is passing through a demographic transition, the window of the demographic dividend would cease after 2029, meaning the dependency ratio in the country would increase afterwards. If women are left behind, that would have significant consequences over transgenerational income, inequality and economic growth. Secondly and more importantly, women's economic empowerment is an effective tool for ensuring gender equity and obtaining multiple SDGs.

Against the backdrop, the necessity for revamped engagements of government, non-government organisations, and donors with clear mandates of women economic empowerment could not be overstated. In this backdrop, SANEM, in collaboration with the World Vision Bangladesh (WVB), undertook a project to understand (i) the way women's economic empowerment contributes to the economy; (ii) assess the extent of some WVB interventions in enhancing women economic empowerment; (iii) identifying a set of targeted policy frameworks for women economic empowerment in Bangladesh. Three WVB programmes selected for this study are Ultra-poor Graduation Programme (UPG), Nobojatra – New Beginning, and Nutritional Sensitive Value Chains (NSVC) for Smallholder Farmers

The study examines the linkages from both micro and macro points of view and utilises quantitative and qualitative research tools. In pursuit of the research objectives, the study uses available secondary data, a systematic literature review, ten KIIs with relevant stakeholders, two FGDs with the programme beneficiaries, and a field survey covering 650 beneficiary households and 200 non-beneficiary households.

Secondary data analysis revealed a grimmer scenario of women empowerment in Bangladesh

Though the female labour force participation rate has experienced a persistent rise since the late '90s, the progress has somehow got stagnated since 2010 (LFS 1999/00 to 2016/17). Moreover, most women are not engaged with mainstream remunerative economic activities: 29.1 per cent of employed women are involved in unpaid work, which is nearly 25 percentage points higher than that for men (LFS 2016/17). According to the SANEM-GED survey (2018), only 14 per cent of the working-age women (aged 15-65) earn from employment. In addition, the quality or type of employment females hold is lower/less productive than males. The data from the latest LFS (2016/17) shows that women hold only 11 per cent of managerial positions, compared to 88.7 per cent of males. A higher percentage of females are employed in elementary occupations and agricultural activities (40.6 per cent and 53.8 per cent, respectively). Such low access to economic activities may hinder other aspects of empowerment indicators. For instance, as SANEM-GED survey (2018) shows, women have no decision-making authority for important household decisions in almost one in five households.

The qualitative findings urge for collaboration between the private sector and government institutions to improve women economic participation

Under the qualitative approach, to address the issues centred on women economic empowerment, the study has conducted ten KIIs with representatives from government, donors, private sector, UN and I/NGO. The KII respondents argued that policies at the macro-level alone might not effectively change the present status quo. On the one hand, it would require some cultural changes, such as introducing specific topics in the education curricula, ensuring female-friendly workforce culture, etc. On the other hand, specific programmes would be needed to ensure increased women participation in the paid employment/self-employment, particularly from rural and marginalised backgrounds. In this context, the key informants focused on the need for improved collaboration between the private sector and government to strengthen the value chain and encompass women in the value chain. Such engagement will extend income-generating support for women, enhance financial inclusion, help eradicate wage discrimination, and create a women-friendly work environment.

The success of WVB's interventions on some selected indicators of women economic empowerment has been reflected in the survey

A quantitative survey was conducted, covering both beneficiaries and non-beneficiaries. In total, 1047 women were surveyed from 850 households (650 beneficiaries and 200 non-beneficiary households). The survey was conducted in Barishal, Chattogram, Dhaka, Satkhira, Jamalpur, Mymensing, Rajshahi, Rangpur and Sunamganj. The survey incorporated sections on women's employment, earning, participation in household decisions, asset ownership, their access to mass media, ICT and finance, gender-based violence, and perceptions of male household members towards women economic empowerment. The findings from the survey identify several key features.

The survey finds that beneficiary women are 9.2 percentage points more employed than the non-beneficiaries, indicating a desirable outcome from income-generating activities. Moreover, A higher percentage of beneficiary earning women save their income (63.66 per cent) compared to the non-beneficiary women (42.9 per cent). In addition, the average savings per month by beneficiary earning women are substantially (100 Tk) higher than the non-beneficiary women. This, to some extent indicates the effectiveness of financial literacy facilities of the programmes and the well-functioning of the savings committees.

Nonetheless, the results are not too promising in terms of indicators of access to finance. Amongst the 64.1 per cent of beneficiary women who are familiar with transactions through mobile banking, only 40.8 per cent of them have made transactions through it. Only 39.6 per cent hold of the beneficiary women have personal mobile banking accounts. In the case of formal bank account, only 6.7 per cent of beneficiary women have it.

The WVB's interventions also experienced a positive impact on productive asset accumulation. The percentage of beneficiary women holding any productive asset is higher than the percentage of non-beneficiary women for that productive asset i.e. large livestock (21.2 vs 8.4), small livestock (44.6 vs 30.4), farm equipment (9.8 vs 4.0) and non-farm business equipment (9.8 vs 4.8). The survey also found that for every major household-level decision, the opinion of beneficiary women gets more importance than the non-beneficiary women. This is also a clear indication that the WVB programs improved the women empowerment situation. There is an observed positive impact of programs on school enrolment rate and school dropout rate. In addition, it is found that compared to non-beneficiaries, beneficiary households spend significantly more on education (on average 320 Tk higher) and health (on average 465 Tk higher), the two fundamental elements of human capital development.

Moreover, two areas where all programmes lacked much were access to information and technology and reducing violence against women. There was no significant difference between the beneficiary households and the non-beneficiary households

Male perception toward women economic participation is moderately satisfactory

In a male-dominated society like Bangladesh, the discussion of women's economic empowerment remains incomplete if the masculine issue or male household members' perception of women's economic participation is not captured. The male perception toward women economic empowerment has been captured based on ten indicators. As such, almost one-third of the male respondents thought if women engaged in work, they would eventually take jobs away from men. But the majority of the surveyed males (more than 87%) agreed that if women engaged in income-generating activities, that would help households. Moreover, almost 70 per cent of the respondents thought that a woman and her family would be happier if she worked for income. Also, nearly 80 per cent of them replied that both husband and wife should contribute to the household income, while 76 per cent responded that full-time employment would make a woman more independent.

Moreover, to understand a comparative scenario of male perception toward women economic empowerment by the beneficiary and non-beneficiary households, a male perception score (0 to 100) has been constructed. The score was prepared based on a Likert scale. Here a higher score represents a more women economic empowerment friendly male perception. As observed from the survey, the score does not vary much between the beneficiary and non-beneficiary households. However, the score of the beneficiary (63.31) households is slightly higher than the non-beneficiaries (62.37).

Construction of the women economic empowerment (WEE) index revealed positive impacts of the WVB interventions on WEE

As a holistic approach to demonstrate the present scenario of women's economic empowerment, this study has constructed a woman economic empowerment (WEE) index (score between 0 to 100), showing the extent to which women are economically empowered. The index is constructed based on five broad indicators, i.e. production, income, resources, digital literacy, and household expenditure decision. The constructed index shows that while women's overall economic empowerment score is not satisfactory, the WVB's beneficiaries (47.90) have a higher score on the WEE index than the non-beneficiaries (42.61). Moreover, on average, the WEE index score for all five domains considered is higher for the beneficiaries than the non-beneficiaries. However, the magnitude of women economic empowerment, as measured with the index, varies largely across the programmes.

Empirical evidence found that WVB interventions, favourable male perception, and education of the women matters for women economic empowerment

In addition to the descriptive statistics, this study also employs standard econometric techniques to determine the WVB programmes' impact on the WEE index, controlling for observable characteristics. Results from the Heckman two-step regression model show the WVB programmes' significant impact on the WEE score. Controlling for all other observable factors, the NSVC is found to have the largest impact on WEE, followed by Nobojatra and UPG programmes. Moreover, the regression-based approach shows that women from female-headed households are more empowered. Moreover, the education of the respondent women has been

found to have a significant impact on the WEE score. Finally, the study finds that male perception of women's economic empowerment matters significantly – households with a more favourable perception of women's economic empowerment have significantly higher scores on WEE indicators.

Doubling the female employment will lead to a 31 per cent increase in the GDP of Bangladesh

Along with observing the impacts of the WVB programmes, another objective of this study was to quantify the relationship between women economic empowerment and GDP. This study applied a standard time series econometric analysis to estimate the relationship. The findings of the econometric analysis show that female employment, which is a proxy of women economic empowerment, has a significant impact on real GDP growth in the long run. While the study of ADB (2016) shows that if the labour force participation rate for women were raised to the same as for men, the gross domestic product of Bangladesh would be increased by 27%, this study finds that if female employment could be doubled, in the long run, this would bring about 31% increase in the GDP of Bangladesh. This provides that empowering women will be crucial for sustainable and higher economic growth in the future.

Policy Recommendations

Based on the findings, this study, therefore, comes up with a set of recommendations. While some of the recommendations are WVB project-specific, others are more far-reaching in nature and fit the broad spectrum of women's economic empowerment in Bangladesh. The recommendations could be categorised as follows – (i) WVB programme specific recommendations; (ii) recommendations for the Government; (iii) recommendations for the private stakeholders; (iv) recommendations for the donors/development partners, and (v) a set of broad recommendations.

Recommendations for the Government of Bangladesh

- ✓ The prevalence of the school dropout rate is still very high in Bangladesh. A strong measure is needed from the Government of Bangladesh (GoB) in containing the school dropouts. An increase in the primary and secondary school stipend rates could work as an effective tool in this regard.
- ✓ The curriculum and texts should sensitise more on issues related to reproductive health, gender-based violence, the importance of women economic empowerment, and how women can contribute more to the family and the country being empowered, etc.
- ✓ Government is in the best position to reduce the extent of gender-based violence. The steps taken by the government (like introducing hot lines) is commendable. However, it needs to be assured that women have access to such services.
- ✓ Family counselling and psychotherapy is considered as essential in combating gender based violence. Both of these issues are highly neglected in the country. There are hardly any professional counselling or psychotherapy services available outside of major divisional cities. The government can make these services more available at least at the Upazila level.
- ✓ Given that the demographic dividend window is ceasing for Bangladesh, the government should prioritize increasing female employment. The main factors that obstruct women's job prospects are the gender gap in tertiary education and skill development, less favourable working conditions, unavailability of favourable and affordable transportation. The government has already taken some policies that reduce the gender gap in primary and secondary education (ADB, 2016). However, the remaining gender gap in higher

education should be eradicated to increase female employment. Assuring a gender-friendly environment in education/training institutes (e.g. a separate bus service, toilet facilities, etc.) as well as at the workplace can be instrumental to the greater involvement of women in tertiary education and economic activities (Raihan & Bidisha, 2018). Moreover, the participants from the KIIs and FGDs mentioned that safety is one of the first issues their families require assurance of during their employment or training outside the home. Women who feel less secured outside are less likely to participate in the labour market (Kotikula et al., 2019). Therefore, the issue of workplace safety and affordable public transport for women should be taken into account with priorities.

- ✓ Moreover, another issue limiting women's participation in the labour market is the lack of childcare facilities (Rahman & Islam, 2013). Women with children under five are less likely to join the workforce if there are no childcare facilities (Kotikula et al., 2019). According to section 94(1) of the Bangladesh Labour Law (2006), every organization with more than 40 should have a childcare centre. However, the issue is still unheard of in the policy arena, and the progress is nonexistent. For greater sensitization, the government can provide the employers with some fiscal incentives such as tax rebates, subsidized credit facilities, etc.
- ✓ Finally, maternity leave policy might also affect female economic participation. Although Bangladesh has a favourable maternity leave policy, it is important to implement the policy in all sectors properly.

Recommendations for the donors/development partners/INGOs:

- ✓ All the livelihood or similar projects taken by the donors/development partners should contain three integral parts: (i) the project must have a women economic empowerment component; (ii) the project must ensure sensitising the male household members on the importance of WEE, and (iii) the project must have a focus on gender-based violence. One approach to it could include: (i) informing the participants on the forms of violence; (ii) collaborating with the government and local stakeholders in boldening the actions against violence; (iii) staging the importance of equal rights through mass communication in the project area; (iv) ensuring stronger collaboration with the local religious leaders (such as Imam or relevant chaplains), etc.
- ✓ Ensuring some essential services – such as psychotherapies or family counselling facilities in remote areas- could be challenging to arrange for the government if there is no support from donors or development partners. The development partners can work with the government in undertaking some pilot initiatives addressing mental health and psychological issues.
- ✓ For ensuring more participation of women in the workforce, there is no alternative to a collective effort in skilling up the women with training and seed supports. The GoB has large training facilities across almost all Upazilas in the country. In this regard, the donors/development partners can collaborate with the government to ensure more female training participants. It can be ensured by taking up projects (in collaboration with the government) providing safe transport facilities for the training participant females, providing hygienic women-friendly toilet facilities at training centres/schools, ensuring training with minimum costs or providing the females with stipends/concessions on training fees, etc.

Recommendations for the private sector:

- ✓ The biggest role the private sector can play is by integrating women in the supply or value chain. For instance, they can offer female farmers concessionary prices for seeds, fertilisers, tractors, etc. This could be linked to the Corporate Social Responsibility (CSR)

funds for the private sector firms. The private sector firms can also ensure more seamless transactions with female farmers or female suppliers.

- ✓ Ensuring some essential services (such as daycare centres, paid maternity leaves, etc.) is not possible without private sector support. All the private sector firms should ensure to provide adequate daycare support for their employees. Although seemingly small, this support alone can increase the female labour force participation by several hundreds of thousands.
- ✓ The private sector should also contribute to ensuring equal employment opportunities for women. They could also encourage more participation of women in taking up their dealership deals, or work as distribution agents, etc. Engaging women in such non-traditional works can increase female employment by several folds.

Broad recommendations

- ✓ Gender sensitisation is required in all the projects related to livelihood improvements, including the WVB interventions. As has been observed, male perception of women economic empowerment is positively related to the WEE index scores. All livelihood improvement projects undertaken by the GoB, private stakeholders or donors, should have an inherent component for the male participants where the importance of gender equality and gender equity would be sensitised.

- ✓ Project planning needs to be devised such as that women's participation in the household's major decision making can be integrated further. As this study points out, women are least integrated into household asset accumulation and investment decisions. In this respect, social mobilisation is required through mass media and awareness-building campaigns.

- ✓ Women access to mass media and ICT needs to be prioritized. Whether beneficiary or non-beneficiary, this study finds that women have significantly less access to mass media and ICT or telecommunication devices compared to men. Government, donors and development partners can identify optimal policy arms to devise an appropriate strategy to bring women within the web of the internet and digital connectivity.

- ✓ Strong actions are needed against violence against women. Although this study cannot directly link women economic empowerment and GBV, policies and projects undertaken for women economic empowerment should emphasise this indicator. Also, there is no counselling facilities available in most of the parts of the country. The projects can incorporate a family counselling service in project designs aimed at WEE.

- ✓ It is important for the programs to design future interventions to promote employment and earning opportunities for working-age women and facilitate their access to finance and upgraded technology.

- ✓ In order to advance or heighten the achievement of economic empowerment of women in Bangladesh, the informants stressed creating strong market linkages for women entrepreneurs, strong collaboration between public and private entities, equal distribution of unpaid domestic work among all family members and male engagement with an aim to reverse social stigma surrounding women empowerment.

- ✓ The participants from the KIIs and FGDs mentioned that safety is one of the first issues their families require assurance of during their employment or training outside the home. Women who feel less secured outside are less likely to participate in the labour market

(Kotikula et al., 2019). Therefore, the issue of workplace safety and affordable public transport for women should be taken into account with priorities.

Section I: Introduction

In countries like Bangladesh, women, particularly those from more impoverished income strata and those with lower education or ethnic backgrounds, are more susceptible to shocks and vulnerabilities (Raihan and Uddin, 2021). Therefore, the overarching attainment of sustainable development goals poised with inclusive growth essentially requires improving women's overall socio-economic condition. In this context, investing in women's economic empowerment (WEE) can be an essential strategy for attaining multiple SDG indicators. As the global experience suggests, empowering women is closely linked with not only the key development goals of gender equality but also with those of poverty eradication and is conducive to inclusive economic growth (UN Women, 2020).

Despite Bangladesh's remarkable advancement on many critical socio-economic indicators, the progress made on women's economic empowerment is somewhat mixed with several challenges ahead. There is no denying that, with patriarchal norms deeply entrenched in social structure and cultural values, women's economic empowerment in Bangladesh is a challenging task. Several socio-economic practices and norms, e.g., deprivation from an equal inheritance, socially imposed gender-specific roles and norms, violence in the domestic and public sphere, are among some of the many crucial factors that have constrained women's economic advancement in Bangladesh. Moreover, the manifestation of hegemonic masculinity through various institutions, media, and establishments of multiple forms has often disrupted policy interventions aimed at ameliorating women's economic status.

Against the backdrop, the necessity for revamped engagements from Government, non-government organizations, and donors with clear mandates of women economic empowerment could not be overstated. In this relation, the World Vision Bangladesh (WVB), which is one of the largest donors and advocacy organisations working in Bangladesh, has been working on emphasising women empowerment as part of their key agenda. The WVB has 32 grant-funded projects being administered in 28 administrative districts with 55 area programmes. Amongst the programmes, three major programmes of WVB with a specific focus on women economic empowerment are the Ultra-poor Graduation Programme (UPG), Nobojatra – New Beginning, and Nutritional Sensitive Value Chains (NSVC) for Smallholder Farmers.

To understand how these WVB programmes influenced and contributed towards economic empowerment of women and also how women economic empowerment can enhance economic growth, the World Vision Bangladesh collaborated with the South Asian Network on Economic Modeling (SANEM) through the project titled "Economic Case for Women: How Economic Empowerment of Women may Contribute in the Economy of Bangladesh". As part of this effort, this study attempts to understand such linkage from both micro and as well as macro points of view and utilizes quantitative and qualitative research tools.

The study has three broad objectives:

Firstly, to assess the extent to which the mentioned WVB interventions (i.e. UPG, NSVC, Nobojatra) related to WEE contributed to women economic empowerment and to identify the challenges, lessons learnt, and gaps in the interventions. The study also seeks to understand whether women's economic empowerment differ geographically across regions. Secondly, to identify the relationship between WEE and economic growth or GDP of Bangladesh, based on

economic models. And lastly, based on the research findings, identifying the role of stakeholders and prioritising a set of policy recommendations for ensuring WEE.

With this brief introduction, the report has been organised as follows. Section 2 of this study briefly reviews the background and context of the research and rationalises the objectives. Section 3 provides a summary of the key literature on women economic empowerment. Subsequently, section 4 describes the study methodology, followed by section 5, which provides a qualitative analysis of the study. The survey findings have been presented in section 6. Section 7 provides a time-series analysis investigating the relationship between women employment and GDP growth. Finally, Section 8 concludes with policy recommendations.

Section II: Background and Context: State of Women's Economic Empowerment in Bangladesh

Before delving into the Women Economic Empowerment (WEE) status based on WVB programme evaluations and available secondary data, it is vital to stocktaking the existing scenario in Bangladesh based on available secondary data. Such data analyses expect to provide an in-depth understanding of the existing gaps in outcomes, assess the needs of different groups, and identify explicit policy options. All of these would be conducive to reducing the gender gap in different spheres and paving the way towards the economic empowerment of women in Bangladesh.

To understand the current scenario of women's economic empowerment in Bangladesh, this study primarily used data from Bangladesh's labour force surveys (various years) and the SANEM-GED household survey, 2018. The labour force survey of the Bangladesh Bureau of Statistics (BBS) is the largest nationally representative data capturing Bangladesh's employment and labour market situation. However, the latest available Labour Force Survey data is available for 2016/2017. Besides, the survey data does not include any specific sector for measuring women economic empowerment. This indicator is also not available in other major BBS surveys, such as the Household Income Expenditure Survey (HIES) 2016. In this respect, this study has used the SANEM-GED household survey 2018, which provides a greater array of information on relevant indicators. In collaboration with the General Economics Division (GED), the planning commission of Bangladesh, SANEM, conducted a nationwide survey on 10,500 households in 2018. The survey contained a separate section for women's economic empowerment, which has been used in this analysis. This section has made use of both of these data to understand different aspects of WEE in Bangladesh.

The overall scenario of women's labour market participation in Bangladesh

Though not comprehensive, female labour force participation is often considered as a proxy indicator of women's economic empowerment (Saqib, 2016). In the context of Bangladesh's labour market, one of the most noticeable changes over the years has been a persistent rise in female labour market involvement. From 23.9 per cent in 1999/00, the female labour force participation rate has increased to 36.3 per cent in 2016/17 (Table 1). However, this progress has stagnated since 2010, and a fall in female labour force participation could be observed between 2010 and 2013.

Table 1: Trends in the labour force participation and employment in Bangladesh

	1999/00	2005/06	2010	2013	2015/16	2016/17
Labour force (millions)						
Both	40.7	49.5	56.7	60.7	62.1	63.5
Male	32.2	37.3	39.5	42.5	43.1	43.5
Female	8.6	12.1	17.2	18.2	19.1	19.9
Employed population (millions)						
Both	39	47.4	54.1	58.1	59.5	60.8
Male	31.1	36.1	37.9	41.2	41.8	42.2
Female	7.9	11.3	16.2	16.8	17.8	18.6
Labour force participation rate (%)						
Both	54.9	58.5	59.3	57.1	58.5	58.2

	1999/00	2005/06	2010	2013	2015/16	2016/17
Male	84	86.8	82.5	81.7	81.9	80.5
Female	23.9	29.2	36	33.5	35.6	36.3

Source: Labour force surveys of BBS (various years)

Nevertheless, it must be kept in mind that female labour market participation solely does not ensure women's economic empowerment. In the case of female labour market participation, one of the crucial aspects is the quality of work in which women are engaged. As shown in Table 2, as high as 29.1 per cent of employed women are involved in unpaid work- the proportion is nearly 25 percentage points higher than that for men. Though included in the employed labour force, these women do not get any remuneration and cannot be considered part of the mainstream remunerative economic activities.

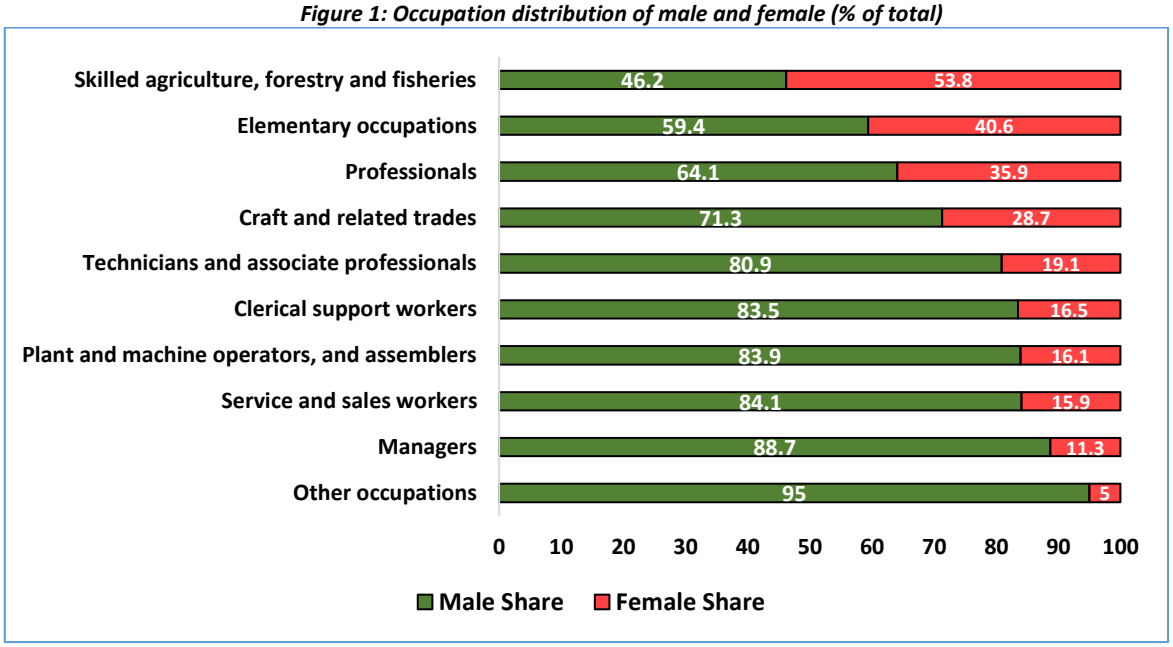
Table 2: Types of employment for male and females (% of total)

	2005/06		2010		2016/17	
Types	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
Wage employment	40	23.9	46.1	18.5	42.6	31.2
Self-employment	50.4	16	47.7	25.3	52.5	39.2
Unpaid family worker	9.7	60.1	7.1	56.3	4.2	29.1

Source: Labour force surveys of BBS

In addition to broad categories, the quality of female employment can also be analysed from gender-segregated occupational distribution data for Bangladesh (Figure 1). The latest LFS (2016/17) shows that women hold only 11 per cent of managerial positions, compared to 88.7 per cent of males. A higher percentage of females are employed in elementary occupations and agricultural activities (40.6 per cent and 53.8 per cent, respectively). The predominance of women in agricultural activities, which is low-paying and low productive, coupled with their concentration on unpaid work, may affect women's economic decision-making ability thus might not contribute to economic empowerment.

Figure 1: Occupation distribution of male and female (% of total)



Source: Labour force survey, 2017

The scenario of women economic empowerment by some selective indicators

Household decision making

While understanding WEE, women's ability/opportunity to either make or share their opinion on important household decisions such as asset sales or purchases, education, or marriages of children, etc., is often considered important indicators (Razzaque and Bidisha, 2012). Table 3 shows that women have no decision-making authority in almost one in five households covered by the SANEM-GED survey. Besides, a regional pattern in the case of household decision-making can also be observed. For Chittagong and Rajshahi, women have no voice in the decision-making process in more than one-third of the households.

Table 3: Major decision making of the households by location (% of total)

Location	Me/ The wife of the household head	Me with my husband/ in law	My husband/in law	All members of the family	Others
Urban	12.12	35.97	20.05	30.63	1.24
Rural	10.32	41.08	20.43	26.88	1.29
Total	10.94	39.31	20.3	28.18	1.27
Barisal	22.9	43.13	9.35	23.47	1.15
Chittagong	13.14	31.16	33.3	21.1	1.31
Dhaka	9.01	47.29	14.81	27.66	1.23
Khulna	6.45	53.93	7.1	31.4	1.12
Mymensingh	3.9	61.04	18.33	14.14	2.6
Rajshahi	18.82	28.59	39.24	12.71	0.64
Rangpur	5.64	21.15	5.21	66.59	1.41
Sylhet	7.01	32.46	4.81	54.51	1.2

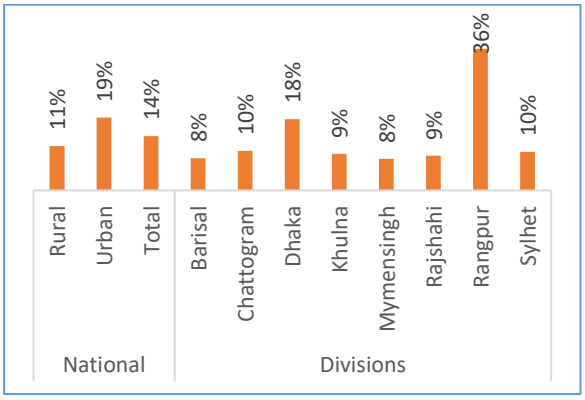
Source: SANEM-GED household survey, 2018

Working-age women with earning status

In the case of women economic empowerment, another important indicator is the earning status of women. As revealed in the SANEM-GED survey, only 14 per cent of the working-age women (aged 15-65) are in active employment and are earning. However, there is a spatial pattern in women's earning status in urban areas. As revealed in Figure 2, more significant percentages of women (19 per cent) are engaged in remunerative economic activities in urban areas than in rural areas (11 per cent). However, It is noteworthy to mention that, in rural areas, many women work as unpaid family workers. Secondly, in most of the divisions, the percentage of working-age women earning is less than the national average except in Dhaka and Rangpur divisions.

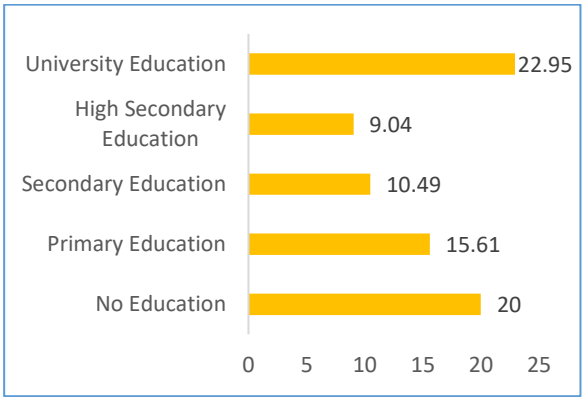
The earning status of working-age women by education level is shown in Figure 3. A more significant percentage, precisely 23 per cent of women with university education, are earners. However, the relationship with education is not linear. While 20 per cent of the working-age women with no education are earners, this percentage is lower for women with primary (15 per cent), secondary (10 per cent), or higher secondary education (9 per cent).

Figure 2: Percentage of working-age women earning by location



Source: SANEM-GED Household survey, 2018

Figure 3: Percentage of working-age women earning by education status

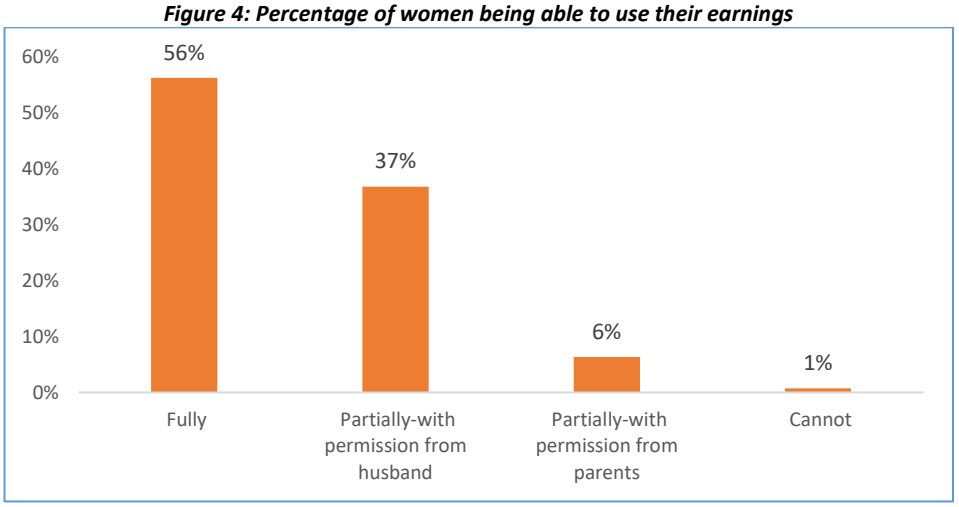


Source: SANEM-GED Household survey, 2018

Control over spending from own earnings

It must be noted that a woman's earning status does not reflect her control over spending, savings or investment decisions (Buvinic et al., 2020). As revealed from the SANEM-GED survey, only 56 per cent of earning women had complete control over the spending decision from their earnings (Figure 4). Forty-three per cent of the women have partial control over their spending decisions, however, only with permission from the husband or the parents. One per cent of the earning women responded that they do not have any voice on the spending decisions from their earnings.

Figure 4: Percentage of women being able to use their earnings



Source: SANEM-GED Household survey, 2018

Due to the lack of any other indicators related to WEE from the available secondary data, further detailed analysis is beyond the scope of this study. As the data limitation depicts, over the years, despite remarkable progress in many social and economic indicators, women's economic empowerment remained a grey area often overlooked. The lack of available indicators in the nationally representative data is nothing but another indication of such lesser emphasis on this matter.

Nevertheless, despite the limited number of indicators available, the anecdotal discussion highlights a grimmer scenario of overall women empowerment in the Bangladesh context. Bangladesh's progress on this parameter is unsatisfactory and needs a revamped policy

direction. Some of the indicators overviewed here, for instance, stagnant female labour force participation and women's bulk involvement in unpaid family labour, have been flagged in the literature for some time. But no significant policy directives have been observed so far. Moreover, the fact that even the women earners do not have substantial control over assets or household's economic decision making – points out the need for some broader yet specific, long term policies. As such, policies at the macro-level alone may not effectively change the present status quo. On the one hand, it would require some cultural changes, such as introducing specific topics in the education curricula, ensuring female-friendly workforce culture, etc. In addition, specific programmes would be needed to ensure increased women participation in the paid employment/self-employment, particularly from rural and marginalised backgrounds.

Against this contextualised background, this study would analyse the impacts of three programme interventions taken by the World Vision Bangladesh, namely – UPG, Nobojatra, and NSVC. This study attempts to understand their effects on different spectrums of women economic empowerment. It also aims to understand the role of male perceptions towards attaining women economic empowerment. In addition, the study also aims to find out the relationship between women employment and the GDP and how higher female employment might influence GDP growth in the long run.

Section III: Literature Review

Economic empowerment is about making markets work for women (at the policy level) and empowering women to compete in markets (at the agency level) (World Bank, 2006). It could be further defined as the process by which women exert their rights to economic resources and power to make decisions that benefit themselves, their families, and their communities (Care, 2020). A similar definition was posed by Taylor and Pereznieto (2014), which defines women's economic empowerment as the process of achieving equal access and control over economic resources and of ensuring that they can exert increased control over other aspects of their lives. In summary, women's economic empowerment is a process of transforming women's lives from a situation whereby they have limited power and access to common resources to a situation where they experience economic advancement (ibid).

As IMF has phrased, women's economic empowerment is "key for growth both through the direct impact of the size of the labour force on output and through the impact on productivity" (International Monetary Fund, 2018). Likewise, a wide array of literature has established a positive relationship between female participation in the labour force and economic growth. Klasen and Lamanna (2008), while using a 40-year-long panel dataset, found that a reduced gender gap in employment and education has a positive impact on economic growth. This reflects the argument of Galor and Weil (1996) that there is a positive association between growth and gender equality. The growth-enhancing effect of export-oriented industrialisation supported by increased female labour force participation has also been highlighted by Blecker and Seguino (2002).

Furthermore, women's success in education, employment, and other social and economic frontiers reduces the likelihood of household poverty and resources owned or controlled by women have a range of positive outcomes for human capital (Saqib, 2016). In economies like Bangladesh, which is ageing rapidly, higher female labour force participation can boost growth by mitigating the potential labour shortage risk (Oizumi, 2013). There is a consensus that women are more likely to devote a more significant proportion of their household income to their children's education (Saqib, 2016). Therefore, if women have better opportunities to earn and utilise income, they can contribute to broader economic development, for example, by ensuring higher school enrolment for girls. Mitra et al. (2015) point out that the greater presence of women in legislative bodies may raise growth over the medium to long run by altering public expenditure composition favouring health and education.

Bandiera & Natraj (2013) analyse the combined effect of gender gaps in labour force participation and education, known as the effective labour on economic output per worker. They found that, on average, a 1 per cent increase in the gender gap was associated with the reduced production of about 0.30 per cent. This rate was close to 0.50 per cent for Africa. The gender gap in Africa leads to an estimated economic loss of US$ 255 billion. On average, between 2010 and 2014, the region lost about $95 billion annually, equivalent to about 6.0 per cent of GDP (United Nations Development Programme, 2016).

Apart from female participation in the labour force and entrepreneurial activities, there are other domains where many improvements are needed. For instance, there is no alternative to ensuring women's economic empowerment to ensure women's control over financial and

household assets. These domains are closely intertwined with the country's legal structure and social dimensions. Gonzales et al. (2015) found that restrictions on women's rights to inheritance and property and legal impediments to undertaking economic activities are associated with gender bias in labour force participation.

Moreover, women mostly serve as unpaid family workers or have vulnerable employment through informal, unpaid, unrecognised, or low-paid agriculture work. The exclusion of a large percentage of women from the formal labour market may reduce the productivity of the total labour force by causing a possible substitution of productive female workers with male workers of relatively lower productivity (Cuberes & Teignar, 2012; Esteve-Volart, 2004). It could, in turn, have the consequence on economies suffering losses as a substantial part of the population cannot compete equitably or realise its full potential (Golla et al., 2011).

There is also a growing literature around women entrepreneurship and the economic losses caused by gender gaps in entrepreneurship (De Haan, 2016). According to the IFC estimate, there is a credit gap of $285 billion, and 70 per cent of women-owned businesses are either not served or under-served (IFC, 2011). Millions of jobs could be created if women could start businesses as often as men (Aidis et al., 2015). According to this study, the constraints faced by women entrepreneurs are manifold, including asset ownership, training, and networks.

Finally, a growing literature shows that gender gaps constrain productivity and growth in agriculture (World Bank, 2014). The existing gender gaps between male and female farmers, with females having limited access to resources, such as land, credit, and technology, have been observed to reduce firms' productivity and overall output.

In the context of Bangladesh, to understand the contribution of WEE on economic growth, the first step is to define the concept of WEE. As suggested in several studies, in the context of a developing country like Bangladesh, few relevant variables captured through survey data is often used. Based on standard literature and anecdotal studies, a couple of core indicators can be separated out in this research. The key indicators of measuring women economic empowerment, identified in this manner, could be as follows (i) Whether women are earners or not; (ii) the working status of women in the past seven days; (iii) women's involvement in major household decision; (iv) decision-making power of women to spend her own earning; women having control over how to spend some cash or savings; (v) women's ownership of productive assets such as land, animals, and machinery; (vi) women's access to information and technology; etc.

These indicators could be considered as yardsticks for measuring women economic empowerment in the subsequent analysis.

Section IV: Methodology

Given the research objectives, this study adopts an eclectic approach combining qualitative and quantitative techniques. The methodology comprises three integral parts. **First,** a desk research combing scanning of the secondary literature, policy documents, as well as data sources and secondary data analysis. **Second,** the collection of primary data through qualitative and quantitative approaches. And, lastly, regression models for establishing the relationships between the variables of interest (such as Women Economic Empowerment, GDP growth rate, etc.) and factors affecting those variables (such as programme participation, female employment, etc.). This section briefly discusses methodology on the first two components, namely – desk research and primary data collection. For the brevity of analysis, the methods on regression models have been discussed in the respective chapters afterwards.

Desk research

As part of the desk research, documents related to the projects of WVB and government policies regarding women's economic empowerment were thoroughly reviewed. The documents reviewed for the current assignment can be broadly categorized into four. First, WVB project documents, implementation plans, ground reports and reports on the beneficiaries. Second, published reports and documents on female labour force participation, female employment, women empowerment, etc. Third, policies related to strategic gender needs. And last but not least, a comprehensive review of available literature on women's economic empowerment and its relation to economic growth.

Along with documents review, relevant and available, secondary data sources were also examined during the desk research. Some of the key data used in this regard were: Labour Force Survey Data (2017), Household Income and Expenditure Survey data 2016, and MICS data (2018). The study team also used Penn World Table (version 10)[1] and International Labour Organization's (ILO) database - ILOSTAT[2].

Primary data collection

In collecting primary data, both qualitative, as well as quantitative approaches were incorporated in the study. As the quantitative method, a primary field survey was conducted. However, many social aspects, which are mostly unrepresented in the quantitative data, can be addressed through qualitative data, which provides in-depth information on social dimensions and characteristics. In that regard, this study conducted Focus Group Discussions (FGD) and Key Informant Interviews (KIIs).

Focus Group Discussion (FGD)

For gathering information on a set of specific topics which cannot be explained statistically otherwise, FGD is a key method (Start & Hovland, 2004). The application of FGDs enables researchers to obtain rich qualitative data more economically at a reasonable speed (Gorman

[1] The database is available here: https://www.rug.nl/ggdc/productivity/pwt/?lang=en; accessed on 1 March 2021.
[2] The database is available here: https://ilostat.ilo.org/; accessed on 1 March 2021.

& Clayton, 2005). Qualitative interviews also enable researchers to understand the significance of people's experiences (Kvale, 1996).

The sample size for an FGD needs to be determined based on objectives, time and available resources for a study (Patton, 1990; Bricki & Green, 2007). Literature maintains that the sample size should be large enough to capture most or all of the perceptions, which eventually leads to the attainment of saturation (Glaser & Strauss, 1967; Morse, 1994; Patton, 2002). For grounded theory, approximately 30 to 50 participants through three to four FGDs has been suggested by Morse (1994). However, Creswell (1998) argues that a total of 20 to 30 respondents is sufficient. Also, it is recommended that the optimal number of respondents per FGD should be between 6 to 12 people while the optimum duration should be between 90 to 120 minutes (Eliot et al, 2005; Krueger, 1988; Stewart & Shamdasani, 1990; Neuman, 2014).

Based on the anecdotal literature, this study conducted two FGDs - one in Dhaka and the other in Jamalpur. Both of the FGDs were carried out with the programme beneficiaries of the World Vision Bangladesh programmes. For the FGDs, the study team used a semi-structured qualitative checklist.[3] As a reliable tool for providing essential insights bridging the gaps between research and policy, the strength of FGD depends on the space its participants can avail to agree or disagree with each other. In this regard, SANEM ensured a free flow of conversation between the researchers and the participants.

Key Informant Interviews (KIIs)

This study conducted fifteen interviews with key informants from diverse yet related fields to capture a more detailed and diverse perspective on' women economic empowerment. Since women's economic empowerment is a multidimensional issue requiring active participation from cross-sectoral stakeholders, the study preliminarily mapped the major stakeholders involved in Bangladesh. The stakeholders can be broadly categorised into four groups, namely – (i) civil society associations and foundations, (ii) donor organisations involved in the process, (iii) Government representatives, and (iv) international non-government organisations (INGOs).

Based on the mapping, appropriate personnel from the representative organizations were approached, and interviews were conducted.[4] All the KIIs with these representatives were conducted through a video conference call given the corona-virus pandemic situation. In total, eight KIIs were conducted with these stakeholders. Moreover, recognizing that it is important to take detailed interviews of the programme beneficiaries, this study took four KIIs with the programme beneficiaries and three KIIs from relevant programme officials. Based on the KIIs with the programme beneficiaries, several case studies were also prepared as part of the qualitative assessment of the report. Therefore, this study conducted 15 KIIs with the relevant stakeholders.

A systematic approach was followed in planning the KIIs. Gaps in existing information and required information from specific key informants were determined based on desk research. Subsequently, appropriate personnel were located for the interview. A person specific customized checklist for each interview was prepared in consultation with the World Vision

[3] The checklist for the FGD is provided in the Annex
[4] See the Annex for the distribution of KIIs

Bangladesh. Transcripts of KIIs were systematically compiled, organized, and analyzed using qualitative data tools.

Quantitative survey

While the qualitative approach provided a broader aspect, in order to understand the individual programme impacts of the World Vision Bangladesh – a thorough survey was essential. In this respect, the study team surveyed beneficiaries from the three selected World Vision Bangladesh programmes. For a proper comparison, a representative number of non-beneficiaries were also surveyed.

The survey's main objective was to assess whether and to what extent the WVB programmes economically empowered the beneficiary women. With that focus, the survey questionnaire included sections on employment, earnings, training, education, access to social safety net programmes, and information on women's contribution and participation in household decision making. It also included the perception of the male household members (husband/father) towards women's economic empowerment.

Sampling design and data collection methodology

Given the objective of the survey, the sample size needs to be a population-representative of the selected WVB programmes. Following the sampling technique suggested by Bartlett, Kotrlik and Higgins (2001), with a 5 per cent margin of error and 95 per cent confidence interval, the sample size is defined as followed:

$$\boldsymbol{ss = \frac{Z^2 * p * (1 - p)}{c^2}}$$

where,

ss = Sample size
Z = Z value (1.96 for 95% confidence interval)
p = Percentage picking a choice, expressed as decimal (here, 0.5)
c = Confidence interval, expressed as decimal (0.05 = for 5 per cent margin of error)

Following this framework, the minimum sample size was found as 384. However, considering a design effect of 1.5, the sample size was estimated to be approximately 577. Assuming 10 per cent non-responses the total sample size was found as 634. Nonetheless, rounding it up, the sample size for the survey was selected as 650. These 650 households were taken from the beneficiaries of selected three WVB programs.

However, to evaluate the impact of the interventions of WVB, a comparison group is required as control who did not receive WVB programmes. Selecting a proper control group is a daunting task. In selecting the control group, two key principles are suggested to follow:[5]

1. The control group should be representative of the treatment group
2. The control group must be selected such that they are independent of the 'treatment' exposure.

[5] Source: Boston University School of Public Health (https://sphweb.bumc.bu.edu/otlt/mph-modules/ep/ep713_case-control/EP713_Case-Control5.html; accessed on 1 March 2021)

It must be noted that there is no 'pure control' group for the selected WVB programmes. Therefore, based on the programme documents, this study identified some common observable characteristics of the programme beneficiary households (such as location, type of dwelling, total household income, etc.). These features were considered while selecting the control group households.

The control group households were selected at multi-stage. At the first stage, the control group survey area was selected at different Upazila within the same district of the programme beneficiaries where no WVB programme is available. A union was selected randomly by the study team. Then the enumerators conducted a mapping of the households in consultation with the Union Parishad. Randomly selected households with observable desired characteristics were selected for the survey. The sample size for the non-beneficiaries was selected to be 200 to construct a reasonably large comparison group for the treated population. Therefore, the total sample size for the survey, including both treatment and control groups, was 850 households.

Since this study's main objective is to evaluate the impact of WVB's past interventions on women's economic empowerment, only women aged 15 to 49 had been surveyed from each household.[2] Moreover, to capture the perception of the males towards women's economic empowerment, this survey interviewed the survey participants' husband/father/father-in-law.

Sampling framework

A multi-stage stratified random sampling was followed for the survey. In the first stage, in consultation with the WVB, SANEM selected nine districts from eight divisions where the three selected projects NSVC, Nobojatra, and UPG, are operational (Table 4). It is noteworthy that Nobojatra is working in Satkhira and Khulna districts, and NSVC is in the Jamalpur district. UPG is available in all the divisions.

From each of the districts, three Upazilas were selected. Two Upazilas are from the WVB project areas and one Upazila from the non-project Upazila (to control spillover effect).

Table 4: Sampling framework and selected districts for survey

Division	Districts	Project Name
Barishal	Barishal	UPG
Chattogram	Chattogram	UPG
Dhaka	Dhaka	UPG
Khulna	Satkhira	Nobojatra
Mymensingh	Jamalpur	NSVC
	Mymensing	UPG
Rajshahi	Rajshahi	UPG
Rangpur	Rangpur	UPG
Sylhet	Sunamganj	UPG

Questionnaire development

A detailed questionnaire was developed with attention to the objectives of the study (see Annex). The questionnaire included sections on participation in WVB and non-WVB support

programmes, employment and earnings of women, participation in major household decision making, women's access to mass media, ICT and finance, asset ownership of women, violence against women, housing information, household income and expenditures, and perceptions of male household members towards women economic empowerment. Once the questionnaire was finalized, the SANEM team transformed the questionnaire into a mobile-based data collection toolbox KoBo.

Mobile-based data collection tools such as KoBo are more popular now and gradually replacing paper-based data collection. In contrast to the paper-based data collection, mobile-based surveys are smoother, and it minimizes the data entry errors as it follows appropriate logic, condition and constrained inputs. They are also cost-effective, efficient and easy to monitor the 'real time' progress.

Hiring of enumerators

Since the main respondents of the survey are females and the questionnaire incorporated gender-sensitive information, SANEM hired only female enumerators for this survey. Moreover, emphasis was given to hiring professional and experienced enumerators to ensure data quality. The recruited enumerators went through a two-layer selection process. At the first stage, based on the Curriculum Vitae (CV), enumerators with prior experience and a minimum of a graduate degree were selected for the interview. From the interviews, 28 enumerators were selected for a two-day training. Based on overall performance in the training sessions, qualifications, and mock tests, 24 enumerators were selected for the survey.

Training and piloting

The two-day long training module was divided into three sessions: (i) briefing session, (ii) mock session, and (iii) evaluation and field tests session. **In the briefing session,** the trainers provided an orientation on the background of the study, study objectives, study design, survey population, location of the survey, and other nitty-gritty. Also, the questionnaire and the survey manual were explained in detail during the briefing session. Enumerators were also introduced to the techniques to ensure data quality. In the **mock session,** enumerators were formed into groups of two, where one played the respondent's role and the other as the interviewer. During the role-play, the enumerators filled up the survey questionnaire on the KoBo toolbox. SANEM team closely monitored their progress and catered to their queries. In the **evaluation session,** the enumerators and supervisors were evaluated based on their performance of the tasks assigned to them and the assessment of their progress. Finally, only the selected 24 enumerators were sent to the field tests. Feedback received from the field test was incorporated in the survey questionnaire along with necessary modifications. Lastly, once the questionnaire was finalized, taking all the modifications, the enumerators were briefed again on the final version of the questionnaire.

Data collection and cleaning

After the training, the enumerators were divided into several groups and sent for different divisions. As trained, they collected the data on KoBo. Once the data was entered into the KoBo toolbox, it immediately became available on the KoBo toolbox server. The research team monitored the data regularly and provided feedback to the respective enumerators when and where required. The research team also inquired the enumerators if anomalies were identified. This 'real time' feedback loop ensured the data quality collected from the field. Once the survey was completed, the research team cleaned the data and prepared for the data analysis.

Limitations of the study

There are a couple of limitations worth mentioning. First, given the ongoing COVID-19 pandemic, conducting the KIIs, and FGDs was more challenging and daunting than before.

Moreover, given the time and budget constraint, SANEM couldn't choose a population-representative sample size for each of the three programmes (and beneficiary sample size) evaluated in this study with a 95% confidence interval and a 5% margin of error. Nonetheless, the sample size selected for the Nobojatra, and NSVC was 130 each – which met the sample size required at the 95% confidence interval with an 8.5% margin of error. The sample size for UPG was 390, meeting the sample size needed for a 95% confidence interval and 5% margin of error. In the case of non-beneficiary households, the 200 sample size meets the requirement for a 95% confidence interval with a 7% margin of error. Therefore, the sample size for NSVC and Nobojatra was sufficiently large but fell short of the standard practice of a 95% confidence interval with a 5% margin of error.

Section V: A Brief Overview of the Programmes, SWOT Analysis, and Case Studies

As has already been mentioned, one of the objectives of this study is to understand the best practices, challenges, gaps, and lessons learnt from the three WVB interventions in Bangladesh related to Women Economic Empowerment, namely – Ultra-poor Graduation Programme (UPG), Nobojatra, and NSVC. This chapter provides a brief overview of these selected WVB programmes along with a Strength, Weakness, Opportunities, and Threat (SWOT) analysis.

SWOT analysis is a common qualitative research tool for evaluating the effectiveness of projects. A program is evaluated in the SWOT framework by identifying strengths, weaknesses, opportunities, and threats associated with the programme. Strengths are the components that a project performed particularly well. Weaknesses like strengths are the inherent features of the project, which mainly capture the loopholes of the programs. Opportunities are chances of the project for something positive to happen. Finally, threats are anything that can negatively affect the projects.

SWOT analysis was conducted by scanning through the mentioned WVB project documents, implementation plans, ground reports, and reports on the beneficiaries in this process. In addition, KIIs, FGDs, and case studies with the programme beneficiaries were also used in complementing the SWOT analysis.

Programme specific overviews, SWOT analysis and case studies

Nobo Jatra – New Beginning

Nobo Jatra or New Beginning is a five-year USAID Food for Peace Title II Development Food Security Activity.[6] The programme is being implemented in partnership with the Ministry of Disaster Management, GoB, and Winrock international. The objective of the program is to induce and improve gender equitable food security, nutrition and resilience in the Southwest regions of Bangladesh. The project is implemented in Dacope and Koyra Upazilas in Khulna and Shyamnagar and Kaliganj Upazilas in Satkhira, targeting 200,495 households and 856,116 beneficiaries.

The program is being implemented with integrated interventions in maternal-child health and nutrition, water sanitation and hygiene, agriculture and alternative livelihood, disaster risk reduction, good governance, social accountability, and gender. The program targets children under two, pregnant and lactating women, youth, female-headed households, adolescent girls or young women (15-24 years), and their husbands and fathers. The program attempts to address the Sustainable Development Goals (SDGs) of no poverty, zero hunger, gender equality, clean water and sanitation, decent work and economic growth and responsible consumption and production to generate sustainable improvements in the southwest coastal region of Bangladesh.

[6] The project details can be found at: https://www.wvb-nobojatra.org/; latest accessed on 1 June 2021.

On the basis of the analysis of relevant reports and interviews with the relevant programme beneficiaries, the following strength, weaknesses, opportunities, and threats have been identified.

Strength:

- Reduced incidence of child marriages among the beneficiary households of Nobojatra can be observed.
- Women's training to pursue alternative livelihood schemes has expanded the set of income opportunities beyond informal work to entrepreneurial activities. This has raised household income and allowed women to earn equitable wages.
- Programmes can be considered to have contributed towards changes in social norms, which would encourage female leadership and entrepreneurial roles. Healthcare interventions for pregnant and lactating women have enabled beneficiaries to maintain timely access to primary healthcare services.
- Family welfare can be considered to have been enhanced through shared decision-making, domestic responsibilities, and nurturing supportive relationships within families.
- Male awareness of shared issues and their active engagement resulting from the programmes would help reduce domestic violence and contribute to better mental health conditions of children.
- Programs have helped single mothers overcome the lack of support from extended family members and have equipped them to graduate out of extreme poverty and invest in their children's education and health.

Weakness:

- More focus is needed to monitor and evaluate Village Savings and Lending Associations (VSLAs) to determine equitable access, the optimal number of loans released, and any unethical practices that could make the institution unstable.
- As part of the Collaboration, Learning and Adaptation (CLA) Framework, promotional graduation participants stated that the reading materials for Income-Generating Activities (IGA) and business plan development were sufficient. However, any actions based on these qualitative findings could be misleading since the beneficiaries are not adequately knowledgeable about profitable business options and current market operations. Adequacy of modules and choice of IGAs should be based on market knowledge and well-trained facilitators.

Opportunity:

- More focus is needed to ensure that after completion of training, beneficiaries are equipped with knowledge on market functioning, well-integrated into markets and receiving fair prices for their commodities, especially for the handicrafts & agriculture produce.
- Increase the number of beneficiaries of the training programs designed for alternative livelihood schemes beyond 18,000 and the benchmark proportion of women participants above 65% through wider dissemination of information to the target groups on availability and eligibility for the training programs. This can be effectively achieved by organizing dialogues with Union level government representatives.

- Widen provision of the healthcare interventions for pregnant women and children under-2 in areas that are not comparatively remote but where such healthcare practices are not prevalent due to income constraints or family restrictions
- Arranging capacity building training arrangements by increasing collaboration with other institutions (such as the Institute of Public Health and Nutrition) can help gain government support on widening the program's reach to a greater number of pregnant and lactating women and children under 2.
- There are scopes for more active participation from the private sector to generate monetary allocations for improving water and sanitary conditions through proper annual plans and WASH services. The plan may include training local service providers, raising awareness at the community level, and marketing essentials such as sanitary products, hand-washing devices, soaps and sanitisers.
- Positive changes brought about through 'Male Engagement for Gender Equality' initiatives can be sustained by ensuring that the alternative income-generating activities which beneficiaries engage in are made sustainable. This could be achieved by financing their entrepreneurial activities through well-established market outlets selling diversified products to earn from a diversified pool of consumers.

Threat:

- The presence of attrition from the training programs is a potential threat.
- Restrictions from an elder or aged family members on adopting healthcare approaches as advised through is another obstacle.
- The effectiveness of behavioural change programs could be reduced if male participants refuse to regularly attend training sessions arranged under the program titled 'Men Engagement training for family well-being.'
- Lack of willingness and enthusiasm of pregnant and lactating women to participate and receive the relevant programs due to their lack of awareness and knowledge on health and nutritional issues and trust in local trainers can be considered a threat.
- Institutional challenges and/or failures could threaten further budgetary allocations by Union Parishads. The Upazila Department of Public Health & Engineering needs to widen access to sanitary latrines and invest more in safe drinking water facilities.

Case study 1: "Women are not a burden for their societies."

Name: Jyotsna Begum (pseudonym)
Marital Status: Divorced
Age: 38
Education: Class 3
Household Members: 5

In February 2018, Jyotsna became a member of World Vision Bangladesh. Initially, she was enrolled in an educational program of 9 months, during which she received training on income-generating activities. The training program has allowed her to learn various ways to earn her living independently. Furthermore, she received financial support through the program, which has helped her to start her own business.

Apart from making her financially stable, the program has taught her the importance of educating her children, safe drinking water, hygiene and sanitation, health and nutrition. Before the program, Jyotsna had very little knowledge of the nutritional requirements of her children. In the past, due to the lack of knowledge regarding safe food and drinking habits, her daughter had to struggle with various diseases and health risks. The program has enabled her to bring valuable changes in her lifestyle, and all members of her family are now healthy.

Jyotsna hopes to support her children's higher education in the coming years. She believes that women are not a burden for their families and societies. With the programmes such as Nobojatra, she has proved that she too can make valuable contributions to the community. Nonetheless, she opined that the cash support she receives as part of the programme is spent mostly on paying back their loans and buying necessary goods, and therefore not always spent productively. Hence, a larger seed money to invest in productive activities could have had helped them lift out of poverty.

Nutrition-Sensitive Value Chains for Smallholder Farmers (NSVC)

NSVC is a six-year project with an aim to improve the nutrition of 20,000 smallholder male and female farmers and their households in Jamalpur district, a Northern area of Bangladesh. The programme aims to target 90,000 direct beneficiaries in 3 Upazilas. Through the adoption of the nutrition-sensitive agriculture (NSA) approach, the program seeks to increase the income of male and female smallholder farmers and their households with gender and nutrition-sensitive value chain development that will enable farmers to afford nutritious food for the household (income pathway). The market pathway will help retain food prices at an affordable range due to higher production and market access. In contrast, the production pathway will help utilise and consume nutritious food at the household level through greater availability. Therefore, the program aims to attain four broad outcomes from the interventions: higher income from value chain activities, improved consumption of nutritious food, improved gender-equitable relationships, and increased learning on nutritious sensitive agriculture in Bangladesh.

Strength:

- Gender and nutrition-sensitive value chain development that aids farmers to achieve high yields of agricultural products according to market demand.
- Gradual learning and adoption of NSA in Bangladesh, particularly in agricultural dependent regions causing a wider segment of the marginalized population to benefit from increased income, spending on nutrition and women's empowerment

Weakness:

- The absence of facilitating farmer households to integrate into the formal banking system hinders them from access to credits for investment and savings. For instance, without a formal banking system, it is not possible to engage them with SME financing strategy being promoted by the government.
- Another weakness is the absence of strategic plans or interventions to facilitate farming households purchase assets or expand asset ownership.

Opportunity:

- Establishment of a lending and savings association that will mitigate the cash flow constraints experienced by farmers.
- The interventions targeting adult female-only households would help disadvantaged females who are victims of social prejudice and discrimination. As such, it may help them overcome financial constraints, benefit from sustainable income sources and consume diverse nutritious food to improve their minimum dietary diversity.
- Introduction and provision of agricultural extension services such as capital needs, training on new cultivation methods, and skills to build resilience against natural disasters will help farming households increase income and overcome poverty.
- Behavioural change training and periodic monitoring will help farming households achieve the maximum improvement in consumption and utilization of nutritious food.

- Project goals and interventions could be designed and implemented to enhance social inclusion, gender equality, targeting the most destitute and disadvantaged young girls and women, and attaining economic empowerment.

Threat:

- Despite the MenCare approach of NSVC, different social and cultural beliefs that shame females who work outside to earn a living could be potential barriers for females to continue and expand their income-generating activities.
- Women could be prevented to seek and access primary health care and antenatal care services due to expectations of performing household chores, lack of decision-making authority for their health and the need to seek permission from household members to visit locales such as health centres.

Case study 2: "A woman's journey in lifting her family out of poverty."

Name: Shamima Begum (pseudonym)
Address: Jamalpur
Age: 26 years
Education: Class 9

When Shamima Begum got married at the age of 13, her husband, Majnu Islam, used to work as a labourer in other people's lands. They lived from hand to mouth on the little money her husband earned and could not afford anything extra. After being introduced to the NSVC programme, they joined multiple training programs on how to improve their livelihoods. As part of the program, they also received vegetable seeds and livestock, which helped them ensure a stable food supply and a source of income. Furthermore, access to homegrown fresh vegetables, milk and milk products helped the family to meet their daily nutritional needs. Shamima Begum now earns Tk 4000 from selling vegetables and TK 4500 from milk each year. Shamima has invested the money she earned to buy three additional goats, and at present, she has Tk 150,000 worth of livestock. Her family has used the remaining income to invest in a portion of land for their dwelling and also to support the education of Shamima's two sons.

Shamima joins a weekly meeting conducted by the WVB on the WASH community, where she learns about the importance of sanitation and hygiene. Shamima and 12 other women from her village are also given hands-on training on how to cook nutritional meals for their families. Regular sessions are organized for them on family planning, child labour, child marriage, domestic violence, etc. When asked about what she has learned from these organised sessions, Shamima mentioned that children below the age of 18 should not get married as early pregnancies and childbirth can be dangerous for girls.

Initially, when Shamima attended the training and sessions conducted by the World Vision Bangladesh, her husband objected to her working outside and often went to the extent of abusing her physically. However, he realized that the programs had benefited them and other families to lift out of poverty with time. Now, with the help of World Vision Bangladesh and a few different loans, her husband has managed to start his own grocery business.

Ultra-Poor Graduation (UPG) programme

To address and mitigate chronic poverty across four sub-districts in the Khulna division, Nobo Jatra undertook a modified version of BRAC's graduation model and the graduation approach of the USAID Food for Peace (FFP) Learning Agenda. The programme, titled as ultra-poor graduation programme (UGP), has components aiming to graduate 21,000 extreme poor households from vulnerability to sustainable income sources and livelihood. The model seeks to empower ultra-poor women by helping them graduate out of extreme poverty by providing

entrepreneurial training, access to savings, engagement with financial institutions, cash transfer, IGA implementation, productive asset development, kitchen gardening, coaching, and mentoring. The interventions also include life skills training, savings practice, and conditional cash grant transfer for livelihood promotion.

Strength:

- Most households qualified several graduation criteria such as (i) minimum two sources of income (termed as criteria 1), (ii) cash savings (criteria 5) and practising knowledge in disaster preparedness activities (criteria 7).
- Food consumption from the kitchen garden is likely to enhance women and children's health status and nutrition.
- Savings and credit groups and access to mobile financial services are expected to have helped women contribute to the higher education expenses of their children and expand income sources.

Weakness:

- The graduation criteria of Improved Hygiene Practices do not include menstrual hygiene practices.
- The graduation criteria of Positive Behaviour Change do not account for initiatives to induce social changes in perception towards women engagement in earning and employment and contributing to household finance.
- Along with social capital and financial literacy skills, life skills coaching should also equip beneficiaries, especially women and young girls, with technological knowledge, working skills and access to equipment.
- Beyond the issues of child marriage and school attendance, the criterion could focus on the presence of local associations and inter-community cooperation mechanisms to contribute to the social empowerment of women.

Opportunity:

- The inclusion of female-headed households based on a threshold that will increase the number of women beneficiaries in the model can be beneficial
- Targeting, monitoring and mentoring at the household and community level based on existing internal graduation assessment could be potentially helpful.
- Intensive phased programming consisting of relief, recovery, rehabilitation, protection and long-term development for sustainable graduation out of poverty can be considered.
- Strengthening relationships with local communities and partners to gain acceptance and trust in the community to reach marginalized female, and their families can be beneficial.
- Identification and implementation of measures to cushion beneficiaries against the economic shocks of COVID-19 could be immensely beneficial. It will help prevent the recent graduates from falling back into poverty can be considered as well.
- Easing up the institutional arrangements and procedures needed to request loans from Village Savings and Loan Association (VSLA) and enhancing the sustainability of VSLA could enhance women economic empowerment.

Threat:

- Disruptions to local, national and international enabling conditions could threaten the provision or facilitation of the core features of the model, such as consumption support, savings, asset transfer, technical skills training and life-skills coaching.
- The marginal returns from enhanced economic empowerment of women from the strategic interventions under UPG could be barred due to the constrained mobility of women and young girls.

Case study 3: "Reshma's journey towards financial security."

Name: Reshma Khatun (pseudonym)
Address: Bhatara, Dhaka
Age: 30
Education: Class 4
Household Members: 4

Reshma Khatun, aged 30 years old, is a beneficiary of the UPG programme of the World Vision Bangladesh. Through her hard work and supports from the programme, she managed to become financially self-reliant. Reshma comes from a small village in Madaripur. She left her home in 2006 to escape from her stepmother's abuse and start living with her garment worker elder sister in Dhaka. Her sister married her off when she was 16 years old.

After the marriage, it was challenging to make ends meet with the limited salary her garment worker husband earned. Later, her son's school teacher introduced Reshma to World Vision Bangladesh. In August 2018, she received a sewing machine from the programme. She was also given a set of three-piece clothing to kick off her business, along with brief training.

Although the programme did not provide her with any direct cash benefits, Reshma received in-kind supports worth Tk 25,000 or more as materials and resources. Nevertheless, participating in the programme has enabled her to lead a more productive and dignified life. She has become more aware of the benefits of savings and investment, concepts that she had little knowledge about before the programme participation. Moreover, participating in the programme, she has become more aware of hygiene, healthy lifestyle, nutrition, sanitation, safe drinking water, women's rights, child labour, child marriage, women empowerment etc.

Since becoming financially self-reliant, Reshma has experienced an increased autonomy in household decision-making. It has also enhanced her contribution and influence over decisions concerning the education, health and wellbeing of her household members. Using her earnings and profits from the business, she has managed to pay for necessary household amenities such as a TV and refrigerator. Moreover, she regularly saves a portion of her income each month. Reshma's participation in the UPG was a silver lining to her hardships.

Section VI: Findings from the Household Survey

This section provides a detailed analysis of the survey findings conducted in eight divisions, namely Chattogram, Dhaka, Rangpur, Mymensingh, Barishal, Rajshahi, Khulna, Sylhet, with the beneficiaries of Nobojatra, NSVC and UPG as well as non-beneficiaries. As mentioned in section 3, the objective of the survey was to identify the extent of achieved women economic empowerment through the selected programmes implemented by the WVB. In retrospect, the survey incorporated sections on women's employment, earning, participation in household decisions, asset ownership, access to mass media, ICT and finance, gender-based violence, and perceptions of male household members towards women's economic empowerment. In this chapter, the survey findings and descriptive statistics have been accompanied by a women economic empowerment index constructed as a yardstick for measuring WEE. Based on the findings from this section, relevant policy directives have been provided in section 8.

Survey coverage

Distribution of households surveyed by division and programme

The survey covered 850 households in total, consisting of 650 beneficiaries and 200 non-beneficiaries. Among the beneficiaries, 390 were from UPG, 130 from NSVC and 130 from Nobojatra (Table 5). Moreover, to capture the regional variation, the survey incorporated beneficiaries and non-beneficiaries from all eight divisions. From each of the divisions, for beneficiary households, one AP was selected in consultation with the WVB, and for the control household, Upazila, Union and Mouza were selected randomly. The detail of the survey coverage is presented in Table 5.

Table 5: Distribution of households surveyed by division and programmes

Division	District	Beneficiary				Non-Beneficiary		Total Sample
		AP	UPG	NSVC	Nobojatra	Upazila	Sample	
Chattogram	Bandarban	Bandarban AP	60	-	-	Bandarban Sadar	25	85
Dhaka	Dhaka	Dhaka East AP	60	-	-	Pallabi thana	25	85
Rangpur	Dinajpur	Birganj AP	60	-	-	Bochaganj	25	85
Mymensingh	Jamalpur	NSVC	-	130	-	Melandaha	15	145
	Mymensingh	Mymensingh AP	30	-	-	Nandail paurashava	10	40
Barishal	Pirojpur	Bhandaria AP	60	-	-	Zianagar	25	85
Rajshahi	Rajshahi	Tanore AP	60	-	-	Kesharhat Paurashava	25	85
Khulna	Satkhira	NoboJatra	-	-	130	Kalaroa paurashava	25	155
Sylhet	Sylhet	Sylhet AP	60	-	-	Fenchuganj	25	85
Total			**390**	**130**	**130**		**200**	**850**

Source: SANEM-WVB Survey 2021

Distribution of interviewed women

The survey attempted to interview all women aged over 15 in the sampled household. In this process, 1047 women were interviewed out of 1232 eligible women approached. Therefore, the survey response rate was 85 per cent. Among the women interviewed as categorized by program status, 61.8 per cent of the women who partook in the survey were beneficiaries of World Vision programmes, 14 per cent were family members of such beneficiaries, and the remaining 23.88 per cent were females from non-beneficiary groups (Table 6).

Table 6: Distribution of interviewed women by program status

Program status	Frequency	%
Beneficiary	647	61.8
Family member of the beneficiary	150	14.33
Non-beneficiary	250	23.88
Total	1047	100

Source: SANEM-WVB Survey 2021

Further disaggregation of the characteristics of the interviewed women shows that most of the surveyed females are married (71.5%), followed by 14 per cent widowed and 8.9 per cent unmarried females (Figure 5). The concentration of married women in the survey could potentially be attributed to the design and target population of World Vision programs and the incidence of early marriages among the target population. Furthermore, distribution by age group reveals that 29 per cent of the female respondents are young adults aged between 25-34 years, while 28.5 per cent are aged between 35-44 years (Figure 6). 17.4 per cent are female youths between the age of 15-24 years while those above 55 years comprise a smaller fraction, i.e. 11.4 per cent.

Figure 5: Distribution of interviewed women by marital status (%)

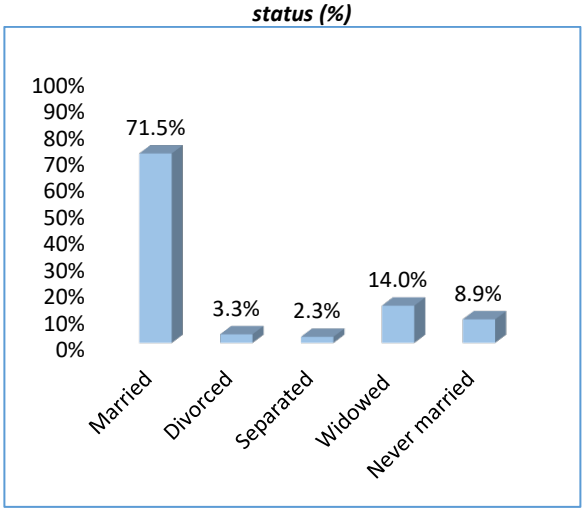
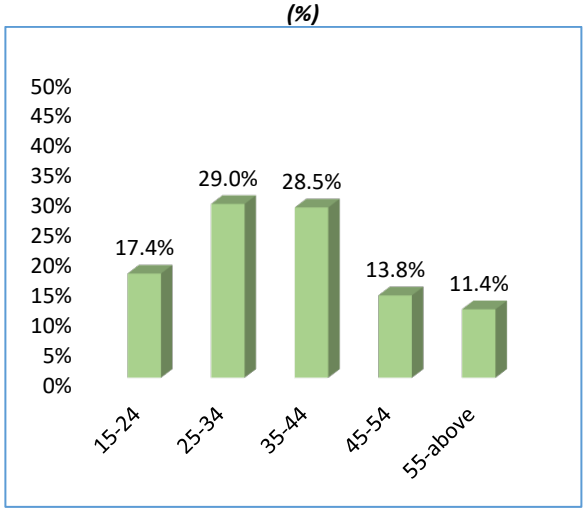


Figure 6: Distribution of interviewed women by age group (%)

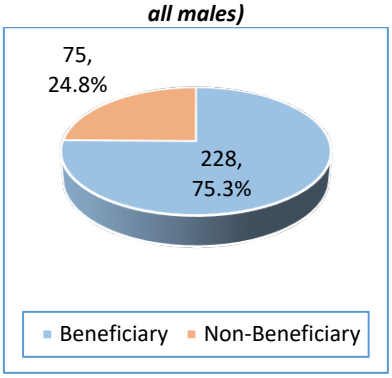


Source: SANEM-WVB Survey 2021

Distribution of interviewed male

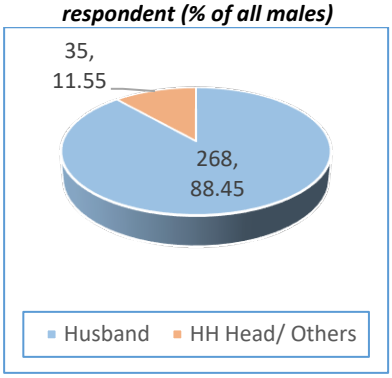
Almost three-quarters of the total surveyed males are from the programme beneficiary households (Figure 7).[7] Most of the male respondents are the spouse of the female respondents of the survey (88.45).[8] The education profile of the male respondents includes mostly no education (37.6%), primary (33.7%), secondary (24.4%), and HSC or above (4.3%) (Figure 9).

Figure 7: Distribution of male respondents by program status (% of all males)



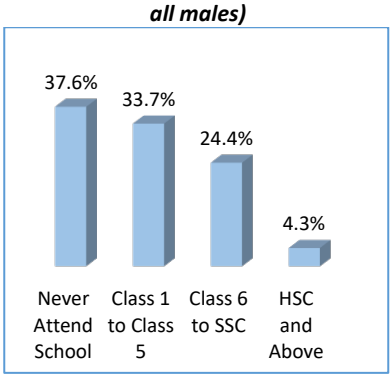
Source: SANEM-WVB Survey 2021

Figure 8: Distribution of male respondents by relation with the respondent (% of all males)



Source: SANEM-WVB Survey 2021

Figure 9: Distribution of male respondents by education level (% of all males)



Source: SANEM-WVB Survey 2021

Household Characteristics

Key household features

Most of the respondents live in their own houses that have electricity and tube-well water facilities. Mostly are agricultural and service-based households with an average household size of 4.8 (Table 7). In the majority of the indicators, the distribution for the beneficiary and non-beneficiary households are almost similar. However, some differences can be observed in few indicators. For instance, only 12.9 per cent of the beneficiary households' main housing material is brick, whereas this is 21.5 per cent for the non-beneficiary households. But, whereas 75.2 per cent of the beneficiaries live in their own dwellings, this rate is 61.5 per cent for the non-beneficiaries. In the case of households' main source of income, 35 per cent of the beneficiaries reported agriculture. In the case of non-beneficiaries, 24 per cent of the households' main source of income was agriculture.

These differences indicate that, despite the efforts from the researchers, it was not possible to create a completely identical 'control group' as for the beneficiary group. It must be noted that creating a control group of households after initiation of a programme (as it is with this study) is always a daunting task and subject to some variations. As such, generating a pure control group is not possible under such circumstances, given the resource and time constraints. Nevertheless,

[7] Note that males were only surveyed for the 'male perception' part of the questionnaire

[8] Female respondents are the targeted interviewee for this survey. For the beneficiary households, they are the programme beneficiaries. In the case of non-beneficiary households, they are women with eligibility criterion defined by the research team.

as the data points out, the variation between the treatment and control group households under this study is not large in most of the indicators and can be considered for comparison.

Table 7: Household characteristics

Indicators	Overall (%)	Beneficiary (%)	Non-beneficiary (%)
Construction material of the walls of the main room			
▪ Straw/bamboo/polishing/plastic/canvas/jupri/mud	35.3	34.9	36.5
▪ Tin (galvanized sheet – commonly termed as GI sheet)	44.5	47.1	36.0
▪ Tally/Semi- pacca	5.3	5.1	6.0
▪ Pacca (brick and cement)	14.9	12.9	21.5
Type of tenancy occupied by dwelling-household			
▪ Owned	72.0	75.2	61.5
▪ Rented	8.6	6.6	15
▪ Rent-free	9.8	9.5	10.5
▪ Provided free by relatives/ employer	6.0	6.2	5.5
▪ Government residence	3.7	2.5	7.5
Main source of light in your household			
▪ Electricity	91.2	92.31	87.5
▪ Solar electricity	3.2	2.92	4.0
▪ Kerosene	5.7	4.77	8.5
Main cooking fuel in your household			
▪ Wood/ bamboo	54.4	55.85	49.5
▪ Kerosene	0.1	-	0.5
▪ Gas/LPG	9.3	8	13.5
▪ Electricity	0.1	-	0.5
▪ Straw/dry leaf/ cow dung	36.1	36.15	36.0
Main source of household income			
▪ Agriculture	32.6	35.23	24.0
▪ Industry	14.9	14	18.0
▪ Service	43.7	44.31	41.5
▪ Government allowance/pension	1.2	1.23	1.0
▪ Remittance	1.4	1.38	1.5
▪ Others	6.2	3.85	14.0
Main source of drinking water in your household			
▪ Tap/supply	20.1	22.2	13.5
▪ Tube-well/ deep tube- well	75.8	75.1	78
▪ Ring well/ Indara/Kup	1.2	0.8	2.5
▪ Surface water (pond, river, canal)	2.9	2.0	6
Distance to the source of the drinking water (in minutes)			
▪ Inside the house	58.9	58.5	60.5
▪ Within 30 minutes of walking distance	36.7	38.5	31
▪ More than 30 minutes of walking distance	4.4	3.1	8.5
Kind of toilet facility			
▪ Sanitary (water sealed)	13.9	13.2	16
▪ Sanitary (not water sealed)	53.8	54.6	51
▪ Non-sanitary/ Kacha	29.4	30.0	27.5
▪ Open space/no latrine	2.9	2.2	5.5
Distance to the toilet facility			

Indicators	Overall (%)	Beneficiary (%)	Non-beneficiary (%)
▪ Inside the house	85.5	87.1	80.5
▪ Within 30 minutes of walking distance	13.3	12.0	17.5
▪ More than 30 minutes of walking distance	1.2	0.9	2
Average Household Size	4.8	4.9	4.4
Female: Male ratio	113: 100	113: 100	112: 100

Source: SANEM-WVB Survey 2021

Household head characteristics

Most of the households are male-headed (76.82 per cent), with the percentage being slightly higher for beneficiary households than non-beneficiaries (Table 8). The ratio of male and female-headed households between the beneficiary and non-beneficiary households could be due to the nature of the interventions for pregnant and lactating mothers and male engagement for gender equality.

Table 8: Household head characteristics (%)

Indicators	Overall	Beneficiary	Non-Beneficiary	Male	Female
Sex of household head					
Female	23.2	22.5	25.5	-	-
Male	76.8	77.5	74.5	-	-
Earning status of household head					
Earner	88.6	88.8	88.0	93.6	72.1
Non-earner	8.8	9.1	8.0	4.8	22.3
Contributing family member	0.6	0.5	1.0	0.0	2.5
Disabled/ not able to earn due to age	2.0	1.7	3.0	1.7	3.1
Education of household head					
Never attended school	42.7	42.6	43.0	40.4	50.3
Primary	36.8	36.3	38.5	36.6	37.6
Secondary	19.5	20.3	17.0	21.9	11.7
Tertiary	0.9	0.8	1.5	1.1	0.5

Source: SANEM-WVB Survey 2021

A high proportion of the household heads are earners (88.6 per cent), and the proportions do not vary much between the beneficiary and non-beneficiary households. However, there is a gender difference. 93.6 per cent of the male household heads are earners compared to 72.1 per cent female household heads. Regarding the education profile, 42.7 per cent of the household heads have no formal education, and the rates are synonymous for beneficiary and non-beneficiary. However, there are more female household heads without formal education (50.3%) than male household heads (40.4%).

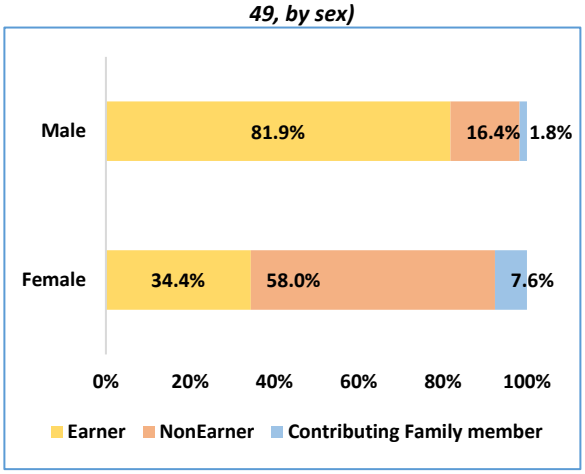
The WVB's interventions and the dynamics of women economic empowerment

Women employment

As mentioned earlier, one of the fundamental indicators of women empowerment is earning status. When measured by the earning status of women, empowerment has not been attained to a desirable level. As opposed to 81.9 per cent of men aged 15-49 who are earners, only 34.4 per cent of women aged 15-49 are earners (Figure 10). Thus, a staggering 58.0 per cent of women aged 15-49 have been identified as non-earners compared to only 16.4 per cent of men aged 15-49. A relatively large gap exists between the proportion of males and females aged 15-49 contributing family members, with the fraction being 5.8 percentage points higher for females. This points to strong cultural and social norms that limit women's contribution to household duties and reproductive roles. Such persistent trends could be counteracted by interventions focusing on improving income-generating opportunities for women and integrating them into market networks, which the key informants cited as success factors in empowering women. The interventions of the WVB have some success in this regard.

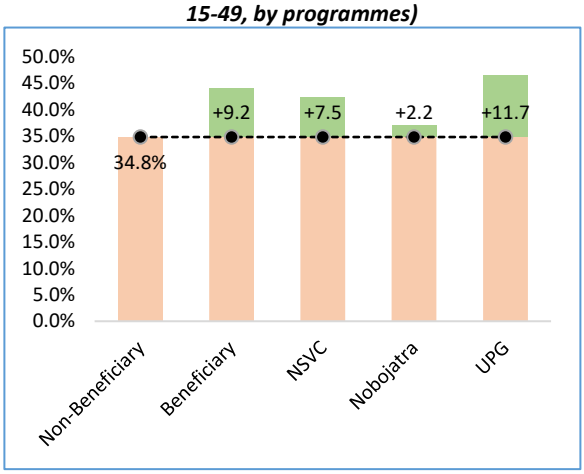
Compared to non-beneficiaries, on average, beneficiary women are 9.2 percentage points more employed[9], indicating the attainment of desired outcomes from income-generating activities (Figure 11). Across the projects, UPG has a better impact on women employment (11.7 percentage points higher than the non-beneficiaries), followed by NSVC (7.5 percentage points higher than the non-beneficiaries) and Nobojatra (2.2 percentage points higher than the non-beneficiaries).

Figure 10: Earning status of women (% of women aged 15-49, by sex)



Source: SANEM-WVB Survey 2021

Figure 11: Percentage employed women (% of women aged 15-49, by programmes)



Source: SANEM-WVB Survey 2021

Savings

Women's ability to save a part of their earning provides essential insight into women empowerment. The interventions of WVB have experienced a positive outcome in terms of

[9] Both earner and contributing family member are regarded as employed.

saving by employed women. A higher percentage of beneficiary earning women save their income (63.66 per cent) compared to the non-beneficiary women (42.9 per cent) (Figure 12). The rates are almost similar across the programmes (though relatively higher for NSVC), which is indicative of the effectiveness of financial literacy facilities of the programmes and the well-functioning of the savings committees. As a result, average savings per month by beneficiary earning women are substantially higher than their non-beneficiary counterparts (Figure 13). However, the average savings (per month) for the NSVC beneficiaries was Tk 100 lower than the earning women from the non-beneficiary category.

Figure 12: Distribution of women earners who save some parts of their earning (%, by programmes)

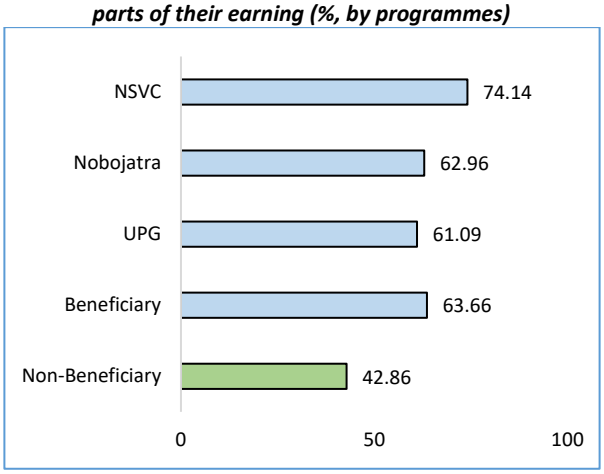
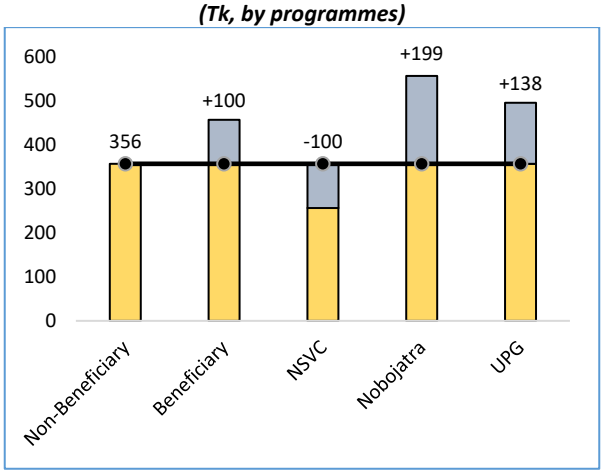


Figure 13: Average savings per month by earning women (Tk, by programmes)



Source: SANEM-WVB Survey 2021

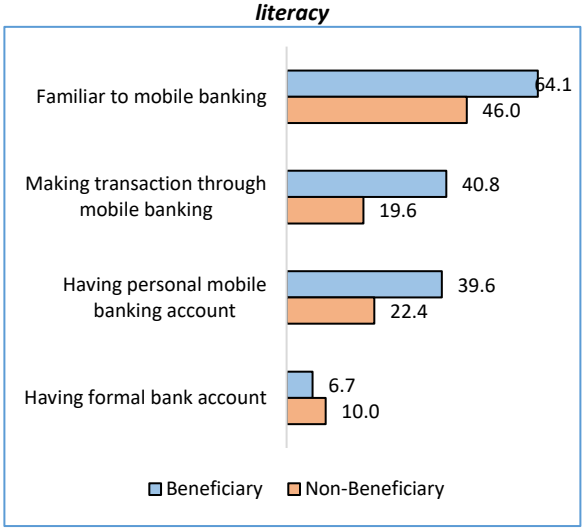
Financial inclusion

The financial inclusion indicators for the beneficiary women are significantly better than the non-beneficiary women, showing positive impacts of the WVB's interventions (Figure 14). 64.1 per cent of the women from the beneficiary households are familiar with mobile banking in comparison to 46 per cent of women from non-beneficiary households. However, only 40.8 per cent of the beneficiary women make transactions through mobile banking. Again, this rate is almost double that of women from non-beneficiary households (19.6%). 39.6 per cent of the beneficiary women hold personal mobile banking accounts compared to 22.4 per cent of non-beneficiary women. However, access to formal banking services is slightly lower for the beneficiary households' women (6.7%) than for the non-beneficiaries (10%). Such more insufficient access to finance could be due to women's lack of ownership of a mobile phone, inadequate information on processes to open and use mobile banking accounts and poor financial conditions restricting the use of formal banking services. Indirectly, it also shows women are not empowered enough to have their own banking system.

When it comes to holding any mobile banking and/or formal banking account, the beneficiary women are substantially better positioned (Figure 15). 42.5 per cent of the beneficiary women have a mobile banking account and/or formal bank account compared to only 28.4 per cent of non-beneficiaries. Across the programs, the rate is significantly higher for beneficiaries of Nobo Jatra. It indicates higher financial literacy among beneficiary women and the programme's

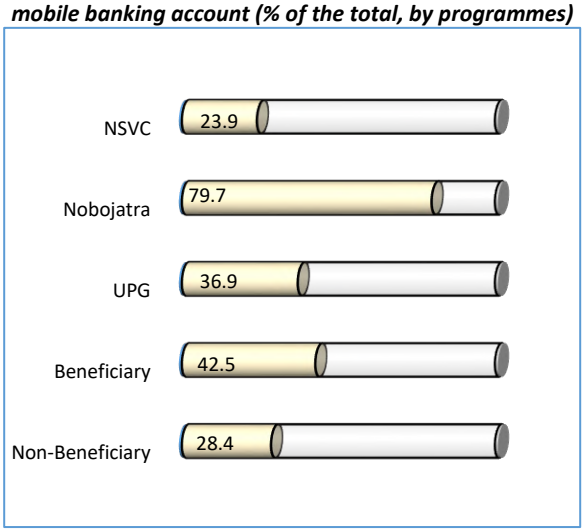
success in financial inclusion. However, amongst the WVB programmes, a lower percentage of beneficiaries from the NSVC have a bank account (23.9 per cent) compared to the control group – which requires a closer retrospection.

Figure 14: Percentage of women aged 15+ have financial literacy



Source: SANEM-WVB Survey 2021

Figure 15: Percentage of women having bank and/or mobile banking account (% of the total, by programmes)

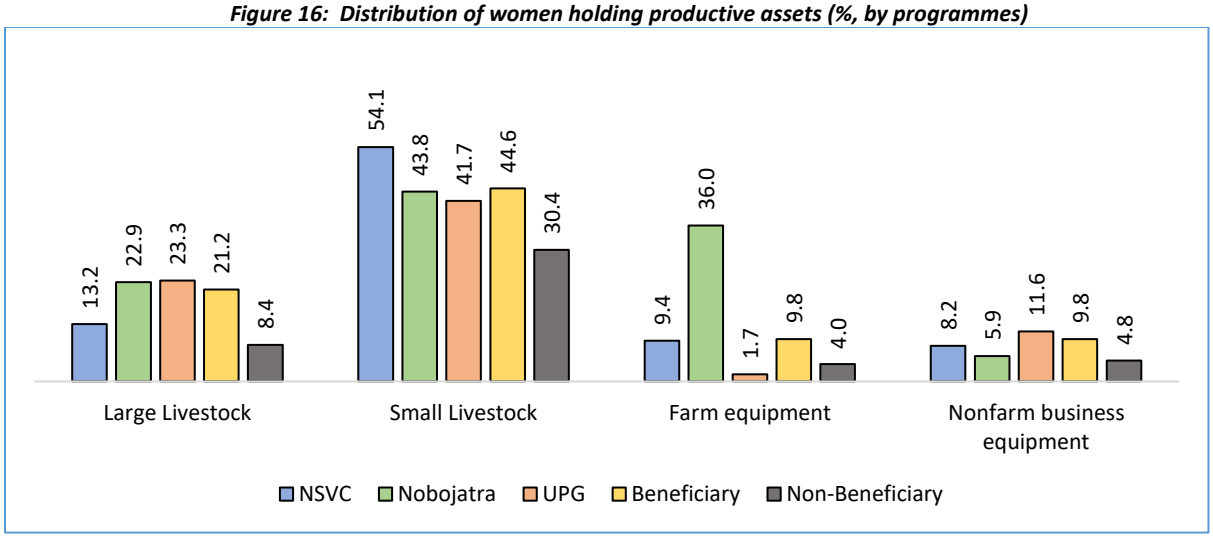


Source: SANEM-WVB Survey 2021

Productive asset accumulation

For every productive asset, the percentage of beneficiary women holding the asset is higher than that of non-beneficiary women (Figure 16). However, most programme beneficiaries own small livestock, and the rates are lower for large assets such as large livestock, farm equipment and non-farm business equipment. It could be because the beneficiaries are involved in small-scale, low value-added income-generating activities that may not provide opportunities for large scale business expansion either in agriculture or services.

Figure 16: Distribution of women holding productive assets (%, by programmes)

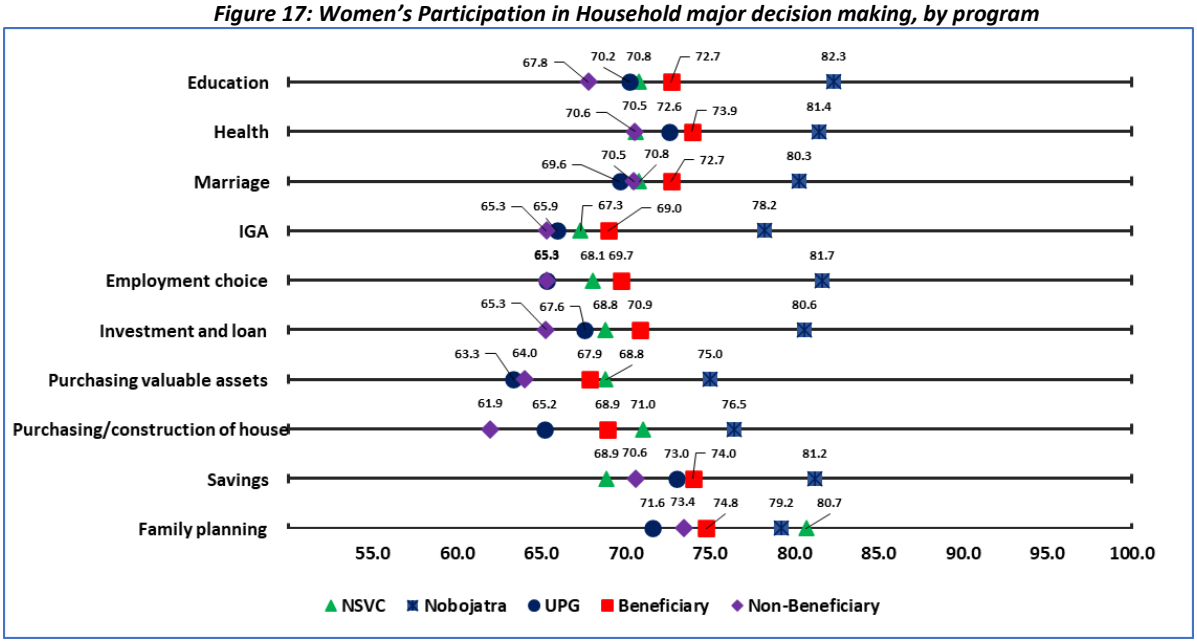


Source: SANEM-WVB Survey 2021

Participation in household major decision making

Women's participation in the household's major decision making is a major indication of women empowerment. To understand women's participation in household major decision making, SANEM has constructed a score ranging from 0 to 100 based on the level of importance that a women's opinion carries on the major household decisions. Figure 17 presents the average score for each of the major decisions by the program. It is found that for every significant household-level decision, the opinion of beneficiary women gets more importance than the non-beneficiary women. It is a clear indication that the WVB programs successfully promoted women empowerment. Among the programmes, Nobojatra is better performing for all the major decisions except family planning. In the case of family planning, the performance of NSVC is relatively better. It is also observed that women's opinion gets relatively more important for some issues, such as family planning, saving, health, marriage, and education. But, for households' decisions on purchasing or construction of a house, purchasing valuable assets, investment and loan, and employment choice, women's opinion gets less importance.

Figure 17: Women's Participation in Household major decision making, by program

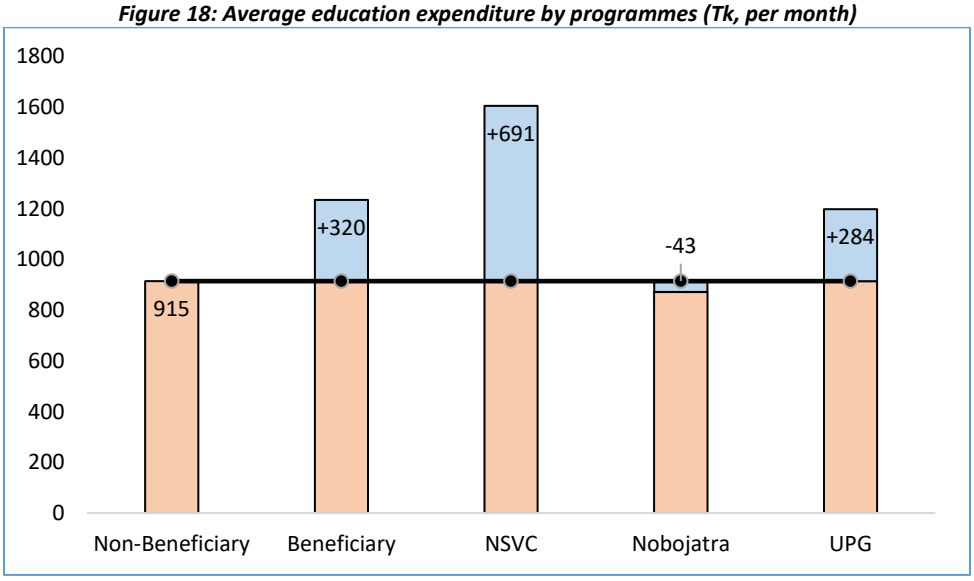


Source: SANEM-WVB Survey 2021

Education expenditure

Compared to non-beneficiaries, beneficiary households spend significantly more on education. The average education expenditure for beneficiary households are higher compared to non-beneficiaries (Figure 18). Amongst the programmes, beneficiaries of UPG and NSVC spend more on education than the non-beneficiaries, whereas the beneficiaries from the Nobojatra spend slightly less. It indicates that these programmes positively impacted households' spending on human capital asset accumulation, possibly integrating a long-term benefit.

Figure 18: Average education expenditure by programmes (Tk, per month)

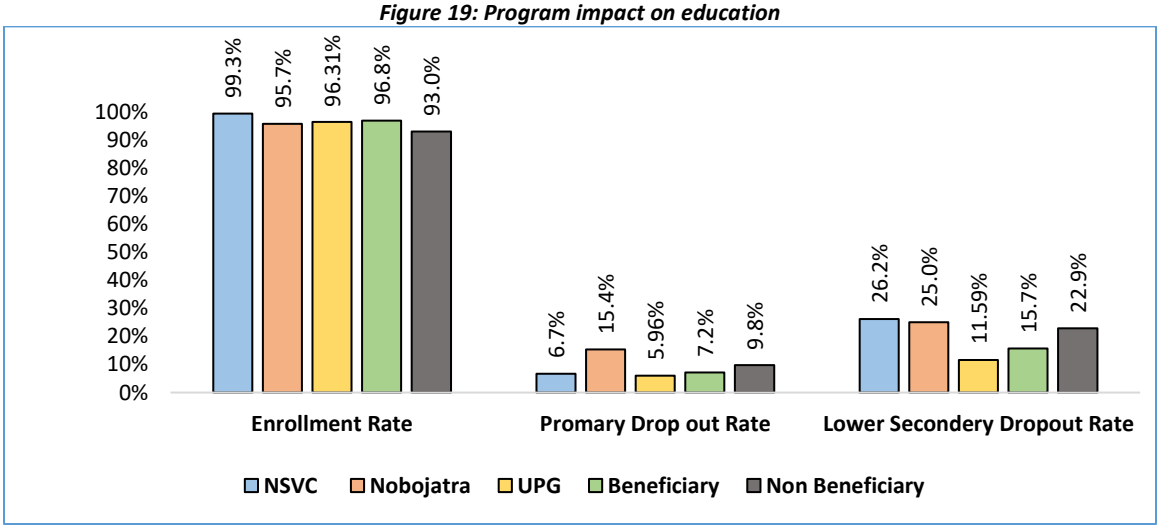


Source: SANEM-WVB Survey 2021

Education of the 'school-going aged' household members (age 6 to 15)

There is an observed positive impact of programs on school enrolment rate. For the beneficiary households, the enrolment rate is observed as 96.8 per cent, when for the non-beneficiary, the rate is 93.0 per cent (Figure 19). All the programs have a higher enrolment rate than the control group. However, there are still concerns over a couple of indicators. For instance, the overall dropout rates from primary education are higher for the non-beneficiary group than the beneficiary group amongst the surveyed population. But, amongst the household members from the Nobojatra, the dropout rates from primary education are much higher than all other categories. It could be linked to the lower education spending by the households on schooling, as observed in Figure 18.

Figure 19: Program impact on education



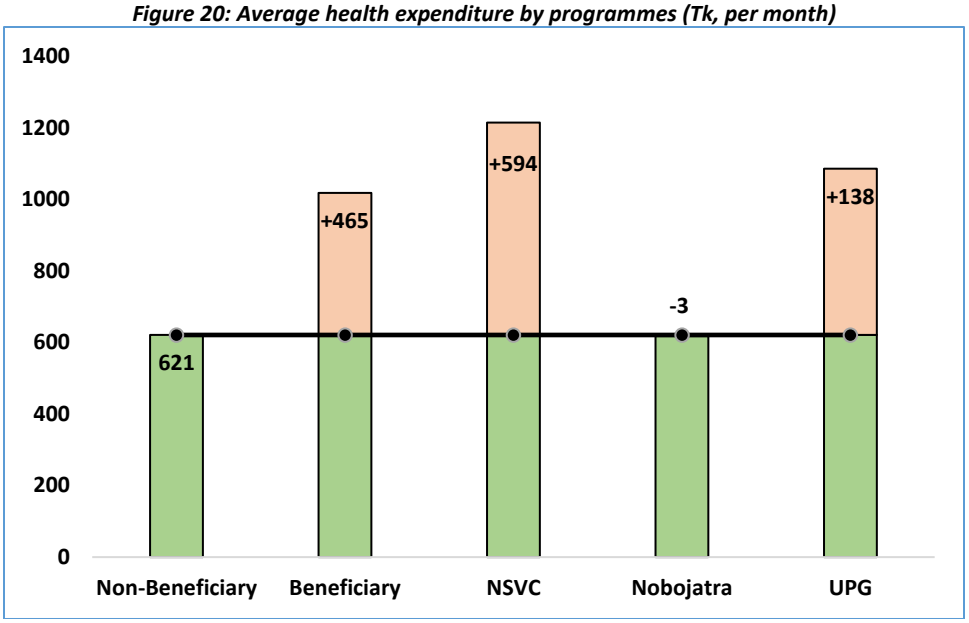
Source: SANEM-WVB Survey 2021

Moreover, the dropout rates for the beneficiary households in the lower secondary education are almost seven percentage points lower than the non-beneficiary households. Nonetheless, the programme beneficiary households from the NSVC and Nobojatra reported higher school dropouts than the others. In all the cases, the beneficiaries from the UPG model flared better condition than others.

Health expenditure

In terms of average expenditure on healthcare, the same pattern of higher spending for beneficiaries compared to non-beneficiaries is observed (Figure 20). Beneficiaries of NSVC and UPG spend significantly higher than their non-beneficiary counterparts.

Figure 20: Average health expenditure by programmes (Tk, per month)

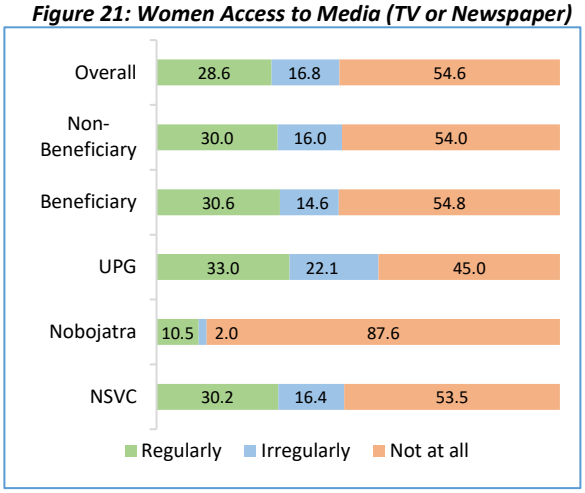


Source: SANEM-WVB Survey 2021

Women's access to media and ICT

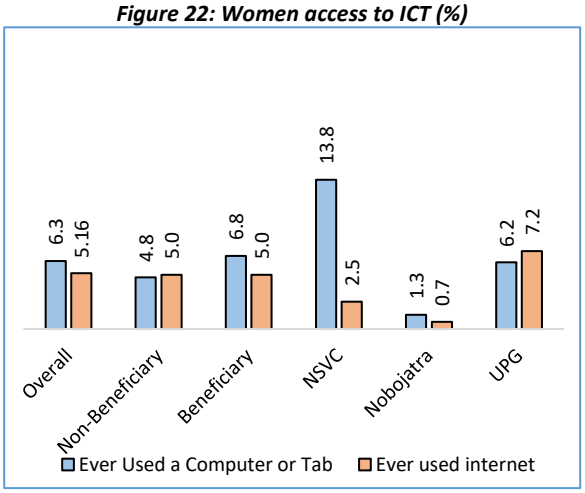
When measured regarding access to information and technology, women's empowerment is not at a desirable level. For instance, more than half (54.6 %) of the women do not have access to media (television and/or newspaper) (Figure 21). Moreover, only 6.3 per cent of surveyed women ever used a computer or mobile tablet, whereas only 5.16 per cent of the surveyed women ever used the internet (Figure 22). However, the program impact in this aspect is found insignificant. The resulting lack of access to critical information such as sexual and reproductive health, job and employment, training opportunities and capacities to engage in government and civil society organized services may affect the progress on women empowerment. Better access to information and communication technology could have contributed higher in ensuring WEE.

Figure 21: Women Access to Media (TV or Newspaper)



Source: SANEM-WVB Survey 2021

Figure 22: Women access to ICT (%)

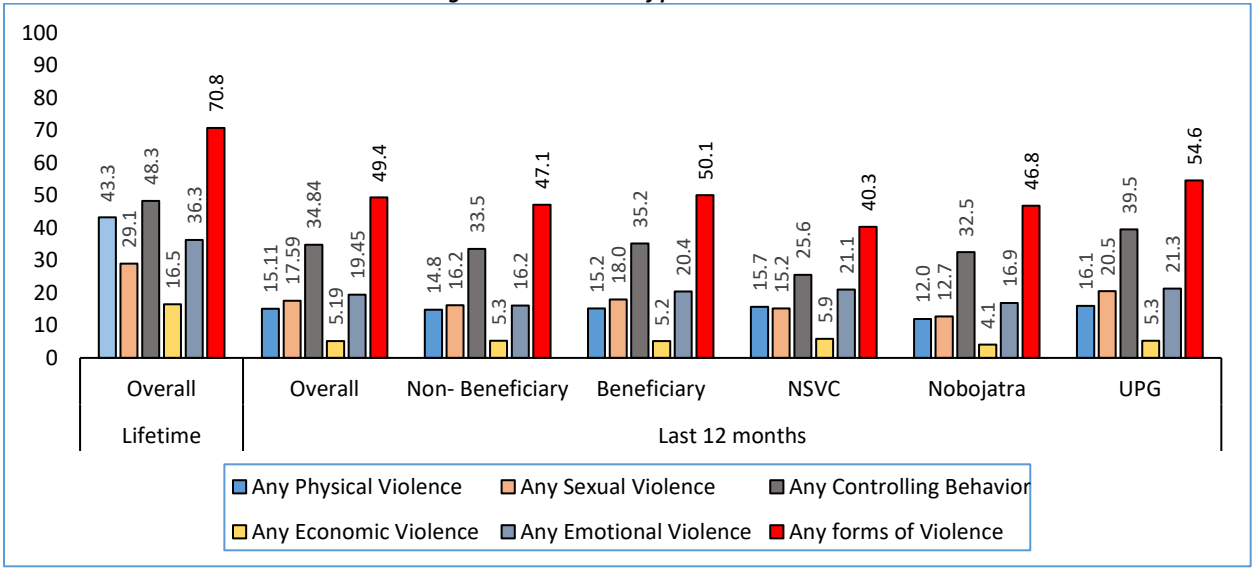


Source: SANEM-WVB Survey 2021

Violence against women

The incidence of violence against women acts as a barrier to empower women and realize the domestic, social and national economic gains from women's economic empowerment. Figure 23 is an indication of the high prevailing rates of violence against women from their intimate partners. In their lifetime, 43.26 per cent of women have experienced physical violence, 29.06 per cent experienced sexual violence, and 48 per cent were subject to controlling behaviour curbing their voice, rights and aspirations. As high as 70.75 per cent of women have suffered from any violence in their lifetime, and in the last 12 months, the rates for each form have been high as well. Almost half of the women have suffered from any form of violence in the previous 12 months.

Figure 23: Incidence of partner violence



Source: SANEM-WVB Survey 2021

The comparison between program beneficiaries and non-beneficiaries in terms of lifetime incidence will not be sensible. But, comparing the incidence in the last 12 months could be reasonable as it could capture the program impact, at least to some extent. There are only slight differences between the beneficiary and non-beneficiary households. Compared to the non-beneficiaries, three percentage points higher women from beneficiary households suffered from any forms of violence in the last 12 months. However, if looked at by programmes, beneficiaries of the NSVC programme faced the least violence (40.3%), followed by Nobojatra (46.8%). Beneficiaries from the UPG faced higher domestic violence compared to any other categories (54.6%). It must be kept in mind that the UPG programme concentrates on ultra-poor households who often comes from very rigid or socially stigmatised areas contravening the programme's effort to reduce gender-based violence.

Male perception toward women economic empowerment

The above discussion analysed the overall scenario of women economic empowerment in the selected districts and the observed impact on the beneficiary households. Nevertheless, this discussion may remain incomplete if the male perceptions towards women economic empowerment are not considered. As noted in the literature, the male household members can hinder (or encourage) the income-generating activities of female members (Karim et al., 2018; Karim & Law, 2013). This is partly because, in a male-dominated country like Bangladesh, social stigma plays an important role in how well women can engage and benefit from development interventions or social entrepreneurship. How the male household members perceive women's economic empowerment can be considered a proxy of such social stigma. Also, it can provide an important parameter to understand the degree of barriers in programme implementation originating from such stigma. In this respect, based on the analysis, this study also constructs a male perception score.

During the household survey, the perceptions of the male household members on women economic empowerment was taken.[10] Their responses were collected based on a structured questionnaire on ten indicators related to WEE (Table 9). The respondents had five alternatives to choose from: (i) strongly agree, (ii) agree, (iii) neither agree nor disagree, (iv) disagree, and (v) strongly disagree.

[10] See section 14 in the survey questionnaire.

Table 9: Male perception toward WEE (% of total)

	Statements	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1	If women engage in work, they eventually take jobs away from men	9.24	23.76	10.23	32.34	24.42
2	If women engage in income-generating activities, it is helpful for the household.	33	54.13	6.93	4.62	1.32
3	Women working outside the home increase the honor of the family in the eyes of the family in the society/community.	12.54	33.99	23.76	17.82	11.88
4	It is equally good being a housewife as working in a job with regular pay	11.55	38.61	28.38	19.14	2.31
5	What most women really want is a home and children not a job / or work outside home	14.52	32.67	28.38	22.11	2.31
6	A woman and her family are happier if she works for income	23.76	46.2	18.48	10.56	0.99
7	A husband and wife should both contribute to household income	33.99	47.85	10.89	5.94	1.32
8	A full time job makes a woman independent	24.09	52.81	13.86	9.24	0
9	A man's job is to earn money, a woman's job is to look after the home and family	13.2	28.05	17.82	23.76	17.16
10	Employers should help with childcare	25.41	38.61	20.79	9.9	5.28

Source: SANEM WVB survey 2021

The findings provide a grimmer but mixed picture, as observed in Table 13. Almost one-third of the male respondents thought if women engaged in work, they would eventually take jobs away from men. But the majority of the surveyed males (more than 87%) agreed that if women engaged in income-generating activities, that would help households. Moreover, almost 70 per cent of the respondents thought that a woman and her family would be happier if she worked for income. Also, almost 80 per cent of them replied that both husband and wife should contribute to the household income, while 76 per cent replied that full-time employment would make a woman more independent.

Even though such positive responses on the aforementioned selected indicators, only 45 per cent of the respondent males thought women working outside the home increased the honour of the family while 28 per cent opined the opposite. Unsurprisingly 47 per cent of the males thought that what women wanted was a home and children, not jobs or working outside. Also, 41 per cent of the respondents thought that it was the role of the males to earn money while a woman's responsibility was looking after the home and family.

Construction of male perception score

For a comprehensive understanding of the male perception towards women's active engagement in economic activities, this study constructs a 'perception score' based on the responses note in Table 10. The responses are weighted between 0 to 100 with an increment of 25. Thus, responses strongly favourable to women's active engagement in economic activities are scored 100, and responses strongly unfavourable to it are scored 0, where neutral answers get 50. Table 14

depicts the score for each of the male perception statements. Finally, based on the responses received on each of the ten indicators, a cumulative average score is prepared for a household.

Table 10: Construction of male perception score

Indicators	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
If women engage in work, they eventually take jobs away from men	0	25	50	75	100
What most women really want is a home and children, not a job / or work outside the home	0	25	50	75	100
A man's job is to earn money; a woman's job is to look after the home and family.	0	25	50	75	100
Women working outside the home increase the honour of the family in the eyes of others in the society/community.	100	75	50	25	0
It is equally good being a housewife as working in a job with regular pay	100	75	50	25	0
A woman and her family are happier if she works for income	100	75	50	25	0
A husband and wife should both contribute to household income	100	75	50	25	0
A full-time job makes a woman independent	100	75	50	25	0
Employers should help with childcare	100	75	50	25	0

Source: SANEM WVB survey, 2021

Male perception score by programmes

The male perception score shows how the male members of the households have a favourable attitude toward women's active engagement in economic activities. The higher the score, the better the perception of male members toward women economic empowerment. As observed from Figure 24, the overall male perception score stands at 63.1. Interestingly, the score does not vary much between the beneficiary and non-beneficiary households, although the score of the beneficiary households is slightly higher than the non-beneficiaries. Amongst the programmes, a higher score is observed from the male members of the NSVC and UPG beneficiaries compared to Nobojatra (Figure 25). Such a lower score on the male perception index in Nobojatra shows that the social stigma in the locality of this programme could be substantially higher than the other programme areas. This might partly explain why this study overserved phenomena such as lower women engagement in economic activities, higher school

dropout rates, lower spending on education and healthcare, etc., for the programme beneficiaries from Nobojatra compared to NSVC or UPG in the earlier sections.

Figure 24: Male perception index by program status (scale 0-100)

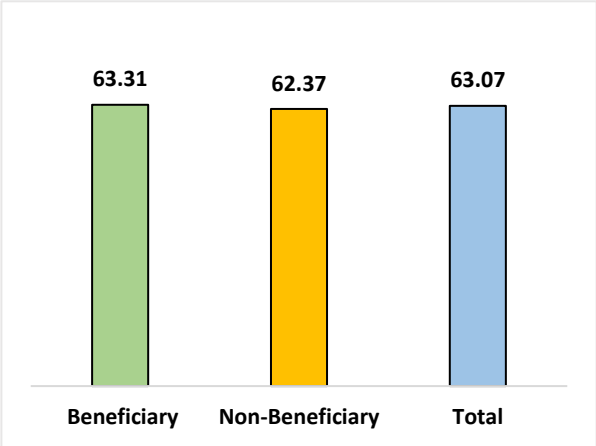
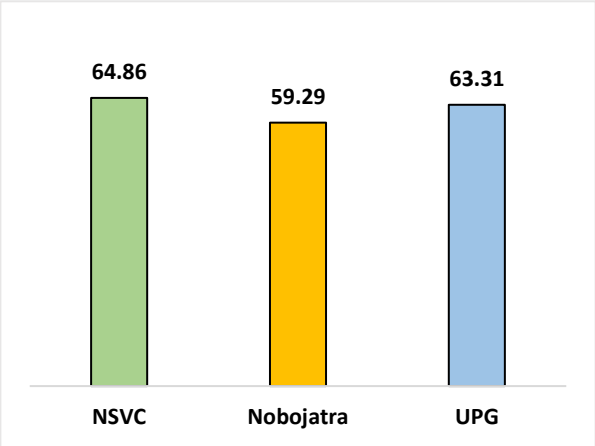


Figure 25: Male perception index by WVB programs (scale 0-100)



Source: SANEM WVB survey, 2021

Women economic empowerment index (WEE index)

In the previous sections, this study has analysed the performance of women on different indicators of women economic empowerment in detail. However, from such detailed analysis, it is often implausible to track a compact scenario or comprehend a brief yet holistic picture of women economic empowerment. Under such circumstances, composite indices often become handy, which is easy to interpret and compare among programmes. In this respect, this study develops a women economic empowerment index based on five broad domains of indicators, namely-

(1) ***Production:*** Women's participation in decision making over productive and income-generating activates,
(2) ***Resources***: Women's ownership and decision making power over productive resources,
(3) ***Income***: Women's control over expenditure from their own income,
(4) ***Digital literacy:*** Women's digital literacy, and
(5) ***Household expenditure decision***: Women's participation on household expenditure decisions.

Under each broad domain, several indicators have been selected, as shown in Table 11. Some of the indicators also have sub-indicators.

The index is constructed based on the responses received from the women respondents on these indicators. The index ranges between 0 and 100. Each broad domain shares equal weight (i.e. 1/5 of total 100). The weight of the indicators under a broad domain is divided equally among the number of indicators. For instance, under the production domain, there are two indicators. And

therefore, each of them carries a weight of (1/10). Likewise, the weight of the sub-indicators is determined based on the number of sub-indicators available within an indicator.

To obtain the empowerment score of each of the identified domain, the weighted score of the indicators (and sub-indicators) has been added up under the respective domains. Thereafter, the scores of the broad domains have been summed together to find the overall score of the WEE index indicator at the household level.

Table 11: The indicators of women economic empowerment index

Broad domain	**Indicators**	**Sub indicators**	**Definition**
Production (1/5)	Input in income generating activities (1/10)		=1 if she has significant input in the household decision on income generating activities;0 otherwise
	Employment/occupation choice (1/10)		=1 if her decision has significant importance to her occupational choice; 0 otherwise
Resources (1/5)	Ownership of assets (1/10)	Land (1/30)	=1 if she owns land; 0 otherwise
		House (1/30)	=1 if she owns house; 0 otherwise
		Large livestock (1/30)	=1 if she owns large livestock; 0 otherwise
	Access to and decision on credit (1/10)		=1 if her decision on credit has significant importance; 0 otherwise
Income (1/5)	Control over use of income (1/10)		=1 if she can spend her income independently; 0 otherwise
	Earning status (1/10)		=1 if she is an earner; 0 otherwise
Digital literacy (1/5)	Having banking/mobile banking account (1/15)		=1 if she has a bank/mobile bank account; 0 otherwise
	Having a mobile phone (1/15)		=1 if she owns a mobile;0 otherwise
	Have used computer/internet (1/15)		=1 if she has ever used computer/internet; 0 otherwise
Household expenditure decision (1/5)	Expenditure on basic needs (1/5)	Food (1/25)	=1 if she has significant input to the household spending decision on food; 0 otherwise
		Housing (1/25)	=1 if she has significant input to the household spending decision on housing; 0 otherwise
		Healthcare (1/25)	=1 if she has significant input to the household spending decision on health; 0 otherwise
		Education (1/25)	=1 if she has significant input to the household spending decision on education; 0 otherwise
		Clothing (1/25)	=1 if she has significant input to the household spending decision on clothing; 0 otherwise

Note: Individual index and sub-index weights are in the parentheses

WEE index by programme status

The constructed WEE index shows the extent of women economic empowerment from a multidimensional perspective. The greater the value of the index, the more empowered women are. The overall value of the WEE index is found at 46.64 (Figure 26), reflecting a grimmer picture. Nonetheless, as observed from the indices values, the weak indices' scores for the beneficiaries are higher than the non-beneficiaries by almost five percentage points. Thus, it provides evidence in support of claims that these programmes lifted the women economic empowerment status of the beneficiary households significantly.

Nonetheless, the magnitude of women economic empowerment, as measured with the index, varies largely by programmes. For instance, the average score of the WEE index for the Nobojatra beneficiaries is 55.92, whereas the scores for NSVC and UPG beneficiaries are 49.5 and 44.9, respectively (Figure 27). Therefore, although the beneficiaries of the Nobojatra programme had lower performance in terms of education expenditure or healthcare expenditures, as observed earlier, this programme indeed increased women's voice and role in important household decision-making and active participation in economic activities. With respect to UPG, as the programme is designed for ultra-poor households, such orientation may have contributed to the low scores on WEE indicators. Nonetheless, as already pointed out, all three programmes had higher WEE index score compared to the non-beneficiaries showing significant improvement for the programme beneficiaries.

Figure 26: Overall women economic empowerment score by program status

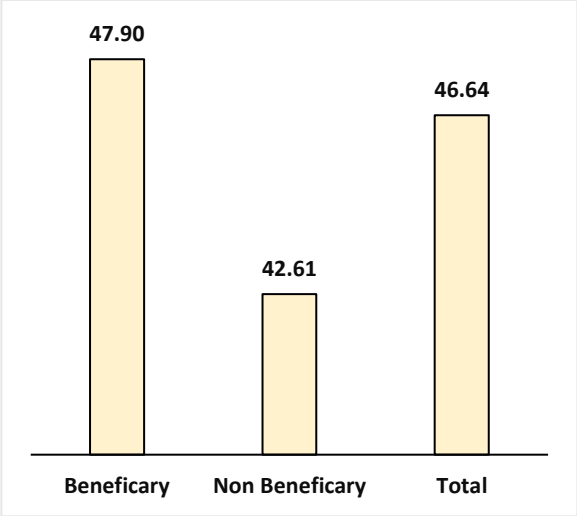
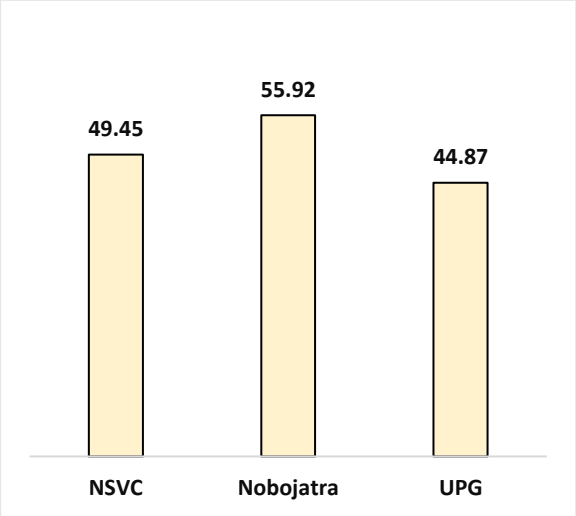


Figure 27: Overall women economic empowerment score by program status



Source: SANEM WVB survey, 2021

The broad domains of the WEE index by programmes

For greater detail on the WEE index, the scores of the individual domains by the programmes have been analysed (Table 12). Among the five domains, the least score is observed on the domain of the resource (7.23), showing women's poor status over the ownership of economic

assets. Such poor performance is also observed on the indicator of digital literacy (7.54), and income indicators (7.54).

Table 12: Women economic empowerment score by broad domains and program status

Category	Production (20)	Resources (20)	Income (20)	Digital literacy (20)	Expenditure decisions (20)
NSVC	16.85	8.81	6.79	6.16	10.83
Nobojatra	16.14	9.26	6.60	10.37	13.54
UPG	11.67	6.52	8.35	7.09	11.23
Beneficiary	13.56	7.50	7.70	7.53	11.59
Non-Beneficiary	12.00	6.40	7.04	5.97	11.20
Total	13.19	7.23	7.54	7.54	11.50

Source: SANEM WVB survey, 2021

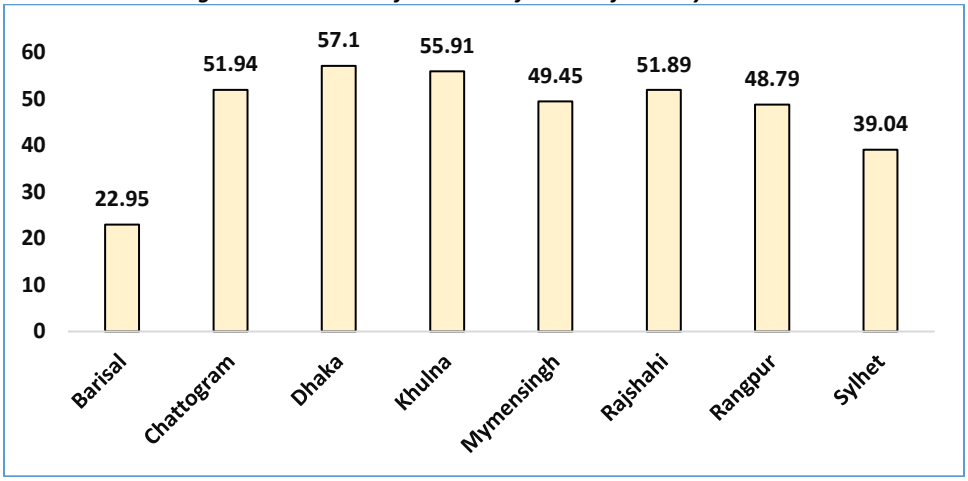
It can also be observed that for all the domains, the performances of WVB's programme beneficiaries exceed that of the non-beneficiaries. However, the domain scores vary significantly among the WVB programmes. The NSVC performs best on the production domain with a score of 16.85. The Nobojatra has the highest scores on resources, digital literacy and expenditure decision domains. Among the three programmes, UPG has the highest score in the income domain.

WEE index of the beneficiaries by divisions

In Bangladesh, usually, a spatial pattern is observed in terms of women participation in economic activities.[11] To see whether such a regional pattern is observed on the constructed WEE index, Figure 28 provides the average value of the WEE score for the beneficiaries of the programmes by divisions. As observed, the beneficiaries from the Dhaka divisions have the highest scores, followed by those of the Khulna and Chattogram divisions. On the other hand, the beneficiaries of the Barisal division have the lowest scores in terms of the WEE index.

[11] For example, from the LFS (2017) data, it is observed that a larger share of women from Rangpur and Dhaka divisions are actively engaged in economic activities compared to those from other divisions.

Figure 28: WEE index for the beneficiaries of WVB by division



Source: SANEM WVB survey, 2021

Furthermore, Table 13 identifies the stemming sources of low performance for regions such as Barisal, Sylhet, Rangpur, and Mymensingh. As observed, these regions have lower scores in income and production domains. Along with other factors, reasons behind it could be social circumstances and geographical factors (such as being riverine or hilly regions).

Table 13: Average scores for the beneficiaries of WVB in the broad domains of WEE index by divisions

Division	Production (20)	Resources (20)	Income (20)	Digital literacy (20)	Expenditure decisions (20)
Barisal	2.22	6	2.34	8.72	3.65
Chattogram	13.58	4.27	12.98	5.57	15.52
Dhaka	13.33	5.5	13.18	10.14	14.92
Khulna	16.14	9.25	6.6	10.37	13.54
Mymensingh	16.93	8.74	7.04	5.81	10.91
Rajshahi	12.83	9.14	9.32	5.85	14.72
Rangpur	16.57	8	10.14	6.76	7.31
Sylhet	10.34	5.28	4.36	6.81	12.22

Source: SANEM WVB survey, 2021

An empirical investigation of the impact WVB's programmes on the Women Economic Empowerment (WEE)

The discussion above points out that the value of the WEE index for the programme beneficiaries is higher than the non-beneficiaries. Although the descriptive statistics show a positive impact, however, such positive impact cannot be directly attributed to the WVB programmes unless and otherwise the impact of other influencing variables are controlled for during the comparison. The widely applicable approach under such circumstances is applying regression models. Therefore, using a regression model approach, this section attempts to identify the impact of the WVB programme interventions on the beneficiaries.

Here, the women economic empowerment index score (WEE index score) is considered as the dependent variable whereas the variables of interest include the WVB programme participation status. However, as the 'self-selection bias could result in a biased estimate of the participation effect, this problem of heterogeneity bias needs to be controlled for. Therefore, this study applies the Heckman two-step procedure, a standard approach for correcting the heterogeneity bias in the case of cross-section data, for providing unbiased estimates of program participation on the constructed empowerment score. In the Heckman two-step approach, a probit model of programme participation (also termed as selection equation) is estimated in the first step, and the OLS equation modelling the participation score (called empowerment equation) is estimated in the second step. The key findings of the regression-based approach are as the following (a detailed methodology and regression results have been presented in the annexe).

Firstly, the result of the estimated selection equation shows that the age of the respondents has a positive influence on the probability of being selected in the programmes. Moreover, although the educational qualification of women has a positive influence, it is found to be insignificant in the case of selection in the programmes. Finally, the result of the selection equation shows that that women from a household with more land are less likely to be selected in the programmes. This matches our expectation as WVB programme beneficiaries usually target households with relatively small amounts of land, which is also used as a criterion to select the beneficiaries.

Secondly, the estimation result of the empowerment score shows that the empowerment score of beneficiaries of the WVB's programmes exceeds the non-beneficiaries by about 4 points, reflecting the fact that the programmes of WVB have been instrumental in improving the economic status of women.

Thirdly, the results also find a positive and significant impact of each of the programmes of WVB (e.g. UPG, Nobojatra, and NSVC) on the women economic empowerment score. In other words, the scores of women economic empowerment for the beneficiaries of each of the programmes exceed statistically significantly the scores for non-beneficiaries (the base category). The largest impact is observed for the beneficiaries of NSVC, followed by those of Nobojatra and UPG.

Fourthly, apart from the programme specific variable, the study finds that the WEE score increases with the respondents' age but at a decreasing rate. Moreover, this study finds that higher educated women tend to have higher empowerment scores compared to women with no education. Also, the results show that the WEE score for the women from female-headed households is significantly higher compared to those from male-headed households. Amongst others, the significant impact of households total landholding or household size on the WEE scores is also observed.

Finally, we observe a positive and significant impact of the male perception score on the WEE score, implying that a favourable attitude of male members in a household towards women's economic participation will positively impact the WEE index indicator.

Based on the empirical investigation of this section, it can be concluded that the programmes of World Vision Bangladesh have positively impacted women economic empowerment on different indicators, and this finding is in line with the conclusions of the descriptive statistics and case studies observed earlier.

This section provides the current scenario of women economic empowerment from a multidimensional perspective for selected regions of Bangladesh. It also evaluates the impact of the programmes of World Vision Bangladesh to improve women economic empowerment based on the findings of the survey undertaken in this study. The survey findings indicated low empowerment of women in terms of earning the status of working-age women, access to finance, large asset ownership and access to media and ICT. However, the analysis shows that the programmes of WVB have been instrumental in improving the status of women in different indicators of women economic empowerment such as earning status, households' decision making, control over earning, access to finance etc. Moreover, the impact of the programmes on different indicators of household welfare such as savings, school enrolment, education and health expenditure have also been observed. However, analysis of individual programs revealed that Nobojatra underperformed in preventing primary school dropouts and enhancing beneficiaries' employment, expenditure on education and healthcare. NSVC, on the other hand, underperformed in facilitating savings for beneficiaries compared to the non-beneficiaries.

As a holistic approach to demonstrate the present scenario of women economic empowerment, a woman economic empowerment (WEE) index has been constructed, showing the extent to which women are economically empowered. The constructed index shows that while the overall economic empowerment score of women is not satisfactory, the WVB programmes have a significant impact on increasing the score of their beneficiaries over the scores of the non-beneficiaries. Finally, since the evaluation of the programmes based on descriptive statistics does not control for other variables that might affect women's economic empowerment, the programmes' impact has been evaluated empirically based on standard econometric exercise. The regression-based approach finds a significant impact of the programmes of WVB on the Women Economic Empowerment score. Last but not least, this section's findings suggest that male perception towards women economic empowerment matters significantly – an important parameter that should be kept in policy mechanism.

Section VII: How does female employment affect GDP growth? Evidence from a time-series regression approach

The previous sections discussed the status of women's economic empowerment and the impact of the WVB interventions on the programme beneficiaries. However, the analysis does not point out how increased women empowerment can influence the overall economy from a macroeconomic perspective – which is also one of the research questions of this study. In this regard, this chapter attempts to identify the impact of women empowerment, measured as female employment, on GDP growth based on a time-series analysis.

As labour is an important factor of production, female employment can stimulate economic growth and can play an important role in poverty reduction by reducing the dependency ratio (Rahman & Islam, 2013). In Bangladesh, women's contribution to the national economy is much lower than it could be due to their low participation in the labour market (ibid). Women make a significant contribution in nonmarket activities, such as household work and care for children and the elderly at home, but to ensure inclusive growth in the economy, it is essential to ensure much greater participation of women in market-based productive activities (Raihan & Bidisha, 2018). However, traditional gender norms and patriarchal values often restrict women's mobility and constrain their activities in the labour market.

The economy of Bangladesh has witnessed an acceleration of economic growth since the early 1990s, and the average annual GDP growth has been over 6 per cent since 2004. However, to attain the target of a high-income country by 2041, the economy must grow at a much higher rate in future. Following Oizumi (2013), Bangladesh will transition to an ageing society in 2029, where 7 per cent of the total population will be 65 and above. According to their measurement, 13 working-age persons supported one senior dependent in 2019, and this ratio will become 1:6 in 2040 and 1:3 in 2065. This increase in dependency ratio might affect future economic growth. In this context, the increase in female employment and labour force participation might help the economy.

Researchers have found a positive association between female labour force participation and economic growth. For example, using a 40-year-long panel dataset, Klasen and Lamanna (2008) see a positive impact of a reduced gender gap in employment and education on economic growth.

As of the Labour Force Survey, 2017, the labour force participation rate in Bangladesh was 80% for men and 36% for women. According to a study of ADB (2016) If the rate for women were raised to the same as for men, the labour force of Bangladesh would be increased by 43% and this would help bring about a 27% increase in gross domestic product, even without any increase in the capital stock.

The level of female employment in Bangladesh has been lower than that for men as a result of both demand- and supply-side issues (Raihan & Bidisha, 2018). However, women in the labour

force have been instrumental to the recent successful economic growth of Bangladesh as they make up most of the workers in the ready-made garment (RMG) sector, which is the country's flagship export-oriented industry (ADB, 2016). Against this backdrop, this section tries to quantify the relationship between women economic empowerment as measured by female employment and economic growth to investigate if there is any impact of female employment on economic growth.

Time series regression-based approach

This study applies Vector Error Correction Model (VECM) to address the relationship between WEE and GDP. With the VECM approach, this paper identifies whether female economic participation has any long-term relationship with GDP growth and the extent.

The model for this econometric exercise is specified as follows:

$$GDP_t = \beta_0 + \beta_1 Capial_t + Male\ Employment_t + \beta_3\ Female\ Employment_t + \mu_t \ldots (1)$$

Where 'GDP' is the real gross domestic product, 'Capital' is the stock of capital in the economy, 'Male Labour' is the size of the male labour force, and 'Female employment' is the female labour employment size. The size of the female employment is used as a proxy of female economic participation.

The data for this exercise are taken from the Penn World Table (PWT, version 10.0) and the ILOSTAT databases and the world economic forum data. The WEF database provides yearly data on capital stock, and real GDP for Bangladesh from 1960 till 2019. From the ILOSTAT, the number of male and female employed workers has been collected.[12] Based on a combined dataset of PWT and ILOSTAT, it was possible to create time-series data for these variables from 1974 to 2019. Data from 46 years provides a sufficiently long time required to carry out a time-series econometric model.

The key steps and findings of this econometric exercise are as the following. (a detailed methodology and findings have been presented in annexe)

At the first stage, it is required to check the stationarity of the variables and their order of integration. To check the stationarity of the variables, the study has employed the Augmented Dickey-Fuller Test (ADF), the Phillips Perron (PP) test, and the breakpoint unit root test. The unit root test usually directs the next step required for the study.

[12] It must be noted that, the data on male and female employment used in this study has been derived based on the data of the ILO modelled estimate as well the PWT 10.0. The proportion of male and female employment have been derived from the ILO Stat while this percentage has been used to get the male and female employment from total employment data of PWT 10.0.

The results of the unit root tests show that all variables are non-stationary at the level in both intercept and trend and intercept specification. But, in the case of the first difference, the hypothesis of non-stationary or presence of unit root is rejected at a 5% level of significance for all the variables. Therefore, it can be concluded that all the variables are integrated of order one, that is, I (1), under the trend and intercept specification with both ADF and PP test. Moreover, to address the problem of a breakpoint, the result of the breakpoint unit root test for each have been reported. Here it is found that all the variables are non-stationary at level but stationary at the first difference, confirming the fact all the variables are I (1).

It is found that all the variables are integrated in the same order. Before running the Johansen cointegration test to see whether there is any long-run relationship among the variables, it is needed to determine the optimal lag length criterion. The appropriate lag length for the model is selected on the basis of the suggested lag length by different criteria (e.g. LR, FPE, AIC, SC). Based on the suggested lag length of maximum criterion two lags have been selected for all variables as the optimal lag length.

Cointegration test is performed to confirm whether there are any long-run cointegrating relationships among the variables considered in the model. To find the long-term relationship between the factors of production and real output, this study has applied the cointegration techniques suggested by Johansen and Joselius (1990). To identify the presence of a cointegrating equation, considering optimal lag length equals 2 and trend in VAR, Trace statistics and Maximum Eigen Value statistics have been calculated. Thus, the Trace test indicates there exist at least 2 cointegrating equations while the maximum eigenvalue test indicates at least 1 cointegrating equation at 5 per cent level of significance confirming that there exists a long-run cointegrating relationship between the factors of production and real output.

The Vector Error Correction Model is used to examine the short-run as well as the long-run relationship among the considered variables. The presence of a cointegrating relationship is a pre-condition for applying VECM. Since we have found that there exists a long-run cointegrating relationship between real output and factors of production, we have applied the VECM to inspect the short-run as well as the long-run relationship among them.

The first part of the VECM shows the long-run cointegrating equation. The cointegrating equation fulfils all the expected signs. The cointegrating equation shows that capital stock and male and female employment has a positive impact on output growth in the long run. The result of the VECM shows that a 1 per cent increase in female employment is associated with about 0.31 per cent increase in real GDP. Moreover, the result also finds a significant impact of the capital stock on output growth.

The insignificant relationship between real GDP and female and male employment in the short run is observed from the block exogeneity Wald test. As can be derived from the results, male and female employment, as well as capital, do not cause real output individually or jointly.

In summary, the results from the time series analysis show that female employment has a significant and positive relationship with economic growth in the long run. A one per cent increase in female employment can effectively increase economic growth by .31 per cent. That is, eventually, even if Bangladesh can increase female employment by only ten percentage points, that will add as much as 3.1 per cent of GDP. If taken the 2021 figure of GDP, such an increase would have resulted in an additional $11.3 billion in the economy.[13] This supports the justification that women economic empowerment in terms of active engagement in economic activities will be crucial for sustainable high economic growth in the future.

[13] According to Government reports, the real GDP of Bangladesh stands at Tk 3,087,300 crore which is equivalent to $365 billion. (Source: https://www.dhakatribune.com/business/2021/05/17/planning-minister-bangladesh-s-per-capita-income-increased-to-2-227; accessed on 1 June 2021)

Section VIII: Conclusion and policy recommendations

The social structure and cultural values in Bangladesh hinder women economic empowerment in Bangladesh. Cultural norms and socially prevalent practices such as unequal inheritance, discriminatory practices in employment, socially imposed gender roles and gender-based violence have curbed women's rights and prevented them from being empowered on various dimensions. This study has attempted to highlight the issues surrounding women's economic empowerment in Bangladesh, the contribution to GDP, and ways to strengthen women economic empowerment in Bangladesh. Hence, the study focused on several broad dimensions of women economic empowerment to advise99` policies needed to overcome the barriers to ensure women empowerment by identifying loopholes and implementing effective solutions to ensure empowerment.

The study undertook methods of qualitative and quantitative techniques to address the issues centred on women economic empowerment. In total 15 KIIs with the representatives from government, donors, private sector, UN and I/NGO, and programme beneficiaries, and two FGDs in Dhaka and Jamalpur were conducted. As informed through the KIIs, the actors were involved in various programs to enhance women economic empowerment ranging from capacity building programs, ensuring decent work for informal workers, advocacy initiatives, empowerment of female migrant workers, enhancing their social protection among a variety of other initiatives. In order to further improve women economic empowerment in Bangladesh, there is a need to increase collaboration between the private sector and government institutions, creation of value chains from marginal level to extend income-generating support for women, increased financial inclusion of women, eradication of wage-discrimination and creation of women-friendly work environment.

The qualitative findings were complemented by a rigorous quantitative survey that highlighted the existing status of women economic empowerment through a holistic approach. The survey findings indicated low empowerment of women in terms of earning the status of working-age women, access to finance, large asset ownership and access to media and ICT. World Vision programs were evaluated to have a positive impact on education enrolment, employment status, savings, financial inclusion, expenditure on education and healthcare expenditure of the beneficiaries as opposed to the non-beneficiaries. However, analysis of individual programs revealed that Nobojatra underperformed in preventing primary school dropouts and enhancing beneficiaries' employment, expenditure on education and healthcare. NSVC, on the other hand, underperformed in facilitating savings for beneficiaries compared to the non-beneficiaries.

As a holistic approach to demonstrate the present scenario of women economic empowerment, this study constructs a women economic empowerment (WEE) index, which shows the extent to which women are economically empowered. The constructed index shows that all three WVB programme beneficiaries have higher scores on the WEE index compared to the non-beneficiaries. Moreover, on average, the WEE index score for all five domains considered is higher for the beneficiaries than the non-beneficiaries. In addition to the descriptive statistics,

this study also employs standard econometric techniques to find out the impact of the WVB programmes on WEE index, controlling for observable characteristics. Results from the Heckman two-step regression model shows the significant impact of the WVB programmes on the WEE score. Controlling for all other observable characteristics, the NSVC is found to have the largest impact on WEE, followed by Nobojatra and UPG programmes. Finally, the study finds that male perception towards women economic empowerment matters significantly – households with more favourable perceptions towards women economic empowerment have significantly higher scores on WEE indicators.

Along with observing the impacts of the WVB programmes, another objective of this study was to quantify the relationship between women economic empowerment and GDP. This study applied a standard time series econometric analysis where the women economic empowerment has been proxied by female employment. The regression results show that female employment has a significant impact on real GDP growth in the long run. While the study of ADB (2016) shows that if the labour force participation rate for women were raised to the same as for men, the gross domestic product of Bangladesh would be increased by 27%, this study finds that if female employment could be doubled, in the long run, this would bring about 31% increase in the GDP of Bangladesh.

Based on the findings, this study, therefore, comes up with a set of recommendations. While some of the recommendations are WVB project-specific, others are more far-reaching in nature and fit the broad spectrum of women's economic empowerment in Bangladesh. The recommendations could be categorised as follows – (i) WVB programme specific recommendations; (ii) recommendations for the Government; (iii) recommendations for the private stakeholders; (iv) recommendations for the donors/development partners, and (v) a set of broad recommendations.

Recommendations for the Government of Bangladesh

- ✓ The prevalence of the school dropout rate is still very high in Bangladesh. A strong measure is needed from the Government of Bangladesh (GoB) in containing the school dropouts. An increase in the primary and secondary school stipend rates could work as an effective tool in this regard.
- ✓ The curriculum and texts should sensitise more on issues related to reproductive health, gender-based violence, the importance of women economic empowerment, and how women can contribute more to the family and the country being empowered, etc.
- ✓ Government is in the best position to reduce the extent of gender-based violence. The steps taken by the government (like introducing hot lines) is commendable. However, it needs to be assured that women have access to such services.
- ✓ Family counselling and psychotherapy is considered as essential in combating gender based violence. Both of these issues are highly neglected in the country. There are hardly any professional counselling or psychotherapy services available outside of major divisional cities. The government can make these services more available at least at the Upazila level.

- ✓ Given that the demographic dividend window is ceasing for Bangladesh, the government should prioritize increasing female employment. The main factors that obstruct women's job prospects are the gender gap in tertiary education and skill development, less favourable working conditions, unavailability of favourable and affordable transportation. The government has already taken some policies that reduce the gender gap in primary and secondary education (ADB, 2016). However, the remaining gender gap in higher education should be eradicated to increase female employment. Assuring a gender-friendly environment in education/training institutes (e.g. a separate bus service, toilet facilities, etc.) as well as at the workplace can be instrumental to the greater involvement of women in tertiary education and economic activities (Raihan & Bidisha, 2018). Moreover, the participants from the KIIs and FGDs mentioned that safety is one of the first issues their families require assurance of during their employment or training outside the home. Women who feel less secured outside are less likely to participate in the labour market (Kotikula et al., 2019). Therefore, the issue of workplace safety and affordable public transport for women should be taken into account with priorities.
- ✓ Moreover, another issue limiting women's participation in the labour market is the lack of childcare facilities (Rahman & Islam, 2013). Women with children under five are less likely to join the workforce if there are no childcare facilities (Kotikula et al., 2019). According to section 94(1) of the Bangladesh Labour Law (2006), every organization with more than 40 should have a childcare centre. However, the issue is still unheard of in the policy arena, and the progress is nonexistent. For greater sensitization, the government can provide the employers with some fiscal incentives such as tax rebates, subsidized credit facilities, etc.
- ✓ Finally, maternity leave policy might also affect female economic participation. Although Bangladesh has a favourable maternity leave policy, it is important to implement the policy in all sectors properly.

Recommendations for the donors/development partners/INGOs:

- ✓ All the livelihood or similar projects taken by the donors/development partners should contain three integral parts: (i) the project must have a women economic empowerment component; (ii) the project must ensure sensitising the male household members on the importance of WEE, and (iii) the project must have a focus on gender-based violence. One approach to it could include: (i) informing the participants on the forms of violence; (ii) collaborating with the government and local stakeholders in boldening the actions against violence; (iii) staging the importance of equal rights through mass communication in the project area; (iv) ensuring stronger collaboration with the local religious leaders (such as Imam or relevant chaplains), etc.
- ✓ Ensuring some essential services – such as psychotherapies or family counselling facilities in remote areas- could be challenging to arrange for the government if there is no support from donors or development partners. The development partners can work with the government in undertaking some pilot initiatives addressing mental health and psychological issues.
- ✓ For ensuring more participation of women in the workforce, there is no alternative to a collective effort in skilling up the women with training and seed supports. The GoB has

large training facilities across almost all Upazilas in the country. In this regard, the donors/development partners can collaborate with the government to ensure more female training participants. It can be ensured by taking up projects (in collaboration with the government) providing safe transport facilities for the training participant females, providing hygienic women-friendly toilet facilities at training centres/schools, ensuring training with minimum costs or providing the females with stipends/concessions on training fees, etc.

Recommendations for the private sector:

- ✓ The biggest role the private sector can play is by integrating women in the supply or value chain. For instance, they can offer female farmers concessionary prices for seeds, fertilisers, tractors, etc. This could be linked to the Corporate Social Responsibility (CSR) funds for the private sector firms. The private sector firms can also ensure more seamless transactions with female farmers or female suppliers.
- ✓ Ensuring some essential services (such as daycare centres, paid maternity leaves, etc.) is not possible without private sector support. All the private sector firms should ensure to provide adequate daycare support for their employees. Although seemingly small, this support alone can increase the female labour force participation by several hundreds of thousands.
- ✓ The private sector should also contribute to ensuring equal employment opportunities for women. They could also encourage more participation of women in taking up their dealership deals, or work as distribution agents, etc. Engaging women in such non-traditional works can increase female employment by several folds.

Programme specific recommendations:

NSVC

- ✓ Financial literacy training should be provided to both male and female members of a household.
- ✓ Couple training session on financial literacy and farming as a business should be initiated, and the training should be provided to all rather than current group approach.
- ✓ Increasing the number of staffing to ensure intensive follow up.
- ✓ To ensure the male participation in the couple session incentives for attending the session should be provided by giving them a financial allowance or other incentives.
- ✓ The social leaders need to be involved, such as chairman, members, religious leaders (such as Imams), in making women entrepreneurship acceptable in society.

UPG

- ✓ Male participation in the training is very low. At present, there is no obligation for male members to attend the training or confidence building sessions. A proper nudge (such as training allowance, snacks allowance, etc.) would induce more male participation in the training programmes. The sessions can be arranged on weekends.
- ✓ Though the beneficiaries are trained on the importance of vaccination or deworming, they often do not give importance to inoculation/deworming their livestock on time. It may contribute to a higher mortality rate of the livestock or lesser returns to this

investment. Regular visits from the project officials and supports for vaccination or deworming could help address this problem. WVB can remind the project beneficiaries over the phone when a vaccination/deworming is due.

- ✓ There are some pockets where social stigma/conservatism towards females are very high. Engaging social leaders (such as Imams/Purohits) would result positively in this regard.
- ✓ Most of the households have access to microcredit facilities. In many cases it is observed that, although the microcredit is taken in the name of the female household member, it is being spent by the husband/male members. Often it is spent unproductively. As a result, it may push back many households below the poverty level.
- ✓ The existing financial literacy training is faulty. In many cases, the beneficiaries do not have literacy at all. In this respect, the introduction of basic literacy could be coined. Also, financial literacy should be provided to both male and female household members. Some basic orientation on numbers, counting and calculation, may add value and make more confident.

Nobo Jatra

- ✓ Male engagement is lower in the couple programmes. Providing some benefits/incentives for participating in the programme can help increase male participation in the programme.
- ✓ A more engaging networking linkage can be established between the seed/livestock companies and the beneficiaries for a sustainable and more strengthened value chain engagement.
- ✓ Setting up an aggregation centre could be integrated into the programme, linking up between distant buyers and producers through e-commerce for the programme beneficiarie

Broad recommendations:

- ✓ Some programme specific reforms are required in the WVB interventions reviewed in this study. As has been observed, Nobojatra performed less than the other two programmes in increasing women earnings from employment. Also, beneficiary households of this project had less expenditure in education and healthcare compared to the non-beneficiaries. The dropout rates for the Nobojatra beneficiaries are also found to be higher compared to other programmes or non-beneficiaries. In this regard, a drive is required to explore the causes behind such findings and identify potential arms to improve the project design so that this concern can be adequately addressed.

- ✓ Project planning needs to be devised such as that women's participation in the household's major decision making can be integrated further. As this study points out, women are least integrated in household asset accumulation and investment decisions. Social stigma and negligence towards women's competencies are the major reasons behind it. In this respect, a multifaceted approach needs to be undertaken. On the one hand, women participation and engagement in education, employment, and training

need to be enhanced. On the other hand, social mobilization is required through mass media and awareness-building campaigns.

- ✓ Moreover, women access to mass media and ICT needs to be prioritized. Whether beneficiary or non-beneficiary, this study finds that women have significantly less access to mass media and ICT or telecommunication devices compared to men. Given that information technology has become almost like a necessary service in day-to-day life, leaving the majority of women out of the reach of mass media and ICT services means widening the existing digital divide. In this respect, the World Vision Projects and interventions targeting Women Economic Empowerment taken by other stakeholders should consider the digital access component as a priority tool. Donors and development partners can identify optimal policy arms to devise an appropriate strategy to bring women within the web of internet and digital connectivity.

- ✓ Strong actions are needed against violence against women. Despite measures taken by the government and non-governmental organizations, gender-based violence (GBV) remains a major concern. Earlier studies show when women have higher resources (such as higher earnings), they face more violence (Block and Rao, 2006; Buller et al, 2018). Although this study cannot directly link women economic empowerment and GBV, policies and projects undertaken for women economic empowerment should emphasise this indicator.

- ✓ Furthermore, it is important for the programs to design future interventions to promote employment and earning opportunities for working-age women and facilitate their access to finance and upgraded technology. The key informants for this study prioritized these factors to accelerate the achievement of women economic empowerment. They also emphasized efforts to integrate women in training programmes to build their entrepreneurial skills, business planning, marketing, accounting and management, and increased and eased access to financial services.

- ✓ In order to advance or heighten the achievement of economic empowerment of women in Bangladesh, the informants stressed creating strong market linkages for women entrepreneurs, strong collaboration between public and private entities, equal distribution of unpaid domestic work among all family members and male engagement with an aim to reverse social stigma surrounding women empowerment.

- ✓ The World Vision projects, to a great extent, have interventions that address the issues above. However, as unearthed from the FGDs, the effectiveness of future programs and attainment of the objectives will be greatly increased by providing cash benefits during training, training programs on poultry, fishery and livestock, and cash/ in-kind support during the COVID-19 pandemic.

No denying, given the vast informal sector that Bangladesh has, implementing the recommended policy suggestions would be a daunting task. Nevertheless, at least if the government can initiate

some bold measures at the existing formal enterprises, that may instigate a chain of a virtuous circle. Moreover, from the perspective of private sector stakeholders and development partners, a more rigorous and comprehensive but collective drive is required for ensuring women economic empowerment. As this study has pointed out, the WVB interventions have successfully contributed to improving WEE on multiple dimensions for the beneficiary households compared to the non-beneficiary households. While there are scopes for further improvements in the project designs considered in this study, the findings support the claim that such drives help improve women's lives and give them a voice that could have remained unheard of had not there been these programmes interventions. It, therefore, justifies the cause for more strengthened and revamped interventions and policy supports with clear mandates of women economic empowerment from the government and non-government organisations alike.

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Annex

An empirical investigation of the impact WVB's programmes on the Women Economic Empowerment (WEE)

Although the descriptive statistics show a positive impact of WVB programmes on WEE, however, such positive impact cannot be directly attributed to the WVB programmes unless and otherwise the impact of other influencing variables are controlled for during the comparison. The widely applicable approach under such circumstances is applying regression models. Therefore, using a regression model approach, this section attempts to identify the impact of the WVB programme interventions on the beneficiaries.

It must be noted that, the observed higher scores of the WVB programme beneficiaries compared to the non-beneficiaries could originate due to two possible scenarios: (i) either the programmes effectively promoted women's status; or (ii) women who were already empowered (or had means to do so) participated in the programmes. The later cause is known as the participants' self-selection into programmes, which their inherent and unobserved characteristics may influence. Due to this self-selection problem, an improved empowerment effect may wrongly be attributed to programme participation unless suitable and appropriate empirical frameworks control other factors that might affect the women's economic empowerment score.

Here, the women economic empowerment index score (WEE index score) is considered as the dependent variable whereas the variables of interests include the WVB programme participation status. However, as the 'self-selection bias could result in a biased estimate of the participation effect, this problem of heterogeneity bias needs to be controlled for. It is argued that there exists a selection process that dictates participation in the programme, and the non-randomness in this process could bias the estimation of the relationship between participation and empowerment. In the presence of the appropriate baseline data with the same indicators of women economic empowerment, the problem of heterogeneity bias could be tackled using standard econometric modelling of panel data. However, due to the unavailability of appropriate baseline data of the same indicators of WEE, it is not possible to use panel estimation in this study. Therefore, this study applies the Heckman two-step procedure, a standard approach for correcting the heterogeneity bias in the case of cross-section data, for providing unbiased estimates of program participation on the constructed empowerment score.

In the Heckman two-step approach, a probit model of programme participation (also termed as selection equation) is estimated in the first step, and the OLS equation modelling the participation score (called empowerment equation) is estimated in the second step. In the first step, the inverse Mill's ratio is estimated, which is used in the second stage regression to control for the heterogeneity bias. Inclusion of such control factor in the analysis frees other explanatory variables in the equation from the effects of unmeasured characteristics, and thereby the selection bias could be tackled effectively.

More formally, let us consider *E* as the measured WEE index score for an individual woman, which can be explained by a vector of their personal and household characteristics X and their participation status (with D_i= 1 for participants and 0 for non-participants). Then, according to the Heckman procedure, as shown in equation (2), D_i is modelled in the first place with a vector of Z variables. Next, the selection bias control factor is constructed from this equation and then inserted into the regression equation (1) to get unbiased estimates.[14]

$$E_i = \beta X_i + \gamma D_i + \mu_i \qquad (1)$$

$$D_i = \lambda Z_i + v_i \qquad (2)$$

As discussed above, the estimation results of the women economic empowerment model are shown in Table 14. The result of the estimated selection equation (equation 1) is presented in column 1. For the selection equation, the age of the respondents is found to have a positive influence on the probability of being selected in the programmes. Moreover, although the educational qualification of women has a positive influence, it is found to be insignificant in the case of selection in the programmes. Finally, the coefficient of the total land variable in the selection equation is negative, implying that women from a household with more land are less likely to be selected in the programmes. This matches our expectation as WVB programme beneficiaries usually target households with relatively small amounts of land, which is also used as a criterion to select the beneficiaries. Amongst others, the Pacca house (base is mud or tin house) dummy which proxies the standard of living, has a negative and significant influence on the probability of selection into the programmes implying that the women from richer households are less likely to be selected into the programmes.

Table 14:Result from the Heckman two-step regression

VARIABLES	(1) Participation equation	(2) Empowerment score	(3) Empowerment score	(4) Empowerment score
Beneficiary		4.21438***		5.43721**
		(1.39009)		(2.16542)
Nobojatra			5.43998***	
			(1.95841)	
NSVC			7.19567***	
			(2.14194)	
UPG			3.04945**	
			(1.49522)	
Age	0.05076***	4.04369***	4.14232***	2.95734***
	(0.01656)	(0.51969)	(0.52063)	(0.72557)

[14] According to the two-stage procedure proposed by Heckman (1979) in the first stage a probit model of selection (in our case the decision to participate in the programme) is estimated on the entire sample. From this probit estimation, the 'hazard rate/inverse Mill's ratio 'λ' can be estimated, where $\lambda = \varphi(\tau Z_i) / \Phi(\tau Z_i)$. In the second-stage an OLS model of the outcome variable is estimated on the non-censored sub-sample (in our case the participants) where this inverse Mill's ratio is inserted as an additional regressors.

Age Squared	-0.00068***	-0.04864***	-0.05002***	-0.03551***
	(0.00`020)	(0.00682)	(0.00684)	(0.00937)
Primary	0.12214	20.95686***	21.08285***	12.32439***
	(0.15752)	(2.43211)	(2.42980)	(4.03372)
Secondary	0.21745	25.96359***	26.30940***	17.40874***
	(0.16371)	(2.84171)	(2.84115)	(4.57764)
Tertiary	0.10993	37.11414***	37.04749***	29.79728***
	(0.15951)	(2.43706)	(2.43509)	(4.06620)
Married	-0.09256	1.34307	0.86157	1.82661
	(0.11033)	(1.95252)	(1.96629)	(3.33919)
HH Size		-2.00692***	-1.87619***	-0.68627
		(0.38713)	(0.39340)	(0.61457)
Total land	-0.01507***	0.32010***	0.29842***	0.13902
	(0.00390)	(0.08232)	(0.08307)	(0.11925)
Pacca House	-0.35462***	-12.40239***	-12.50588***	-10.09976*
	(0.11782)	(3.28362)	(3.28143)	(5.31599)
Female Head		7.92963***	7.95109***	5.24721
		(1.78245)	(1.82211)	(3.63991)
Lambda		66.15084***	69.23047***	29.78342
		(16.41620)	(16.45662)	(26.31672)
Male perception				0.33081***
				(0.06629)
Constant	-0.20972	-75.77963***	-78.85130***	-62.18214***
	(0.32886)	(15.82086)	(15.85347)	(23.37301)
Observations	1,047	1,047	1,047	395
R-squared		0.39388	0.39699	0.38035

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Columns 2 and 3 of Table 14 presents the estimation result of empowerment score, where along with several controls for empowerment, the lambda correction term constructed from the selection equation is included. Identification of these two equations is attained while excluding the male perception score variable in the empowerment model[15]. The estimated coefficients of the result of the second column show that the empowerment score of beneficiaries of the WVB's programmes exceeds the non-beneficiaries by about 4 points, reflecting the fact that the programmes of WVB have been instrumental in improving the status of women.

To investigate the impact of each of the programmes of WVB (e.g. UPG, Nobojatra, and NSVC), a separate regression has been estimated as shown in column 3 of Table 18. Here, a positive and significant impact of each of the programmes of WVB on women economic empowerment is also observed. In other words, the scores of women economic empowerment for the beneficiaries of each of the programmes exceed statistically significantly the scores for non-beneficiaries (the

[15] The reason is that for all the women in this study we do not have the information of male perception of the male members of their households

base category). The largest impact is observed for the beneficiaries of NSVC, followed by those of Nobojatra and UPG.

Apart from the programme specific variable, the coefficient of respondents' age has a positive sign and age squared has a negative sign implying that the WEE score increases with age but at a decreasing rate. While looking into the effect of the education of the respondents, this study finds that the coefficient estimates of education status dummies (i.e. primary, secondary and tertiary) are positive and significant, implying that higher educated women tend to have higher empowerment scores compared to women with no education (the base category). Also, the results show that the WEE score for the women from female-headed households is significantly higher compared to those from male-headed households (the base category). Amongst others, the significant impact of households total landholding or household size on the WEE scores is also observed. Although the impact of land is positive, it is negative for household size. Finally, the lambda correction term turns out to be positive and statistically significant, suggesting that beneficiaries compared to non-beneficiaries have unmeasured characteristics which are positively related to empowerment.

There is no denying that for a male-dominated society like Bangladesh, the perception of male members is likely to have a significant impact on the WEE score. Therefore, to find the effect of the male perception score discussed earlier, another regression model has been estimated (column 4). Here we observe a positive and significant impact of the male perception score on the WEE score, implying that a favourable attitude of male members in a household towards women's economic participation will positively impact the WEE index indicator.

Time series regression-based approach

This study applies Vector Error Correction Model (VECM) to address the relationship between WEE and GDP. With the VECM approach, this paper identifies whether female economic participation has any long-term relationship with GDP growth and the extent.

The model for this econometric exercise is specified as follows:

$$GDP_t = \beta_0 + \beta_1 Capial_t + Male\ Employment_t + \beta_3\ Female\ Employment_t + \mu_t \ldots (1)$$

Where 'GDP' is the real gross domestic product, 'Capital' is the stock of capital in the economy, 'Male Labour' is the size of the male labour force, and 'Female employment' is the female labour employment size. The size of the female employment is used as a proxy of female economic participation.

The data for this exercise are taken from the Penn World Table (PWT, version 10.0) and the ILOSTAT databases and the world economic forum data. The WEF database provides yearly data on capital stock, and real GDP for Bangladesh from 1960 till 2019. From the ILOSTAT, the number of male and female employed workers has been collected.[16] Based on a combined dataset of PWT and ILOSTAT, it was possible to create time-series data for these variables from 1974 to 2019. Data from 46 years provides a sufficiently long time required to carry out a time-series econometric model.

Descriptive statistics

The descriptive statistics of the variables used in this exercise is presented in Table 15. The average or mean value of Log Real GDP, Log Capital Stock, Log Male Employment and Log Male Employment are 28.79, 27.10, 17.22, and 15.59, respectively. Among the measures of dispersion, the standard deviation of each of the variables has been reported. To test the normality of the variables, the Jarque-Bera test statistics have been reported where the null hypothesis is that the series is normally distributed. For each of the variables, we cannot reject the null hypothesis that the variable is normally distributed at the 5 per cent level of significance, which proves the normality of the variables.

Table 15: Descriptive statistics

	Mean	Median	Standard deviation	Skewness	Kurtosis	Jarque-Bera (prob.)
Log Real GDP	28.79	28.72	0.64	0.28	1.91	2.87 (0.23)
Log Capital stock	27.10	27.10	1.09	-0.11	2.07	1.75 (0.41)

[16] It must be noted that, the data on male and female employment used in this study has been derived based on the data of the ILO modelled estimate as well the PWT 10.0. The proportion of male and female employment have been derived from the ILO Stat while this percentage has been used to get the male and female employment from total employment data of PWT 10.0.

Log Male employment	17.22	12.2	0.25	0.04	1.81	2.68 (0.26)
Log Female employment	15.59	15.92	0.95	-0.69	2.17	5.01 (0.081)

Unit Root Test

At the first stage, it is required to check the stationarity of the variables and their order of integration. To check the stationarity of the variables, the study has employed the Augmented Dickey-Fuller Test (ADF) and the Phillips Perron (PP) test. The unit root test usually directs the next step required for the study. Table 16 reports the result of ADF and PP tests.

For the unit root test, both intercept and trend and intercept specification have been used. According to ADF test results, where the null hypothesis is that the variable has a unit root, all variables are non-stationary at the level under both intercept and trend and intercept specification. But, in the case of the first difference, the hypothesis of non-stationary or presence of unit root is rejected at a 5% level of significance for capital and male employment. However, although the first differences of real GDP and female employment are stationary under trend and intercept specification, they are nonstationary under the only intercept specification.

Besides, like ADF test results, according to the PP test results, all variables are non-stationary at the level in both intercept and trend and intercept specification. But, in the case of the first difference, the hypothesis of non-stationary or presence of unit root is rejected at a 5% level of significance for all the variables except female employment under both types of specifications. Although the first difference of female employment is stationary under the intercept the only specification, it is stationary under both the trend and intercept specification.

Therefore, it can be concluded that all the variables are integrated of order one, that is, I (1), under the trend and intercept specification with both ADF and PP test.

Moreover, to address the problem of a breakpoint, the result of the breakpoint unit root test for each have been reported. Here it is found that all the variables are non-stationary at level but stationary at the first difference, confirming the fact all the variables are I (1).

Table 16: Unit Root Test

Variables	ADF		PP		Breakpoint unit root test	Comments
	With intercept	With trend and intercept	With intercept	With trend and intercept		
GDP	5.23	1.67	7.64	-0.37	2.08	
ΔGDP	0.99	-3.57**	-7.09***	-10.99***	-11.82***	I(1)
Capital	2.26	-2.21	-0.43	-2.22	-1.37	
ΔCapital	-3.90***	-4.49***	-7.52***	-7.74***	-9.49***	I(1)
Male employment	-0.67	-2.81	-0.82	--2.09	-3.26	
ΔMale employment	-3.87***	-3.84**	-3.77***	-3.75**	-5.03***	I(1)
Female employment	-2.58	-1.51	-3.58	0.89	-2.65	

ΔFemale employment	0.14	-3.29**	0.18	-3.29**	-5.65***	I(1)
Note:*,**, and *** denote rejection of the null hypothesis that the series has a unit root at 10%, 5%, and 1% level of significance, respectively						

Lag selection

It is found that all the variables are integrated of the same order. Before running the Johansen cointegration test to see whether there is any long-run relationship among the variables, it is needed to determine the optimal lag length criterion. The appropriate lag length for the model is selected on the basis of the maximum criterion. Table 17 reports the result of VAR lag order selection. While FPE, AIC and HQ suggest two lag length for the analysis of output growth, the SIC proposes only one lag length. Based on the suggested lag length of maximum criterion two lags have been selected for all variables as the optimal lag length.

Table 17: VAR Lag Length Criterion

Lag	LogL	LR	FPE	AIC	SC	HQ
0	112.0518	NA	6.85e-08	-5.14533	-4.97983	-5.08467
1	436.8427	572.2505	2.83e-14	-19.8497	-19.02219*	-19.5464
2	463.6576	42.13771*	1.73e-14*	-20.36465*	-18.8752	-19.81871*
3	477.6190	19.28003	2.02e-14	-20.2676	-18.1162	-19.479
4	487.8138	12.13662	2.97e-14	-19.9911	-17.1778	-18.9599

Cointegration test

Cointegration test is performed to confirm whether there are any long-run cointegrating relationships among the variables considered in the model. If all the considered variables are integrated in the same order, there is at least one cointegrating relationship. The cointegration test is performed by two test statistics as follow-

$$1.\quad \Lambda_{trace}(\mathrm{r}) = -\mathrm{T}\sum_{i=r+1}^{n} \ln\left(1-\hat{\lambda}\right) \quad \ldots (2)$$

$$2.\quad \Lambda_{max}\left(\mathrm{r}, \mathrm{r}+1\right) = -\mathrm{T}\ln(1-\hat{\lambda}_r+1) \quad \ldots (3)$$

Here, $\hat{\lambda}$ is the estimated values of the characteristic roots or eigenvalues
T is the number of usable observations.

Also, here trace statistics test H_0: r=0 against the alternative of r>0 and the maximum eigenvalue statistic tests the null hypothesis that r=0 against the alternative hypothesis of r=1.

To find the long-term relationship between the factors of production and real output, this study has applied the cointegration techniques suggested by Johansen and Joselius (1990). By examining the number of independent linear combination for a set of time series variables that yields a stationary process, Johansen approaches to identify the cointegrating relationship among

the variables (Stern, 2000). To identify the presence of a cointegrating equation, considering optimal lag length equals 2 and trend in VAR, Trace statistics and Maximum Eigen Value statistics have been calculated. The cointegration result with the trace and maximum eigenvalue statistics is presented in Table 18 and Table 19, respectively. Here, the null hypothesis of no cointegrating equation is rejected in both trace and maximum eigenvalue statistics at a 5% significance level. Further, the trace statistics also reject the null hypothesis of at most 1 cointegrating equation at a 5% significance level. Thus, the Trace test indicates there exist at least 2 cointegrating equations while the maximum eigenvalue test indicates at least 1 cointegrating equation at 5 per cent level of significance.

Table 18: Co-integration rank test for the real output equation

No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.66789	92.72652	63.8761	0
At most 1 *	0.431011	45.32806	42.91525	0.0281
At most 2	0.266334	21.08058	25.87211	0.1761
At most 3	0.165185	7.763432	12.51798	0.2716

Table 19: Co-integration max eigenvalue test for the real output equation

No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.66789	47.39845	32.11832	0.0003
At most 1	0.431011	24.24748	25.82321	0.0796
At most 2	0.266334	13.31715	19.38704	0.3031
At most 3	0.165185	7.763432	12.51798	0.2716

Vector Error Correction Model (VECM)

The presence of a cointegrating relationship is a pre-condition for applying VECM. If cointegration exists among the variables in the model, the VECM will inspect the short-run as well as the long-run relationship among them.

Before running VECM, it needs to determine the optimal lag length to be considered. As mentioned earlier, the optimal leg length has been determined to be 2. Equation 4 presents the structure of the Vector Error Correction Model. Besides the estimates for all the variables with a specified lag structure, the equation will also estimate the error correction term, which is the measurement of the speed of adjustment toward long-term equilibrium.

$$\mathrm{LnGDP_t} = \mathrm{C_0} + \mathrm{C_1EC_{t-1}} + \mathrm{C_2}\ \Delta\mathrm{LnGDP_{t-1}} + \mathrm{C_3}\Delta\mathrm{Ln}Cap_{\mathrm{t-1}} + \mathrm{C_4}\Delta\mathrm{LnMale\ employment_{t-1}} + \mathrm{C_5}\Delta\mathrm{Female\ employment_{t-1}} \quad \ldots (4)$$

Where $ECT_{\mathrm{t\text{-}1}}$ is the lagged error correction term.

The first part of the VECM shows the long-run cointegrating equation. The result of the long-run cointegration equation has been presented in Table 20. The cointegrating equation fulfils all the

expected signs. The cointegrating equation shows that capital stock and male and female employment has a positive impact on output growth in the long run. The estimated coefficient of female employment is -0.313, which implies that a 1 per cent increase in female employment is associated with about 0.31 per cent increase in real GDP. Moreover, the result also shows a significant impact of the capital stock on output growth.

Table 20: Long run cointegrating equation

	Dependent Variable: Ln GDP		
	Coefficient	Standard Error	t-statistics
Ln Capital	-1.20	0.2430	-4.93
Ln Male employment	-1.32	1.125	-1.17
Ln Female employment	- 0.313	0.111	-2.82
Trend	0.085	0.02	-

From VECM, there is no significant relationship between real GDP and female and male employment (Table 21). Here, the error correction term is negative although statistically insignificant which indicates that there is long term adjustment from any deviation in the short run.

Table 21: Details of error correction term

	Coefficient	Standard Error	t-statistics
Error Correction Term	-0.00843	0.016	-0.50

The insignificant relationship between real GDP and female and male employment in the short run is observed in the following block exogeneity Wald test. Results of the VECM Granger causality or block exogeneity Wald test are presented in Table 22. As can be derived from the table, male and female employment, as well as the capital, do not cause real output individually or jointly.

Table 22: VECM Granger Causality test / Block exogeneity Wald test

Dependent variable: D(Ln GDP)			
Excluded	Chi-sq	df	Prob.
D(Ln Capital)	3.950479	2	0.1387
D(Ln Male employment)	1.987923	2	0.3701
D(Ln Female employment)	2.375330	2	0.3049
All	8.989490	6	0.1742

Post estimation test

Autocorrelation LM Test

The Serial Correlation LM test confirms that there is no serial correlation in the residuals of the ECM regression up to four lags as LM statistics, and their associated P-value implies not to reject the Null hypothesis of no serial correlation (Table 23).

Table 23: Autocorrelation LM test

Lags	LM-Stat	Prob
1	19.08710	0.2642
2	18.01584	0.3230
3	22.48005	0.1284
4	20.57961	0.1952

Heteroscedasticity tests

The heteroscedasticity test result shows that the test cannot reject the null hypothesis of no heteroscedasticity (Table 24).

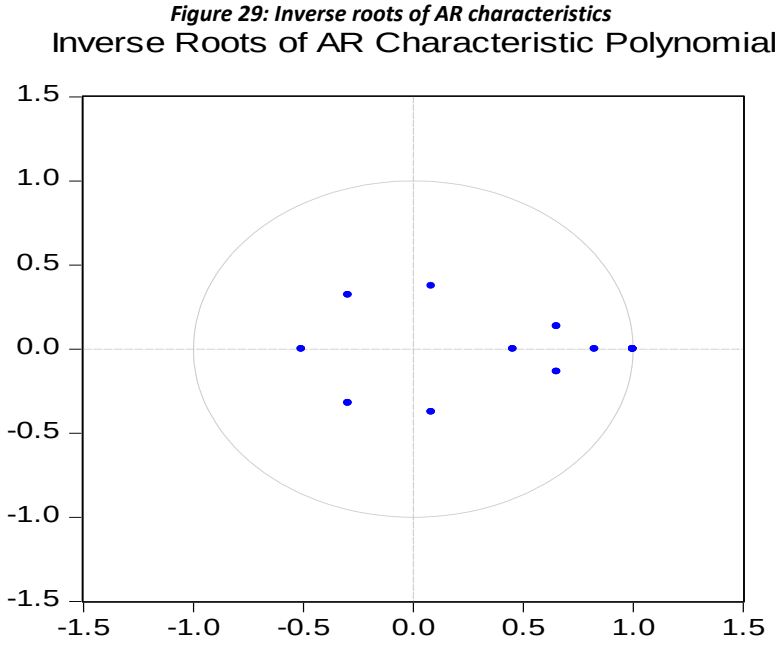
Table 24: The BPG test for heteroscedasticity

Heteroscedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	1.294763	Prob. F(12,30)	0.2721
Obs*R-squared	14.67149	Prob. Chi-Square(12)	0.2599
Scaled explained SS	6.087319	Prob. Chi-Square(12)	0.9116

Stability Test

The stability of the model is usually analysed with the inverse roots of AR characteristics polynomials. From Figure 29, it can be found that all the points lie within the circle indicating the stability of the model.

Figure 29: Inverse roots of AR characteristics



Checklist for Focus Group Discussion (FGD)

1. Kindly tell us about your participation in the World Vision Programme. When did you join and what are of benefits did you receive from the programs?
2. What challenges (in terms of earnings and livelihood) did you face before participating in the World Vision Programme?
3. How the participation in the programme helped you overcome your challenges? How did the programme help you improving your family's life and livelihood? Did the programme help you with improving the status of education or nutrition of the household members?
4. How did the programme help you obtaining an earning source/engage in income generating activities? What economic activities do you do now? What did you do before?
5. Did you receive any training from the programme? If so, what trainings did you receive? How helpful was the training programme in obtaining or increasing your earnings/employment opportunities/ other way?
6. How did the perception of your household members (particularly male members) change towards you after participation in the World Vision programmes? What changes do you see towards you (in terms of importance of your opinions, or your thoughts) from your other household members, particularly from the male household members (husband, household head, etc.) on important family decision makings?
7. Do (Did) you face any challenges in participating in the world vision programmes from your household/household members/society? What are the challenges that you faced since joining the programme?
8. ***If there is training/received training programme:*** What are the challenges that you faced in participating the training programmes? How can the training programme be further improved? What components (like seed capital or introducing training on different trades) do you think would be helpful in making this training more fruitful?
9. In your view, how can the programme be improved further? What component, if it was included in the programme, could have improved your economic status better?

Table 25: Distribution of the sample of the key informant interview

Respondent Group	Organization Name
Private Sector (2)	Manusher Jonno Foundation
	Bangladesh Mahila Parishad
Government Institutions or affiliated organizations (1)	Joyeeta Foundation, Ministry of Women and Children Affairs (MOWCA)
Academician/Researcher (2)	University of Dhaka (2)
INGO (1)	ActionAid Bangladesh
Donor Organisation (1)	Foreign Commonwealth & Development Office (FCDO) (1)
UN (1)	UN Women Bangladesh

Target Group: Academician/Gender Expert

Name of the respondent: _____

Title: _____

Organization: _____

1. Over the years, what changes have you observed with respect to women economic empowerment (WEE) and ensuring justice for women in Bangladesh?

2. In your expert opinion, what are the potential challenges in ensuring WEE and justice for women in Bangladesh? What are the key factors to ensure women economic empowerment and justice for women in the Bangladesh context?

3. How supportive are the private sector actors (local NGOs/INGOs, UN bodies, Donors, etc.) toward WEE? What roles they can play for ensuring WEE and justice for women?

4. How important is the role of the male household members in ensuring WEE? How supportive are the male household members in this regard? What roles can the male household members play in ensuring WEE? How can their participation and their active role in enhancing WEE can be ensured?

5. To what extent do relevant policies adequately address WEE and justice for women? What are the policy gaps? How the policy gaps could be addressed? What is the quality of policy implementation related to WEE?

6. What steps do you think are necessary from the Government of Bangladesh (GoB) in increasing and ensuring women economic empowerment and justice for women in Bangladesh? How the collaboration between Government and the private sector could be enhanced in this regard?

Target Group: Donors/INGOs/Local NGOs

Name of the respondent: _____

Title: _____

Organization: _____

7. What are the currently ongoing programs (or programs being funded by your organisation) on women economic empowerment (WEE) and justice for women in your organisation?

8. What are the key features (in terms of project objectives, beneficiary selection, project benefits/support activities, and project implementation timeline) of the aforementioned programs as far as WEE and justice for women component is concerned?

9. What is the experience observed in the aforementioned programs on the following indicators:
   i. Implementation of programs
   ii. The will of women to engage in programs and continue till completion
   iii. Support from the male household members and their perceptions
   iv. Means by which the programs helped women to overcome their poor conditions and ensured WEE and justice for women

10. What are the key achievements/successes observed from the programs? What challenges did you face in implementing the programs? How did you overcome the challenges?

11. In light with your previous experience, what are the keys to ensure women economic empowerment and justice for women in the Bangladesh context? What could be the potential challenges?

12. How supportive are the private sector actors (local NGOs/INGOs, UN bodies, Donors, etc.) toward WEE? What roles they can play for ensuring WEE and justice for women?

13. To what extent do relevant policies adequately address WEE and justice for women? What are the policy gaps? How the policy gaps could be addressed? What is the quality of policy implementation related to WEE?

14. What steps do you think are necessary from the Government of Bangladesh (GoB) in increasing and ensuring women economic empowerment and justice for women in Bangladesh? How the collaboration between Government and the private sector could be enhanced in this regard?

Target Group: Government Officials

Name of the respondent: _____

Title: _____

Organization: _____

1. What are the currently ongoing programs on women economic empowerment (WEE) and justice for women in your ministry/department/organisation?

2. What are the key features (in terms of project objectives, beneficiary selection, project benefits/support activities, and project implementation timeline) of the aforementioned programs as far as WEE and justice for women component is concerned?

3. What are the key achievements/successes observed from the programs? What challenges did you face in implementing the programs? How did you overcome the challenges?

4. In light with your previous experience, what are the key factors for ensuring women economic empowerment and justice for women in the Bangladesh context? What could be the potential challenges?

5. What steps do you think are necessary from the Government of Bangladesh (GoB) in increasing and ensuring women economic empowerment in Bangladesh?

6. How supportive are the private sector actors (local NGOs/INGOs, UN bodies, Donors, etc.) toward WEE? What roles they may play for ensuring WEE and justice for women? What role do you expect from the INGOs/Donors/Development partners in assisting the GoB in achieving the WEE and justice for women?

7. To what extent do relevant policies adequately address WEE and justice for women? What are the policy gaps? How the policy gaps could be addressed? What is the quality of policy implementation related to WEE?

Target Group: Program beneficieries

Name of the beneficiary:
Address and details of the beneficiary:
In which of the World Vision programs were you involved in?

- Nobo Jatra
- NSVC
- UPG

10. Kindly tell us about your participation in the World Vision Programme. When did you join and what are of benefits did you receive from the programs?
11. What challenges did you face (in terms of earnings and livelihood) before joining the World Vision Programme.
12. How the participation in the programme helped you overcome your challenges? How did the programme help you improving your family's life and livelihood? Did the programme help you with improving the status of education or nutrition of the household members?
13. How did the programme help you obtaining an earning source/engage in income generating activities? What economic activities do you do now? What did you do before?
14. Did you receive any training from the programme? If so, what trainings did you receive? How helpful was the training programme in obtaining or increasing your earnings/employment opportunities/ other way?
15. How did the perception of your household members (particularly male members) change towards you after participation in the World Vision programmes? What changes do you see towards you (in terms of importance of your opinions, or your thoughts) from your other household members, particularly from the male household members (husband, household head, etc.) on important family decision makings?
16. Do (Did) you face any challenges in participating in the world vision programmes from your household/household members/society? What are the challenges that you faced since joining the programme?
17. ***If there is training/received training programme:*** What are the challenges that you faced in participating the training programmes? How can the training programme be further improved? What components (like seed capital or introducing training on different trades) do you think would be helpful in making this training more fruitful?
18. In your view, how can the programme be improved further? What component, if it was included in the programme, could have improved your economic status better?

SANEM-World Vision Bangladesh (WVB) Survey Questionnaire
on
"Assessing the Women Economic Empowerment (WEE) of the Beneficiaries of Selected World Vision Bangladesh Programme"

Consent Statement

Greetings! My name is _____. I am working as an enumerator for the South Asian Network on Economic Modeling (SANEM). SANEM is a Dhaka based renowned research organisation.

SANEM, in association with the World Bank is collaborating on a project where the objective is to understand the scenario of the delivery of health (specifically related to vaccination) and other social protection programs in poor areas of Dhaka City. We are conducting this survey as part of that project. The principal objective of this survey is to collect data on several indicators related to expound the perspectives from the urban poor on access and receipt of primary health services (including vaccination) and economic support services. The survey covers information on several key areas, including- basic information on the household members, livelihoods, housing conditions, problem faced during Covid-19, education, health, access to basic services, and behaviours, etc. We request your kind participation in this survey.

The interview will take around 1 hours to be completed. All information collected for this survey will be considered confidential and will be used only for research. Your participation in the survey is entirely voluntary. You can refuse to take part in this survey now or terminate the survey at any time during the interview.

You may skip /avoid any question if you do not know the answer or feel uncomfortable answering the question

Can I start the interview now?

1. Yes
2. No [Thank the respondent and end the interview]

Basic Information

1. Survey Date		6. Area	1. Rural (Upazila based) 2. Urban (Urban based)
2. District Name	Select from the options	7. Enumerator's Name	Select from options
3. Household no			
4. Program Status	1. Beneficiary 2. Non-Beneficiary	9. Consent	1. Interested 2. Not Interested
5. Program Types (If Beneficiary)	1. NSVC 2. Nobojatra 3. UPG	10. Survey Status	1. Completed 2. Incomplete 3. Refused

Section 1: Household information roster

(All members of the household)

Total number of household member: ……

MID	1. Name	2. Sex	3.a. Relation with the household head	3. B. Relation with the respondent	4. Age	5. Religion	6. Marital status	7. If ever married, Age at first marriage	8. Current status of education (if age>=3)	9. What is the highest class that you passed	10. Do you have any kind of disability?	11. Earning status	12. Do you have a mobile phone? 1. Yes (>Q12) 2. No (>> go to the next person)	13. What is the type of mobile phone that you have? 1. Smart Phone 2. General cellular phone -95. Don't know
		1. Male 2. Female 3. Others	1. Head 2. Husband/wife 3. Son/Daughter 4. Spouse of Son/Daughter 5. Father/ Mother 6. Father/ Mother-in-law 7. Brother/Sister 8. Brother/Sister law 9. Grandchild 10. Grand Father/Mother 11.Niece/Nephew 12. Uncle/Aunt 13. Employee 14. Others	1. Respondent 2. Husband of the respondent 3. Children of the respondent 4.Other family member	Put the age in complete numbers. If age is less than 1, put 0.	1. Islam 2. Hinduism 3. Buddhism 4. Christianity 5. Other (specify)	1. Married 2. Divorced 3. Separated 4. Widowed / Widower 5. Never married		1. Student 2. Completed study / Dropout 3. Never Attended School	*See code*	1. No known disability 2. Difficulty in seeing 3. Difficulty in hearing 4. Difficulty in walking/physical movement 5. Difficulty in communicating / speaking 6. Other	1. Earner 2. Non-Earner 3. Contributing Family member 4. Disabled/ not able to earn		

Education Code

0.Pre-Primary Education 1. Class 1 2. Class 2 3. Class 3 4. Class 4	5. Class 5/PSC 6. Class 6 7. Class 7 8. Class 8/JSC 9. Class 9	10. SSC/ equivalent 11. HSC/ equivalent 12. Graduate / Bachelor/ equivalent 13. Postgraduate/ Masters/ equivalent	14. Medical 15. Engineering 16. Vocational 17. Technical Education	18. Nursing 19. Diploma 20. PhD 21. Others

Section 2: Participation in relevant WVB support programmes

(Only for WVB benefit recipients)

2.1 Have you ever participated in any World Vision Bangladesh's programmes in the last THREE Years (since 2018)?

1. Yes
2. No (>> Next section)

(Use multiple rows if the participant has participated in more than one WVB programme in the last Three years)

1. What was the month you started your participation in the WVB programme?		2. What supports/benefits did you receive from the program? (Multiple Selection Possible)	3. What is the interval of receiving the programme benefits (such as cash/ in-kind support)	4. What is the amount of benefit (in cash/ in-kind) at each interval?	5. What is the total amount of CASH/LOAN benefits that you have received till March 2021 since the starting of the programme? (in Tk.)	6. What is the total value of in-kind support that you have received so far? (in Tk.)	7. Have you received any (IGA) training from the program?	8. What trainings did you receive?' *(See code)* (Multiple selection possible) Select four most recent training received				9. What was the duration of the training programme? 1. Less than 1 week 2. 2-4 weeks 3. More than 1 month but less than 3 months 4. More than 3 months				10. On a scale of 1 (very ineffective) to 5 (very effective) – how effective was the training programme? 1. Very ineffective 2. Ineffective 3. Neither ineffective nor effective/ somewhere in between 4. Effective 5. Very effective			
MM	Year	1. Cash support 2. In-Kind support 3. Loan 4. Only Training (>>Q8)	1. One time support (received only once) 2. Weekly 3. Bi-weekly 4. Monthly 5. Once in four months 6. Once/ Twice in a year				1. Yes 2. No	a	b	c	d	a	b	c	d	a	b	c	d

Section 3: Participation in relevant non-WVB programmes (All female household members aged 15+)

Have you/any other female members (aged 15 years and older) ever participated in any NGO organised training/ support programmes (OTHER THAN WVB programmes) in the last THREE years (Since January 2018)?

1. Yes
2. No (>> Next section)

Use multiple rows if the participant has participated in multiple programmes (OTHERTHAN WVB programmes) in the last Three years.

Line number	ID code as in the roster (MID)	1. Name of the beneficiary (as in the Household Roster)	2. What was the name of the programme?	3. What was the month you started your participation in the programme?		4. What supports/benefits did you receive from the program? (Multiple Selection Possible)	5. What is the interval of receiving the programme benefits (such as cash/ in-kind support)	6. What is the amount of benefit (in cash/ in-kind) at each interval?	7. What is the total amount of CASH/LOAN benefits that you have received till March 2021 since the starting of the programme? (in Tk.)	8. What is the total value of in-kind support that you have received so far? (in Tk.)	9. Have you received any (IGA) training from the program?	10. What trainings did you receive? *(See code)* (Multiple selection possible) Select four most recent training received				11. What was the duration of the training programme? 1. Less than 1 week 2. 2-4 weeks 3. More than 1 month but less than 3 months 4. More than 3 months				12. On a scale of 1 (very ineffective) to 5 (very effective) – how effective was the training programme? 1. Very ineffective 2. Ineffective 3. Neither ineffective nor effective/ somewhere in between 4. Effective 5. Very effective			
				MM	Year	1. Cash support 2. In-Kind support 3. Loan 4. Only Training (>>Q10)	1.One time support (received only once) 2.Weekly 3.Bi-weekly 4.Monthly 5.Once in four months 6.Once/ Twice in a year				1. Yes 2. No	a	b	c	d	a	b	c	d	a	b	c	d

Training Code

Mechanical / civil engineering	01	Craftsman / handicraft and cottage work	06	Non-crop agricultural activities	09	Beautician & hairdressing	13	Construction related works	18
Electrical and electronic engineering	02					Tourism	14	Furniture	19
		Creative arts / artists / photography	07	Health and paramedical services	10	Journalism, mass communication	15	Welding	20
Computer	03							Poultry	21
Leather and Textile	04	Agriculture crop production and preservation	08	Office management	11	Printing	16	Plumbing / Pipe Fitting	22
								RMG	23
Catering, hotel and restaurant	05			Driving and motor mechanic	12	Foreign language	17	Other	99

Section 4: Information on Social Safety Nets programme

Now we would like to know from which Social Safety Nets programmes your household, or any member of your household received assistance during the last 12 months. We would like to know which benefits your household have received from Social Safety Nets programmes and quantity of that assistance.

Collect the data for all the household members aged 5 years and older. In case any member participates in multiple programmes, report in multiple rows for each programme the member is participating and carry over the respondent ID as in roster.

Line number	ID code as in the roster (MID)	1. Is (name) currently enrolled/ received any assistance from any social safety nets programme in the last 12 months? 2. Yes 3. No >> Next person	2. Which programme (name) has included in the last 12 months? Enumerators: List all programmes received by that person first Code	3. When did (name) enlist in this programme?		4. What supports/benefits did you receive from the program? (Multiple Selection Possible)	5. What is the interval of receiving the programme benefits (such as cash/ in-kind support)	6. What is the amount of benefit (in cash/ in-kind) at each interval?	7. What is the TOTAL amount of CASH/LOAN benefits that you have received till March 2021 in the last 12 Months? (in Tk.)	8. What is the TOTAL value of in-kind support that you have received so far? (in Tk.)	9. Have you received any (IGA) training from the program?	10. What trainings did you receive? See code (Multiple selection possible) Select four most recent training received				11. What was the duration of the training programme? 1. Less than 1 week 2. 2-4 weeks 3. More than 1 month but less than 3 months 4. More than 3 months				12. On a scale of 1 (very ineffective) to 5 (very effective) – how effective was the training programme? 1. Very ineffective 2. Ineffective 3. Neither ineffective nor effective/ somewhere in between 4. Effective 5. Very effective			
				MM	Year	1. Cash support 2.In-Kind support 3. Loan 4. Only Training (>>Q10)	1.One time support (received only once) 2.Weekly 3.Bi-weekly 4.Monthly 5.Once in four months 6.Once/ Twice in a year				1. Yes 2. No	a	b	c	d	a	b	c	d	a	b	c	d

Safety Net Programme Code

1. Ananda School (ROSC) [Cash/kind]	11.Honorarium for Insolvent Freedom Fighters	21.Food Assistance in CTG-Hill Tracts Area	31.Char Livelihood Project
2. Stipend for Primary Students	12. Honorarium & Medical Allowances for Injured Freedom Fighters	22.Employment Generation Programme for the Ultra Poor	32.Economic Empowerment for the Poor/Shiree
3. School Feeding Program	13. Ration for Shaheed Family and Injured Freedom Fighters	23.Food/Cash for Work (FFW/CFW)	33.Urban Partnership for Poverty Reduction (UPPR)
4. Stipend for Secondary and higher students (boys/girls)	14. Allowances for Distressed Cultural Personalities/Activists	24.Test Relief (TR) Food (cash)	34.Shouhardo Program
5. Stipend for Dropout Students	15. Allowances for the Financially Insolvent Disabled	25. Rural Employment Opportunity for Public Asset (REOPA)	35.Nobojibon Program (Save the Children)
6. Stipend for Disabled Students	16. Vulnerable Group Development (VGD)	26. Rural Employment and Road Maintenance Programme (RERMP)	36.Proshar Program (ACDI VOCA)
7. Old Age Allowance	17. Vulnerable Group Feeding (VGF)	27. Housing Support	88. Other (specify)
8.Widow/Deserted/Destitute Women Allowances	18. General Relief Activities	28.Agriculture Rehabilitation	
9. Maternity Allowance Programme for the Poor Lactating Mothers	19. Gratuitous Relief (GR) – Food/Cash	29.One Household One Farm	
10.Maternal Health Voucher Scheme	20. Allowance for Beneficiaries in CTG-Hill Tracts Area	30.Targeted Ultra Poor (TUP) (BRAC)	

Section 5A: Employment and Earnings

Wage and salary (Applicable for the household's members aged 5 years and above) (If there is more than one job, use the next row)
If Q1=2 for all members, go to the next section

Individual ID Code (as in HH roster)	Serial No.	1. Did you do any work **for wage, salary or in kind, even if only for 1 hour in last 7 days?** (excluding domestic work) (Examples: A regular job, contractual job, part-time job, work in exchange for food or housing, day laborer in agriculture, day laborer in non-agriculture etc.) **(Employee, laborer, domestic workers)** 1 Yes 2 **No>> Next person** 3 Absent temporarily and will return to work (due to illness or some other reasons	2. Where do you work? (Examples: Computer shop, Agricultural land, Primary School, Office, Market, House, Coaching centre, mobile shop, transportation etc.)	3. Industry Code (BSIC – 3 Digits)	4. What is your job title/designation? (Examples: Farmer, Rickshaw puller, fisherman, primary school teacher, food seller, coaching teacher etc.)	5. Occupation code (BSCO-3 Digit)	6. What is the nature of your current occupation? 1 Paid employee 2 Day laborer (Agriculture) 3 Day laborer (Non-Agriculture) 4 Apprentice/intern/ trainee (if paid) 5 Domestic worker 95 Others (specify)	7. How many days in a week do you work now? **(Number of days)**	8. What was your salary in **February** 2020? **[If not in employed/in labour force, write 00]**	9. What is your salary in **February 2021**?
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									

Section 5A: Wage and salary (Continued)

Individual ID Code (as in HH roster)	Serial No.	10. How did your income change during March 2020 till February 2021? 1=Increased 2= remained the same 3=Decreased if option 3 is selected then >>> **Q11**	11. In which month your salary was lowest in the last nine months since April 2020? 1= April'20 2=May'20 3=June'20 4=July'20 5=August'20 6= September'20 7= October'20 8= November'20 9=December'20 10 = January'21 11 = February'21 (In case of more than one month please mention the first one)	12. In the mentioned month what was your monthly salary? (In BDT)	13. Did you change your profession in the last nine months (Since March 2020)? 1. Yes 2. No **(>> next section)**	14. Why did you change your profession? 1) Lost job 2) Due to lack of opportunities 3) Increased competitions 4) Wage is low 5) Wage was cut 6) Was forced to change the profession. 7) For better opportunities 8) Others, specify (multiple answers are applicable)	15. Did you ever remain in a position where you were unemployed (jobless and searching for a job and not getting one) during the period of job switching? 1. Yes 2. **No (>>next section)**	16. How long were you unemployed (jobless and searching for a job and not getting one before switching to new job)? *In days* *[If reported in months, convert that to days.* *1 month = 30 days]*
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							

Section 5B: Self-employment (Applicable for the household's members aged 5 years and above) (If there is more than one job, use the next row)

If Q1 = 2 for all members then skip to next section

Individual ID Code (as in HH roster)	Serial No.	1. Do you have any kind of business/farm, or with one or more partners? (Examples: commercially livestock or poultry rearing, fishing, flower or fruit garden, agricultural production, departmental store, transportation, hotel business/ handloom owner, tailor and so on) **(Self-employed)** 1 Yes 2 **No>> Next Person** 3 Absent temporarily and will return to work	2. What is the status of your involvement in this farm /business? 1. Employer in agriculture (Self-employed with paid employee) 2. Employer in non-agriculture (Self-employed with paid employee) 3. Self-employed (Agriculture) 4. Self-employed (Non-Agriculture) 5. Unpaid family worker	3. What are the main goods or services produced or traded? (For example - computers are sold/ hotel business/tailoring/weaving, rice/wheat/vegetables are produced, shirts are made, bricks are made etc.) (multiple answers applicable)	4.Industry Code BSIC 4 digit	5. How many employees are employed in the business/ farm? 1. Only myself 2. Me and my family members 3. <10 persons 4. 10-24 persons 5. 25-99 persons 6. 100-249 7. 250+	6. What kind of problems did you face doing business since March 2020? 1= Decrease in sales/production 3= Decrease in income 4= laid off workers 5= had to change the business 6=Others, mention If the business does not exist now, put 0	7. What was your Gross profit for the month of February 2021? (Gross profit is equals Gross Income per month excluding all expenses) (Taka) If the business does not exist now, put 00	8. What was your Gross profit for month a year ago (On the month of February 2020)? (Gross profit is equals Gross Income per month excluding all expenses) (Taka) If business did not exist last year, write '0'	9. Have you halted your business since March 2020 (even though temporarily)? 1=Yes 2=**No (next section)**	10. What was the reason for the business to halt? 1= Due to lockdown 2=Due to lack of demand 3= Due to increased cost of production 4= Due to fall in price 5= Due to COVID related additional cost 6=Others, mention (multiple answers are applicable)
	1										
	2										
	3										
	4										
	5										
	6										
	7										
	8										

Section 5C:

Did she/he do any of the following non-economic activity in the last 7 days?

Type of activity (not for wage, salary or profit of the household)	Response 1. Yes 2. No	If yes, how many hours did you work in the last 7 days?
1. Cooking		
2. Cleaning utensil/house		
3. Shopping for own household		
4. Caring for Child/old/sick		
5. Washing and cleaning of clothes/dishes		
6. Volunteer work (help others without pay) (Example- education, health care, social welfare, charity, emergency response, environment protection, sports and culture, legal service etc)		
7. Apprentices/ intern/trainees (if un-paid)		
8. Other household tasks (specify)		
9. 9. How many hours did you work in the last 7 days? (1+2+3+ 4+5+6+ 7+8 = 9)	-	

Section 5D: Control on earnings

(ALL female household members **aged 15+ who are earners**)

Instruction for the enumerators: The enumerators should try to speak to all the female household members aged 15+. In case any of the household member is not available, the enumerator should skip to the next available eligible female member in the household.

Individual ID Code (as in HH roster)	Serial No.	1. Can you spend your earning as your wish?	2. Who usually decides how to spend the money you earn?	3. Can you save some part of your earnings as your wish?	4.. On average how much you save per month	5. Do you keep some money for your spending or as a precaution of unforeseen need?	6. Do your husband or household head take your earnings forcefully?	7. What do you do with the money you earn?
		1. Yes 2. No	1. Yourself 2. Your husband/HH Head/Family 3. Both Yourself and Your Family Members 4. Someone else (specify)	1. Yes 2. No		1. Yes 2. No	1. Yes, Fully 2. Yes, Partly 3. No	1. Spend on regular household expenditures 2. Give it to my husband/HH Head 3. Give to other family members 4. Save 5. Buy Productive asset

Section 6: Participation in the household expenditure decisions

(ALL female household members **aged 15+**)
Instruction for the enumerators: The enumerators should try to speak to all the female household members aged 15+. In case any of the household member is not available, the enumerator should skip to the next available eligible female member in the household.

Who decides how to spend money on the following items?		
Basic Needs		
1. Food		Yourself ..... 1 Your husband/HH Head/Other family members..... 2 Self and husband/HH Head/ Other family members.....3 Someone else (specify) ..... 4 Not applicable 9
2. Housing		
3. Health care		
4. Education		
5. Clothing		
Assets and Investment		
6. Buying assets		
7. Buying land		
8. Investment		
9. Buying livestock		
10. Buying house		
Personal Buying		
11. Clothes for yourself		
12. Medicines for yourself		
13. Toiletries/cosmetic for yourself		

Section 7: Participation in the household's major decision making

(ALL female household members **aged 15+ who are earners**)

Instruction for the enumerators: The enumerators should try to speak to all the female household members aged 15+. In case any of the household member is not available, the enumerator should skip to the next available eligible female member in the household.

How much importance does your opinion carry on the following household level decisions? (On a scale of 1 (No importance at all) to 5(Carries full importance)	No importance at all (1)	Very little importance (2)	Moderate importance (3)	High importance (4)	Full importance (5)	Not Applicable
1. Education of household members						
2. Health-related matters						
3. Marriage of household members						
4. Income generating activities (Business/ Farming/ Agriculture etc.)						
5. Employment/occupational choice decision of the household members						
6. Investment and loan						
7. Purchasing Land/any other valuable assets						
8. Purchasing/construction of house						
9. Savings						
10. Family planning/ Contraceptive use						

Section 8: Access to mass media, ICT, and finance

(ALL female household members **aged 15+ who are earners**)

Instruction for the enumerators: The enumerators should try to speak to all the female household members aged 15+. In case any of the household member is not available, the enumerator should skip to the next available eligible female member in the household.

Question	Response
Do you read newspaper or magazine?	1. Not at all 2. Less than once a week 3. At least once a week 4. Almost every day
Do you watch television?	1. Not at all 2. Less than once a week 3. At least once a week 4. Almost every day
Have you ever used a computer or a tablet PC from any location?	1. Yes 2. No
How frequently do you use internet?	1. Never used internet before 2. Used internet before, but not using now 3. Less than once a week 4. At least once a week 5. Almost every day
Do you know about the mobile banking system	1. Yes 2. No
Have you ever made a transaction through a mobile banking system?	1. Yes 2. No
Do you have your own mobile banking account (such as bKash/rocket, etc)	1. Yes 2. No
How frequently do you use your mobile banking account?	1. Never used mobile banking service before 2. Less than once a week 3. At least once a week 4. Almost every day
Do you have a bank account?	1. Yes 2. No
On what purpose do you use the bank account?	1. Saving 2. Remittance 3. Business 4. Salary 5. Others (Specify)

Section 9: Asset ownership of women

Do you have any assets (from the following list) of your own?	A) Answer 1. Yes 2. No	B) If yes, how did you get this asset? 1. Inherited from father/mother 2. Received from husband/Son/Daughter/other relatives 3. Bought myself (from own income/savings) 4.Others (please specify)	C) What is the approximate market value of the assets?
1. O1. Land			
2. O2. House/Flat			
3. O3. Deposit in Bank/Savings certificates. share, fixed deposit			
4. O5. Ornaments (Gold, diamond)			
5. O6. Other valuable assets			
6. 07. Large livestock (oxen, buffalo, goats, sheep)			
7. 08. Small livestock (goats, sheep, Chickens, Ducks, Turkeys, Pigeons)			
8. 10. Farm equipment (non-mechanized)			
9. 11. Farm equipment (mechanized)			
10. 12. Nonfarm business equipment (such as sewing machine)			
11. 13. Large consumer durables (fridge, TV, sofa)			
12. 14. Small consumer durables (radio, cookware)			

Section 10: Violence Against Women

Informed Consent

The objective of this part of the survey is to identify how, where, when, why, and what type of violence women face. We request you to share the violence/tortures/abuses that you have faced as a woman. The questions in this section will cover some background information along with some basic forms of violence that you might have experienced. Every person has both good and bad moments in life. Your participation in this survey will help the policymakers to recognize how, where, and what kind of violence women face and how to improve their condition. The information obtained would help the policy advocates, nationally and globally, to suggest evidence-based policy suggestions to the Government. We assure you that all the answers including your name, address, age, or any other personal information will be kept anonymous. Your name will not appear in the interview or on any documents or any reports produced by this survey. The response will be kept confidential and will be used only for research. The interview will take approximately 20 minutes. If you agree to participate in this survey, we would like to interview you in a private setting of your choice, where you will feel comfortable talking to us. You have the right to stop the interview at any time, or to skip any question that you don't want to answer. If you have any questions about the survey, feel free to ask.

10.A Partner Violence

All married women in the household:

A1: Violation of independence by husband	A) in a lifetime	B) in the past 12 months
1. Does your husband try to restrict you from the company of your friends?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
2. Does your husband restrict you from going to your paternal house?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
3. Does your husband insist on knowing (with a suspicious mind) what you are doing and where you are at all times?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
4. Does your husband ignore your feelings and opinions without caring or thinking about your priorities?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
5. Is your husband angry if you speak with your relative and non-relative males?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
6. Is your husband always suspicious that you are unfaithful?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
7. Does your husband force you to maintain a hijab (parda)?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
8. Does your husband expect you to ask his permission before seeking health care for yourself?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
9. Does your husband obstruct your studies or employment?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
10. Does your husband forbid you from going out of recreation?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
11. Does your husband misbehave with you for giving birth to a girl child?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
12. Does your husband misbehave with you for not able to give birth to any child?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
A2: Economic Violence	A) in a lifetime	B) in the past 12 months
1. Does your husband refuse to give enough money for household expenses, even though he has money for other things?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
2. Does your husband refuses to provide regular pocket money	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
3. Are you married in condition with giving money or property or dowry	1. Yes, 2. No, 3. No answer, 4. N/A	***
4. Does he pressure you to get money or belongings from your father's house?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
5. Has the "Denmohor" been paid by your husband?	1. Yes, fully paid, 2. Partly paid 3. No, 4. Request for waive, 5. No answer.	

A3: Mental Violence by Husband	A) in a lifetime	B) Last 12 months
1. Did your husband insult you in a manner by which you were humiliated or felt bad about yourself?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
2. Did your husband belittle or humiliate you in front of other people?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
3. Did your husband do anything to scare or intimidate you on purpose (such as scream at you or break something)	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
4. Did your husband verbally threaten to hurt you or act in a manner by which you were terrified?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
5. Did your husband torture you for socializing with your neighbours or other women?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
6. Did your husband threaten to marry other women?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
7. Did your husband threaten to divorce you?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
8. Did your husband torture you for keeping relation or for communicating with your parental relatives?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
9. Does your husband utter attacking words against your parents	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
10. Does your husband often get angry with you without any reason?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A
11. Does your husband misbehave with you due to complaints from your mother-in-law or sister-in-law or other family members?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, No answer, 4. N/A

A4: Physical Violence by Husband	A) in a lifetime	B) Last 12 months
1. Has your husband ever slapped, punched, or throw something at you by which you were injured?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3. No answer, 4. N/A
2. Has your husband ever pushed you or shoved you or pulled your hair?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A
3. Has your husband ever brunt you with hot things?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A
4. Has your husband ever throw hot water/oil/milk/peas etc. intentionally?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A
5. Has your husband ever kicked you, dragged you, or beat you up?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A
6. Has your husband ever intentionally suffocated you or choked you by hand?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A
7. Has your husband ever threatened with or used a gun, knife, or any other weapon?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A
8. Has your husband ever hit you with a stick or any other heavy things?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A

A5: Sexual Violence by Husband	A) in a lifetime	B) Last 12 months
1. Did you ever have sexual intercourse with your husband against your will?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A
2. Did you have sexual intercourse with your husband against your will in fear of future torture or any kind of harm?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A
3. Did your husband ever perform any unusual sexual behaviour which seems defaming or disgraceful to you?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A
4. During intercourse does your husband discuss any kind of contraceptive method that you should use?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A
5. During intercourse does your husband use any kind of contraceptive method which tends to hurt you or you do not approve of?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A
6. Did your husband try to have intercourse with you against your consent during pregnancy/period/prohibition from the doctor?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A

10.B. Non-Partners Violence (Married/Unmarried)

All women in the household (aged 15+)

	A) in a lifetime	B) Last 12 months	E) By whom? 1. Family members 2. Others 3. Both 4. N/A
1. Have your ever in your life face any kind of verbal abuse (eve teasing, sexually explicit verbal abuses, etc.? has anyone slapped, punched, or thrown something to you by whom you were injured?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A	
2. Have you ever in your life face any kind of threats (to kidnap you, do harm to you or your family, spread rumours about you, spread your photos/videos online, etc.) or pressure for marriage?			
3. Have you ever in your life face any kind of physical violence (pushed you or shoved you or pulled your hair, intentionally suffocated you, or choked you by hand, threw the hot thing, beat your with sticks or anything, else, etc.)?			
4. In your life has anyone touched your body with bad intentions?	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A	
5. In your life has any of your family members or anyone by force proposed sexual intercourse or compelled you to sexual intercourse.	1. Yes, 2. No, 3. No answer, 4. N/A	1. Yes, 2. No, 3.No answer, 4. N/A	
6. Have you ever experienced abuse during your childhood (age<18)?	A) 1. Yes, >B &C 2. No	B) What Types? 1. Sexual, 2. Physical, 3. Mental, 4. Stalking	C) By whom? 1. Family member 2. Others

10.C. Legal actions taken against violence

1. Have you ever taken any legal actions (General Diary (GD), filed police case, FIR, Arbitration, complaints to the local influential/panchayat, etc.) after facing the abuse/violence?	2. Where did you file the complaint or sought for legal action??	3. What was the result of the action	4. Why didn't you take any legal action against the perpetrator?
1. Yes 2. No> Q4 3. N/A > next section	1. Police/Thana 2. Village Court 3. Union/ Upazila Parishad 4. Court 5. Government organization 6. One-stop crisis centre 7. NGO 8. Others	1. Good/The perpetrator was punished 2. Partial 3. Bad/the complaint was dismissed without proper hearing 4. Forcefully dismissed 5. Decision still pending 6. Currently ongoing 7.Others	1. Being threatened by the perpetrator/afraid of the perpetrator 2. In fear of members of household/in-laws/husband 3. In fear of own/family defames 4. Thinking of the children and family members 4. Due to financial constraints 5. Did not know where to complain/lack of knowledge of available litigation services 7. Lack of trust on law 8. The perpetrators are very influential 8. Considered it as not necessary

Section 11: Housing information

1. How many rooms does your household occupy? Number of rooms	2. What is the construction material of the walls of the main room?	3. Type of tenancy occupied by dwelling-household	4. What is the main source of drinking water in your household?	5. Walking distance to the source of the drinking water (in minutes)	6. What is the main source of light in your household?	7. What is the main cooking fuel in your household?	8. What kind of toilet facility do members of your household usually use?	9. Distance to the toilet facility	10. Main source of household income
	1. Straw/ Bamboo/ polishing/ plastic/ canvas/jupri/ Mud 2. Tin (GI sit) 3. Tally/ semi-pacca 4. Pacca (Brick and Cement) 5. Others	1. Owned 2. Rented 3. Rent-free 4. Provided free by relatives/ employer 5. Government residence 6. Others	1. Tap/supply 2. Tube-well/ deep tube- well 3. Ring well/ Indara/Kup 4. Surface Water (pond, river, canal) 5. Others	1. Inside the house 2. Within 30 minutes of walking distance 3. More than 30 minutes of walking distance	1. Electricity 2.Solar Electricity 3. Kerosene 4. Bio-Gas 5. Others	1. Wood/ Bamboo 2. Kerosene 3. Gas/LPG 4. Electricity 5. Straw/dry leaf/ cow dung 6. Bio-gas 7. Others	1. Sanitary (water sealed) 2. Sanitary (not water sealed) 3. Non-sanitary/ Kacha 4. Open space/no latrine	1. Inside the house 2. Within 200 meters 3. Above 200 meters	1. Agriculture 2. Industry 3. Service 4.Government allowance/Pension 5. Remittance 6. Others

Section 12: Household yearly income and land holding

Income		Land holding	
Source	Amount (in Taka)	Land types	Amount (Decimal)/Market value
Agriculture (selling of crops)		Homestead land	
Selling of non-crops (timber, cattle, poultry, fisheries, etc.)		Cultivator	
Wages and salaries (service)		Pond	
Business		Uncultivated	
House rent and other property income		Others	
Remittance and income from other family members			
Social safety nets			
Other (Dividend, interest, gifts)			
Total yearly household income			

Section 13: Household monthly expenditure

Food expenditure (last one month)	Amount (Taka)
HE1. What was the total food expenditure of your household on Cereals -Rice, Ata, and Wheat in the last one month?	
HE2. What was the total food expenditure of your household on Pulses in the last one month?	
HE3. What was the total food expenditure of your household on Vegetables (potato, radish, brinjal, cauliflower, pumpkin, etc.) in the last month?	
HE4. What was the total food expenditure of your household on Fruits in the last one month?	
HE6. What was the total food expenditure of your household on Fishes, Meat, Eggs, Milk, and Milk products in the last month?	
HE7. What was the total food expenditure of your household on Oil and fat in the last month?	
HE8. What was the total food expenditure of your household on Sweet items (sugar, molasses, etc) in the last month?	
HE9. What was the total food expenditure of your household on other food items (drinks (tea, coffee, beverage), spices (ginger, onion, turmeric, chili), dining out, etc.) in the last month?	
HEA. What was the total food expenditure of your family in the last month?	
Non-Food expenditure	Amount (Taka)
HE10. What was the total education expenditure of your household in the last month?	
HE11. What was the total health expenditure of your household in the last month?	
HE12. What was the total transport expenditure of your household in the last month?	
HE13. What was the total house rent or house-related expenditure of your household in the last month?	
HE14. What was the total electricity, water, fuel expenditure of your household in the last month?	
HE15. What was the total expenditure on Telephone, mobile, internet for your household in the last month?	
HE16. What was the total expenditure on cleaning and protective equipment (mask, gloves, hand sanitizer, soap, disinfectant, etc.) for your household in the last month?	
HE17. What was the other total non-food expenditure (personal articles, recreation & leisure, ceremonies, gifts, etc.) of your household in the last month?	
HEB. What was the total non-food expenditure of your household in the last month?	
HEC. What was the total expenditure of your household in the last month?	

Section 14: Perception of the male household members towards women economic empowerment

This section should be answered by an adult male. The eligibility criteria are as follows.

- The husband of the respondent (if the respondent is married)
- If the respondent is unmarried or if the husband of the respondent is unavailable, the household head (if male) will be the potential respondent.
- If the household head is also unavailable, then any male member of the household aged 18 or more could be the respondent.
- If none of the above criteria are matched then skip this section

1. Is there any eligible male respondent in the household?
    1. Yes
    2. No (next section)

Basic information of the male respondent

MID	Name	Age	Relationship with the female respondent	Highest class passed	Earning Status	Monthly Income
			1. Husband 2. Father or Father-in-Law 3. Brother or Brother-in-Law 4. Uncle/ Uncle-in-law 5. Son/ Nephew 6. Others	*See education code*	1. Earner 2. Non-Earner	

Thank you for participating in the survey. Now, I will tell you some statements. You have to say whether you agree with the statement or not.

	Statements	1. Strongly agree	2. Agree	3. Neither agree nor disagree	4. Disagree	5. Strongly disagree
1.	If women engage in work, they eventually take jobs away from men					
2.	If women engage in income-generating activities, it is helpful for the household					
3.	Women working outside the home increase the honour of the family in the eyes of others in the society/community.					
4.	It is equally good being a housewife as working in a job with regular pay					
5.	What most women really want is a home and children not a job / or work outside home					
6.	A pre-school child suffers if the mother works (outside)					
7.	A family suffers if mother has a full-time job					
8.	A woman and her family are happier if she works for income					
9.	A husband and wife should both contribute to household income					
10.	A full time job makes a woman independent					
11.	A man's job is to earn money, a woman's job is to look after the home and family.					
12.	Employers should help with childcare					
13.	It is good if the man stays at home and cares for the children and the woman goes out to work.					