

Role of Remittances in Reduction of Poverty *Learning from Bangladesh*

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Abstract: Expatriates' remittances perhaps the second largest source of foreign currency of Bangladesh. She receives a lot of remittances every year since independence and the volume is escalating day by day with the growing of expatriates. As a developing country remittances are playing immense role in reduction of poverty. The study aims to witness this role of remittances in reduction of poverty in Bangladesh. The study recognized that remittances have enormous impact on the smoothing consumption, education, investment, agriculture, housing, savings and generating income of households. Remittances play role in the development of commodity market, money and capital market, educational and religious institutions, road and electrification and labor market in the community. In the national and international level remittances boast tip the export, per capita income, consumption, investment, GDP foreign exchange reserve, FDI, revenue and expenditure of Bangladesh. Further remittances take part in reducing inequality amoizg regions arid countries.

1.0 Introduction :

Poverty is a rampant **social** problem in **Bangladesh**. She has high poverty (40%), low per capita income (599 US dollar) poor current account balance (672 US dollar), low rate of education (56.1%) and deficit budget (EAW: 2009). Poverty is such a condition in which a person either because of inadequate income or unwise expenditures, does not maintain a scale of living high enough to provide for his physical and mental efficiency and to enable him and his natural dependents to function usefully according to the standards of the society of which he is a member (Gillin & Gillin: 2007). According to Household Income and Expenditure Survey (HIES) 43.8 pc (percent) rural and 28.4 pc urbane people is living below absolute poverty line based on Direct Calorie Intake (DCI) and head count ratio (BBS-2007). According to head count ratio and DCI method the incidences

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of national hard core poverty was 19.5 pc (BBS-2007). The estimation of incidence of poverty by ownership of land and using the upper poverty line were 46.3 pc for landless household, 56.4 pc for owners of less than 0.05 acre land, 44.9 pc for owners of 0.05-0.49 acre land and 22.9 pc for 1.5-2.49 acre of land, 15.4 pc for 2.5-7.49 acre of land and 3.1 pc for owners of 7.5 acre or more land in 2005(BBS-2007). The monthly household nominal income in 2005 was estimated at Tk. 7203 in the national level while it was estimated at Tk. 6096 in the rural area and Tk. 10463 in the urbane area(BBS-2007). The average monthly household expenditure was estimated at Tk. 6134 in 2005 at the national level while it was estimated at Tk. 5319 in the rural area and Tk. 8533 in the urbane area in 2005(BBS-2007). The average monthly household consumption was estimated at Tk. 5964 in 2005 at the national level while it was estimated at Tk. 5165 in the rural area and Tk. 8315 in the urbane area(BBS-2007). Per capita annual expenditure on consumer goods and services at market prices and at real expenditure were Tk. 28352 and Tk.14999 respectively in 2008(EAW:2009).

Therefore, the country is suffering from the curse of poverty. The main causes of poverty are underdevelopment, inequality, low per capita income, inadequate growth rate, high growth rate of population unemployment, regional disparities, low availability of essentials, inflation, low technology, capital deficiency, illiteracy, ignorance, and conservatism etc (Jhingan, 1995). Economic growth with concomitant humane development is absolutely essential for poverty alleviation. K.N. Bhattacharya said "Poverty and underdeveloped of the economy are thus synonymous. A country is underdeveloped because it is poor and remains underdeveloped as it has not the necessary resources for promoting development. Poverty is a curse, but a greater curse is that it is self-perpetuating." In order to ensure poverty reduction and sustainable development it is necessary to enhance per capita income along with employment generation. This would result in establishing an economic base of their own and continued investment in different social sectors which would eventually uplift their standard of living as well as human welfare. A number of programs both at government

and non government levels have been taken and in under implementation for the employment and income generation and the betterment of the poor since the independence. These programs continuing to contribution in enhancing the entitlement of the poor, and the same time their empowerment and awareness building.

Beyond the programs at government and non-government level, the foreign remittances have been playing an imperative role in the reduction of poverty in the country directly and indirectly from household to international level since the independence. The country received 7914.8 MUD (Million US dollar) in 2007-2008 legally, while the total export earning was 14110.80 mud and import cost was 21629 mud (EAW: 2009). Therefore, foreign remittances in terms of export earning and import cost is 56 pc and 37 pc respectively. Remittance in terms of ready made garment export is 153 pc and in terms of knitwear export is 143 pc. Every year country receives a large volume of foreign remittance directly and indirectly which has a mammoth role in reduction of poverty. Taseem (2005) in his work paper thrashed out the importance of labor migration in the economy of Bangladesh. Admons C. Jenifer P and others (2005) made a study on the socioeconomic impact of remittances on poverty reduction. A.K. Azad (2005) has made a study on remittances and showed the impact of remittances on micro enterprise development. The hub of the current paper is to make a role model of remittances in reduction of poverty in the country.

2.0 Objectives of the study

The core objective of the present paper is to make an appraisal on the usage of remittances and its impact on reduction of poverty. The specific objectives are to:

- i) make conscious about the volume of remittances to the concerned authorities and the society;
- ii) show the economic importance of remittances in Bangladesh;
- iii) make a framework of the impact of remittances in reduction of poverty;

- iv) give suggestions and recommendations for the better usages of remittances in reduction of poverty.

3.0 Methodology of the Study

③.1) Research methods: Two techniques have been used to conduct the study viz.(i) Focus Group Discussion (FGD);and Unit/ enterprise survey. The FGD was applied for qualitative study. The quantitative approach has been used for unit/ enterprise. The FGD helped in preparing questionnaire and to identify the factors of assessing the impacts of remittances in reduction of poverty. The focus group composed of: i) Academicians; ii) Executives of NGO; iii) Members of welfare associations; iv) Social elites; v) Business man and vi) Journalists.

③.2) Preparation of Questionnaire and Sampling: There were a separate set of structured questionnaires for the following respondents: i) household respondents; ii) shopping mall investors; iii) Shop owners and small enterprisers ; (iv) Real estate and housing business; v) Share market brokers; (vi)Share market investors; (vii) Community leaders; (viii) Households' without remittances; (ix) Authorities of mosques and educational institutions and (xi) Labors working in the area. There are sixty four distiicts in Bangladesh. But traditionally a large number of expatriates from the district of Sylhet have gone to overseas countries. For convenient of collecting data Sylhet district has been selected for the study. In selecting respondents random sampling has been applied for the study. The number of each type of respondents was 20.

3.3. Sources and Analysis of Data: The study based on both primary and secondary data. The primary data have been collected through structured questionnaire from the respondents while the secondary data from the publications of Bangladesh Bureau of Statistics (BBS), Ministry of Finance and Planning, Ministry of Labor and Employment, Bangladesh Bank (BB). Data so collected have been analyzed through some statistical techniques viz. tables, mean, correlation and T-test.

4.0 Role model of Remittances in Reduction of Poverty

The importance of remittances in the economy of Bangladesh is well recognized. Every citizen of the country directly and indirectly gets benefits from remittances. Remittances play an important role in reduction of poverty from micro level to macro level and vice versa. The impact of remittances on poverty reduction may be offered in the following drawings:

- i) Receiver (inflow) Reduction of Households poverty Reduction of Community poverty Reduction of National poverty Reduction of International poverty.
- ii) Supplier (outflow) Reduction of International poverty Reduction of National poverty Reduction of Community poverty Reduction of Households poverty.

From the receiver point of view remittances directly play role in reduction of poverty firstly in the households (the direct receiver), secondly in the community, thirdly in the national level and finally in the international level in the receiver of remittances while, from the supplier point of view, firstly remittances help in reducing poverty at international level, secondly in the national level, thirdly in the community level and fourthly in the households' level.

5.0 Analysis of the Impacts of Remittances in Reduction of Poverty

The following sections represent the impacts of remittances in reduction of poverty:

5.1. Household level: Household means the family of the remittances recipient and also the remittances sender. All the members of the family are included in this family. Here the hypothesis is that the remittances imbue income of household and reduce poverty. Family consumption- Households depend on remittances for daily expenditures, improved health services, better nutrition and better education for longer. They also help in reducing child labor as remittances meet up daily needs. The households disbursed 21.5 pc of his total remittances for consumption on average (AX-I.) Millions of

families are living on remittances. The field survey on 20 families showed that remittances in terms of family income ranged between 0 pc to 25 pc of 6 pc family following 25 pc to 50 pc of 35 pc family, 50 pc to 75 pc of 30 pc family and 75 pc to 100 pc of 29 pc family. Household's housing- Remittances are used as finance for building and development of houses, purchase of plot /land for housing and purchase of apartments in town (8.5 %) for the sender as well as receiver of remittances (AX-1). Generation and re-generation of income- Remittances used as income directly to the recipient families. Again remittances are invested in short term and long-term projects to re- generate income permanently. Remittances are invested in medium and small enterprises, poultry and dairy firms, real estate company(s), apartment building companies, share market, hospitals and clinics, tourism, hotel and restaurant and educational institutes. AX-I affirmed that 40.25 pc total of remittances are invested in production and services sectors(real estate companies, apartment building companies, share market, medium and small enterprises, livestock, poultry and dairy firms, hospitals and clinics, tourism, hotel and restaurant and educational institutes) and help in prolongation advancement of remittances recipient families. Formation Money and Humane Capital-Humane capital formation refers to the process of acquiring and increasing the number of persons who have the skills, education and experience which are critical for the economic and political development of a county (Harbison, 1962). Remittances recipient families save a part of remittances in banks and banking instructions. This savings is invested permanently to earn income. The field survey confirmed that 8.5 pc of total remittances are saved in banks and financial institutions (AX-1). Humane capital is also basic need for economic development (Todaro, 360-61). A part of remittances works as blood for forming humane capital as they used in education and health care. Development of agriculture-Cultivation of land requires labor, seeds, fertilizers and insecticides. The remittances are used as a source of finance to purchase these. Production of agriculture largely depends on the availability of these inputs. Further remittances may used as a source of finance in

purchasing land for agriculture. The remittances used in agriculture are on average 6.25 pc (AX-1). Therefore, remittances plug household's poverty through development of agriculture. The field survey on 20 families annually 47 pc family receives remittances below Tk. 5,00,000 following 29 pc family above Tk. 5,00,000 but below Tk.10,00,000, 13 pc family above Tk. 10,00,000 but below Tk.20,00,000 and 12 pc family Tk. 20,00,000 and above. Thus remittances constitute an imperative input of alleviating poverty in households.

5.2 Community level: Community means the surrounding area and people of the remittances recipient. Our hypothesis is that remittances play positive role in the development of community. Development of household's level is the base for the development in the community level because community consists of households. The collected data rendered that 3.25 pc of total remittances is spend for community development directly (AX-1). Further indirectly branches of many banks, insurance companies have been set-up at the door of the remittances recipients based on remittances. The investment of remittances in capital markets, real estate and apartment building companies is 15.50 pc (AX-1). Remittances help in smoothing festivals and marriage ceremonies and establish relationships among the neighbors and relatives. The usages of remittances in sending relatives to foreign countries, marriage ceremony, festivals, accidents and loan without interest to relatives is 1.5 pc (AX-I). Data showed that about 80 real Estate and Apartment Building companies have constructed and developed at Sylhet where large customers (30%) are expatriates. There are at least 30 share broker houses of Chittagong Stock Exchange and Dhaka Stock Exchange at Sylhet. The survey on 20 broker house showed that 10 pc of the invested capital came from remittances directly and indirectly. Investments of remittances have developed the commodity markets like luxury goods and services in comparison to others without remittances. The usages of surplus labor of one area has optimized through the impact of remittances. The study shows that the large portion (80%) of labor working in the study area has emigrated from West and North -West regions (less or without

remittances area) of the country. Out 20 shopping malls 12 constituted 'remittances' and on average (20%) of total investment financed from remittances in Sylhet. Further purchasing powers of remittances recipients have brought goods and services near to them like luxury furniture, beauty parlors, travel and construction. It is well known to all that Osmany International Airport at Sylhet has been constructed and developed based on expatriates who send remittances. The study on 20 religious educational institutions 18 has contribution of remittances and on average provided working capital (40%) and permanent capital (30%) for infrastructural development. The expenditure for education and health is smoother in remittances recipient family than a family without remittances and making the community stronger day by day. A number of social welfare associations have been developed by remittances which are working for socio economic development in the community. Remittances are in all the mosques, graves and temples in the study and remittances provided more than 60 pc of total cost on average. Thus remittances play a great role in the development of community.

5.3 National and international levels: Foreign remittances have a great impact on the economy of Bangladesh especially in reduction of poverty. The poverty may be alleviated through proper utilization of remittances. Here an attempt is taken to analyze the importance of remittances in the national and international economy of Bangladesh in terms of the following indicators:

5.3.1. Trend of Remittances: Remittances from overseas employment is a vital source of foreign exchange. Generally, volume of remittances on overseas employment depends on the volume of overseas employee. The absolute volume of remittances was 764 MUD in 1990-91 and it went to 7915 in 2008 and on average it was 2560 during the period (AX-2). Thus it has been increased by more than 1000 pc over the period. The study showed that both the number of expatriates and the volume of remittances have shown an increasing trend through the period 1990-2008 except in some years. In this case our hypothesis is that there is a significant relationship between these

two variables. AX-6 clarifies that these two variables are highly positive (0.88) correlated and the calculated T-value (7.41) is much greater than tabulated value (2.12) at 5 pc level of significance with 16 degrees of freedom. Therefore our hypothesis is accepted and we can conclude that an increase of expatriates will imbue an increase of remittances.

5.3.2. Remittances by Country: Bangladesh receives remittances from different countries in the world. AX-3 shows that the percentage of remittances from KSA varies between 35 in 1990-91 and 49 in 2000-01 and on average it was 40. Thus two-fifth of total remittances come from KSA. The percentage of remittances from Kuwait varies between 1.17pc in 1990-91 and 17pc in 1993-94 and on average 12. Thus Kuwait is the second largest country from which we earned remittances. USA is the third country of sending remittances in Bangladesh. The percentage of remittances from USA fluctuates between 6 in 1991-92 and 1 in 2007-2008 and on average 12. The UAE is the fourth country from which we received remittances by 9 pc on average while UK fifth (6%), Oman sixth (5 %), Qatar seventh (4.5 %), Bahrain eighth (2%), Malaysia ninth (3 %) and Singapore tenth (0 .5%) on average. Therefore the lion portion of remittances (79.5 pc) comes from Middle-East countries.

5.3.3. Remittances in Terms of GDP: Remittances directly help in increasing GDP of a country because remittances are invested in production and imbue purchasing power of remittances recipients. The remittances in terms of GDP varied between 0.03 pc and '100 pc and' on average it was 0.19 pc during 1990-2008 (AX-5). Per capita remittances in terms of per capita GDP ranged from 1 pc to 9.15 and on average 5.65 pc over the period. Therefore remittances shared a considerable part of per capita GDP. These two variables are highly positively (0.97) correlated and the calculated value of 'T' (17) is much greater than the table value of 'T' (AX-6). Therefore we can conclude that relationship between GDP and remittances is significant. Remittances transfers the greatest impact on GDP in Middle East and North Africa and South Africa (Admons C. Jenifer P *et. al.* :2005)

5.3.4 Remittances in Terms of Consumption and Investment: Consumption is that part of income which is consumed for sustain. Consumption directly comes from income. Consumption of a nation may come from the remittances. Remittances directly consumed by the recipient of remittances. The per capita remittances as percentage of consumption per capita vary between 29 pc and 125 pc and on average 59 pc (AX-4). Therefore, remittances constitute more than one-half of consumption per capita in Bangladesh. Investment is the foundation of GDP and economic functions. It comes both from government and private sectors. A part of saving is invested in the economy. Foreign remittances directly may invest in the economy. Indirectly it helps in savings and a part of savings again comes in the form of investment. Remittances in terms of investment varied between 3.21 pc and 6.04 pc and on average it was 4.11 pc during 1990-2008 (AX-2). In this case our hypothesis is that both consumption, investment are positively correlated with remittances. These variables are highly positively (0.97) correlated and the calculated value of 'T' (17) is much greater than the table value of 'T' (AX-6). Therefore we conclude that the increasing trend of remittances help in increasing both the consumption and investment.

5.3.5. Remittances in terms of Export Revenue and Import Cost: International trade may make a tremendous contribution to the development of less development countries (G.Haberler, 1959). Remittances in terms of export revenue ranges between 29 pc in 2000-2001 and 56 pc in 2007-08 and on average 40 pc during 1990-2008 (AX-5). Thus remittances are two-fifth of export income in the national economy of the country. Remittances as percentage of import cost was 18 in 1995-96 and it rose to 37 pc in 2007-2008 and on average 26 pc during the period 1990-2008 (AX-5). Therefore, about one fourth of import cost is covered by the remittances earned from the overseas employment. Both the export and import have been increased with the increase of remittances. Remittances, export revenue and import are highly positively correlated (0.97) and the calculated T-value (17) is greater than tabulated T-value (2.12) which indicates that the relationship among remittances and export revenue

and import cost is significant (AX-6). Therefore we conclude that the increasing trend of remittances help in increasing both the export income and import cost. Remittances as percentage of export is 194 pc in Eritrea (Sander and Samuel: 2005)

5.3.6. Remittances in Terms of Foreign Exchange Reserve: Remittances usually permeate foreign exchange reserve of a country. Remittance as percentage of foreign exchange reserve fluctuates between 39 pc 1993-94 and 158 in 2001-02 and on average 94 pc during 1990-2008(AX-5). Therefore foreign remittances almost are equal to foreign exchange reserve in Bangladesh. The study shows that foreign remittances and foreign exchange reserve is positively related at 0.88 AX-6 and the calculated 'T' value (7.41) is higher than the tabulated T value (2.12) and validated that remittances have direct positive impact on foreign exchange reserve. It is notable that the first foreign exchange reserve after independence was created by the contribution of the expatriates (FGD).

5.3.7. Remittances and National Revenue and Expenditure: Remittances occupy a key position in the national economy in terms of revenue income and revenue expenditure. Remittances in terms of revenue received varied between 32 pc and 90 pc and on average 49 pc during the study period while, in terms of revenue expenditure they ranged from 37 pc to 94 pc and on average 58 pc (AX-4). Here a hypothesis is that both the revenue income and revenue expenditure have a significant relationship with remittances. AX-6 affirmed that Revenue income, revenue expenditure and remittances are highly positively correlated (0.98) and the calculated 'T' value (19) is higher than the tabulated T- value (2.12). Therefore, we can conclude that remittances have direct positive impact on national revenue income and revenue expenditure.

5.3.8. Remittances and Foreign Direct Investment (FDI): Remittances have impact on foreign direct investment and in low income countries they constitute 228 pc of FDI and in developing countries 76.4 pc (Dilip Ratha; 2005). Remittances as percentage of FDI ranged between 48 and 934. Here we assumed that remittances have positive

impact on FDI. AX-6 affirmed that FDI and remittances are highly positively correlated (0.88) and the calculated 'T' value (5.13) is higher than the tabulated T-value (2.228). Therefore, we can conclude that remittances have direct impact on FDI.

6.0 Summary and suggestions:

The foregoing discussion and analysis inveterate that remittances play an important role in the reduction of poverty from family to international levels. From households to international level remittances encompass roles. Remittances form an important part of household source of revenue approach. Remittances help as direct income to meet household's expenditure. These also help in generating income through extending opportunity. They also allow household to increase their consumption of local goods and services. Further they help households as liquid assets in crisis to tackle the unwanted risk. They help the community as a whole in the local economy creating job and stimulating new economic and societal infrastructure and services. They develop local market economy and minimize inequality in local development. At the national level they add more value in GDP. They help in augmenting per capita income, exports and balance of payments. They distort national capital market and money market. Finally remittances help in minimizing inter-country inequality. The productivity of all inputs, specialization and optimization of resources are undisturbed in the flow of remittances from one country to another. In the line of above the study attempted the following suggestions for the betterment of the households, community, national and international:

- 6.1. The study revealed that huge part of remittances are incurring for housing and real estate out of which a large part is unproductive and fashion investment and has little or no importance in poverty reduction. This kind of investment should be discouraged socially and nationally by law.
- 6.2. The field survey evident that remittances bring the consumption of luxury goods and services in the recipient families. The senders and recipients must be conscious in the utilization of remittances.

- 6.3. The researcher found that a part of investment in small and medium enterprises is unplanned, economic unviable and commercially unprofitable. The investors should take into consideration these factors before such types of investment.
- 6.4. Remittances and number expatriates are significantly correlated. Therefore the government should take necessary steps to send more expatriates for earning more remittances.
- 6.5. The lion portion of remittances comes from middle-east countries. Therefore the government should take necessary steps to earn remittances from western countries through sending expatriates to those countries.
- 6.4. The poverty of Bangladesh may be lightening through planned usages of remittances. Both the households and community is the player of remittances on which the development of a nation is dependent. The national economic plan and policy should consider the usages and investment of remittances.
- 6.5. The remittances recipients should be advised to invest the remittances in the economic viable productive and sectors. Misusages of hard earned remittances should be discouraged.

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Appendix-1: Households Expenditure pattern of Remittances

Items of Expenditures	% of total remittances
Household consumption for: daily expenditures, education, health care and clothing.	21.5
House hold housing through: building and development, Plot /land for housing and purchase of apartments in town.	18.5
Investment in: real estate Company(s), apartment building companies and share market.	15.5
Investment in: Medium and small enterprises, Investment in livestock, poultry and dairy firms.	19
Investment in: Investment in Hospitals and clinics. Investment in Tourism, Hotel and restaurant and educational institutes.	5.75
Savings: In Banks (DPS/FD/ Special Saving), Insurance companies and local NGOs.	8.5
Development of agriculture: Capital for cultivation and purchase of land for agriculture	6.25
Community development through: i) Donations in educational institutions (schools, colleges and others), Donations in religious institutions (mosque, temple and grave), Donations to relatives and neighbors for any purpose, Rural infrastructure development like road, electrification.	3.25
Expenses for relatives in: Sending relatives to foreign countries, marriage ceremony, festivals, accidents and loan without interest.	1.5
Others: Law charges, bribes and others to relieve from harassments and etc.	0.5
Total	100

Source: Field Survey

Appendix-2: Absolute Volume of Remittances, Trend of Remittances (RMT), Remittances per Expatriate (Expt.), Number of Expatriate, Trend of Expatriate, Per capita RMT, Per capita GDP, RMT as percentage of GDP Per Capita During 1990-2008.

Year Year	RMT. Ml. US\$)	Trend Ml. Of RMT (%)	No. of Expat	Trend of Expat (%)	Per Expt. RMT	Invest ment (In L. TK.)	RMT as% of Invest Ment.	Per Capita RMT (US\$)	Per Capita GDP (US\$)	RMT As% Per Capita GDP	FDI Ml. US\$)	RMT As% Of FDI
1990-91	764	-	97000	-	7876	18670	4.1	6.85	991	6.9	NA	NA
1991-92	848	111	185000	191	4583	20690	4.1	7.50	1055	7.11	NA	NA
1992-93	947	112	238000	129	3979	22500	4.2	9.47	1085	8.73	NA	NA
1993-94	1089	113	192000	81	5672	24920	4.4	9.26	1152	8.00	NA	NA
1994-95	1198	110	200000	104	5990	29160	4.1	10.4	1282	8.11	NA	NA
1995-96	1217	102	181000	91	6724	33250	3.67	10.04	1372	7.58	1554.4	78
1996-97	1475	122	228000	126	6469	37450	3.40	11.99	1469	8.16	1053.5	140
1997-98	1525	103	243000	107	6275	43300	3.52	12.22	1601	7.63	3160.01	48
1998-99	1706	112	270000	111	6319	48760	3.50	13.48	1735	7.77	1925.54	89
1999-00	1949	114	248000	55	7858	54590	3.57	15.17	1852	8.19	1954.88	100
2000-01	1882	97	213000	86	8835	58540	3.21	14.42	1943	7.42	1226.88	154
2001-02	2501	132	195000	92	12825	63240	3.95	19.00	2076	9.15	354.5	706
2002-03	3062	121	251000	129	12199	70350	4.35	22.95	2253	1.00	328.3	934
2003-04	3372	110	277000	110	12173	79990	4.22	24.95	2463	1.00	460.4	733
2004-05	3848	114	250000	90	15392	90920	4.23	28.08	2706	1.00	845.3	455
2005-06	4802	125	291000	116	16501	102480	4.69	34.60	2995	1.16	792.5	606
2006-07	5978	125	564000	194	10599	115590	5.17	42.76	3380	1.23	666.3	898
2007-08	7915	132	981000	174	8068	130950	6.04	56.54	3870	1.46	NA	
Average	2560		283555	9126	26	58075	4.11	19.43	1960	5.65		

Sources: Bangladesh Economic Reviews 2003-04, to2007-08, Bangladesh Bureau of Statistics, Official records of Bangladesh Bank, Bangladesh Bank Annual Report 2007-08. NA= Not Available

Appendix-3: Percentages of Remittances by Country during 1990-91 to 2005-2006

Year	KSA	UAE	Qatar	Oman	Bahrain	Kuwait	Malaysia	Singapore	UK	USA	Others	Total
1990-91	35	10	8	6	2	1	0	.28	9	8	20.72	100
1991-92	37	9	6	7	2	8	0	.20	7	6	17.80	100
1992-93	43	8	6	6	2	13	4	.68	5	7	5.42	100
1993-94	41	8	5	7	3	17	9	.20	3	6	.80	100
1994-95	43	7	6	7	3	15	4	.25	4	8	2.75	100
1995-96	41	7	4	7	2	14	6	.33	3	9	6.67	100
1996-97	40	6	4	6	2	14	7	.45	4	10	6.55	100
1997-98	39	7	4	6	2	14	5	.50	4	13	5.50	100
1998-99	40	7	5	5	3	13	4	.77	3	14	5.23	100
1999-00	47	7	3	5	2	13	3	.60	4	12	3.4	100
2000-01	49	8	3	4	2	13	2	.47	3	12	3.53	100
2001-02	40	9	4	5	2	13	2	.57	4	14	6.43	100
2002-03	41	11	4	4	2	11	1	1	7	15	3.00	100
2003-04	41	11	3	4	2	11	1	.96	9	14	3.04	100
2004-05	39	11	4	3	2	11	1	1	10	14	4.00	100
2005-06	35	12	4	3	1	10	1	1	11	15	4.00	100
2006-07	29	12	4	3	2	11	1	1	15	16	6	100
2007-08	30	14	4	3	2	11	1	2	11	17	6	100
Average	40	9	4.5	5	2	12	3	0.5	6	12	6	100

Source: Ibid.

Appendix-4: Absolute Volume of Remittances, , Remittances per Capita, Remittances as Percentage GDP, Revenue, Expenditure, Total population GNI, Percentage of GNI in terms of remittance during 1990-2008.

Year Year	RMT. MI. US\$)	RMT. (crore TK).	Total Rev. Recv. (crore TK).	RMT. as% of	Total Rev. Exp. (crore TK)	RMT as % Rev. Exp.	Total Pop. in MI.	RMT Per capita (US\$)	RMT Per capita (TK)	Consm. (In ML. Tk.)	Consm Per Capita (in tk.)	RMT As% Of Consm (TK)
1990-91	764	2726	7822	35	7310	37	111.5	6.85	244	94410	847	29
1991-92	848	3242	9517	34	7900	41	113.3	7.49	286	102970	909	31
1992-93	947	3710	11060	34	8510	44	115.5	8.2	321	109950	952	34
1993-94	1089	4355	12280	35	9150	48	117.5	9.27	370	117670	1001	37
1994-95	1198	4814	14210	34	10300	48	119.3	10.04	403	132500	1110	36
1995-96	1217	4978	15512	32	11814	42	121.2	10.04	411	141840	1170	35
1996-97	1475	6304	17415	36	12535	50	123.0	12.00	525	151960	1235	43
1997-98	1525	6951	18777	37	14500	48	124.8	12.22	569	165320	1325	43
1998-99	1706	8213	19700	42	16765	49	126.6	13.48	649	180800	1428	45
1999-00	1949	9825	21345	46	18444	53	128.4	15.17	765	194690	1516	50
2000-01	1882	10266	24173	43	20662	50	130.5	14.42	787	207920	1593	49
2001-02	2501	14377	27670	52	22692	64	131.6	19.00	1092	223590	1699	64
2002-03	3062	17730	31120	57	25307	70	133.4	22.95	1329	244570	1833	73
2003-04	3372	19870	35400	56	28783	69	135.2	24.94	1470	267930	1982	74
2004-05	3848	23647	39200	60	34664	68	137.0	28.08	1726	296510	2164	80
2005-06	4802	32211	44868	72	38070	85	138.8	34.59	2320	331550	2389	97
2006-07	5978	41304	49472	83	45502	91	139.8	42.76	2955	376320	2692	110
2007-08	7915	54293	60539	90	57922	94	140.0	56.54	3878	433080	3093	125
Average	2560		25125	49	21712	58		19				59

Sources: Bangladesh Economic Reviews 2003-04, to2006-08, Bangladesh Bureau of Statistics, Official records of Bangladesh Bank, Bangladesh Bank Annual Repot 2006-07. N.B. Total population has been adjusted with the growth rate. Figures are rounded. RMT= Remittances. Rev. Recv= Revenue received. Rev. Exp.= Revenue expenditure. FER=Foreign Exchange Reserve.

Appendix-5: Remittances (RMT) in Terms of Export, Import, Foreign Exchange Reserve and Gross Domestic Product (GDP)

Year	RMT. ML US\$)	RMT. (crore TK.	Export (ML US\$)	RMT as % of Export	Import cost (US\$)	RMT as % of Import	FER ML US\$)	RMT as % of FER	GDP (crore Tk.)	RMT as % of GDP
1990-91	764	2726	1718	44	3510	22	880	87	110520	0.03
1991-92	848	3242	1994	42	3526	24	1608	53	119542	0.03
1992-93	947	3710	2383	40	4071	23	2121	45	125369	0.03
1993-94	1089	4355	2534	43	4192	26	2765	39	135412	0.03
1994-95	1198	4814	3473	34	5834	21	3070	40	152518	0.03
1995-96	1217	4978	3882	31	6931	18	2039	60	166320	0.82
1996-97	1475	6304	4418	33	7152	21	1719	86	180701	0.04
1997-98	1525	6951	5161	30	7520	20	1739	88	200177	0.04
1998-99	1706	8213	5313	32	8006	21	1523	112	219697	.004
1999-00	1949	9825	5752	34	8374	23	1602	122	237086	0.04
2000-01	1882	10266	6467	29	9335	21	1307	139	253546	0.04
2001-02	2501	14377	5986	42	8540	29	1583	158	273201	0.05
2002-03	3062	17730	6548	47	9658	32	2470	124	300580	0.06
2003-04	3372	19870	7603	44	10903	31	2705	125	332973	0.06
2004-05	3848	23647	8655	45	13147	29	2930	127	370707	0.06
2005-06	4802	32211	10526	46	14746	33	3484	115	415728	0.08
2006-07	5978	41304	12178	40	17157	34	5077	95	472477	0.90
2007-08	7915	54293	14111	56	21629	37	6149	78	541919	1.0
Average	2560	14934	6039	40	9126	26	2487	94	256026	0.19

Source: Ibid.

.N.B.GDP=Gross Domestic Product; FER=Foreign Exchange Reserve; RMT=. ML=Million.

Appendix-6: Correlation coefficient and T- value of selected variables.

Variable	correlation	Calculated T-value	Table value of T	Level of Significance / degree of freedom.
Remittances	0.88	7.41	2.12	5 pc/16degrees
Expatriate				
Remittances	0.97	17	2.12	
GDP				
Remittances	0.88	7.41	2.12	
Reserve				
Remittances	0.97	17	2.12	
Consumption				
Investment				
Remittances	0.97	17	2.12	
Export revenue				
Import cost				
Remittances	0.98	19	2.12	
Revenue				
Expenditure				
Remittances	0.88	5.13	2.228	5 pc/10degrees
FDI				

Source: Table 2,3,4,5.