

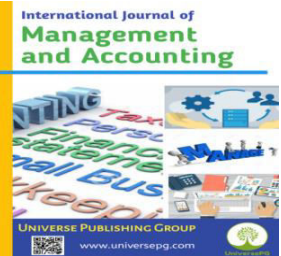


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Impact of Foreign Remittances on Household Welfare in Bangladesh: Evidence from Public and Private Bank

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ABSTRACT

Remittance is the rapidly growing source of income through which most emigrant households fulfill their daily expenditure. The study identifies the effect of foreign remittance and migration on household welfare in Bangladesh. The primary source is the main basis to collect data mostly which is collected from the public and private banks of Bangladesh. The research also considers the secondary data to display the trends of remittances over the past years, the effect of remittances on the gross domestic product (GDP), import payments, export earnings, and balance of payments. The research further applies descriptive statistics to illustrate the demographic features of migrants as well as to show the scenario of migration and remittances. It also applies multiple regression analysis to guess the household spending on education, healthcare, food, and financial inclusion. The estimated outcome from the analysis shows that foreign remittance has a more significant impact on household expenditure. The major portion of remittance is utilized for medical treatment, education, food purchasing, financial burden, and savings. Lastly, the research paper discloses that migrant workers contribute more to the economy of Bangladesh.

Keywords: Remittance, Migrants, Expenditure, Bank, Household, Welfare, Standard of Living, and Poverty.

1. INTRODUCTION:

Foreign remittance has become an essential source of earnings in many countries like Bangladesh, Maldives, Brazil and Malaysia. The Significance of remittance is extensively recognized and rarely desires to be repeated in the economy of Bangladesh. In addition to ready-made garment sector (RMG) and non-agricultural activities in the agricultural sector, remittance has been marked as one of the major factors for reducing poverty and maintain a healthy balance of payments. Bangladesh participated in the influx of USD 24777 million in remittances (fiscal year 2020). The inflow of remittances to the balance of payments (BoP) creates a

surplus to decrease the deficit. The inflows of overseas remittances in the import payments are 35.91% and export earnings is 54.06%.

Bangladesh is one of the biggest labor exporters in the world. Every year, a huge number of human resources are exported from Bangladesh and received an enormous remittance from them. The wave of immigrants began in the 1970s when countries in the Gulf region started looking for low wage labor exporters. The organization of Household Income and Expenditure Survey (HIES) shows that more than 15 million households in Bangladesh depend on international remit-

tances. The migration of a huge number of people supports in household well-being in many ways. It creates more employment opportunities, reduces poverty, raises savings, empowers women, increases investments, increases foreign reserves and improves the balance of payments.

Human movement is an inseparable part of life. Sometimes people move voluntarily and also to survive. This movement is called migration and people who migrants are called immigrants. The emigration is happened both domestically and internationally (Kumar *et al.* 2018). Basic decisions about migration are made for many reasons, including unemployment, poverty, religion, educational purpose and the desire to raise the living standard (Todaro and Smith, 2012). The immigrants who currently live, work abroad and transfer their income in their home countries are called overseas remittances.

Household welfare is a controversial issue. All countries need some indicators to identify the world's economic growth, cultural, social and environmental progress. Most of the studies use Gross Domestic Product (GDP) to measure only national economic activities because GDP was not intended to identify social or monetary conditions though today household welfare is the most widely used indicator of human well-being (Costanza *et al.*, 2009 and Sti glitz *et al.*, 2010). There are substantial evidences in the economic literature that remittances have the most direct link to a country's economic welfare.

A study (Syed Rashid Ali and Md. Golam Kibria) demonstrates that the overseas remittance plays a great role to women's empowerment and welfare which has received a lot of attention lately. People of all discipline's emphasis the need of women's role in the social welfare, politics, and economic stability. Overseas remittance has the probability to change the economic role of women in their households and wider communities. It has more impact on both micro and macro economy. Remittances help to increase income and alleviate budget constraints on the households of recipients at the micro level during the financial distress. Recipient of the migrated family's spend their remittances mainly for consumption which further stimulate the demand for local workforce, goods and

services. Household's members are investing money in productive projects that create new opportunities for employment. It raises the income level for the community's inhabitants. Furthermore, the influx of remittance plays an important role to reduce child mortality, improve the health of children and increase child enrollment in the school.

There is no doubt about the positive influences of foreign remittances in macro and micro level. But some researchers believe that remittances may increase discrimination among the people as it is the rich people who are able to migrate their family members easily than poor people. Adams, (1991) conducted a survey of household's incomes with and without the migrants to assess the influence of remittances on the rural development, income inequalities and poverty level. He focused that despite of reducing poverty in a paradoxical manner, remittances also create inequality in the income distribution.

The impact of migration is very wide at the macro level. Overseas remittances are not only accelerating the growth of economy and promoting the balance of payments but also it is one of the major sources of foreign exchange earnings in developing country like Bangladesh, Nepal and Bhutan (El. Sakka & Mcnabb, 1999). Despite having a large number of positive effects of foreign remittances, some researchers denied it and shown many negative effects. They focused that international remittance increases the level of dependency among household members. It has created idleness among them. It also creates moral and social issues like broken family incidents and parentless children. The main objective of the study is to fix the contribution of foreign remittance to the welfare of households. It has also tried to identify the origins of overseas remittances and to analyze the trends of foreign remittance over the last 10 years. Further the researcher has tried to find out the impact on the microeconomic issues; the healthcare of migrant's family members, and education. Lastly the research has focused the consequences of remittance on the living standard and overall household wellbeing.

2. Literature Review:

Adams and Cuecuecha defined that remittances are as money or goods which is transferred by workers from

migration destination to place of origin. Research on overseas remittance has shown the contributions of the dispatched society such as improvement on consumptions levels, loan repayment, improvement on education, health care expenditures and poverty reduction. The literature review is primarily centered on the facts of growth of economy, household welfare and the poverty mollification effect on overseas remittances. Most of the present studies (Rao and Hasan, 2010; Ratha, 2003; Barajas *et al.*, 2009; Chami *et al.*, 2003) show an affirmative impact of the international remittances.

The highest remittances earnings countries in Asian region are Bangladesh, China, India, Pakistan, and Philippines. The flows of remittances are contributing to the economy of those countries (Selim Raihan, 2009). The foreign remittances have significant effect on the well-being of people (Koc & Onan, 2001). He showed that foreign remittances have a potentially significant impact on poverty and production.

Chimhowu *et al.* (2004) focused that overseas remittances help reduce income discrimination by transferring resources from industrialized countries to emerging countries from the country. It helps to reduce inequality, but increase income inequality at the local level. A World Bank study, (2006) found that remittance reduced the level of poverty by 6% in Bangladesh, 11% in Uganda and 5% in Ghana. Ratha, (2009) found that increasing of remittance by 10%, reduced poverty by 3.5%. Chowdhury and Chowdhury (1992) demonstrated that there are certain effects of overseas remittance as it has a direct impact on the economy which further increments the level of savings, the national investment level and augments in the growth of economy. Foreign remittances are an important origin of foreign exchange earnings for the developing countries like Bangladesh. A report of 2008 signified that around 5.8 million immigrants contributed in the GDP which was accounted by 10%.

Rao and Hassan, (2010) found with high level of data analysis among 40 countries of the GMM system that international remittance has an indirect contribution to the growth of economy by incrementing the ratio of M2 to GDP. Beck *et al.* (2000) found that a major proportion of the informal sector's population have no

access to bank credit, resulting in lower productivity and slower economic growth. Beck *et al.* (2004) used cross-border data in another study for 58 developed and developing countries to determine the impact of remittances on reducing poverty & inequality through financial development. A report (World Bank, 2006) portrayed that remittance costs, recipient countries' attitudes toward immigrant's financial problems, opportunities of employment in the host countries, living cost in the host and home countries, policies set by government on receiving and origin countries are crucial factors of affecting remittances. These policy variables include exemption from taxes on the remittance earnings, availability for beneficiaries to the financial services, incentives to attract investment, easy access to foreign exchange, lower import tariffs, and support for migration projects for home countries.

Makhlouf, (2018) discussed that foreign remittances by migrant citizens contributed more to the country's development than the other foreign financing channels such as foreign direct investment or public development support. Goerlich and Luke, (2011) also claimed that overseas remittances have a positive outcome on the sustainability of workers' wages and government spending. Jongwanich and Kohpaiboon, (2018) gave a reverse conclusion that trade and foreign direct investment (FDI) has a greater effect on economic growth than remittance. He also pointed out that if the remittance amount reaches more than 10% of the Gross Domestic Product (GDP), it can lead to income dissimilarity and negatively affect economic growth. A study of Adam, (2006) "Based on a comprehensive analysis of households in six developing countries" highlighted those foreign remittances to reduce existing poverty significantly. Wagle, (2012) added that while remittance can reduce poverty, it can also demotivate people to work or start a business. Families (received remittances in developing countries) are poorer than others and tend to spend remittance on current consumption rather than investment (Adams, 1998; Adams and Cuecuecha, 2010).

The review of literature on remittance usage displays that the countries where remittance contributes significantly to government budgets, the availability of safe investment or savings vehicles largely determines how beneficiary families use their money. Several authors

have emphasized the significance of overseas relocation for human capital, and particularly educational development. Barajas *et al.* explained that foreign remittance has the potential to increase the amount of funds passing through the banking system. This may lead to enhance the economic progress and thus, high financial growth is achieved through one or both of the following two pathways: (1) increased economies of scale through financial intermediation, or (2) the political and economic effect that a larger group (savers) can pressure governments to make profitable financial transactions with revision. Ruiz-Arranz and Giuliano (2005) showed that the growth of foreign remittance is stronger in those countries which have weaker financial sectors. The argument is that countries with weaker financial sectors can compensate significantly because of the lower access to credit. There is an affirmative relationship between overseas remittance and the ratio of bank deposit to GDP in 99 countries (Aggarwal *et al.* 2006).

Many economists and analysts have conducted several empirical studies on various aspects of foreign remittance, for an example the motives of sending remittance by the migrants, the impact of remittance on economy, and the cost of sending international remittance. But opinions vary on the effect of remittance on the growth of economy. The progressive effect of foreign remittance emphasizes on the consumption multiplier effect, the development of remittance financial institutions, and the using of international remittance. Nsiah and Fayissa investigated the relationship between economic growth and remittances using panel data from 1987 to 2007 for 64 countries in Africa, Asia, Latin America and the Caribbean. They used panel-by-root and panel-by-panel tests of integration to scrutinize the precise relationship between remittances and economic growth. They found a helpful connection between foreign remittances and financial growth for the group as a whole. Rodrik showed that the overvaluation of long-term financial growth may weaken the rate of exchange. This is happened in the under developed countries because trade production is disproportionately affected by weak industries and market turmoil. Chami and Jahjah found that immigrant remittance has an adverse effect on the per capita income. It discussed three facts; Firstly a 'significant part of

overseas remittance has been spent on the consumption by households. The second reality is a small fraction of the overseas remittance which is used for reserves or investments. Thirdly, the investment strategy is not always productive for the economy.

The empirical results focused that overseas remittance has adverse effect to the real exchange rate, causing the influx of foreign remittances to trigger the rate of exchange or cause "Dutch disease", which delays the fall of exchange rate. Though all the countries have a huge level of foreign remittance, exchange rates are rising quickly. It resists in the economic growth of the countries. This study will try to find out the area where remittances are used and how the family members of migrant's are benefited.

3. METHODOLOGY:

The study requires a systematic procedure to select the topic and to prepare the final report. The data sources have been identified and collected from a survey. All the collected data have been classified, analyzed, interpreted and presented in a systematic way. The overall process of methodology has been discussed below:

3.1. Study Design: This report investigates the impacts of overseas remittances on household well-being in Bangladesh. It applies quantitative methods in the part of analysis and descriptive statistics to present the demographic features of migrants. It also shows multiple regression analysis to estimate the family expenses on tutoring, healthcare and the impact on their livelihood.

3.2. Sample Design: The study bases the analysis on the impact of international remittances on household welfare. The paper mainly aims at measuring the level of household expenditure on education, healthcare and so on. The questionnaire is surveyed among the family members of migrants. The estimated number of respondents is three hundreds. Data have also been collected over the period ranging from 2011 to 2020 from different bank and financial institutions.

3.3. Data Collection: Both primary and secondary data sources are used to prepare the report. Primary data has been collected through handing out questionnaire to the recipients of remittances. The Likert scale questionnaire has been used to collect data from the respondents. The questions related to a variety of

identified factors that affect the well-being of households such as education level, healthcare, rural development, standard of living, savings, financial engagement, entrepreneurship and poverty. The paper also used secondary sources (Annual reports of banks, relevant papers, Official web site of the banks, Prior research reports, Online journals and articles) to furnish the report.

3.4. Variable Measurement: The database contains different variables of respondents’ social, economic and demographic characteristics. A questionnaire (contained 10 questions) has been used to estimate the effect of foreign remittances on the welfare of households. The identified 10 questions were used for measuring the dependent variables. The independent variable (X) is the percentage of foreign remittances to wealth and dependent variables (Y) are the remittances impact on healthcare, education, standard of living, savings, involvement in financial inclusion, role in rural development, poverty, entrepreneurship, resolves financial burden and chances of creating labor shortages.

3.5. Data Analysis Tools and Techniques: Many arithmetic and graphical tools have been used to analyze, to classify and to interpret the collected data clearly. The analytical techniques are; (a) Firstly the report applies regression analysis to identify the cause-and-effect relationship between total volume of remittance transferred per year and a set of explanatory variables

as stated earlier, (b) Secondly Microsoft Word has been used to complete the overall report, (c) Thirdly to process, sort and calculate the data collected from secondary sources, MS-Excel has been used, (d) Lastly to examine the descriptive statistics and regression, SPSS software has also been used.

4. Trends in Migration and Remittances:

4.1. Top Remittance Earning Countries in South Asia:

The inflow of overseas remittances has been increasing across the world over the last few years. Developing countries (for example Bangladesh, India, China and Mexico) made up the largest share of total remittances from worldwide. But the recent global recession has slowed down the remittance streams in some regions of developing countries in spite of increasing more inflows of remittance. Bangladesh has gained the third position in South Asia region in terms of earning remittance (World Bank Report, 2020). The **Table 1** shows the highest 6 remittance earning countries in South Asia in 2020. It depicts that India has received the largest number of remittances which is 11.64% of global remittance inflow. It also shows oppositely that remittance contributed largely to Gross Domestic Products (GDP) of Nepal. The other countries (for example Pakistan, Sri Lanka, Bangladesh, Afghanistan) are also contributed more in the GDP than India. The below **Table 1** shows the top remittance earnings countries in the South Asia;

Table 1: Top Remittance Earning Countries in South Asia (Source: Quarterly Report on Remittance Inflows, Research Department, Bangladesh Bank).

Top remittance recipient countries			Top countries (Contributing to GDP)	
Country	Number of Remittances (in billion USD)	% Of total Global remittance inflow	Country	% Share of GDP
India	83	11.64	Nepal	27.3
Pakistan	23	3.15	Pakistan	7.9
Bangladesh	18	2.56	Sri Lanka	7.8
Nepal	8	1.13	Bangladesh	5.8
Sri Lanka	7	0.94	Afghanistan	4.6
Afghanistan	1	0.13	India	2.8

4.2. Remittance Flows in Bangladesh (2011-2020):

Foreign remittances contribute more to the economy of Bangladesh. A greater number of people are migrated from Bangladesh every year. A huge number of

remittances have come to Bangladesh from them. Bangladesh is the third highest recipient of foreign remittances in South Asia (Bangladesh Bank, 2020). International remittance has been increased signifi-

cantly from the last many years. The **Fig. 1** shows that overseas remittances are increasing over the previous few years. Though the trend of growing remittance went downward for a while in 2015 and 2016 but again it was up warding in 2017.

Bangladesh into the many countries over the past many years. The major percentage of remittance comes from Saudi Arabia, United States of America (USA), and United Arab Emirates (UAE). The **Table 2** shows the remittances earned in the fiscal year 2020-21 in country wise;

4.3. Remittance Inflow in Bangladesh (Country-wise): A huge number of people are migrated from

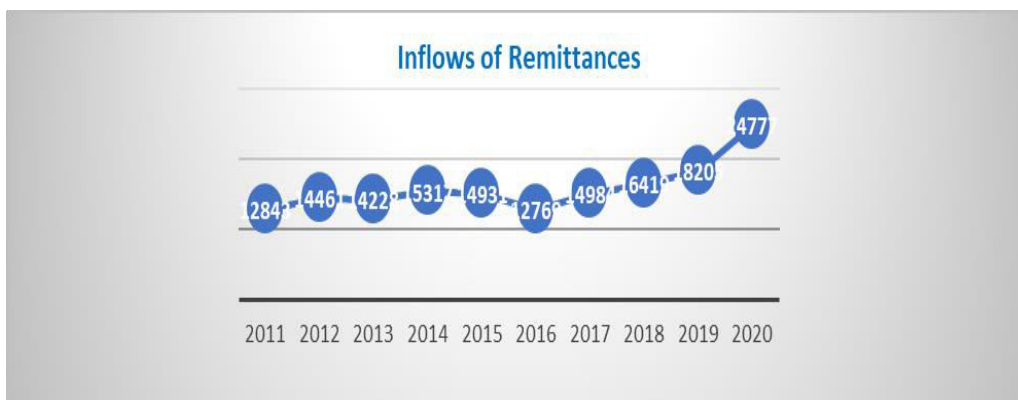


Fig. 1: Annual Flows of International Remittances in Bangladesh, 2011-2022 (In million USD) (Source: Statistic Department Report of Bangladesh Bank).

Table 2: The country wise remittances in fiscal year 2020-21 (Source: Statistics Department, Bangladesh Bank).

Fiscal Year	Saudi Arabia	USA	UAE	UK	Malaysia	Kuwait	Oman	Qatar	Italy	Singapore
2011	3684	1498	2405	987	847	1190	401	335	-	31
2012	3829	1859	2829	992	997	187	640	287	-	499
2013	1478	2323	1282	812	489	547	316	122	-	197
2014	3345	2380	2824	84	135	1078	9125	310	-	35
2015	2956	2424	2712	863	1337	1039	909	436	-	387
2016	2267	1689	2094	808	1104	1033	898	576	511	301
2017	2592	1997	2429	1106	1107	1199	958	844	662	330
2018	3110	1843	2540	1176	1198	1463	1066	1024	758	368
2019	4015	2403	2473	1365	1231	1372	1241	1019	699	457
2020	5721	3462	2440	2024	2002	1887	1536	1450	811	625
Total	32997	21878	24028	10217	10447	10995	17090	6403	3441	3230

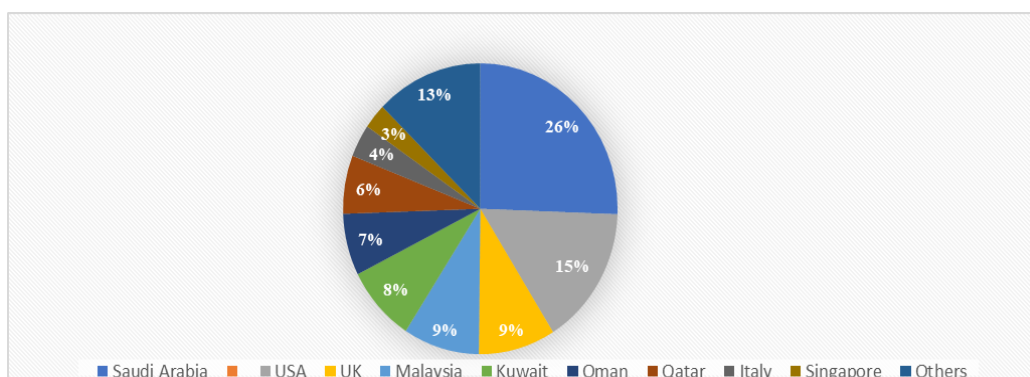


Fig. 2: Share of Remittances (%) by Country.

The pie chart (Fig. 2) shows the top 10 countries share of remittances in percentage from where most of the remittances come to Bangladesh.

The chart shows that in fiscal year 2020-21, maximum foreign remittances come from Saudi Arabia and United States of America (USA). United States of America (USA) and United Kingdom (UK) are in the second and the third position respectively. It also shows that the major quantity of remittance was received in FY 2020-21 from Saudi Arabia which was 23% of remittance inflows, UAE (14%), US (11%), UK (10%), Malaysia (8%), Kuwait (8%), Oman (6%) and other countries (5%).

4.4. Annual Flows of Overseas Workers: The Number of migrants was very volatile over the last few years. It can be seen from the Fig. 3 that number of migrants had increased in 2012 compare to 2011. But it had declined in 2013 significantly. The highest number of employees had migrated in 2016 and from 2017 the outflow of immigrants was down warding. The lowest number of migrations happened in 2019 due to pandemic, which stood to 2,17,669 employees from last year which was 7,00,159 employees. The fluctuation of the employee (outflow) over the previous 10 years has also been shown in the pie chart (Fig. 3).

Table 3: Outflow of Employee (2011-2020). Source: Bureau of Manpower, Employment and Training Data.

Year	Employment
2011	5,68,062
2012	6,07,798
2013	4,09,253
2014	5,55,881
2015	7,57,731
2016	10,08,525
2017	7,34,181
2018	7,00,159
2019	2,17,669
2020	485893

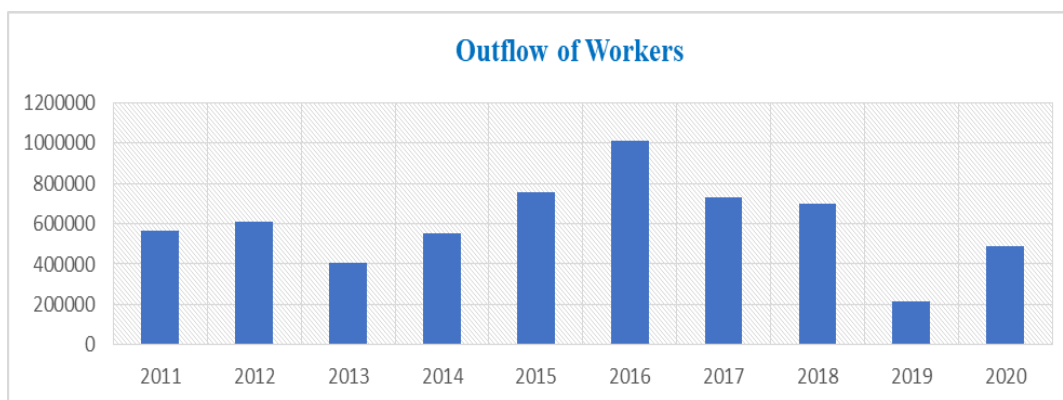


Fig. 3: Annual outflow of worker (2011-2020). Source: Bureau of Manpower, Employment and Training Data.

4.5. Share of Bangladeshi Migrants by Skill Categories:

The most common feature about Bangladeshi migrant’s employees is that they are mostly semi-skilled or not skilled. The Table 4 shows that greatest number of the employees are semi-skilled and less skilled who are migrated than the professional and skilled employees, It can be seen from Fig. 4 that about 42% employees are in less skilled and 38% employees UniversePG | www.universepg.com

are in semi-skilled categories. There have many reasons behind the huge percentage of employees being less skilled, such as they do not have proper schooling with almost zero ability to communicate in English or the other languages of the destination countries. Employees are getting low paying jobs like construction, driving, cleaning; work in hotels and shops for the lacking of training on any specific field. They were

fired out and sent back during pandemics (COVID 19). Bangladeshi immigrants by their skill categories are shown in the **Table 4** and pie chart in percentage (**Fig. 4**) for clear specification of last 10 years.

Table 4: Share of Bangladeshi Migrants by Skill Categories (2011-2020).

Year	Categories				
	Professional	Skilled	Semi-Skilled	Less-Skilled	Others
2011	1192	28729	229149	301552	7440
2012	36084	104721	173331	284153	9509
2013	689	62528	133754	203058	9224
2014	1730	70095	148766	193403	11690
2015	1828	91099	214328	243929	4697
2016	4638	119946	318851	303706	10590
2017	4507	155569	434344	401803	12302
2018	2673	117734	317528	283002	13244
2019	1914	142536	304921	197102	53686
2020	1689	89489	119989	214574	60152
Total	56944	982446	2394961	2626282	192534

The below **Fig. 4** presents that there are only 16% skilled workers, who have educational background and may have some training in trades, engineering and electrical works, etc. Therefore, they have experiences which enable them to earn a good salary and a longer term or better job than less skilled workers. They also have good opportunities to survive and find out a new job in crisis. The professional group which consists of

3% of total migrant workers including doctors, accountants, teachers, engineers and so on. They are far in better position than unskilled or less skilled workers in terms of earning, opportunity and job security. They are allowed to live with their families and have access to enjoy the benefits (such as free schooling, health services) of a better welfare system in many countries.

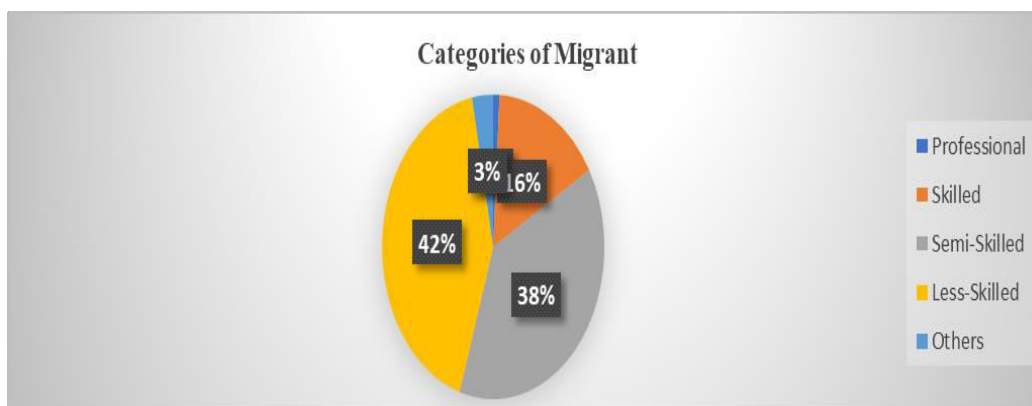


Fig. 4: Share of Bangladeshi Migrants by Skill Categories (%), (2011-2020).

4.6. Observations from Macroeconomics Data: Overseas remittances (sent by migrants) make a significant contribution to the country’s financial progress through the growth of overseas exchange of cash and income. Foreign migration is inevitable for the developing country along with Bangladesh. Remittance not only generates a massive inflow of foreign currency but also provides an exit for the workers who are unemployed.

It also helps reduce domestic unemployment rate and for the accumulation of valued overseas currency to augment economic growth.

Remittance flows have an affirmative impact on financial progress in terms of savings, consumptions, poverty, rural development, SME entrepreneurship and investments, etc. Even this may reduce domestic macro-economic volatility by inspiring greater domestic in-

vestment. Remittances positively influence the growth of increasing saving rate and also increase spending on education. Migration also pays greatly to the technology development through the transfer and diffusion of technology. Migrant employees learn latest technologies internationally. When they return to the home country, they bring new knowledge and technology which is acquired abroad. Although migrant workers whether they return or not, act as the epithet of new ideas and technologies that can be easily disseminated through improved channels. As a country with a huge surplus of labor, Bangladesh takes part in the global labor supply market. A huge number of people migrate abroad voluntarily for both long term and short term work in every year.

It is mentioned earlier that according to World Bank report, Bangladesh has ranked third in South Asian region. Therefore, remittance plays a great role in the economy of Bangladesh. It crossed 18 billion US dollar in fiscal year 2020. The contribution of remittances is very significant in Bangladesh because it is the 2nd

biggest source of earnings of foreign currency following ready-made garment sector. International remittance and employment keep a great impact to the economy of Bangladesh. Migration helps to generate more job occasions, improves living standard, reduces poverty, creating more involvement in financial inclusion, enhancing opportunities for better education and building up overseas exchange funds.

The below **Table 5** shows that overseas remittance was estimated 5.52% of GDP, 35.91% of import payments and 54.06% of export incomes during the fiscal year in 2020. It can be seen that compared to economic year 2019, remittances inflow increased by 10.87% to US dollar 18205 million in financial year 2020. Remittance also plays a supportive role to strengthen the current account balance. The main reason behind that the direction from central bank and the legal action taken by the administration against informal and illegal way of sending international remittance. It has helped to increase the flow of international remittance through formal and legal ways.

Table 5: Remittance as Percentage of GDP, Export-Import and its Growth (Source: Quarterly Report on Remittance Inflows, Research Department, Bangladesh Bank).

Fiscal Year	Remittance to GDP Ratio	Remittance- Export Earnings Ratio	Remittance- Import Payments Ratio	Remittances Growth (%)
2011	9.05	50.64	34.61	6.03
2012	9.63	53.58	38.59	10.24
2013	9.64	54.43	43.07	12.51
2014	8.21	47.78	38.91	-1.61
2015	7.85	49.08	40.67	7.64
2016	6.74	43.59	37.42	-2.51
2017	5.11	36.85	29.36	-14.48
2018	5.47	40.86	27.51	17.32
2019	5.43	40.51	29.62	9.60
2020	5.52	54.06	35.91	10.87

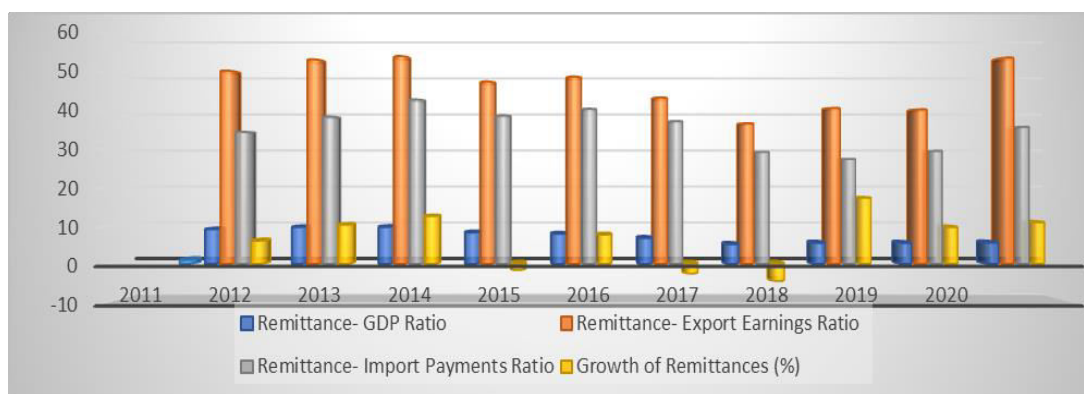


Fig. 5: Percentage of GDP, Export-Import and its Growth.

The above **Fig. 5** shows the remittances as a % of GDP, import, export and international remittance enhancement of Bangladesh. The remittance as a proportion of GDP, export, import and growth were 5.52%, 54.06%, 35.91%, 10.87% in year of 2020 respectively. The remittance growth has increased to 10.87% compare to year 2019. It was 9.60% in 2019 due to pandemic (COVID 19). Remittance to GDP ratio, export earnings ratio and import payments ratio have also increased in fiscal year 2020 compare to 2019.

5. RESULTS:

The research mainly focuses on primary data that are collected from private and public banks along with some financial institutions. The questionnaire is surveyed among 300 respondents. Majority of the respondents are the members of the migrant’s family. Every question is asked to know about the influence of overseas remittance on the household welfare. Household welfare has been categorized in 10 specific factors such as healthcare, education, standard of living, savings, financial inclusion, rural development, poverty, entrepreneurship, financial burden and labor shortages.

Table 6: Descriptive Statistics (Source: SPSS output).

Variables	Descriptive Statistics		
	Mean	Std. Deviation	Analysis N
Healthcare	3.7900	1.14467	300
Education	3.4833	1.26030	300
Financial Inclusion	3.8167	1.14342	300
Standard of Living	3.5733	1.14411	300
Labor Shortages	3.7900	1.13587	300
Savings	3.5100	1.23626	300
Entrepreneurship	3.7233	1.15379	300
Poverty	3.6433	1.13744	300
Financial Burden	3.5267	1.24946	300
Rural Development	3.3033	1.31291	300

The research uses standard deviation to identify how spread out the data are from the mean, where a greater value of standard deviation indicates the higher spread in the data and a lower standard deviation value indicates the lower changes of spread in the data comparably. The above **Table 6** displays that standard deviation of rural development is higher than the other variables standard deviations. Standard deviation of labor shortages is the least that means here the dis-

The independent variable of the paper is the remittance of the households and the factors of welfare are considered as dependent variables. Simple linear regression analysis has been conducted as a statistical tool.

5.1. Descriptive Statistics: Descriptive statistics is the most well-known statistical for data analysis which shows, identifies and summarizes the data in a formative way. It also provides essential information about the variables and highlights potential relationships among the variables. The following **Table 6** shows the mean value and standard deviation of 10 factors from the surveyed data set. The mean value of these factors is based on the respondent’s perspective which shows the level of consequence of each factor. The below table illustrates that the size of sample respondents is 300. It also shows that financial inclusion has the highest mean value (3.82) and labor shortages has the lowest mean value (3.3). The mean value represents a single value which describes the sample along with the center of the data set.

person is lower than other factors. A lower variance also states that it has lower magnitude of dispersion of the value from the mean.

5.2. Factor Analysis: It is a statistical method which has been used to describe the variability among the observed, correlated variables. Eigenvalue test has been used to understand which factors create the greatest effect on household welfare. The below **Fig. 6**

describes that there are 3 factors which have eigenvalue greater than 1. Therefore, it can be estimated that

these are the 3 factors which have the biggest effect on the household welfare.

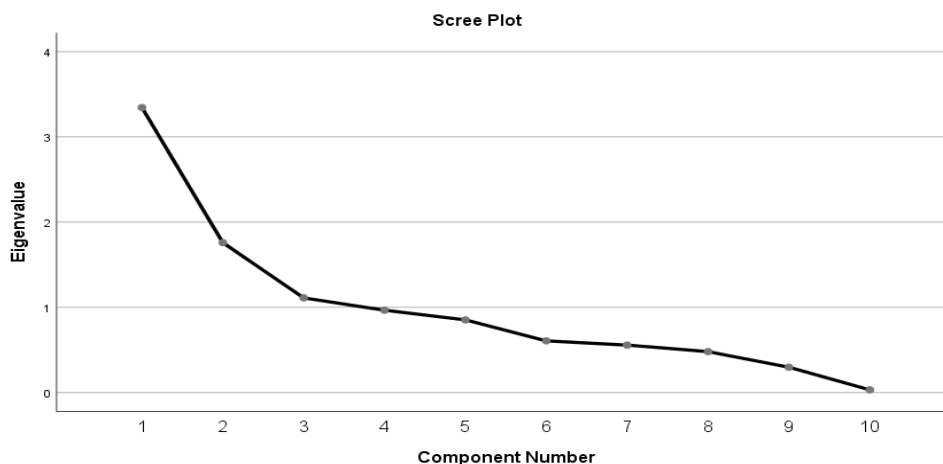


Fig. 6: Eigenvalue (Source: SPSS output).

Table 7: Rotated Component Matrix (Source: SPSS output).

Rotated Component Matrix			
Variables	Component		
	1	2	3
Healthcare	.931	.000	.118
Financial Inclusion	.913	-.002	.111
Labor Shortages	.841	.041	.118
Poverty	.678	.063	.097
Savings	.595	.103	-.298
Rural Development	-.034	.786	-.269
Entrepreneurship	.109	.780	.110
Education	.055	.710	.330
Standard of Living	.084	.171	.657
Financial Burden	.048	-.050	.651

The following **Table 7** shows those factors which have the greatest effect on remittance on the household welfare; those are rural development, healthcare, and standard of living.

5.3. Regression Analysis: The analysis consists of three different models. Analytically, the regression models are simple linear relation on performance. The three models are described below:

Model 1: The model shows that the independent variable is the percentage of remittance to wealth and considering healthcare as a dependent variable. Here,

H_0 = There is no relation between remittance and healthcare

H_1 = There is a relation between remittance and healthcare

The simple linear regression model is:

$$Y = 3.326 + 0.125X + e$$

The intercept and slope coefficient indicate the association between two variables in the regression model. The slope coefficient tells how much change can be expected as independent variable (X) increases. The following **Table 8** shows that the significance level is 3%, which means there is an association between the remittance and healthcare. Therefore, rejecting null hypothesis and accepting alternative hypothesis that remittance has a relationship with healthcare. The intercept is 3.326 and 0.125 is the slope coefficient. This result indicates that if remittance earning increases by 1%, it will positively have impact on the healthcare by 0.125%.

Table 8: Simple Linear Regression of Model 1 (Source: SPSS Output).

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1. (Constant)	3.326	.222	14.969	.000	3.326
% Of Remittance to Wealth	.125	.057	.126	2.184	.030

Model 2: The model 2 shows that the independent variable is the same as the model 1 which is the percentage of remittance to wealth and considering rural development as a dependent variable. Here,

H_0 = There is no relation between remittance and rural development

H_1 = There is a relation between remittance and rural development

The simple linear regression model is:

$$Y = 1.59 + 0.46X + e$$

It has been mentioned earlier that slope coefficient tells how much change can be expected as independent variable (X) increases. It can be estimated from the **Table 9** that the significance level is 0, which means there is a perfect relationship between the remittance and rural development. The intercept is 1.59 and the slope coefficient is 0.46. This result indicates that if remittance earning increases by 1%, it will lead to increase the rural development by 0.46 %.

Table 9: Simple Linear Regression of Model 2 (Source: SPSS output).

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
2. (Constant)	1.590	.235		6.766	.000
% Of Remittance to Wealth	.460	.060	.404	7.634	.000

Model 3: The independent variable for this model is the percentage of remittance to wealth and considering standard of living as a dependent variable. Here:

H_0 = There is no relation between remittance and standard of living

H_1 = There is a relation between remittance and standard of living

The simple linear regression model is:

$$Y = 3.053 + 0.14X + e$$

The below **Table 10** shows that the significance level is 1.5%, which means the study can accept the alternative hypothesis that there is a relationship between the remittance and standard of living. The intercept is 3.053 and the slope coefficient is 0.14. This result indicates that if remittance earning increases by 1%, it will lead to .14% improvement in the standard of living.

Table 10: Simple Linear Regression of Model 3 (Source: SPSS Output).

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
3. (Constant)	3.053	.222		13.776	.000
% Of Remittance to Wealth	.140	.057	.141	2.456	.015

5.4. Model Summary: Coefficient of determination or r square signifies the variance proportion for a dependent variable that can be explained by the independent variable. In a regression model, it shows that closeness of the data to the fitted line. The following **Table 11** shows that the 3 different values of r square for 3 simple linear regression models. In model 1, the r square

is 2% which means 2% of the entire variability of the effect of remittance on healthcare. Similarly, in model 2 and 3, the r squares are 16.4% and 2% respectively which indicates the percentage of the variability of the impact of foreign remittance on pastoral progress and standard of living. It can be described by the following model:

Table 11: Model Summary (Source: SPSS Output).

Model	R	R square	Adjusted R square	Std. Error of the Estimate
1	.126	.016	.012	1.13752
2	.404	.164	.161	1.20276
3	.141	.02	.017	1.13460

5.5. ANOVA: The following **Table 12** depicts that overall f test is important in 3 models. Therefore, it can be forecasted that international remittance has significant effect on the rural development, healthcare and standard of living. In this case, rejecting null hypothesis of model 1 and accepting alternative hypothesis that has a significant impact on household’s healthcare. Similarly in model 2, the significance level is 0 which shows that international remittance has a great influ-

ence on rural progress. Rejecting the null hypothesis and accepting the alternative hypothesis indicate that there is a relation between international remittance and rural development. The significance level of model 3 is 1.5%, which depicts that overseas remittance has an inspiring relationship with standard of living. If remittance increases, it also helps to increase the standard of living.

Table 12: ANOVA (Source: SPSS Output).

SL	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.173	1	6.173	4.771	.0300
	Residual	385.597	298	1.394		
	Total	391.770	299			
2	Regression	84.298	1	84.298	58.272	.0001
	Residual	431.099	298	1.447		
	Total	515.397	299			
3	Regression	7.763	1	7.763	6.030	.0150
	Residual	383.624	298	1.287		
	Total	391.387	299			

5.6. Findings: It has been found by analyzing all 300 responses that foreign remittance does have a great effect on the household welfare. International remittance is a huge source of foreign currency earnings. It has become an important driving force for the growth of economy and poverty alleviation in Bangladesh. Remittance supports to improve a country’s development prospects and maintain the stability of economy. The research also finds that households who receive international remittance can spend more on their healthcare needs and alleviate health deficiencies. As low-income households are less likely to afford proper medical treatment. A huge amount of remittance inflows can provide them the facility to afford proper healthcare treatments. The standard of living is improving gradually because of more remittance inflows. Now the members of migrant families can spend more to fulfill their needs and upgrade their living standard. The remittance has also created a pro-

minent impact on rural progress. Most of the immigrants are from rural areas in Bangladesh. It has been observed from the overall analysis that remittance doesn’t have a significant impact on savings because people have to spend more to fulfill their basic needs rather than saving in the developing country. However, it can be concluded that international remittance has a massive impact on the welfare of households.

6. CONCLUSION:

The paper has tried to portray the relationship between overseas remittance and household welfare. The analysis shows that international remittance plays a vital role in terms of macroeconomic solidity and household well-being. It keeps a great contribution to reduce poverty. The increasing inflows of foreign remittance becomes a basis of earnings for the migrants’ family members. It facilitates the consumption which increases the total demand of a country. It also creates a great influence on the development of a country. The paper

discloses that inflow of foreign remittance is creating a huge positive effect on the well-being of household, especially in terms of people's healthcare, rural development and living standard. The results also recommend that this is high time to take appropriate policies for the efficient use of remittance which will help raise the household's well-being. Furthermore, awareness should be created among households to use the overseas remittance in a productive way such as investing in business, education, commercial sector, transportation, and agriculture rather than expenses more on consumption. Then international remittance can create new opportunities for employment and earnings that may increase the welfare of households and reduce the poverty. The Skill development program can also enhance the skill of Bangladeshi migrants to compete with other workers of different countries. It is very essential for migratory employees to continuously upgrade their skills so that they can survive in international market. The government may take initiative to rise the inflows of foreign remittance by providing reliable and low-cost services through formal channel, enhancing knowledge and creating awareness among the migrants and their families. Lastly, future researcher may be able to find out the impact of remittance on the whole issues of life of all classes of people by using this paper. But in using the result of this study, the limitations (unable to cover more issues, small sample respondents, previous financial report of bank and financial institutions, etc.) should be considered carefully.

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8. CONFLICTS OF INTEREST:

The authors proclaim that there is no conflict of interest with any other parties while preparing the research paper.

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