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Graduation of Bangladesh as Least Developed Countries (LDC)

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Introduction

Committee for Development Policies (CDP) defines Least Developed Countries as “low-income countries suffering from severe structural impediments to sustainable development”. A set of formal criteria is used for identifying countries as LDCs by CDP. LDC category was established in 1971 and its membership has changed over time. At the initial stage of establishment, a low per capita gross domestic product (GDP) and structural impediments to growth were required for designating a country as least developed. The list of LDCs is reviewed by CDP every three years with the advice and suggestions to the Economic and Social Council of the United Nations about inclusion of new countries and graduation of existing ones. At present, the CDP uses three criteria for identifying countries as LDCs: Gross National Income per capita, the Human Asset Index (HAI) and the Economic Vulnerability Index (EVI). Both HAI and EVI are composed of several indicators.

Bangladesh was enlisted as an LDC in 1975 and since then, the country has progressed in the different indicators heading toward the graduation level. This study provides a country specific report regarding the existing position and condition of Bangladesh as a LDC with a view to provide valuable assessment and useful platform for further development and elaboration of smooth graduation strategy. The first section of the study describes the recent macro-economic performance of Bangladesh including social development indicators. The second section of the study describes Bangladesh's stance in the way to graduation using the three criteria and attempts to analyze the existing “gap”. The third part of the study includes the identification and analyses of policy instruments and government interventions needed to close each of the “gaps”. Section four discusses the costs and benefits in phasing out of the support measures such as concessional ODA and DFQF market access. The last section ends up with concluding remarks along with some recommendations.

Chapter 1

Recent Macroeconomic Performance of Bangladesh

The recent performance of Bangladesh's economy in the context of macro-economic and social development is praiseworthy considering the impact of the global financial crisis. Bangladesh has been able to manage the desired GDP growth rate despite the difficulties in external sectors resulted from the financial crisis 2008.

1.1 Economic Growth

Global financial crisis in 2008 slowed down Bangladesh's economy causing GDP growth rate decline to 5.7 % in 2008-09 from 6.1% in 2007-08. In 2009-10, growth bounced back and average growth remained above 6 percent in the past three years. GDP grew by 6.71% in FY 2010-11 and by 6.32% in FY 2011-12. Overall GDP growth has been mostly driven by industry and service sector. In FY 2011-12, agriculture, industry and service sectors grew by 2.53%, 9.47 % and 6.06 % respectively.

GDP at current market prices stands at Tk. 91,47,840 million in FY 2011-12, which was 14.82% higher than that of the previous year (table 1). At current prices, per capita GDP for FY 2011-12 is USD 772 which has been increased from the per capita GDP of USD 748 in FY 2010-11. Per capita national income stood at USD 848, increasing from USD 816 a year earlier.

Table 1: GDP, GNI, per capita GDP, per capita GNI at Current Price

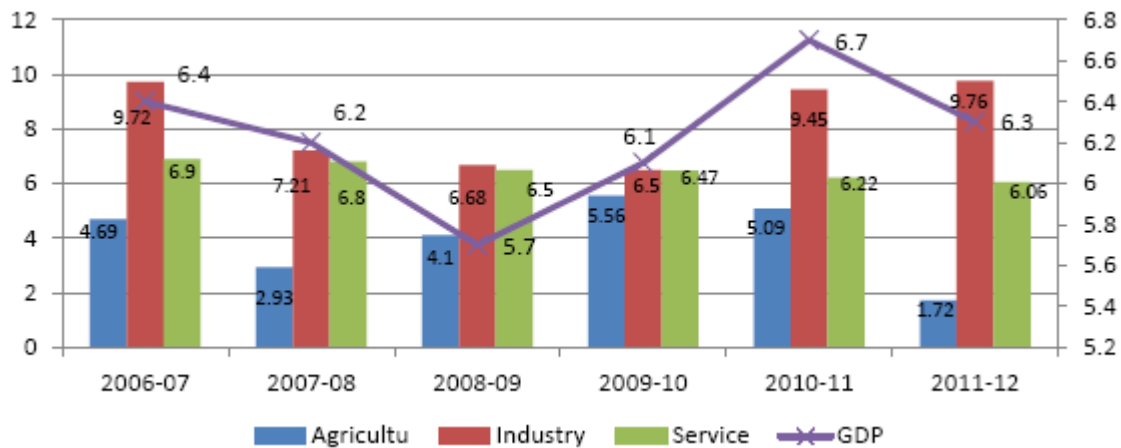
Item	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12*
GDP (In Crore Tk.)	415728	472477	545822	614795	694324	796704	914786
GNI (In Crore Tk.)	442935	507752	594212	670696	758928	869217	1004723
Population (In Crore)	13.88	14.06	14.24	14.42	14.61	14.97	15.16
Per Capita GDP (In Tk.)	29955	33607	38330	42628	47536	53238	60350
Per Capita GNI (In Tk.)	31915	36116	41728	46504	51959	58083	66283
Per Capita GDP (In US\$)	447	487	559	620	687	748	772
Per Capita GNI (In US\$)	476	523	608	676	751	816	848

Source: Statistical Year Book 2011-12, Bangladesh Bureau of Statistics

Sectoral Performance in GDP Growth

Global financial crisis in 2008 slowed down the growth rate of three major sectors resulting in lower GDP growth rate than previous years. However, agriculture growth rate increased to 4.15% in 2008-09 from 2.93% in 2007-08 revealing that the global crisis has not affected agriculture sector of Bangladesh. The economy bounced back with increased GDP growth of 6.1 % in 2009-10 from 5.7% in 2008-09, which was solely geared by agricultural growth (figure 1). Agricultural growth rate increased by 1.46 percentage points in 2009-10 whereas the other two sectors observed lower growth rates. Higher GDP growth rate in the following years can be explained by the major contribution of industry sector while agriculture and service sector had experienced lower growth.

Figure 1: Sectoral GDP Growth at Constant Price



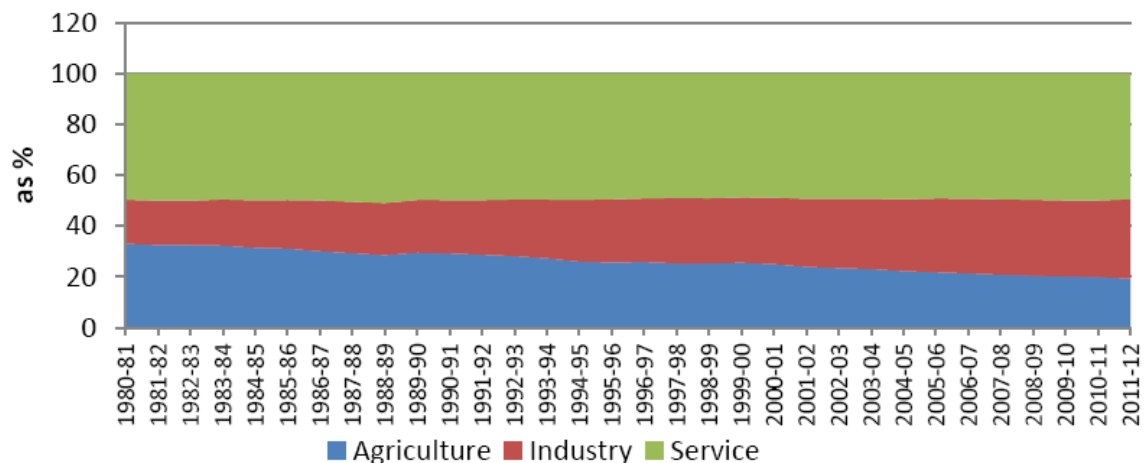
Source: Bangladesh Economic Review 2012, Ministry of Finance of Bangladesh

Agriculture Sector

Three major sub sectors: crops and horticulture, livestock and forestry, fisheries have contributed to the growth of overall agriculture sector.

In FY 2011-12, the provisional growth rate of broad agriculture sector stood at 2.53 %, which was lower than the 5.13 % in FY 2010-11. Of this growth performance, the growth of crops and horticulture sub-sector plunged from 5.04 % in FY 2010-11 to 1.72 % in FY 2011-12. Livestock and forestry sub-sector grew by 3.39 % and 4.42 % respectively in FY 2011-12, and were 3.48% and 3.90 % respectively in the previous fiscal year. The fisheries sector grew by 5.38 % in FY 2011-12 compared to 5.25 % in FY 2010-11.

Figure 2: Trend of share of three major sectors in last three decades at constant price



Source: Bangladesh Economic Review 2012, Ministry of Finance of Bangladesh

Industry Sector

Within the broad industry sector, the growth of mining and quarrying sub-sector was 6.25 % in FY 2011-12 up from 4.8 % in FY 2010-11. In this sub-sector, natural gas production and crude petroleum grew to 2.95 % from 1.05 % a year earlier. The growth rate of the production of large and medium scale manufacturing industries was 10.78 % in FY 2011-12, remaining at about the same level as in FY 2010-11, 10.94 %. The index of production in this sub-sector, especially jute, cotton, ready-made garments, wooden furniture, non-metallic products, basic metallic products, fabricated metallic products increased in the first six months of FY 2011-12 compared to the index of the same period of FY 2010-11.

Service Sector

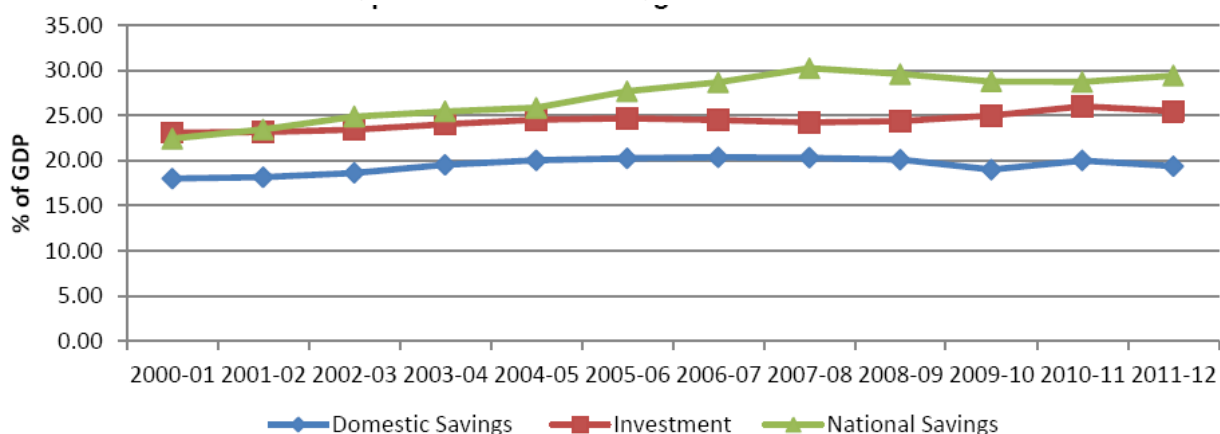
The growth in almost all the sectors within the broad service sector except financial intermediation, whole sale and retail trade were estimated at 5.88 % during FY 2011-12 compared to 6.31 % growth of the previous fiscal year. The output of the wholesale and retail trade came down from 7.75 % of the previous year to 5.88 % in FY 2011-12. Growth in hotel and restaurant sub-sector was expected to remain the same while that in transport, storage and communication was estimated at 6.58 % for this fiscal year up from 5.69 % in FY 2010-11. On the other hand, air transport and post and telecommunication sub-sector with an estimated growth of 9.24 % and 10.61 % respectively contributed significantly to GDP.

During FY 2011-12, financial intermediation showed the prospect of an estimated growth rate of 9.52 % which was 9.64 % in FY 2010-11. Among the three sub-sectors of this sector, the growth of two sectors was estimated to be declined. The growth rate in the real estate renting and business activities sector was provisionally estimated at 4.05 % which was 3.96 % in FY 2010-11. Among the other services sectors, the growth rate of public administration and defense, education, and health and social services were expected to grow at the rate of 6.07 %, 8.61 % and 7.94 % respectively in FY 2011-12. Moreover, community, social and personal service sector was estimated to grow by 4.76 % in FY 2011-12, slightly higher than the growth rate of the previous fiscal year.

1.2 Savings and Investment

Estimated domestic savings remained at same level with 19.3 % of GDP in FY 2010-11 and 19.4 % of GDP in FY 2011-12. Investment in FY 2011-12 also showed similar feature and stood at 25.4 % of GDP in FY 2011-12 from 25.2 % of GDP in FY 2010-11. Of which the share of private investment stood at 19.1 % of GDP while that of public investment was 6.3 % in FY 2011-12. In FY 2010-11, the private and the public sector investments were 19.5 and 5.6 % of GDP respectively. Major initiatives of the Government implemented in infrastructure sector including power and reduction in cost of doing business helped create investment-friendly environment. In addition to this, because of satisfactory growth of remittances, national savings in FY 2011-12 upturned to 29.4 % of GDP from 28.8 % of GDP in the previous year.

Figure 3: Trend of Savings and Investment



Source: Bangladesh Economic Review 2012, Ministry of Finance of Bangladesh

A close look on the composition of total investment reveals that construction sector accounts for more than 75% of total investment, followed by machinery and equipment which account for about 16 %, and transport which accounts for about 6 % of total investment (table 2).

Table2:Sectoral Composition of Investment

Categories	2006-07	2007-08	2008-09	2009-10	2010-2011
Construction					
Total	76.23	77.96	78.71	77.33	75.41
Private	61.65	64.66	66.18	63.93	61.21
Public	14.58	13.31	12.53	13.39	14.36
Machinery & equipment					
Total	16.76	15.61	14.99	15.22	16.91
Private	10.98	10.29	10.04	9.97	11.60
Public	5.78	5.32	4.95	5.26	5.31
Transport & equipment					
Total	6.83	6.26	6.13	7.28	7.52
Private	5.11	4.59	4.47	5.56	5.85
Public	1.72	1.67	1.64	1.72	1.67
Breeding stock & plantation					
Total	0.17	0.17	0.16	0.17	0.17

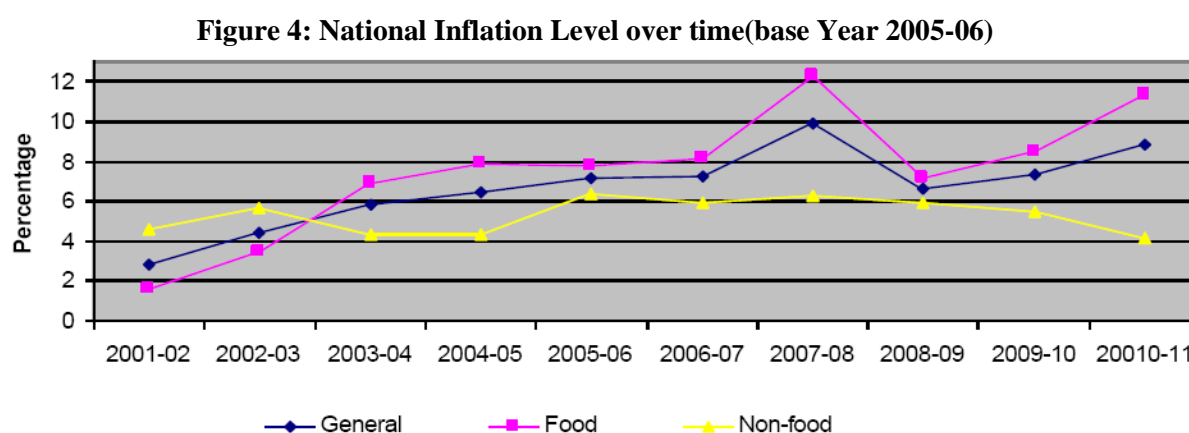
Source: Bangladesh Bureau of Statistics

Thus, share of private investment in construction sector to total investment is the key source of change in the pattern of private investment. However, this share seems to decline over time from 66% in FY 2009-10 to 61% in FY 2010-11. Though there is an increase of the share of transport sector but still the increase is not sufficient to offset the decrease in investment in construction sector.

1.3 Inflation

The overall inflationary picture is somewhat alarming especially considering the FY 2011-12 when the annual inflation rate reached to 10.62 % in FY 2011-12 from 8.80 % in FY2010-11(Figure 4). Global recession has induced the general inflation to cease up to 6.66% in 2008-09; however, inflation grew persistently in the following three years.

Oil and food inflation in global market and excessive credit flows to unproductive sectors were mainly responsible for this upturn. Inflation on point to point basis in June 2012 stood at 8.56%. The trend analysis of inflation in Bangladesh reveals that in the first half of FY 2011- 2012 general inflation went up because of food inflation while at the end of FY2011-12, non-food inflation was the key factor in pushing general inflation upward. At thatpoint in time, food inflation receded to 7.08%(monthly rate, point to point basis) from about 13 % in the same month of FY2010-11.



Source: Bangladesh Bureau of Statistics

Satisfactory food production and supply of essential commodities including demand management through Open Market Sale (OMS) of the essential commodities and sufficient stock of food grains contributed to the efforts of pulling down food inflation. On the other hand, price hike in international market, depreciation in exchange rate and adjustment of oil price contributed to non-food inflationary pressure. In order to contain inflation, the Government has undertaken necessary steps by forging better coordination between fiscal and monetary policies.

1.4 Wages and Employment

Wage Rate Index constructed by BBS reveals that nominal wage rate index kept on rising and in FY 2011-12 the index rose by 11.88 % compared to that of the previous fiscal year (Annex 2).The wage rate index of agriculture, fisheries and manufacturing sectors increased by 15.17 %, 2.86% and 6.54 % respectively. Compared to these sectors, the wage rate indices of construction sector is much higher and have been the highest during the recent times. It is to be noted that, in FY 2011-12, the wage rate indices of construction sector increased by 32.10 %.

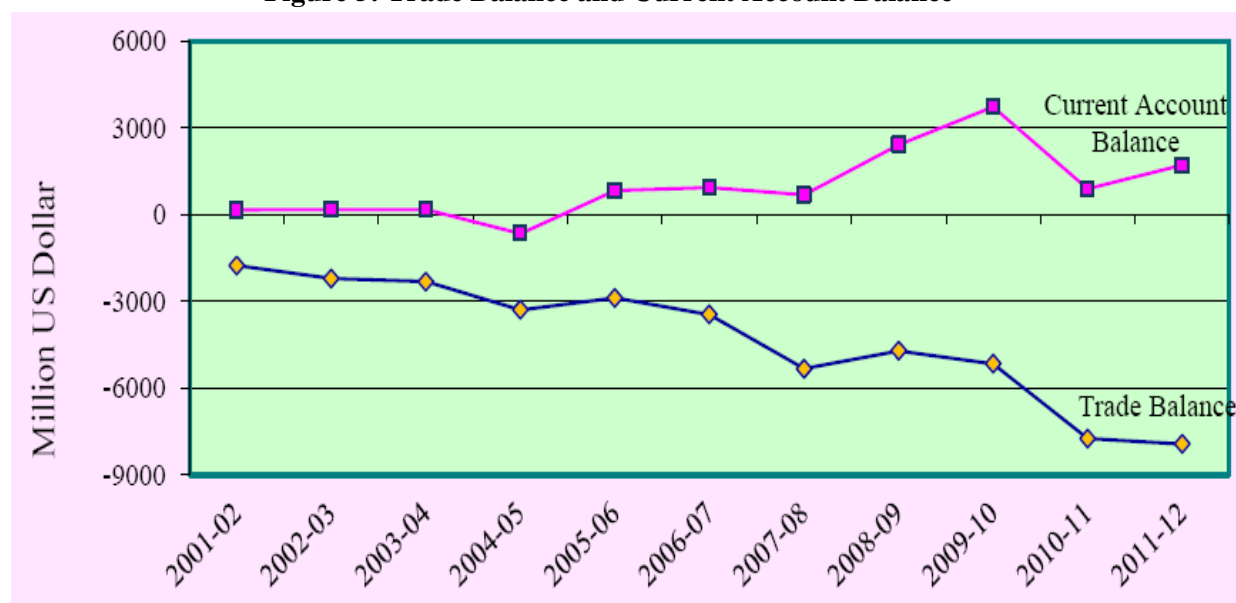
According to “Labor Force Survey 2010”, the number of economically active population (above 15 years) is 56.7 million. Out of this, as many as 54million people (male 37.8 million and female 16.2 million) are engaged in a number of professions, the highest (47.33 %) still being in agriculture.

According to the Labour Force Survey, 2005-06, the total labour force of over 15 years of age was 47.4 million (male 36.1 million and female 11.3 million) with agriculture remained the highest (48.10 %) source of employment. Between the two survey periods, the number of agricultural workers decreased by nearly 1 %. According to LFS 2010, it is observed that 44.4 % (25.5 % in agriculture and 18.9% in others) of labour force is engaged in self-employment while it was 41.98 % in FY 2005-06.

1.5 Balance of Payment

The trade balance recorded a deficit which increased by 3.2 % as compared to the deficit of US\$7,744 million during FY 2010-11 and stood at US\$7,995 million in FY 2011-12. The current account balance recorded a surplus of US\$1,630 million in FY 2011-12 as compared to the surplus of US\$885 million in FY 2010-11.

Figure 5: Trade Balance and Current Account Balance



Source: Bangladesh Economic Review 2012, Ministry of Finance of Bangladesh

In spite of increase in the deficit recorded in the income account at 3.7 %, the deficit in service accounts increased by 8.3 % and the same in trade account by 3.2 %. The current transfer account increased substantially to US\$13,699 million in FY 2011-12 compared to US\$12,452 million in FY 2010-11. The deficit recorded in the overall balance of payment stood at US\$494 million in FY 2011-12, which was US\$656 million in FY 2010-11. Trade balance and current account balance situation is shown in figure 5 from FY 2001-02 to FY 2011-12 and the overall balance of payments position from FY 2005-06 to FY 2011-12 is shown in Annex 3.

1.6. Human Development

Bangladesh has achieved progress in human development including education and health sector. National Population Policy, Poverty Reduction Strategy (PRS) and Millennium Development Goals (MDGs), National Health policy are some of the initiatives of government which have significant milestones involving reduction of infant and maternal mortality, prevention of communicable diseases, improvement of the nutritional status and life expectancy and also reduction of the population growth rate (Annex 4). Bangladesh is on track in terms of reduction of infant and maternal mortality (MDG 4).

The status of Human Development Index (HDI) depicts that Bangladesh has ranked 146 with life expectancy of 69.2 years, mean years of adult schooling of 4.8 years, GNI per capita in PPP terms (constant 2005 international \$) of US\$1,785 (Annex 5).

One of the major milestones of the present Government is the adoption of a comprehensive National Education Policy within the shortest possible time. The policy broadly follows the directives of the Constitution. It has 24 targets, all of which are attributed towards introducing modern and work-oriented education system as stipulated in the Election Manifesto 2008 and Vision 2021. The Policy has taken into account the views of all relevant stakeholders that include teachers, students, parents, educationists, politicians, businessmen and professionals.

Bangladesh's performance in reducing child mortality rate is quite satisfactory comparing with other countries in South and South-West Asia. Bangladesh has reduced under-five mortality rate by 92 percentage points and infant mortality rate by 60 percentage points in the past two decades. The existing mortality rates are even lower than that of India, Nepal and Pakistan (table 3).

Table 3: Reduction in Child Mortality Rate

	Under-5 mortality rate (per 1,000 live births)		Infant mortality rate (per 1,000 live births)	
	1990	2011	1990	2011
South and South-West Asia				
Afghanistan	192.0	101.1	129.4	72.7
Bangladesh	138.8	46.0	96.5	36.7
Bhutan	138.4	53.7	96.3	42.0
India	114.2	61.3	81.0	47.2
Iran (Islamic Rep. of)	61.1	25.0	47.1	21.1
Maldives	105.2	10.7	75.7	9.2
Nepal	134.6	48.0	93.5	39.0
Pakistan	122.2	72.0	94.6	59.2
Sri Lanka	28.9	12.2	24.2	10.5
Turkey	72.0	15.2	59.8	11.5

Source: Asia-Pacific Regional MDGs Report 2012/13

Bangladesh has performed well to be “on track” in achieving some of the goals such as reducing underweight children, infant mortality and maternal mortality. Moreover, the performance in reducing under-5 mortality rate is also satisfactory depicted from the status as “early achiever” in MDG progress chart (Table 4).

Table 4:MDG Progress of South and South-West Asia

Goal		1	2	3	4	5	6	7
		\$1.25 per day poverty Country line poverty Underweight children	Primary enrolment Reaching last grade Primary completion	Gender primary Gender secondary Gender tertiary	Under-5 mortality Infant mortality	Maternal mortality Skilled birth attendance Antenatal care (≥ 1 visit)	HIV prevalence TB incidence TB prevalence	Forest cover Protected area CO ₂ emissions per GDP Safe drinking water Basic sanitation
South and South-West Asia	Afghanistan	■	▶	▶	■	■	▶	▶
	Bangladesh	▶	■	■	■	■	▶	▶
	Bhutan	■	▶	■	▶	■	■	■
	India	■	■	■	■	■	■	■
	Iran (Islamic Rep. of)	■	■	■	■	■	■	■
	Maldives	■	▶	■	■	■	■	■
	Nepal	■	■	■	■	■	■	■
	Pakistan	■	■	■	■	■	■	■
	Sri Lanka	■	■	■	■	■	■	■
	Turkey	■	■	■	■	■	■	■

● Early achiever ▶ On track ■ Slow ◀ Regressing/No progress

Source: Asia-Pacific Regional MDGs Report 2012/13

Chapter 2

Bangladesh's stance in the way to graduation as LDC

CDP uses three criteria for identifying countries as LDCs:

- i. Gross National Income per capita,
- ii. Human Asset Index (HAI) and
- iii. Economic Vulnerability Index (EVI).

2.1 GNI per capita of Bangladesh

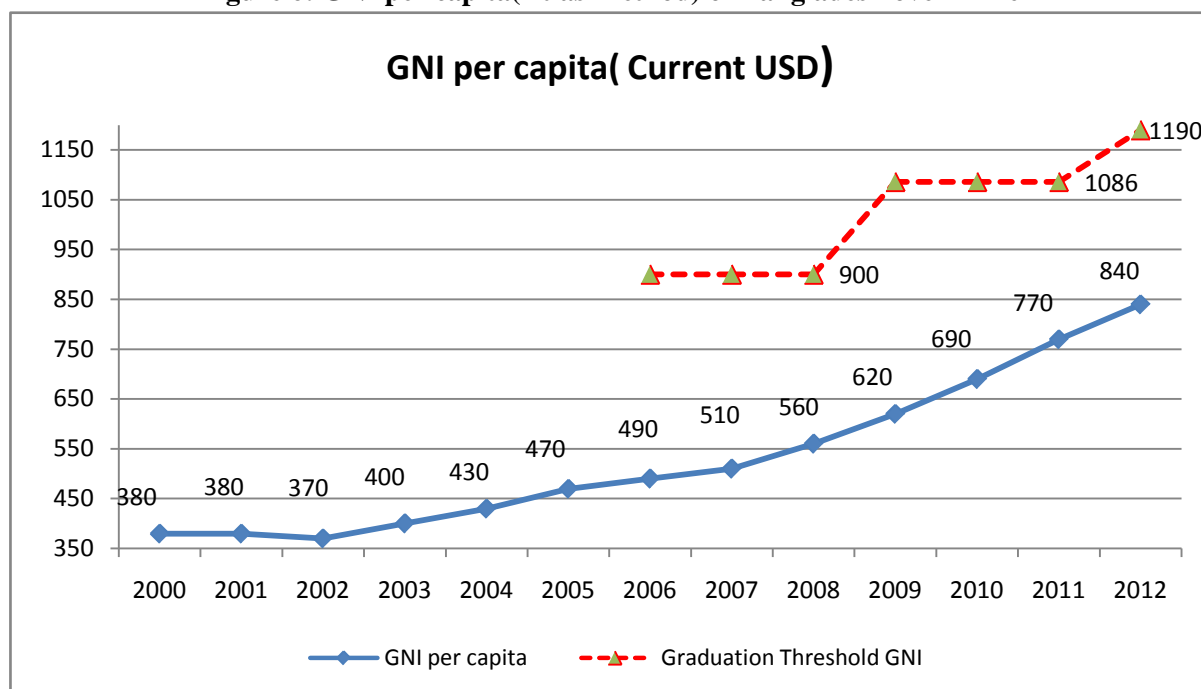
GNI per capita provides information on the income status of a country. The GNI measure used by the CDP is expressed in current United States Dollars. National currencies are converted into United States Dollars according to the World Bank's Atlas Method. The Atlas Method reduces the effects of short term fluctuations in inflation and market exchange rates.

Table 5: Threshold level of GNI over time

	Inclusion Threshold (Current USD)	Graduation Threshold (Current USD)	Per capita GNI of Bangladesh (Current USD)
2006 Review	749	900	403.3
2009 Review	905	1086	453.3
2012 Review	992	1190	636.7

Source: StatPlanet, UN-DESA

Figure 6: GNI per capita(Atlas Method) of Bangladesh over Time



Source: World Bank

The improvement of Bangladesh over per capita GNI is quite satisfactory; GNI per capita has observed a faster increase after 2009. GNI increased from US\$ 620 in 2009 to US\$ 690, US\$ 770, and US\$ 840 respectively in 2010, 2011 and 2012.

Bangladesh government has set a goal to reach in middle-income group by 2021 for which it has targeted the growth rate of GDP to be 7%. However, based on the recent trend of growth of per capita GNI, an extrapolation can depict the estimated timeframe for Bangladesh for reaching the threshold value of per capita GNI. (table 7)

Table 6: Average growth rate of per capita GNI

Year	2001	2002	2003	2004	2005	2006	Average (2001 to 2006)	2007	2008	2009	2010	2011	2012	Average (2007 to 2012)
Growth Rate	0	-2.6	8.11	7.5	9.3	4.26	4.42	4.08	9.8	10.7	11.3	11.6	9.09	9.43

Considering the average growth rate of 9.43% from 2007 to 2012 , the extrapolation suggests that Bangladesh could be able to reach the threshold level for graduation by 2016 with the estimated per capita GNI of US\$ 1,205 (table 7)

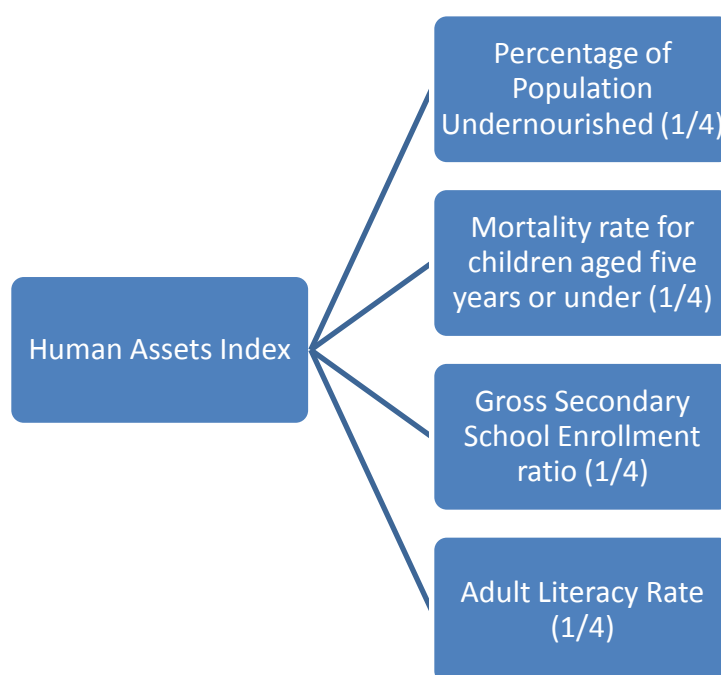
Table 7: Extrapolation over per capita GNI of Bangladesh

Year	2013	2014	2015	2016
Extrapolated per capita GNI (Current US\$)	919	1,006	1,101	1,205

2.2 Human-Asset Index (HAI) of Bangladesh

The HAI provides information regarding the level of development of human capital. It is a combination of four indicators. There are two indicators of health and nutrition outcomes and two of education.

Figure 7: Indicators of Human Asset Index (HAI)



2.2. a. Historical Trend of Human-Asset Index (HAI) for Bangladesh

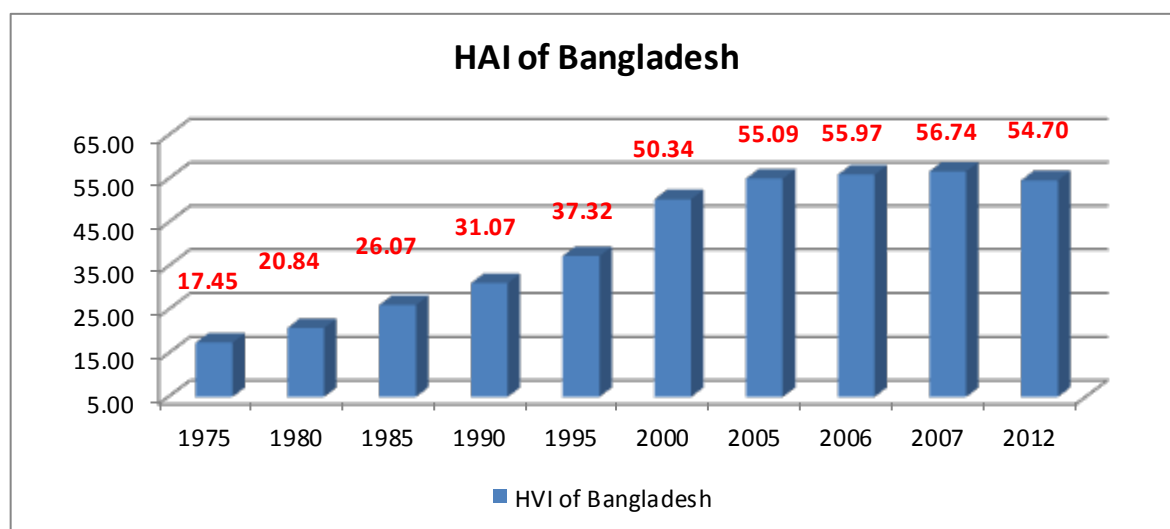
Bangladesh has lagged behind the threshold level for graduation of HAI as set by the three different reviews (table 9).

Table 9: Threshold level of HAI over time

	Inclusion Threshold	Graduation Threshold
2006 Review	58	64
2009 Review	60	66
2012 Review	60	66

Source: UN-DESA

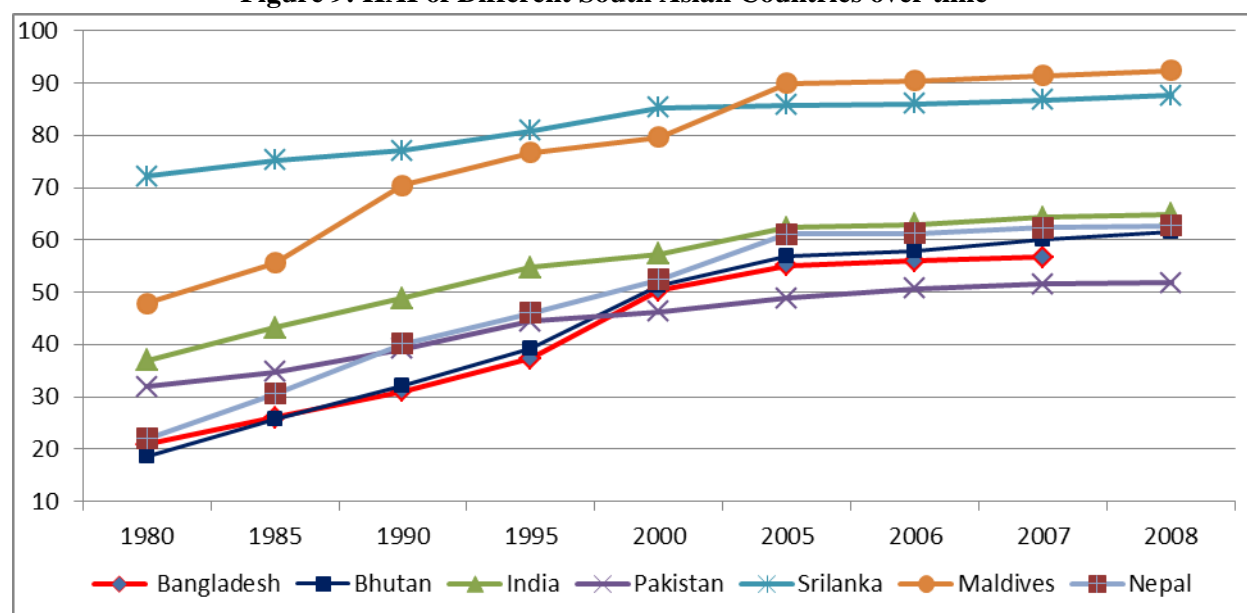
Figure 8: HAI of Bangladesh over time



Source: UN-DESA

Bangladesh has never managed to reach threshold level for graduation in any of the three reviews. The country lagged behind about 8 points from the threshold level for graduation in 2006 (figure8). The gap even increased when the threshold value increased to 66 in 2009 and 2012 from 64 in 2006 and the HAI also decreased to 54.7 in 2012 from 55.9 in 2006. Bangladesh has to undergo an immense improvement through gradual development of human capital.

Figure 9: HAI of Different South Asian Countries over time



Source: UN-DESA

The improvement of Bangladesh over HAI in 1980s and 1990s didnot come with any significant movement comparing to other SAARC countries. Bangladesh's HAI has been lower than other SAARC countries except Pakistan (Figure9). However, the improvement of HAI over Pakistan has been accompanied by deterioration of Pakistan's HAI from its past trend rather than faster pace of the improvement of Bangladesh's HAI.

2.2.b. Indicators for Health and Nutrition

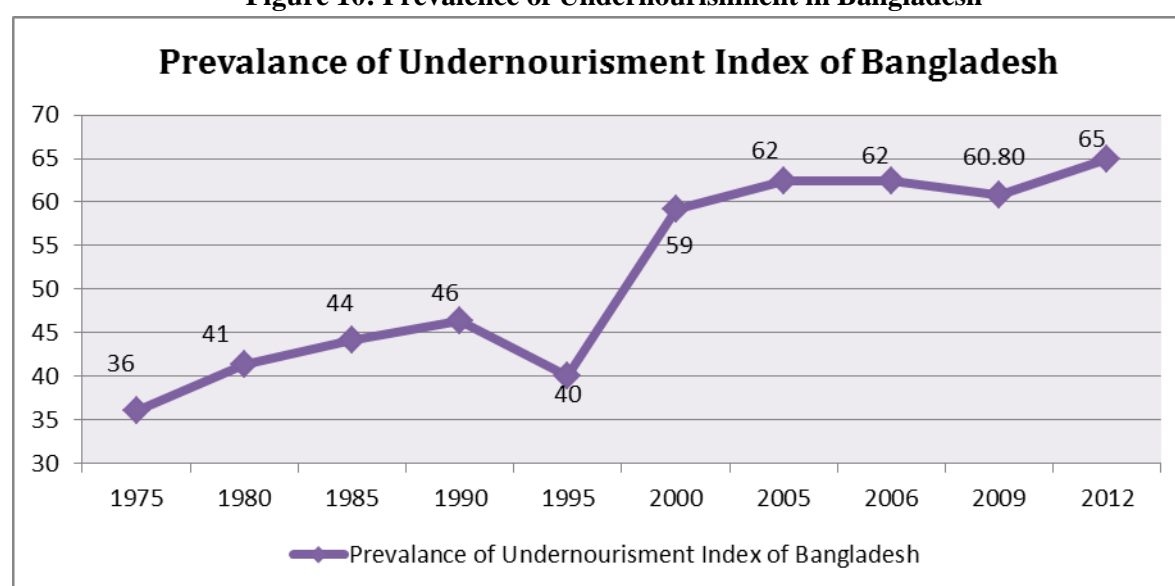
i. Percentage of Population Undernourished

The indicator provides information on the prevalence of undernourishment in the total population. It shows the proportion of the population whose dietary consumption continuously falls below an established minimum dietary energy requirement for maintaining a healthy life and carrying out light physical activity. Undernourishment compromises the health status and educational achievement and has an important negative impact on productivity.

According to definition of FAO, undernourished people are those whose food intake is less than their minimum requirements. Average minimum energy requirement per person is 1800 kcal per day. Exact requirements are determined by a person's age, body size, activity level and physiological conditions such as illness, infection, pregnancy and lactation.

The higher rate of this index represents lower rate of undernourishment. This index is observed with increasing trend resembling the improvement of the overall condition of nourishment in the country (figure 10). The significant shift has been taken from 1995 to 2000 with an increase in the index of 19 percentage points. The trend has been stable around 61% from 2000 to 2009 which then again has a slight increase up to 65% in 2012.

Figure 10: Prevalence of Undernourishment in Bangladesh



Source: UN-DESA

Bangladesh still lags far behind in improving the health status of the country. According to the State of the World's Children (SOWC) Report 2008, issued by the UN Children's Fund (UNICEF), eight million or 48% of all children under-five are underweight. Millions of children and women in Bangladesh are suffering from more than one form of malnutrition, including low birth weight, stunting, underweight, Vitamin A deficiency, iodine deficiency disorders and anemia. The severity of the problem can be gauged from the fact of its chronic nature whereby undernourishment passes from

one generation to the next. Bangladesh has one of the highest rates of child and maternal malnutrition in the world.

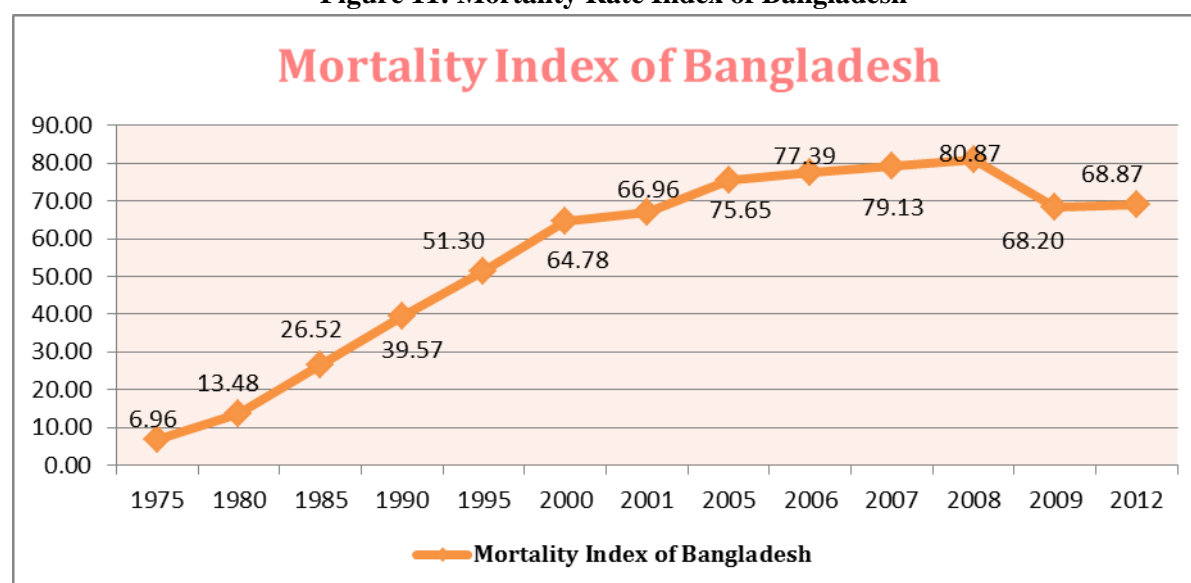
No much progress has been placed in the improvement of undernourishment index of Bangladesh for the period of 2005 to 2009 (figure 10). However, little progress has been achieved in the phase of 2009 to 2012; still the improvement is not sufficient to have a significant contribution against the exiting gloomy scenario.

ii. Mortality Rate Index:

The indicator expresses the probability of dying between birth and age five. It is expressed as deaths per 1,000 births. Under-five mortality rate provides comprehensive information on the health impacts of social, economic and environmental conditions in a country. It is seen as more reliable than alternative indicator such as life expectancy, in particular in least developed countries.

The higher rate of this index represents lower rate of mortality. This index is observed with increasing trend resembling the improvement of the overall declination of under-five mortality in the country (figure11). The pattern of the increasing trend is affected by gradual increase rather than any significant shift like undernourishment index. This phenomenon depicts the appropriate interventions and measures of government taken over different periods that have enabled Bangladesh to be on track to achieve the Millennium Development Goals (MDGs) of reducing by 2015 the under-five mortality rate to 50 per 1,000 live births from 65. Matching achievements of only five other countries, Bangladesh has halved the child mortality rate since 1990.

Figure 11: Mortality Rate Index of Bangladesh



Source: UN-DESA

Between 1996 and 2005, the prevalence of underweight children fell from 56% to 45%, while stunting fell from 55% to 40%. Achieving the MDG would mean about 30 million children and two million mothers would be saved by 2015. But the urban slums, the Chittagong Hill Tracts, coastal regions and other ecologically vulnerable areas are falling behind; their distinct problems need to be addressed carefully.

Despite this positive outcome in reducing child mortality index, it should be noted that the pace of the progress has somehow slowed down since 2005 whereas it has even deteriorated after 2008 when the index came down below 70.

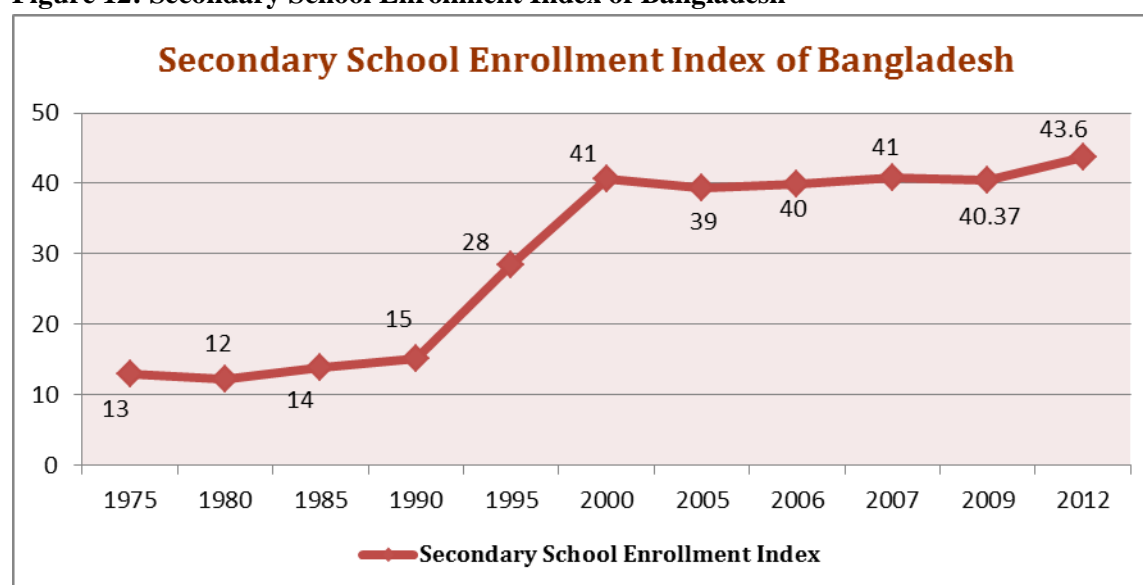
2.2.c. Indicators for Education

iii. Gross Secondary School Enrollment ratio:

The indicator measures the number of pupils enrolled in secondary schools, regardless of age, expressed as a percentage of the population in the theoretical age group for the same level of education. It provides information on the share of population with a level skills deemed to be necessary for significant developmental progress.

Bangladesh's performance in improving the secondary enrollment index is depicted with increasing trend revealing the fact that Bangladesh is gradually achieving progress in secondary education (Figure 12). The improvement was taken by a shift of 13 percentage points from 28% in 1995 to 41% in 2000. However, the trend of development has remained stagnant around 41% on average from 2000 to 2012. That fact implies that government is yet to undertake any significant policy measures to improve the existing trend of progress of past twelve years.

Figure 12: Secondary School Enrollment Index of Bangladesh



Source: UN-DESA

The study “*Dropout Rate in Secondary Level Education in Bangladesh: A Study of VAB School*” of ten high schools in rural Bangladesh, assisted by a US-based NGO, Volunteers Association for Bangladesh (VAB), presents detailed data on the dropout rate in each class from VI to X over a period of six years. In 2012, 70 % of children in Bangladesh, according to available statistics, were enrolled as students at the primary level of education. Research reveals a trend of dropout starting at a slower pace of about 9-10 percent at Class VI, rising slowly to Class IX and ending with a ‘bang’ of around 60 to 70 percent at Class X. The study confirms the prevailing views about the main reasons for dropout as being poverty and poverty related factors. There is unanimity in this regard among all the direct sources surveyed. There is also unanimity about higher dropout among girl students in rural

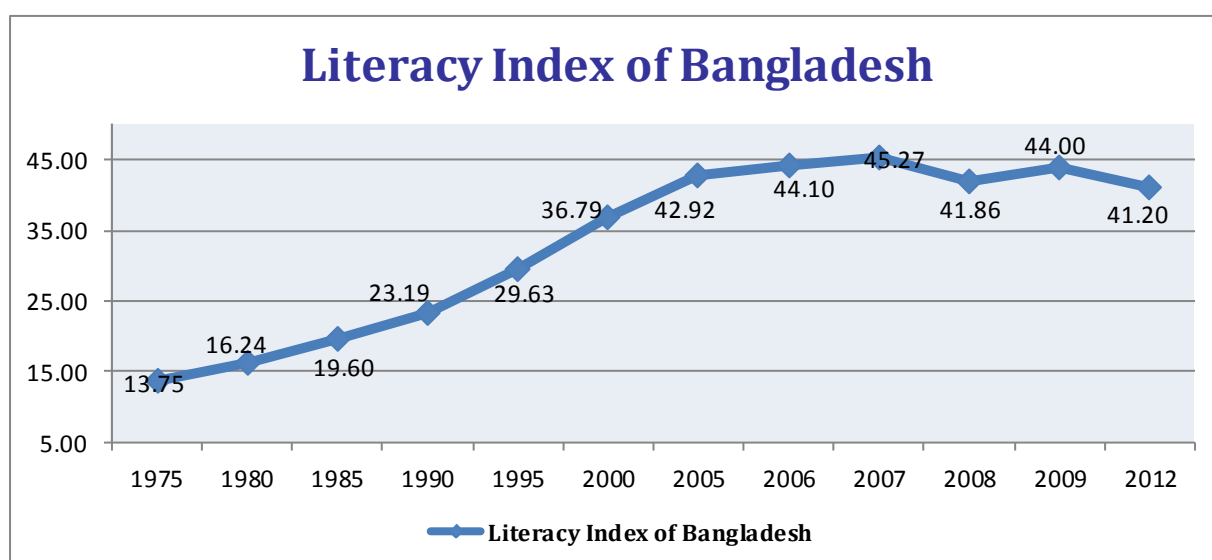
Bangladesh, confirming prevailing views about early marriage of girls, household role of girls in life and lack of recognition for the need for their education.

iv. Adult Literacy Rate:

The indicator measures the number of literate persons aged fifteen and above expressed as a percentage of the total population in that age group. A person is considered literate if he/she can read and write, with understanding, a simple statement related to his/her daily life. The indicator provides information on the size of the bases available for enlarging the trained and skilled human resources needed for development.

Bangladesh has experienced gradual progress toward increased rate of adult literacy. The significant improvement took place until 2000; literacy index increased to 36.79% in 2000 within 15 years from 19.6% in 1985 (figure 13). The pace of progress seems to be quite sluggish in the past decade; literacy index became constant around 42% from 2001 to 2012. The situation got worse when literacy index declined by 2.8 percentage points within three years from 44% in 2009 to 41% in 2012.

Figure 13: Literacy Index of Bangladesh



Source: UN-DESA

Bangladesh performance cannot be classified as a good when considering the improvement of Human Asset Index since 2007. The situations worsened in this period; decline in HAI by 2.04 percentage points from 56.74 in 2007 to 54.70 in 2012 indicates the urge of drawing the attention of the government to focus on this area. However, Bangladesh government has been overwhelmed with the remarkable performance in Human Development Index (HDI) in 2013 as the United Nations has listed Bangladesh as one of the 18 countries in the world that have made rapid progress in human development in the last three decades, though occupying a rather low position. That result of HDI may induce the government to be satisfied with the current interventions and policy mechanisms. However, it should be carefully noted that the parameters of Human Development Index and Human Asset Index are different, which has made the contradictory performance in these two indices.

2.3. Economic Vulnerability Index (EVI) for Bangladesh

EVI reflects the risk posed to a country's development by exogenous shocks, the lower is EVI the better is the stage of development for the country. EVI consists of two components: exposure index and shock index

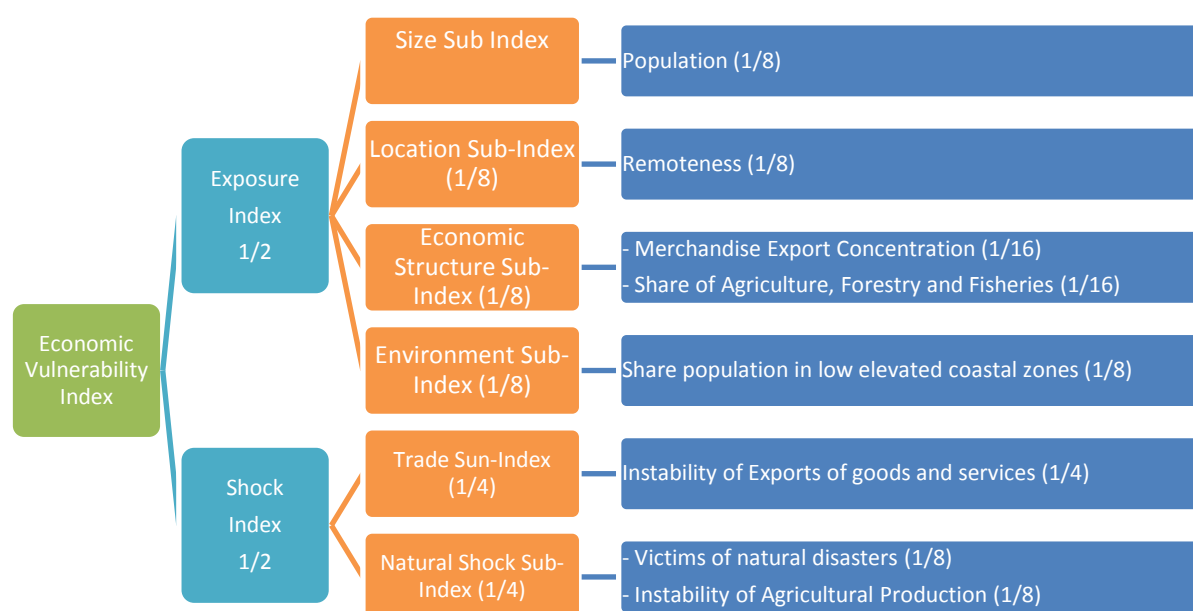
Exposure index

It represents the exposure of a country to natural and economic shocks. The higher the index, the lower is the EVI and the better is the country's development stage.

Shock index

It represents the magnitude of the shock. The lower is the index, the lower is the EVI and the better is the country's development stage.

Figure 14: Indicators of Economic Vulnerability Index (EVI)



2.3. a. Historical Trend of Economic Vulnerability Index (EVI) for Bangladesh

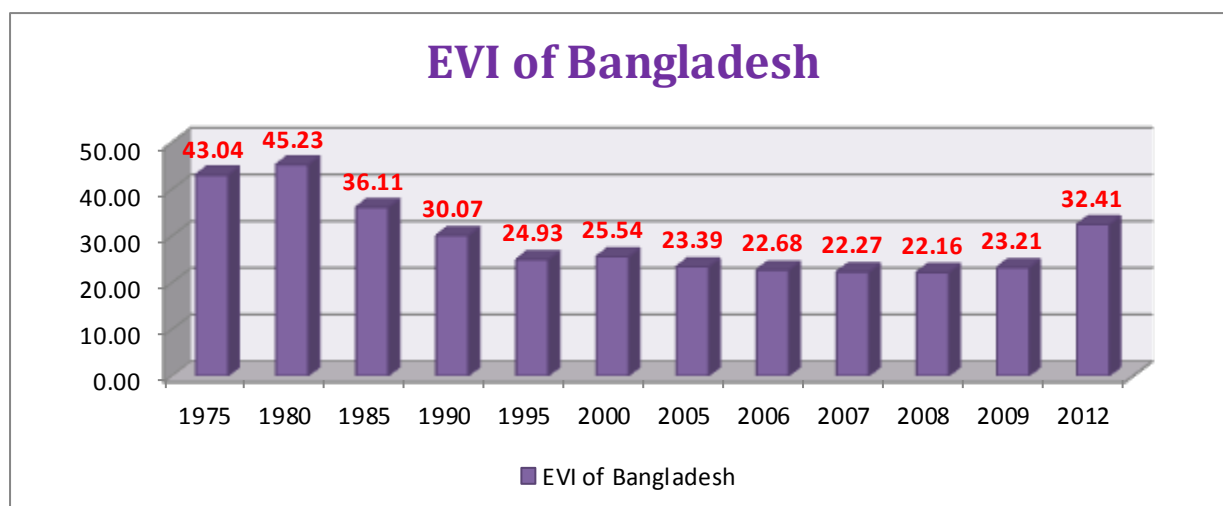
Bangladesh has performed well in terms of reaching the threshold level for graduation of EVI in three different reviews (table10).

Table 10: Threshold level of EVI over time

	Inclusion Threshold	Graduation Threshold
2006 Review	42	38
2009 Review	42	38
2012 Review	36	32

Bangladesh managed to reach threshold level for graduation both in 2006 and 2009 reviews when EVI of Bangladesh were 22.68 and 23.21 respectively (figure 15). However, Bangladesh stands at marginal border (32.41) of the threshold level (32 or less) considering 2012 review.

Figure 15: Economic Vulnerability Index (EVI) of Bangladesh over time

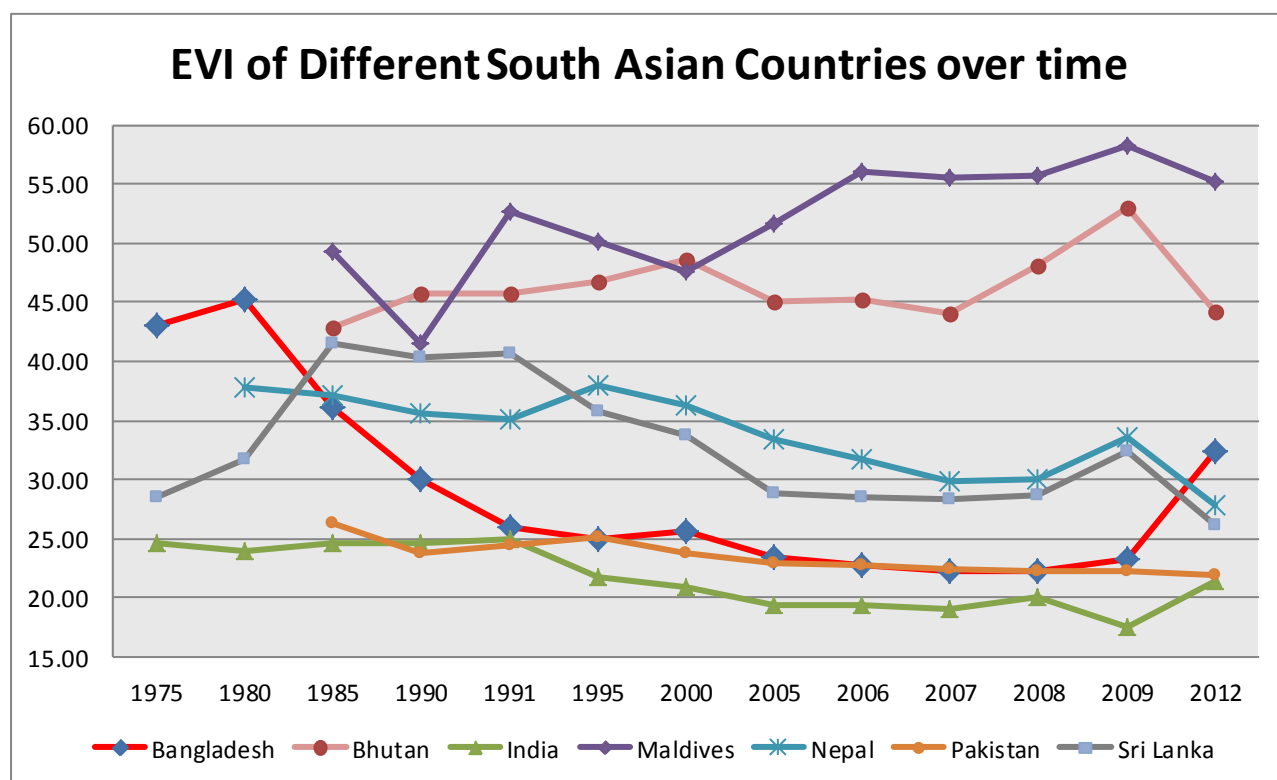


Source: UN-DESA

It is obvious to note that there has been a sharp increase in EVI of Bangladesh in 2012. The increase had been by 9 percentage points from 23.21 in 2009 to 32.41 in 2012 even though Bangladesh stands at the marginal border of the graduation threshold level. All the indicators except remoteness index and natural shock index have rather contributed toward the improvement of EVI in 2012. The increase in remoteness index can be explained as one of the main reasons for the increased EVI in 2012. However, there are two other variables that have been newly introduced in EVI calculation: Share of Low elevated Coastal zone (LECZ) population and victims to natural disasters. Before 2012 review, the index of victims to natural disasters had been counted as homelessness due to natural disasters. The newly introduced definition might be the reason of increase in the value of EVI.

The performance of Bangladesh as measured by the EVI is remarkable comparing to other SAARC countries. Bangladesh's EVI has always been lower than other SAARC countries since 1985 except Pakistan and India (Figure 16). However, the declining trend of Bangladesh seems to have a faster rate compared to India and Pakistan.

Figure 16: EVI of Different South Asian Countries over time



Source: UN-DESA

2.3. b. Exposure Index:

i. Population (sub-Index for size):

The rationale is based on the ability of larger countries with lower exposure to shocks. They often have a more diversified economy owing the presence of economies of scale supported by a relatively large domestic market, and hence, more resilient towards economic shocks. Additionally, they are also less exposed to natural shocks as small countries are often affected by natural shock. (The larger is the population, the less is the exposure)

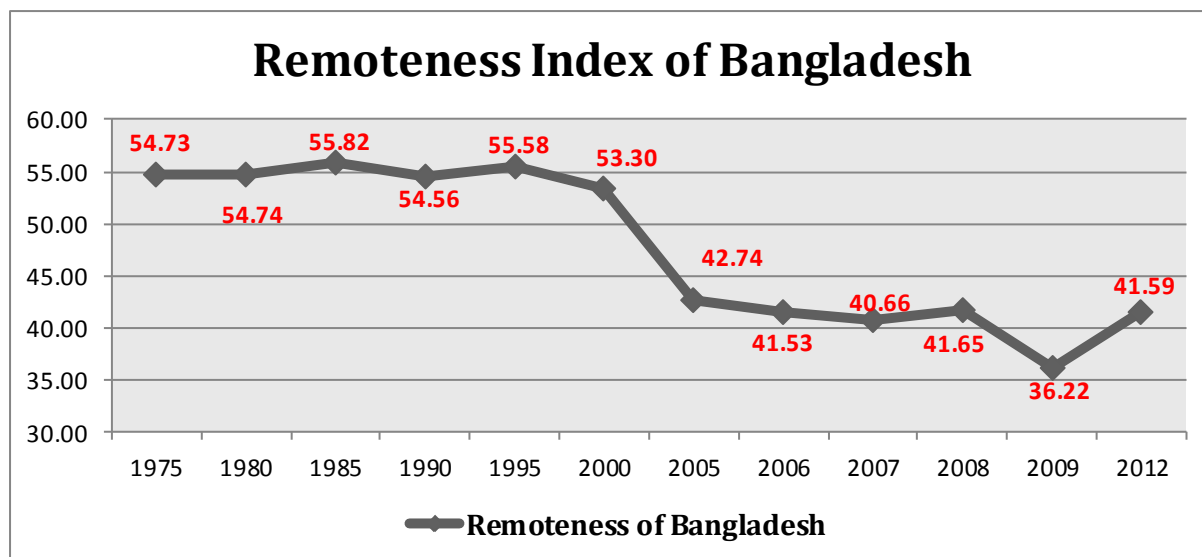
Table 11: Population Index of Bangladesh over time

	1975	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2012
Population Index of Bangladesh	3.62	1.55	0	0	0	0	0	0	0	0	0	0

Bangladesh has a comparative advantage in case of population which determines the sub-index for size. Bangladesh has the population large enough to exhibit more resilience against economic shock supported by its large population. Although the large population is regarded as the major impediment in socio-economic development of Bangladesh, it results in sub-index for size as zero from the year 1985 to present period depicting the stronger resilience.

ii. Remoteness (sub-index for Location):

Figure 17: Remoteness Index of Bangladesh



Source: UN-DESA

Bangladesh does not reveal any satisfactory improvement considering remoteness index over time. Remoteness index is calculated by trade-weighted minimum average distance for a country to reach 50% share of the world markets. Two different components: market share of Bangladesh and its trading partners in world market and Bilateral Physical Distance between Bangladesh and its trading partners are used to calculate trade-weighted minimum average distance.

Figure 17 is the historical illustration of remoteness index of Bangladesh. The figure reveals that Bangladesh could not perform remarkably to improve the remoteness index over time, only 1.5 % decline in this index has been observed for twenty-five years (from 54.73% in 1975 to 53.30 in 2000). The situation seemed to be better in post 2000 phase; the remoteness index was around 41% on average in this decade. The performance was even better in 2009 when the index went down to 36%. However, this trend was not sustained in the following periods; the index again surged up to 41.6% in 2012.

The most significant fact is that the remoteness index increased around 14.7 percentage points from 36.2% in 2009 to 41.6% in 2012. The index for 2009 has been calculated from the average trading volume (sum of export and import) for the three years of 2006, 2009 and 2010 and index for 2012 has been calculated similarly from the average trading volume of the three years of 2009, 2010 and 2011. Two major components determine the value of remoteness. First, share of trading volume of Bangladesh in world market and the second one is the market share of trading volume of the major trading partners of Bangladesh. There has been an increase in the market share of trading volume of Bangladesh from .02% in the period 2006-08 to .03% in the period 2009-11 (Table 12). The increased remoteness at the presence of increased market share of Bangladesh can only be explained by the share of its trading partner in world market. As Bangladesh has not experienced any major change regarding the composition of the importing and exporting trading partners, the bilateral physical

distance in calculation of remoteness has been remained almost same for that respective period. Thus, it is plausible to state that the market share of trading partners compared to the market share of Bangladesh in world market have led the remoteness index for Bangladesh to deteriorate in 2012.

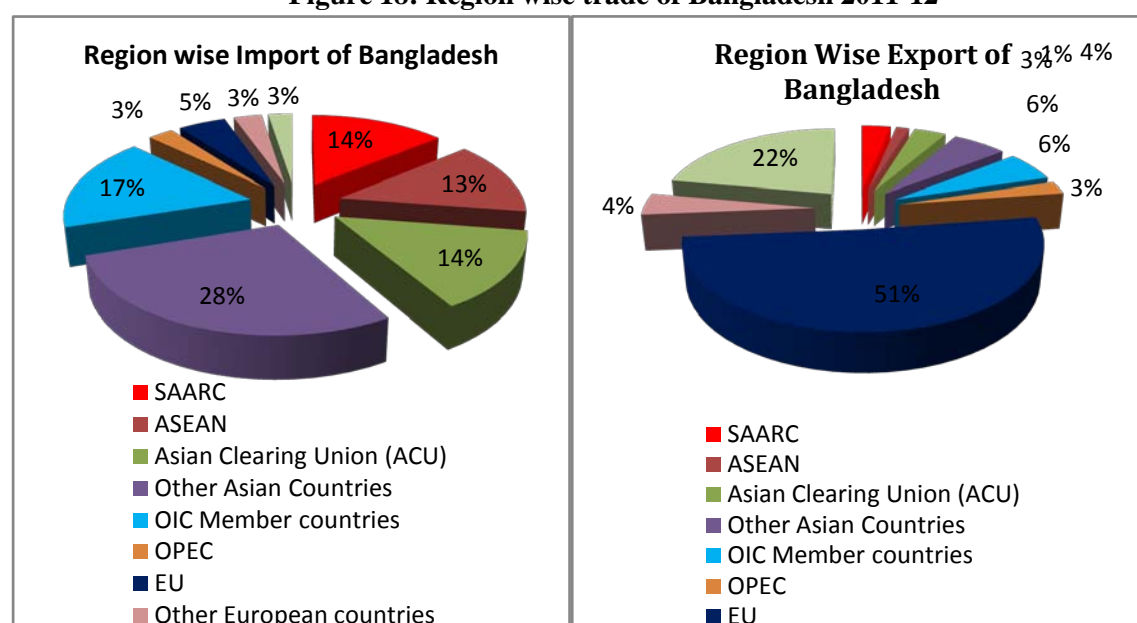
Table12: Trading Volume of Bangladesh in World Market (2006-2011)

	Average trading Volume of Bangladesh (Million USD)	Average trading Volume World (Million USD)	Market share of Bangladesh (%)
2009-2011	47439.20754	152903836	0.031025518
2006-2008	97612.64808	418013159.9	0.023351573

Source: United Nations (<http://unstats.un.org/unsd/snaama/>)

Bilateral Physical distance is one of the determinants of remoteness index. The higher the distance with the trading partners, the greater the vulnerability to trade shocks. In case of imports, Bangladesh is mostly oriented within Asia; more than 60% of imports are from Asia comprising 14% from SAARC, 13% from ASEAN, 14% from ACU and 28% from other Asian countries (figure18). Bilateral physical distance seems to be minimum considering the import partners of Bangladesh. The higher remoteness index for Bangladesh can mostly be explained by regional export composition. More than 50% of exports are injected to European Union whereas only 14% of exports go to Asian Countries stating the fact that Bangladesh's export is highly vulnerable to trade shock due to greater remoteness of major exporting partners.

Figure 18: Region wise trade of Bangladesh 2011-12



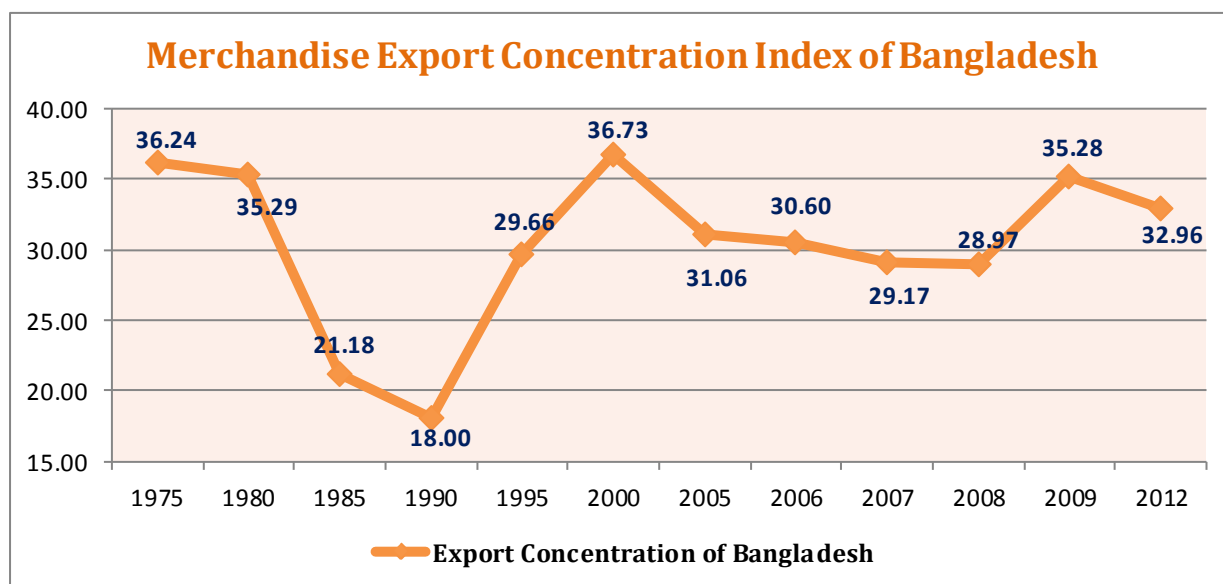
Source: Bangladesh Bank

iii. Economic Structure:

iii.a. Merchandise Export Concentration:

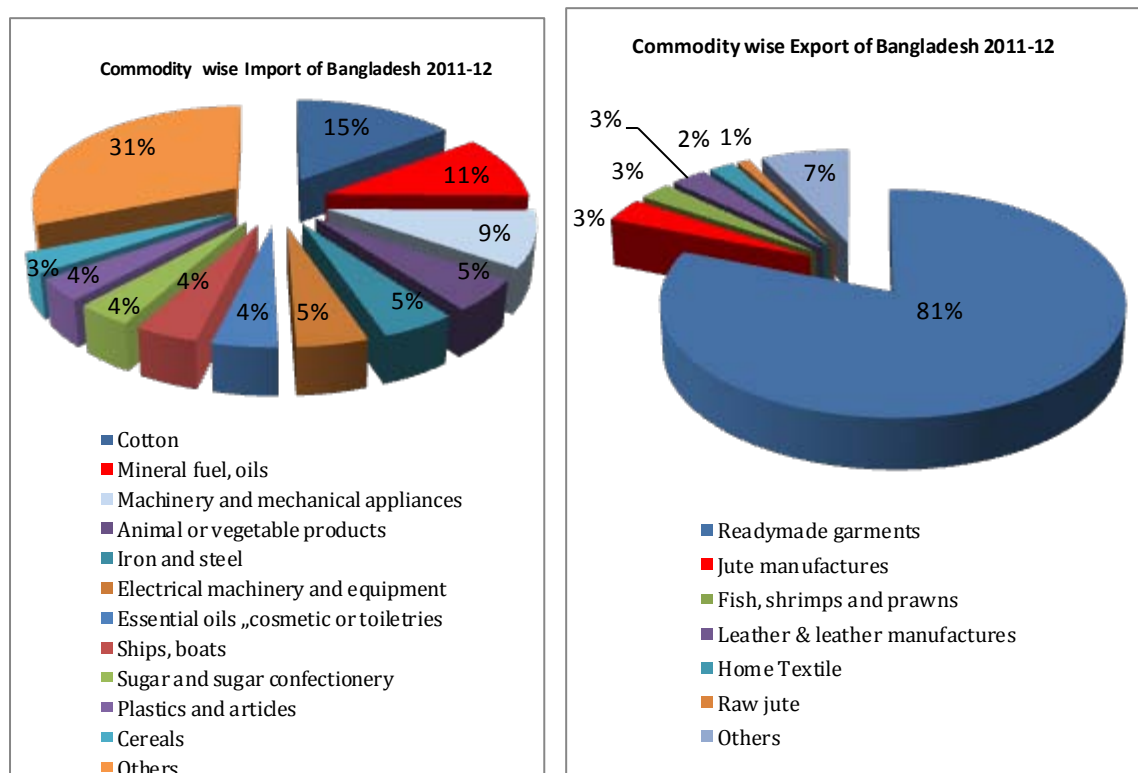
This index reflects the exposure to trade shocks resulting from a concentrated export structure. The higher is the concentration, the lower is the resilience, and the higher is the exposure to shocks.

Figure 19: Merchandise Export Concentration Index of Bangladesh over time



Source: UN-DESA

Figure 20: Commodity wise Trade of Bangladesh 2011-12



Source: Bangladesh Bank

The export of Bangladesh has always been depicted with high concentration of some specific commodities in the export basket. The merchandise export concentration ratio has not undergone with any radical shift rather it has remained in the same range of 30% to 35% since 1975 (figure 19). The drastic fall in the index in mid-80 has again been accelerated up to 33% in 2012. There has been a steady movement of the concentration index around 30% from 2005 to 2008 which again drastically surged up to 35% in 2009. However, the situation has been improved in 2012 when the concentration came down to 33%.

Import basket of Bangladesh has a quite balanced composition whereas export is highly concentrated with only one specific commodity (figure 20). More than 80% of export earnings come from readymade garments.

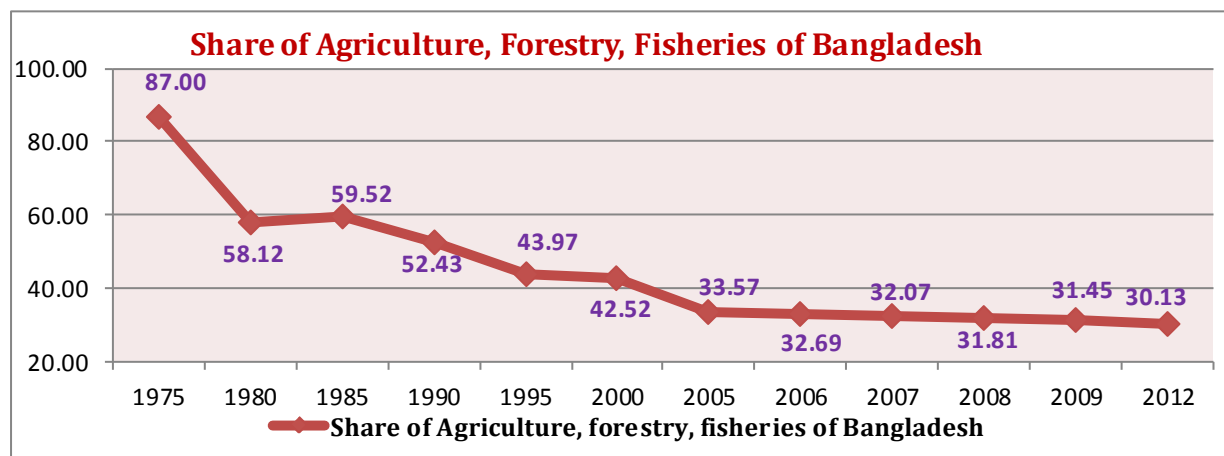
Bangladesh has ample scopes to improve over the concentration index which can have a major contribution in minimizing the gap toward threshold level for graduation of EVI for Bangladesh. The relevant areas of these probable scopes are discussed in the following chapter.

iii. b. Share of Agriculture, Forestry & Fisheries (AFF) on GDP:

It reflects the exposure of countries caused by their economic structure because AFF are particularly subject to natural and economic shocks. The higher is share, the less is the resilience, and the more is the exposure to shocks.

Bangladesh has come up with satisfactory result considering the contribution of Agriculture, Forestry and Fisheries in GDP. AFF (Agriculture, Forestry and Fisheries) are the three most vulnerable sectors subject to natural and economic shocks. The higher share of AFF in GDP reflects comparatively lower resilience of the economy to natural and economic shocks.

Figure 21: Share of Agriculture, Forestry & Fisheries of Bangladesh



Source: UN-DESA

Bangladesh has managed to reduce the dependence on agriculture over time. The contribution of AFF in GDP has been decreased by 57 percentage points from 87% in 1975 to 30% in 2012 (figure 20). This drastic fall has been accompanied by increased contribution of industry sector and gradual growth of service sector (figure 1). Bangladesh still has scope to improve the situation further as the service sector has experienced sustained growth in recent times. This can facilitate to improve the EVI index for Bangladesh by reducing the gap toward the threshold value.

iv. Share of Population in Low Elevated Coastal Zone (LECZ):

This is a newly introduced index from 2012 onwards which reflects vulnerability to natural hazards such as sea level rise and storm surges associated with climate change. The higher the share of population, the lower is the resilience and the higher is the exposure to shocks. Low elevated coastal zone (LECZ) is defined as an area contiguous to the coast below 10 meters of elevation.

Bangladesh has the second largest share of LECZ population when the comparison is undertaken among the nearest coastal areas of five of the highly exposed Asian countries: Sri Lanka, Maldives, India, Indonesia and Philippines (table 13).

The calculation of the population in LECZ for EVI came up with the index as 65.09 in 2012 review reflecting the fact that Bangladesh is under the threat with lower resilience against sea level rise and storm surges associated with climate change.

Table 13: Population in Low Elevated Coastal Zone in Different Countries

	Population in LECZ	Total Population	Share of LECZ Population (%)
Bangladesh	137,232,248	62,524,048	45.56075
Sri Lanka	18,922,088	2231097	11.79097
Maldives	290,923	290923.1	100
India	1007874208	63188208	6.269454
Indonesia	212,067,840	41,609,754	19.62096
Philippines	75289646	13329191	17.70388

Source: Socioeconomic Data and Applications Center (SEDAC), Columbia University (<http://sedac.ciesin.columbia.edu/gpw/lecز.jsp>)

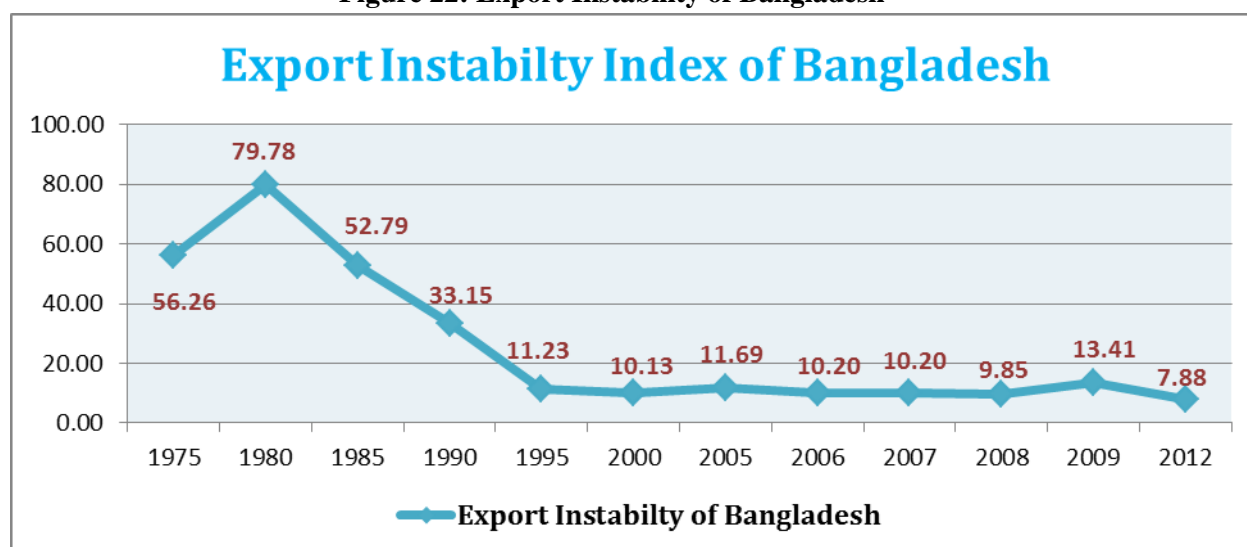
2.2. c. Shock Index:

i. Export Instability of Bangladesh (Trade Shock Index):

This index is used to reflect the instability of export earnings, or the capacity of a country to import goods and services from current export earnings. Bangladesh is a net importer country. It has performed quite well in improving the export earnings over time. Contribution of exports in GDP has increased and export instability has been observed with declining trend

Despite that, no significant change has taken place since 1995. The export instability on average remains at 10% to 11% from 1995 to 2012 whereas there was a drastic decline from 80% in 1980 to 11% in 1995 (Figure 22).

Figure 22: Export Instability of Bangladesh



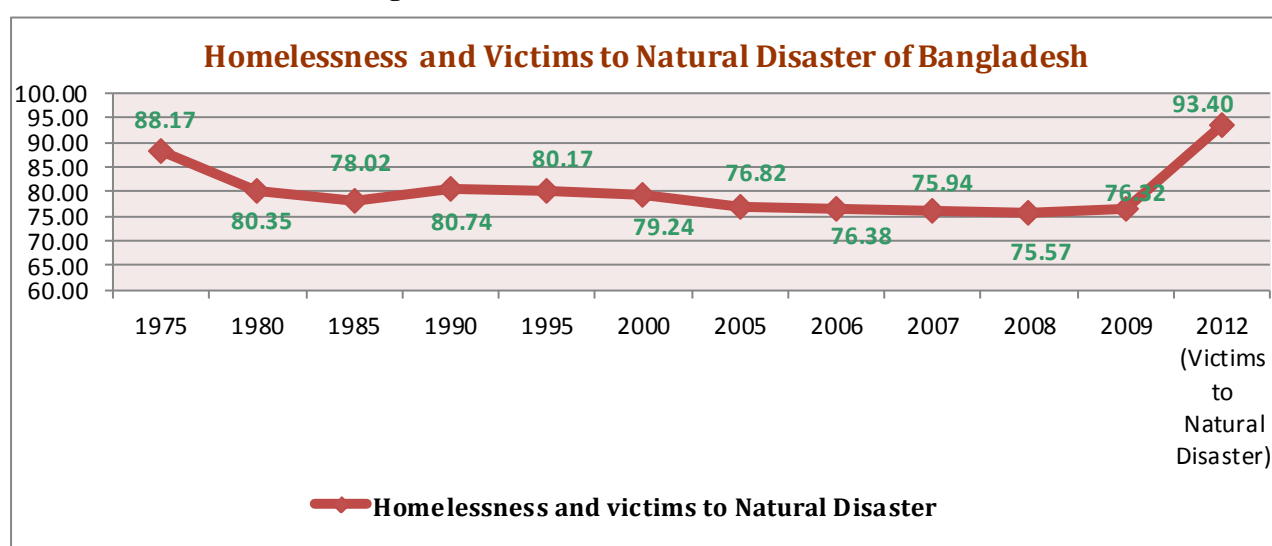
Source: UN-DESA

ii. Natural-Stock Index:

ii.a. Victims to Natural Disaster:

This index reflects the vulnerability to natural shocks, in particular the human impact of natural disasters associated with these shocks. Victims are defined as people killed or affected (i.e., people requiring immediate food, water, shelter, sanitation or medical assistance) by weather and climate-related disasters (such as floods, landslides, storms, droughts and extreme temperatures) as well as geo-physical disasters (such as earthquakes or volcanoes).

Figure 23: Victims to Natural Disaster



Source: UN-DESA

The index is calculated from average of the annual share of population killed or affected by a natural disaster. However, this index has been introduced to 2012 review as “victims to natural disasters”

where the victims are defined by being killed or affected. Prior to 2012 review, this index used to measure the homelessness where the population was defined as people became homeless due to natural disaster. The redesigning of index perhaps is the reason of the increased value of 17 percentage point from 76.32% in 2009 to 93.40 % in 2012 (figure 23).

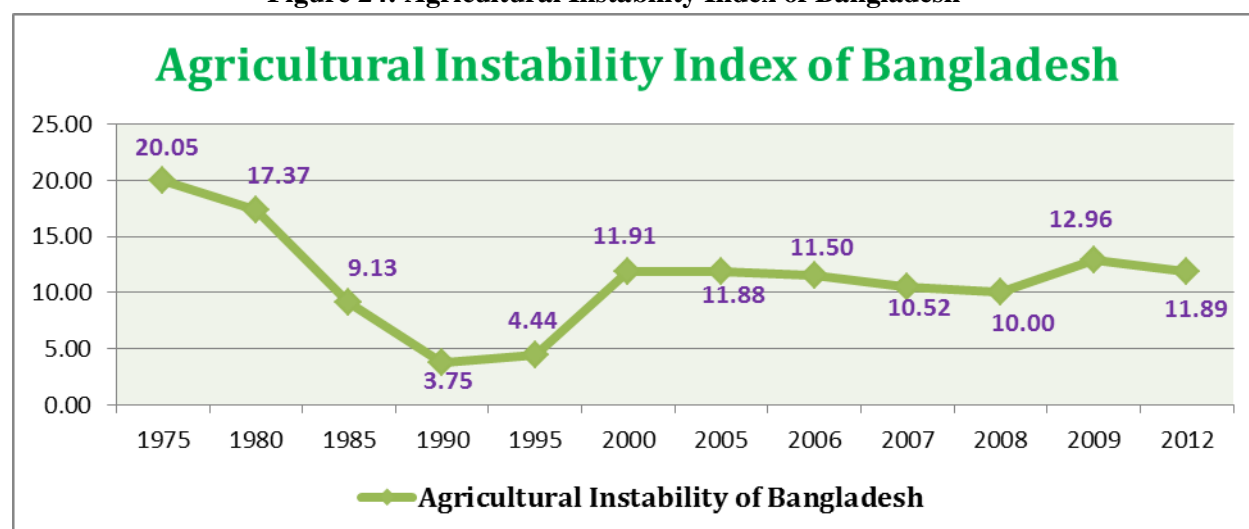
Bangladesh provides a gloomy outcome in the context of homelessness and victims to natural disasters. The index seems to remain at 80% from 1975 to 1995 and remained at 77% on average from 1995 to 2000 without any significant decline.

ii.b. Instability in Agricultural Production:

This index reflects the vulnerability of countries to natural shocks, in particular impacts of droughts and disturbances in rainfall patterns. This is measured from the standard error of the regression of “total agricultural production in real terms” on its past values as well as on a trend variable.

Bangladesh represents a satisfactory history in maintaining the trend of stability over time. Beginning with 20% in 1975, the index came up to 4.44% in 1995 depicting a drastic improvement against the instability (figure 24). However, this trend was not maintained in following years; agricultural instability was around 11% on average from 2000 to 2012. Bangladesh has immense scope to improve the stability in agricultural production that may lead to lower values of EVI resulted from increased resilience against natural shock.

Figure 24: Agricultural Instability Index of Bangladesh



Source: UN-DESA

The sudden upsurge of EVI up to 32.41 in 2012 from its previous trend value of around 22 since 1995 may raise the argument that Bangladesh has deteriorated in performing over EVI. It is obvious to state that the increased value of remoteness index and natural shock index have contributed to this increased value of EVI. This argument might be replaced with different statement explaining the fact that two indicators have been newly introduced in the calculation method of EVI in 2012 review. The first indicator; share of population in Low Elevated Coastal Zone has contributed in higher value of EVI as Bangladesh is one of the countries having the largest share of population located in coastal area. As mentioned earlier in 2.2.c.ii, the redesigning of natural shock index with newly introduced indicator “victims to natural disaster” has increased the value of index in 2012. In addition, in other

areas, such as population index, economic structure and natural shock index has been observed with very little progress.

Chapter 3

Closing the Gaps: Policy Instruments and Government Interventions

Bangladesh needs to intervene across the indicators of three different criteria with a view to minimizing the gaps toward threshold level of graduation. Bangladesh lags far behind from the threshold value of HAI depicting the fact that a number of policy interventions need to be added in human capital development. The development toward increase of per capita GNI is quite satisfactory and this trend has to be boosted up by faster growth. Development of EVI can also induce the other two factors through multiplier effect in the economy.

3.1. Development of Human Asset Index (HAI)

HAI can be developed through interventions in two specific sectors: Health and Education

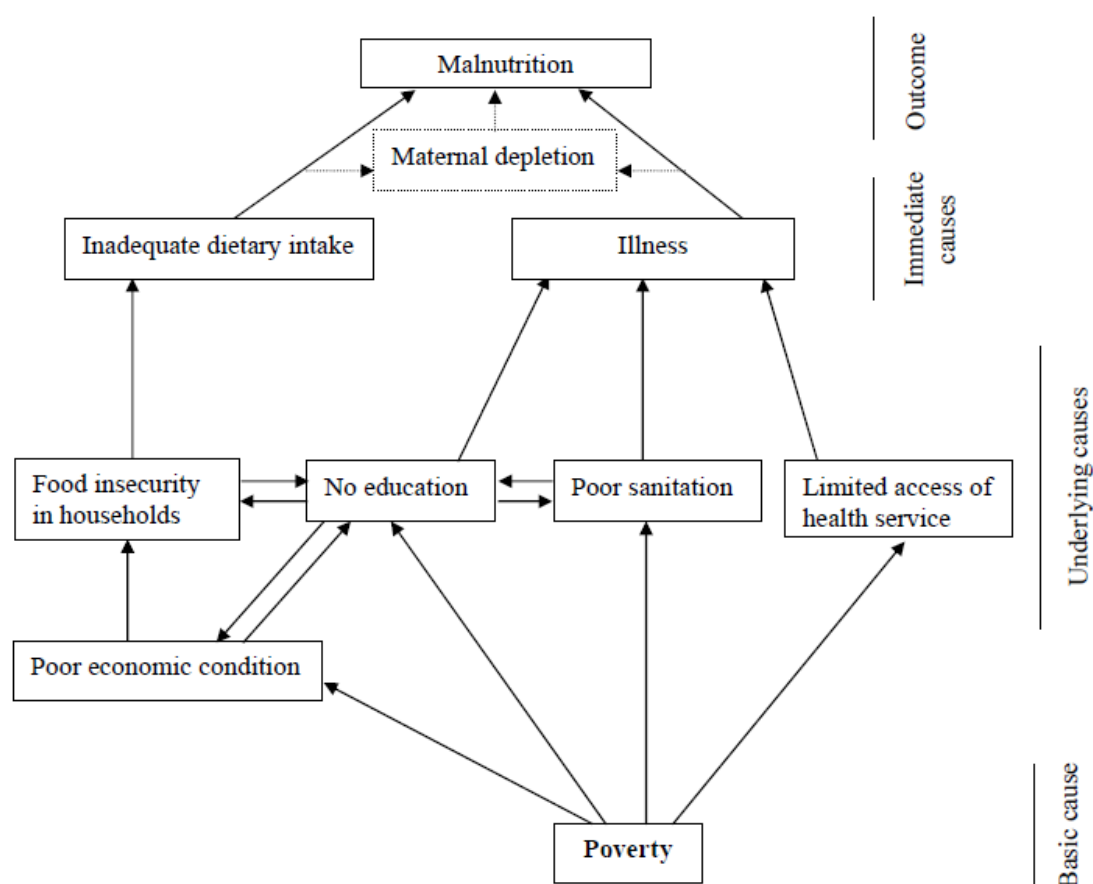
Policy Intervention in Health Sector

Bangladesh needs to undertake certain policy measures to combat against malnutrition, undernourishment and mortality rate with a view to improving the undernourishment and mortality index.

The prevalence of undernourishment and malnutrition seems to be as acute as to be considered as “silent emergency”. Despite significant increases in average food intake resulting from increased domestic production of cereal and non-cereal food items, there are still about 27 million hardcore poor in Bangladesh. These 27 million people cannot afford the minimum intake of 1,805 kcal of energy per person per day according to a Household Income Expenditure Survey HIES (2005). According to a recent study by Murshed et al. (2008), average calorie intake was as low as 1,894 kcal from 684 grams of food per person per day. Bangladeshis are generally energy deficient. Especially children below 10 years of age consume far less energy than required. Generally, cereals are the main part of the diet, accounting for roughly 75 percent of caloric intake. Average meals in poor households are seriously nutrient deficient in fat and protein, impairing healthy body development and protection against disease. Despite higher food production, efficient dietary guidelines and national nutrition plan, some 26% of more than 166 million people of Bangladesh were undernourished in 2012, according to a new Global Food Security Index (GFSI) launched by the Economist Intelligence Unit. Bangladesh has been placed at 81 in GFSI, with an aggregate score of 34.6 with moderate performance availing points 33, 37.6 and 30.4 respectively in the three categories of affordability, availability, quality and safety of food. Bangladesh has been ranked 78th in terms of food availability with a score of 33.

A number of factors contribute to the chronic prevalence of undernourishment leading toward severe malnutrition in Bangladesh. (figure25)

Figure 25: Causes of Malnutrition in Bangladesh



Source: Haseen, F., "Malnutrition among Bangladeshi women in ultra-poor households :prevalence and determinants"

Poverty is defined as the root of all evil causes of undernourishments through different channels including food insecurity in households, lack of education and sanitation, limited access to health service. Inadequate dietary intake is solely driven by food insecurity in households. Food security of the country has been significantly and adversely affected by recent rising of food prices, and the size of food insecure population increased. The country's food insecure population is now estimated to be 65.3 million people; nearly half (45 percent) of the country's 145 million population is now food insecure (< 2,122 kcals/person/day), and nearly one-quarter (23.9 percent) of the population is understood as severely food insecure (consuming less than 1,805 kcals/person/day). Due to the rise in food prices and other basic essentials, the GoB has announced a significant expansion of food security oriented safety net programmes for 2008/09.

Food security is determined by; (i) access to food (ii) availability of food and (iii) proper utilization of food. Food availability of the country has been significantly and adversely affected by recent rising of food prices. Food utilization is determined by food safety and quality, how much a person eats and how well a person converts food to energy, all of which affect health, nutritional status and growth. Adequate food utilization requires a diet with sufficient energy and essential nutrients, potable water, adequate sanitation, access to health services, proper feeding practices and illness management. Constraints to food utilization include nutrient losses associated with food preparation, inadequate

knowledge and practice of health techniques, and cultural practices that limit consumption of a nutritionally adequate diet by certain groups or families.

Using the WHO 2005 GRS, 40 percent of children below 5 years of age were underweight, 46 percent were stunted, 15 percent were wasted and 1.4 percent overweight/obese. According to criteria of the World Health Organization, the prevalence of underweight and stunting was 'very high' and the prevalence of wasting indicated a 'critical problem'. Severe underweight, severe stunting, severe wasting and obesity were found in 11, 19, 3 and 0.3 percent of the population, respectively. Perhaps the single most important basic factor that determines malnutrition in Bangladesh is the inability of women to claim their rights. Data from Helen Keller International suggests that when women are in control of household resources they spend more on food and medical care and provide a more diverse diet, despite their lower income status. As a consequence, they and their children have a better nutritional status. The converse is also true – when women in the HH are incapable of making key decisions regarding food, expenditures and health, their children suffer from lowered nutritional status.

Education is another important factor in determining the nutritional status (World Food Program, 2004). Children of mothers with no schooling are two to three times more likely to experience severe malnutrition. Education improves nutrition through a number of ways: it teaches parents, boys and girls about the importance of a nutritious diet, it develops skills necessary for undertaking income generating activities and in this way increases the household's income potential, it delays age at first marriage for girls and hence age at first birth.

Natural disasters compound malnutrition, which is often considered a "silent emergency", even in normal times. Every five to 10 years there is a major disaster that causes widespread damage, wiping out crops, houses, safe water sources, livelihoods and wreaking havoc on nutrition. Although the situation is improving in some sectors, the overall situation is quite serious.

Higher food price is one of the major catalysts to the increased undernourishment. Higher food inflation in recent times has affected the food security with uncertainty leading to the greater number of people keeping undernourished.

Government should intervene in ensuring food security through implementation of public food distribution system. Moreover, the ecologically vulnerable areas such as urban slum, Chittagong Hill Tracts, coastal regions need to be addressed with proper attention to be provided with the access to the safety-net programs of the government.

Government can intervene into two different steps considering the high rate of undernourishment and mortality. First, intervention in national-level management system and secondly, intervention in community-based management mechanism.

Intervention in national level involves certain initiatives of government to ensure food-security which indirectly affects the reduction procedure of undernourishment and mortality rate such as by ensuring food security, proper sanitation, enhancement of female education mainly in rural areas, increased per capita income of hardcore and absolute poor. Community based intervention is somewhat explicit in the sense that its mechanisms are designed specifically targeting the reduced rate of undernourishment and mortality in community.

(i) *Intervention in national-level management system*

Availability of Food

The persistent supply-demand gap of food can be minimized by ensuring the appropriate availability of food by reducing the cost of production, promoting crop diversification and increased crop productivity.

Cost of production can be reduced by sufficient supplies of major fertilizers, increased usage of higher yielding rice varieties, participation of private entrepreneurs for adequate stock of fertilizers.

Poor farmers grow crops throughout the year, but don't get reasonable prices all year. Government and private companies usually buy crops at a fixed price, without consulting farmers on what a fair cost is. Through a cooperative, farmers could enhance their crop output per distributor and empower themselves with more leverage in bargaining for fair prices.

Access to Food

The substantial gap in the standard of living between urban and rural areas needs to be addressed to ensure the uniform access of rural-urban population to food. The areas of concern are irrigation facilities, access to water, access to fertilizers, access to land, access to credit and low interest loans, proper education, health facilities, glass root cooperatives, improved access to rural market, improvement of transport facilities along with decreased transportation cost.

(ii) *Community-based intervention*

The exiting health policy of Bangladesh government has some limitations which may impede the development of health sector. Most of the policy mechanisms of the government are designed with setting up specific targets and achieving those targets mostly in short-term period. There are no specific mechanisms to monitor if those achieved targets are going to be sustained in long-run or not.

For instance, the major national guideline of Bangladesh government regarding malnutrition; namely, **“National Guidelines for Community Based Management of Acute Malnutrition in Bangladesh”** and **“National guidelines for the management of severely malnourished children in Bangladesh”** have national guidelines to check the prevalence of malnutrition of Bangladesh. These guidelines suggest the required mechanism to handle and manage the children already detected as victims of malnutrition ignoring the prevention mechanisms.

Government should undertake community-based interventions to decrease the probability of malnutrition in future. Interventions in community level will be most effective in this regard.

Compulsory birth registration

Birth registration seems to be luxury practice in Bangladesh; rural poor or even urban literates do not feel the urge of birth registration of infant. Compulsory birth registration can be one of the process by which government can keep the records of health, education and other indicators over time. Under community based management system the government can introduce certain mechanism: The government can initiate new dynamics in birth registration process where infant can be checked up with health and nutrition status. This process can provide the overall scenario of health and nutrition status of newly born infants in each particular year.

These infants can be monitored under certain time interval by provision of routine check-up in nearest health centers. The community based health centers can organize this check-up program quarterly where parents will have the update of the health status of their children in regular basis.

Based on the health status of each child, the health centers should suggest the required treatment procedures for the malnourished children based on the intensity of the malnutrition.

Awareness building mechanisms

- Ensure adequate food utilization at the community level through dietary education campaigns
- Community based health programmers like food for training for nutrition, health and hygiene can be introduced
- More health and nutrition assessments and monitoring need to be conducted.
- Advocating programs for diet diversification and fortified foods.
- Promotion programs for greater use of iodized salt, vitamin-A supplementation and iron-based supplements to reduce iron deficiency anemia.

Public-private participation

Different NGOs are working in development of health indicators through community-based management programs. The government may offer these NGOs to work in broad spectrum through public-private partnership program. For instance, the government can provide funds with some legislations and conditions to some selected NGOs which seem to perform efficiently.

Safety net activities can be introduced under public-private participation to take care of maternal and child health and supplementary feeding by ensuring potable water and adequate sanitation and proper vaccination programs for children.

Easy and low cost or free access to public health care facilities should be ensured. Extreme poor and women headed households can be provided with subsidized health care facilities.

Policy Intervention in Education

One of the major impediments in increasing the gross secondary enrollment and adult literacy is higher dropout rates at the two initial stages of education: primary and secondary level. There are number of policy interventions taken up by Bangladesh government to decrease the drop out ratio along with higher enrollment in secondary and higher-secondary education. Besides the support provided by the government of Bangladesh for supplies of textbooks, non-governmental organizations (NGOs) like BRAC and VAB have been working to improve the services for pre-school, elementary and secondary levels of education in rural Bangladesh. They run programs like students' scholarships, school improvement, vocational computer literacy, tutorial facilities from Grade VI up to secondary School Certificate (SSC) and Higher Secondary Certificate (HSC) levels and teachers' training with Head Masters' professional development in various pilot project schools and computer training centers. The focus of NGOs and VAB on rural schools in Bangladesh and the high schools under pilot projects has been supportive of measures to reduce drop-out rates. Such program is aimed at reducing the rate.

In order to increase nationwide rural high school graduates or reduce dropout rates among rural high school students from 65 % to 30 % at SSC and HSC, there is need for public and private partnership between the government and the NGOs, particularly for prevention of crime and corruption in education sector. This is specially so in the cases with the government officials and classroom teachers, for stopping them from not teaching sincerely in classrooms, for after-school tutorial-income confirmation and also for making appropriate change in Bachelor in Education (B. Ed) or other teacher training courses. The latest 21st century psychology, being not teacher-centered but being student focused or having student motivational teaching strategies, should be the prime objective of such changes in order to help to differentiate instructions by a wide variety of students' ability, need and interest as part of teacher training programs for all public and private faculties of education.

There is need for legislation about ensuring that all parents send their children, aged between 5 and 15, to schools. Child marriage should be stopped by increasing marriage age. Educational texts should continue to be provided by the government which is in practice now, with monthly allowance from local educational NGOs like VAB, BRAC, UNICEF or expatriates as private donors.

After-school free and compulsory tutorial programs need to be introduced. At least one meeting on school issues should be conducted every month. Four to five annual school council meetings need to be held with influential parents, leading students and school administrators plus trustees to plan and work out the on-going programs for improvement of facilities and educational environment at schools.

A minimum of four professional development days with workshops for teachers' curriculum planning, lesson planning for proper instructional delivery, assessment, evaluation and reporting also need to be organized, along with conducting annual teacher training seminar or conference to train teachers on how to motivate students and not to threaten or abuse them physically, emotionally or sexually.

At least, one trained guidance teacher for students' annual learning guidance counseling, based on an individual student's ability, need and interest, should be hired for every high school. Besides, the services of a special education-trained teacher to collaborate with classroom teachers should be ensured for every high school. This will help to accommodate lessons, assessment and evaluation of special needs of children (slow learners and those with autism, ADD, ADHD etc.). A vocational or cooperation department or teacher should be set up or hired in every high school to prepare and guide students for current and future post-secondary vocational education with the demand and available trades for local jurisdiction. Enough learning materials of printed-, audio-video- and computer-generated types, along with science laboratory facilities, need to be provided. A piece of legislation should also be enacted for post-secondary teachers that they can only go outside the campus for higher education but not for private practice or consultation and for doing second and third jobs which make their students suffer while the authorities concerned give them enough salary, housing accommodation and even facilities for their children's education and healthcare.

3.2. Development of Economic Vulnerability Index (EVI)

Development in export sector with reduced export concentration and export instability, ensuring agricultural stability through increased agricultural production, supporting LECZ people for confronting natural disasters are some of the policy instruments to perform better over the existing score of EVI.

Improvement of export sector

Improvement of export sector of Bangladesh can have immense contribution in minimizing the gaps toward the threshold level of EVI through the development of three distinct indices: remoteness, merchandise export concentration and export instability.

Export of Bangladesh is highly concentrated with one commodity: readymade garments and the market of this commodity is also based on two major regions: EU and USA. Government should intervene in two different mechanisms.

The export policy of Bangladesh need to be examined to detect the underlying shortcomings that impede the process of export diversification. The government of Bangladesh has designed “The Export Policy 2009-12” which has underscored the need for expanding export, increasing the productivity of export-oriented industries and facilitating the overall development of the export sector through capacity building of local export-oriented industries. Export diversification seems to be the uttermost priority issue in this export policy. Export Policy 2009-12 has a separate chapter as “Steps toward export diversification” stating the relevant measures for export diversification segmented in different stages. For instance, (i) **Priority based classification of products and service sectors for export diversification**, (ii) **Inter-Sector Project for Product Diversification** and (iii) **Product-Specific Export Facilities** are the three major features of the new export policy.

Priority based classification of products and service sectors for export diversification

Government has identified products as “highest priority sectors” and “special development sectors”. Highest priority sectors will refer to those product-sectors which have special export potentials, but such potentials could not be utilized properly due to certain constraints, and more success is attainable if adequate support is rendered to them.

These are: 1) Agro-products and agro-processed products; 2) Light engineering products (including auto-parts and bicycles); 3) Footwear and leather products; 4) Pharmaceutical products; 5) Software and ICT products; 6) Home textile; 7) The Sea-bound Ship Building Industries; and 8) Toiletries Products.

Product sectors which have export potentials but whose production, supply and export base are not consolidated will be included in special development sectors to strengthen their export base. The following product sectors will be included in the special development sectors: a. crushed and finished leather production; b. frozen fish production and processing; c. handicrafts; d. electric and electronic products; e. fresh flower and foliage; f. jute and jute products; g. hand-woven textiles from hilly areas; h. uncut diamond; i. producing herbal plants, medicine and medicinal products; j. ceramic products and melamine; k. plastic products; and l. furniture industries.

The major limitation of the export policy is that there is no specification of the benefits and facilities providing to these highest priority and special development sectors. The benefits and the facilities

provided to these two broad sectors seem to be very similar. This may raise the question that how these sectors are different if they are provisioned with similar benefits and facilities.

Another limitation of the export policy is whatever measure is prescribed; they are prescribed in very general terms rather than specifying the exact initiative. For example, in case of jute industry, one of the product-specific export facilities for jute industry is mentioned as “*Obstacles impeding export of jute and jute products to different countries will be identified and necessary remedial measures will be taken to address those*” and for leather industry is “*Initiatives will be taken to increase export through enhancing competitiveness of leather and leather products in the international market by taking measures for improving productivity and development of products.*”(Export Policy,2009-12). This kind of statement provides a vague and regular appearance discussed in different literature instead of resembling any specific agenda of government toward identification, and required remedies and initiatives for the implementation of such policies.

Government needs to undertake some immediate steps for the effective implementation of existing export policy:

- ***Identification of the “Most Priority Products”***

The classification of the export products into highest priority and special development sectors seem to be little generic as the lists contain many commodities. Government still needs to shortlist the “Most priority sectors” depending on the level of production and supply, (i)existing contribution to the export sector, (ii) present demand in the international market (iii) potential to attract new buyers in future (iv) level of supply according to potential demand and above all (v) the capacity to contribute to the socioeconomic development. Jute, leather , fish, prawns and shrimps seem to be the three most promising and effective sectors which can contribute to the process of export diversification (figure 20).Once, raw jute and jute manufactures were the major exporting items of Bangladesh which had been replaced by readymade garments after mid-80. Leather and leather manufactures; another exporting item which also used to have a major share in the export basket had lost its demand in world market over time. Government should promote the domestic entrepreneurs and industrialist of these sectors to acquire the ability to produce quality products in the context of high competition in world market.

- ***Specification of the implementation phase***

The existing export policy has yet to pass a long way for the effective implementation. Most of these policies are still far behind from the implementation stage. As the export policies already designed the framework of the product-specific export facilities, the government needs to focus in implementing those facilities. Formation of different committees for each product can be the immediate step. These committees will formulate the relevant initiatives for each of the policies based on the discussion with entrepreneurs, stakeholders, government officials and fix the exact timeline based on the feasibility study of each policy.

- ***Region-wise diversification of export***

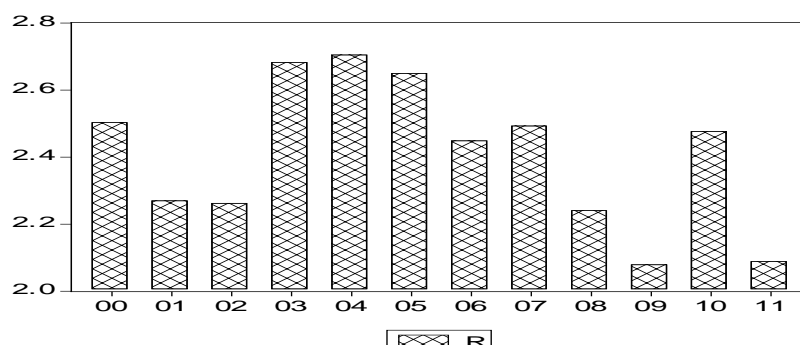
Another major limitation in the export sector of Bangladesh is region-specific concentration along with product-specific concentration. Thus, export sector of Bangladesh is not only concentrated in specific products but also exporting those products to some handful countries. The implications and implementations of the export policies may require a longer time frame. Government should also

consider another mechanism which will create a diversified export market for Bangladesh instead of the higher dependence on EU. Government can undertake different policies to attract the market of other regions in world with the existing export composition.

Encouraging Private Investment

Service sector of Bangladesh has the largest share in GDP at present. This growth has been facilitated by increased contribution of private entrepreneurship in recent times. Private entrepreneurship can be encouraged through enhancement of the scope of increased private investment in economy.

Figure 26: Private Investment- Public Borrowing ratio (R) in Bangladesh during FY01-FY11



Source: Bangladesh Bureau of Statistics

At recent times, Bangladesh is at the controversy of crowding out of private investment due to increased public borrowing needed by the government to stabilize and the economy against higher inflationary pressure. Private Investment- Public Borrowing ratio has significantly declined from 2010-11 to 2011-12 (Figure26) raising the concern of the probability of decline in private entrepreneurship leading to lesser share of service sector in GDP. Government can intervene by undertaking pragmatic measures in enhancing private investment through the control over interest rate at times of higher public borrowing.

Reducing Vulnerability of LECZ population

One of the main reasons of the higher value of this index is the large population living in LECZ as discussed earlier. People living in coastal is vulnerable to natural disasters. Government cannot help much in shifting the population from coastal zones. The knowledge and awareness of these people about the resilience against natural disaster are far from adequate. Government need to initiate policy interventions to improve the level of awareness and knowledge and also provide proper rehabilitation at the state of natural disasters. Moreover, the northern part of Bangladesh which is located at hilly regions is exposed to acute drought every year leading to lower agricultural production and poverty. These areas also need to be addressed through the implementation of modern mechanization of irrigation system throughout the year.

Increased Agricultural Production

The declining share of agriculture and increased share of industry and service sector in GDP may be described as an indication of economic development; however, Bangladesh still depends largely on agriculture for ensuring food security, controlling poverty and inflationary pressure. Agricultural production system of Bangladesh is yet to utilize the benefits from usage of modern technology. Traditional and improvised technology, inadequate supply of quality seeds, fertilizer, and lack of mechanized and modern irrigation technology are the major impediments in agricultural production system. Government needs to intervene to improve the overall agriculture system with a view to implementing the usage of modern agricultural technology through replacement of labor-intensive traditional system.

National Agricultural Policy

The government of Bangladesh has already undertaken several policy instruments in these regards which in principle may seem to be adequate and appropriate enough for the modernization of the existing agricultural system. National Agriculture Policy (NAP), New Agricultural Extension Policy (NAEP), DAE Strategic Plan 1999-2002, DAE Agricultural Extension Manual, National Seed Policy, 1993, and Seed Rules, 1998, Plan of Action on NAP, Actionable Policy Brief and Resource Implication (APB), National Jute Policy, National Livestock Policy, National Fishery Policy, National Forestry Policy, National Land Use Policy, National Water Policy, Environmental Policy, National Food Policy, National Rural Development Policy, PRSP- Agriculture and Rural Development are the major policy manuals of the government in agricultural sector.

Despite the apparent efficacy of these policies, substantial inconsistencies or inadequacies still exist in the level of formulation and implementation of these policies.

The first issue is at the conceptual level of policy formulation. The mind set for policy preparation is generically directed towards agriculture only and not to the rural economy as a whole. This perception misses understanding of farm vis-a-vis non-farm components of the rural economy in a coherent fashion.

Another crucial issue is that the policy documents are generally devoid of any serious policy analyses, notwithstanding lack of reliable data. These are not discussed or debated at any length at the ministerial level nor in public so that feedback from various stakeholders is missed. Often, the objectives and strategies are mixed up and the programmes are not checked against their implementability.

While the policies reviewed in this exercise dwell on numerous issues and concerns, these do treat them either superficially or miss them altogether. Some of the generic areas of concerns are as follows:

Dominance of cereal food production: The NAP, PoA, APB and other major crop sector policy documents mainly focus on food production, especially rice production, giving lesser attention to non-cereal crops i.e. vegetables, fruits and flowers.

Diversification and commercialization: The policy documents mention diversification and commercialization of agriculture as a common objective, but very little understanding is given with

respect to relative profitability of competing crops, physical and location specific conditions for non-crop enterprises, supply chain of high value products and provision for processing, storage and marketing activities.

Crop-fish conflicts: The NAP, PoA, APB and DAE extension policy and strategies push forward increasing crop production, but that this might encourage chemical uses or drying of floodplain water bodies for rice cultivation to the detriment of fish culture is hardly well understood or acted upon as far as the policies are concerned. One glaring example is the advocacy for flood embankment to protect crops from flood damage, but that it adversely affects fish passes and fish breeding grounds is either overlooked or less carefully treated in the documents.

Small indigenous fish ignored: The Fishery Policy and also Vision papers have failed to properly address the issue of small and indigenous fish species, which are gradually disappearing. The policy should have dealt with this aspect more seriously as the growth of small fishes has had very positive implication for supplying fish protein to the poor but also for maintaining bio-diversity in rural aquaculture.

Lack of insights about poultry waste utilization: Bangladesh produces approximately 200 million poultry birds a year, which give by-products equivalent to about 40,000 tons of waste materials such as poultry litter, feather, bones and skins. The poultry policy, in the newly formulated Livestock Policy, does not address how these waste materials can be used productively. According to informed sources, about 20,000 tons of poultry wastes (i.e. 50% of total) can be used as raw materials for industrial production purposes.

Not enough private sector focus: The agriculture and rural development policies that have been reviewed in this work largely demonstrate increased role of public sector. Although the policies broadly mention increased role for the private sector, there are seldom any clear direction as to how and where the growing private sector and NGO have the opportunities and support to play more active role.

Commercialization of soil and water tests: Soil tests for proper fertilizer use and water quality tests for fish culture are crucially important interventions. The concerned policies mention these casually to imply that the government should do these, but there does not seem to be any understanding of the recent trend that the private sector has already taken up soil tests (with *Katalyst* support) and water test by an NGO, Shushilon as business ventures.

Silence on new form of production- contract farming and value chain: The policies being reviewed do conceive agriculture as individualistic production system, although this is becoming economically and technically infeasible for increasingly large number of small and marginal farmers due to rapid decline in average farm size. Increase in number of farms vis-à-vis rapid loss of cultivable land is recognized in the documents, but there are no reflection on or thinking about the emerging new forms of farming e.g. contract farming by the private sector for high value products like poultry, vegetables, aromatic rice, milk and so on.

Farm and non-farm linking absent: The most conspicuous shortcoming of all the policy documents is their silence over the growing non-farm sector development. Even the most recent policy documents, e.g. APB avoids any analysis of linking the growth of farm productivity with development

of non-farm activities. This is bound to limit the value of the APB exercise in that production of crops, especially cereals, cannot be increased unless aggregate demand for rice is increased and the demand for rice will not rise without increase in employment and real wage through acceleration of non-farm sector growth.

Subsidy issue weakly placed: Subsidy on agricultural inputs, i.e. diesel and fertilizers, is put forward as a tool for allowing a 'level playing field' for the Bangladeshi small farmers in the trade liberalized era especially, when Indian farmers are subsidized for irrigation, electricity, etc.). But the case of subsidy is put forward without any rigorous analysis of its possible effects on real rice price, sustaining rice production at profitable level or its implementation. The glaring example is the Agriculture Ministry's attempt to introduce subsidy on diesel for irrigation pumps without understanding the varied pattern of pump ownership and management, modes of payment for water (cash or crop share), dynamics of water market (partnership and social conflict resolution) and so on.

Chapter 4

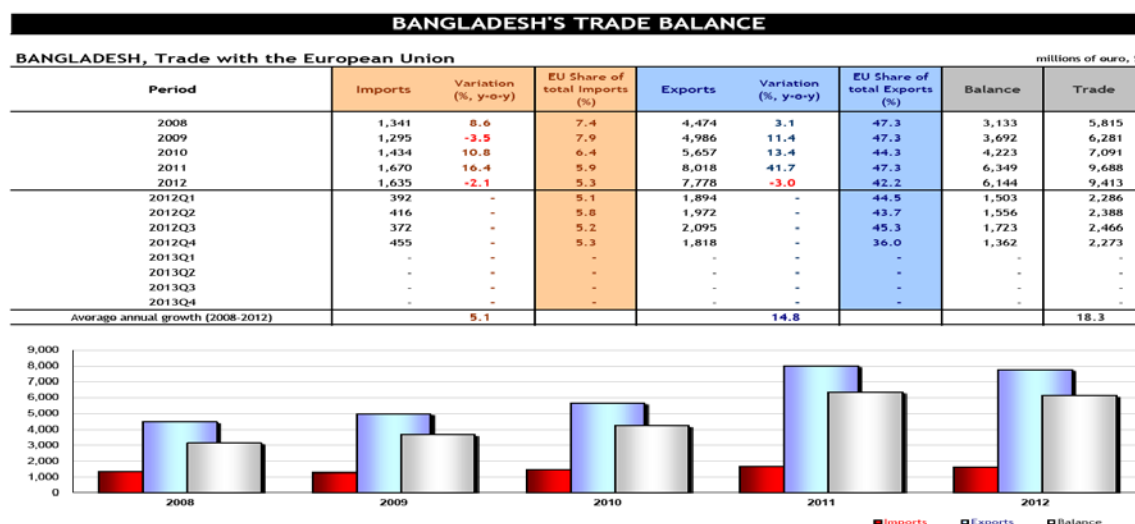
Cost-Benefits of transition strategies of International Support Measures (IMS): Phasing out of concessional ODA and DFQF market access

Bangladesh enjoys certain International Support Measures (IMS) as one of the beneficiaries for being LDC. Duty free-Quota Free (DFQF) and Official Development Assistances (ODA) are the two major support measures contributing significantly in socio-economic progress of the country. Bangladesh will lose the provision of these support measures after its graduation from the current LDC status as per the post-graduation conditions. There is the concern about the consequences of the phasing out of the support measures especially for the DFQF market access and concessional ODA as both of these have crucial contribution considering the impact on the trading pattern of Bangladesh.

Contribution of Duty free-Quota Free (DFQF) market Access in Bangladesh's economy

As discussed in earlier section, Bangladesh has high export concentration both in terms of specific commodity and region. Readymade Garments composites the lion share (around 80%) of export basket (figure 18) and EU extracts more than 50% of total exports of Bangladesh (figure 20). This high export concentration across region and commodity can be explained by the market access through DFQF measure. EU is Bangladesh's main trading partner, accounting for around 12% of Bangladesh's total trade whereas Bangladesh was the EU's 35th largest trading partner in goods in 2012. EU imports from Bangladesh are dominated by clothing, accounting for around 90% of the EU's total imports from Bangladesh. EU exports to Bangladesh are dominated by machinery and transport equipment. From 2008 to 2012 EU's imports from Bangladesh increased from €5,464 million to €9,212 million (69% increase), which is more than half of Bangladesh's total exports.

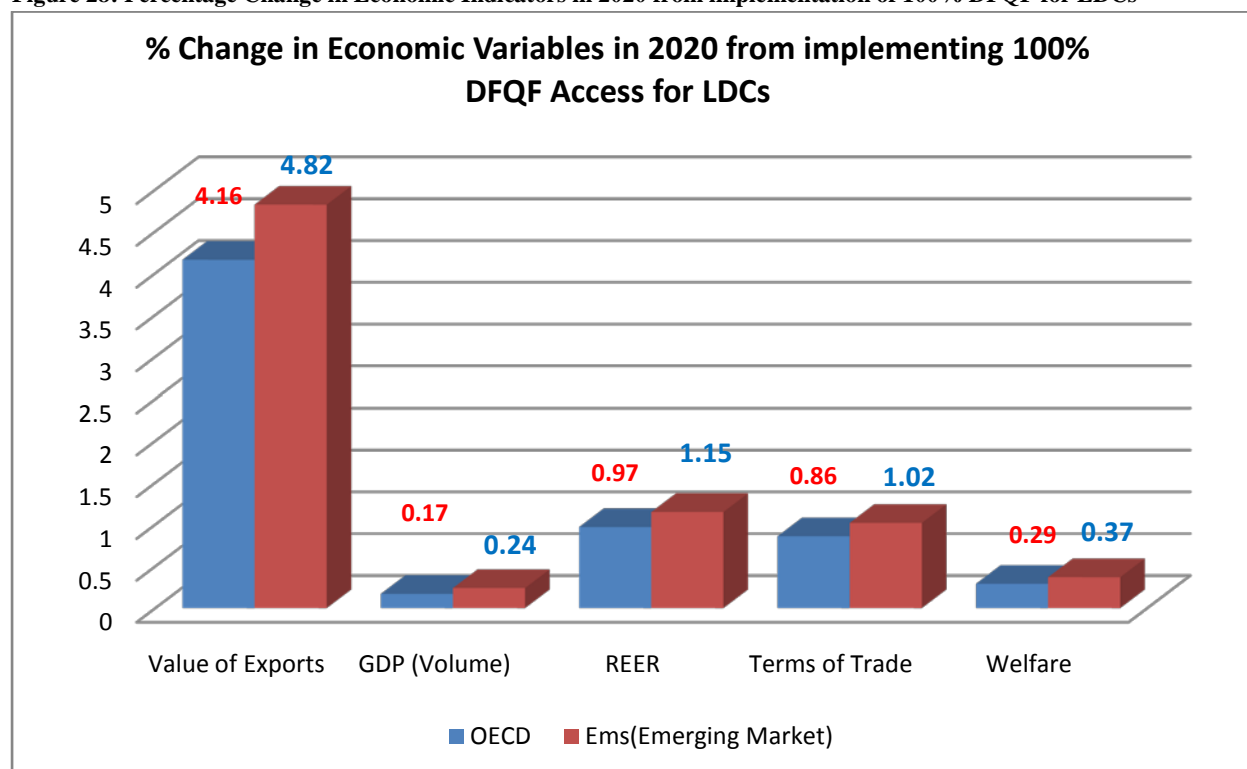
Figure 27: Trade of Bangladesh with European Union



Source : European Commission http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc_113349.pdf

Bangladesh can gain even more if DFQF is provided with 100% implementation for LDCs. The study carried out by IFPRI (Bouet et. el)examining the potential benefits and costs of providing duty-free, quota-free (DFQF) market access to the LDC reveals that export and GDP can increase by 4.16% and 0.17% in case of 100% implementation of DFQF by OECD (Figure 28). It will also have positive welfare effect of 0.29% from OECD and 0.37% from EMs.

Figure 28: Percentage Change in Economic Indicators in 2020 from implementation of 100% DFQF for LDCs



Source: IFPRI Discussion Paper 00990

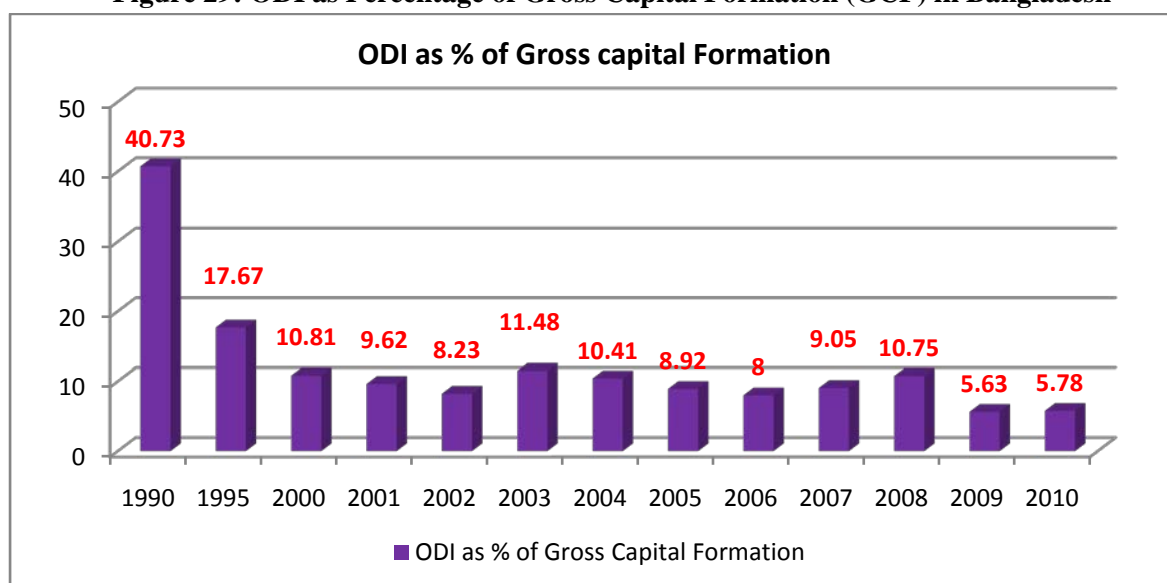
Official Development Assistance (ODA) for Bangladesh

Official Development Assistance is resource flows to developing countries which are: (a) provided by official agencies; (b) administered with the promotion of the economic development and welfare of developing countries as the main objective; and c) concessional in character and conveys a grant element of at least 25 per cent.

Bangladesh enjoys the benefits of ODA as a LDC. Bangladesh is emerging as an LDC which has moved out of “extreme” aid dependency through generation of non-debt creating foreign exchange earnings (e.g. through exports and remittances by temporarily migrant workers).

ODI as percentage of Gross Capital formation of Bangladesh is observed with declining trend where the drastic fall was placed in the period of 1990 to 1995(Figure 29). Another major decline was taken in 2009 when ODI as share in GCF decreased by 48 percentage from 10.75% in 2008.

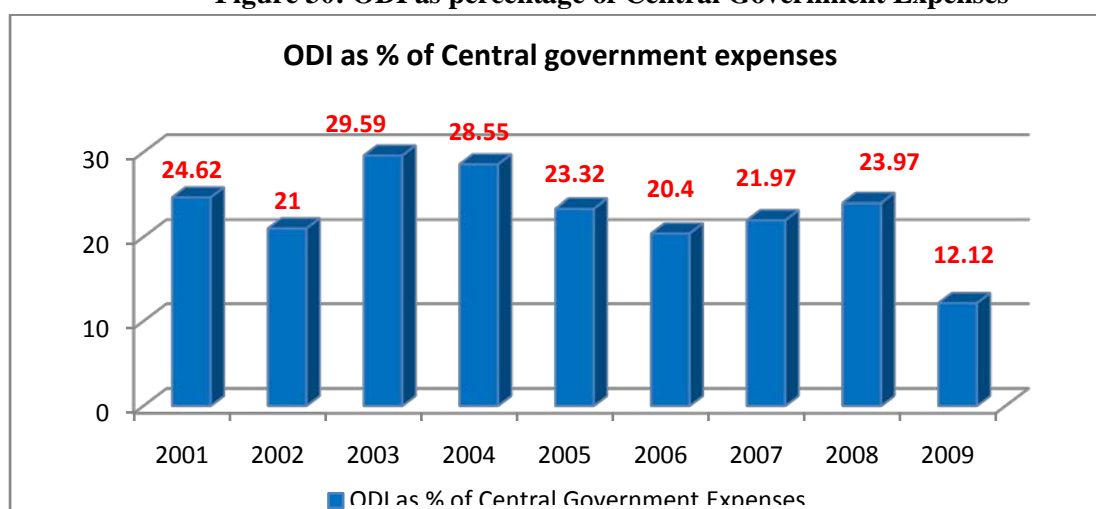
Figure 29: ODI as Percentage of Gross Capital Formation (GCF) in Bangladesh



Source: World Bank Indicators

ODI as percentage of central government expenses seemed to have a significant fall in 2009 to 12.12% from the past trend of over 20% since 2000 (figure 30). This fact suggests that Bangladesh is gradually heading toward progress in context of minimizing aid dependency.

Figure 30: ODI as percentage of Central Government Expenses



Source: World Bank Indicators

Bangladesh seems to undergo with certain difficulties with the phasing out of DFQF and ODA in post-graduation phase of LDC. However, the consequences will be more in case of cease of DFQF rather than ODA as Bangladesh is still highly contingent upon DFQF for maintaining the existing improvement over balance of payments.

The cease to the existing DFQF access will affect the exports adversely leading to overall imbalance in macro-economic performance of the country. Bangladesh is yet to achieve the required level of quality products to compete in the global market without DFQF. The general perception implies that graduation of Bangladesh from LDC status which will be accompanied by cease of the provision of

DFQF and ODA will drastically reduce the export earnings from the ready-made garments. Therefore, graduation of Bangladesh from LDC status is not solely a matter of advancement but also a threatening concern with probable threat of reduced export earnings from the core export sector imposing a macro-economic imbalance in near future. Now, the outcome effect of this phenomenon can raise two major issues:

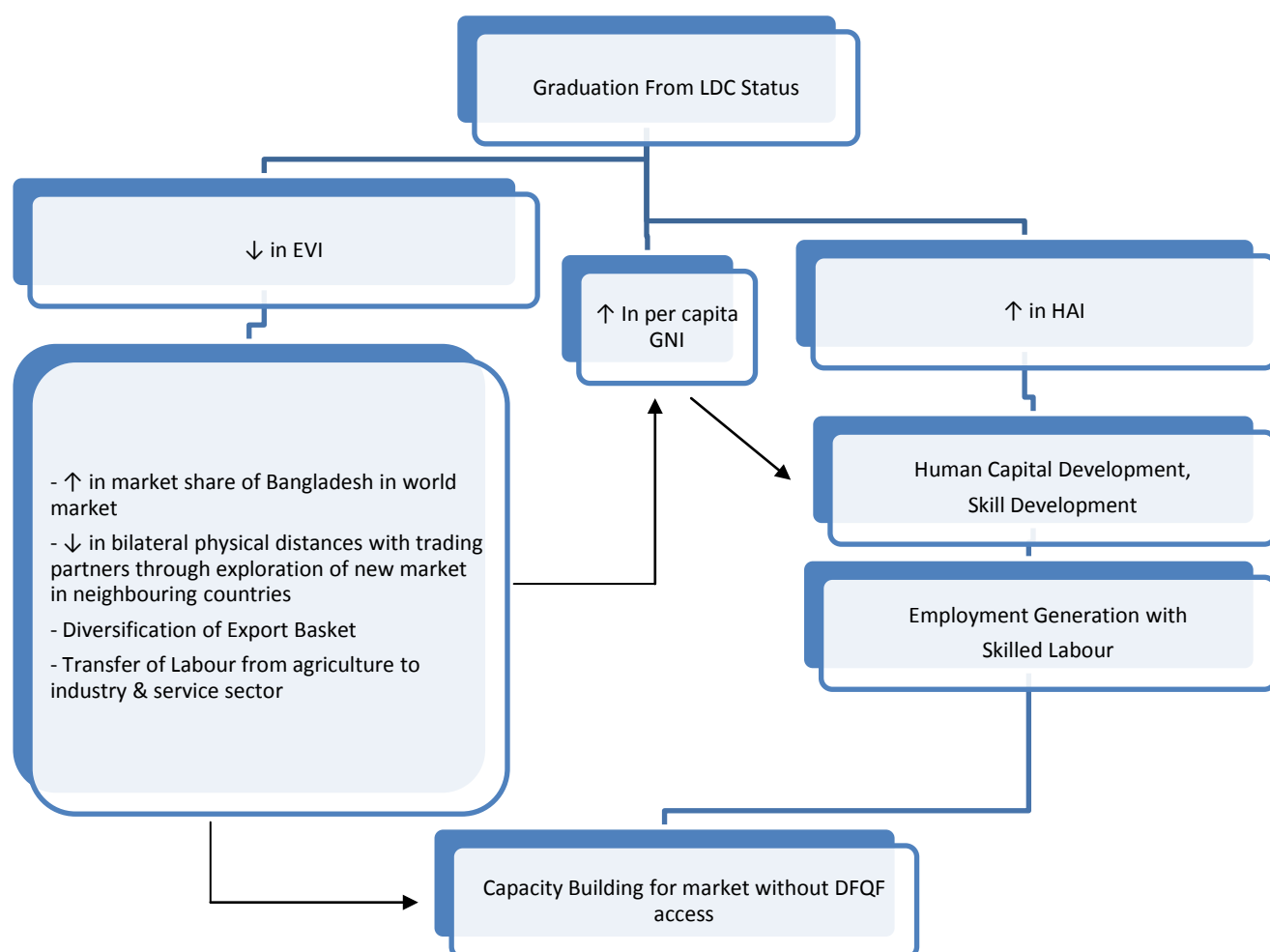
First, will Bangladesh prefer to be LDC for enjoying the DFQF and ODA incentive for some more time considering the export earnings from ready-made garments?

Second, will Bangladesh focus on graduation from LDC with the concern of reduced export earnings from garment sector?

To answer logically with the first issue it must be stated that there is no alternative of graduation of Bangladesh from LDC status as graduation itself facilitates the overall development process while being LDC involves huge developmental cost. Moreover, the process of graduation involves certain level of development over some specific indicators that are prerequisite for socio-economic development of the country. Therefore, the perception of being beneficiary from enjoying DFQF and ODA through LDC status should be ruled out considering the large opportunity cost of holding LDC status. At present, DFQF benefits are enjoyed by ready-made garments which have eventually expedited the process of export concentration of Bangladesh. In other words, DFQF access can be considered as one of the major reasons for which the export basket of Bangladesh had been grasped with over concentration by ready-made garments. Despite its beneficiary contribution in increased export earnings of Bangladesh, DFQF also serves as disincentive for the ready-made garments sector to compete in the world market through productive capacity of more qualitative and competitive products. Phasing out of DFQF might impose a concerning threat for these ready-made garments entrepreneurs but at the same time will induce them to improve the productive capacity to survive in the world market. Even though Bangladesh is not graduated, it cannot enjoy DFQF benefits for longer time period as WTO is periodically becoming stringent by limiting the quota status for Bangladesh. Thus, holding LDC status for some more periods for DFQF access cannot be supported by any means. There is another issue by side that needs to be addressed. Though DFQF has contributed to a large extent in external trade of Bangladesh, the country could not have the full utilization of DFQF access. The underrated quality of Bangladesh's products is the outcome of the inadequate human capital development; in other words, inefficient and unskilled labor force with outdated technology.

The second issue can be explained with more logical supports. The probable threat of decreased export earnings from abolishment of DFQF access can be dismissed if we consider the multiplier effect of the process of graduation of Bangladesh from LDC status. Graduation from LDC includes certain development process which in turn may affect the export earnings both in direct and indirect manner. The whole process can be illustrated by the following diagram where different variables are interconnected and simultaneously affected by each other.

Figure 31: Effect of Graduation of Bangladesh as LDC on DFQF market access



Graduation process involves the upgradation of existing per capita GNI which undoubtedly has a multiplier effect over the whole economic development as well as on the other two indicators of graduation: EVI and HDI.

Human capital development is one of the outcomes of increased per capita GNI that eventually leads to decreased rate of undernourishment and mortality and increased rate of adult literacy and gross enrollment of secondary school enrollment. Development in HDI has indirect effect over the resilient capability of Bangladesh against the DFQF market. The main underlying reason for the over dependency on DFQF is the huge pool of unemployed-unskilled labor that cannot contribute with increased and improved productivity in producing qualitative commodities substantially competitive with the commodities of other developing countries in world market. Skill development of this labor pool can be the ultimate solution of this problem which can be initiated by development especially in education and health indicators.

Some indicators of EVI have direct effect on the process of increased per capita GNI as well as on increased competitiveness of Bangladeshi entrepreneurs with qualitative products in world market. Improvement of remoteness index, export concentration index, exports instability, and agricultural instability is those specific variables. As discussed earlier, improvement of remoteness index can be

accompanied by increased market share of Bangladesh in world trade market and increased trade share of Bangladesh with trading partners relatively geographically closer to Bangladesh. These two components eventually imply export diversification as the key mechanism which can resolve the probable threat against the phasing out of DFQF and ODA assistances.

On the other hand, employment generation through enhancement of industrial and service sector can be one of the crucial steps in graduation. Despite the diminishing contribution of agriculture in GDP, it is still the largest job provider in Bangladesh. According to UNCTAD's Least Developed Countries Report 2013, agriculture sector accounts for 56 percent of total employment, while the manufacturing and service sectors contribute to 13 percent and 31 percent of the jobs respectively. An increase in agricultural productivity will release labour that has to be absorbed by the rest of the economy. Given that the tradable sectors are less likely to provide an abundance of employment opportunities, employment creation in non-tradable activities becomes critical.

It is often argued that the phasing out of DFQF access and ODA should be based on a gradual process with comparatively proper and adequate timeline to provide enough space to Bangladesh for coping up with the market without DFQF as well as getting prepared to face the competitive world.

Comparing the three criteria for graduation, Bangladesh needs to improve significantly in first two criteria: per capita GNI and HAI to reach the threshold level of graduation.

Conclusion

Graduation of Bangladesh from LDC status can be achieved through reaching the threshold level in two of the criteria: per capita GNI, HAI and EVI. It seems that Bangladesh needs to emphasize most on development of HAI as the gap of this indicator from threshold level is higher than that of the other two indicators. But development of HAI cannot be possible without rapid improvement of per capita GNI as increased income can mostly facilitate human capital development. Therefore, the first priority area should be to focus on the increase in per capita GNI which is expected to enhance the development of both HAI and EVI through multiplier-effect in economy.

Bangladesh is slowly improving its economic condition in terms of per capita GNI and already at the marginal stage threshold value of EVI. However, EVI is measured with number of variables those are vulnerable to even minimum shock. Hence, Bangladesh needs to oversee the movement of the variables of EVI especially to maintenance of stability of export earnings and agricultural production which are the two major contributing components in Gross Domestic Products. At the same time, post-graduation phenomenon should also be considered. As Bangladesh is largely dependent on readymade garments for its export earnings, phasing out of DFQF market access may pose a sudden shock with decreased export earnings in this sector. It may also be argued that graduation needs the development of EVI, HAI and increased per capita GNI which can introduce the economy with new domestic entrepreneurs of different industries. It is expected that graduation from LDC will lead Bangladesh to achieve the desired ability for competing in the world market with quality products. Development of Human Asset Index will be accompanied by human capital development which will enable Bangladesh to have efficient and skilled labor force. Increase in per capita GNI is expected to affect the economy with more diversification through improvement of service sector which may contribute to minimize the commodity and region specific export concentration.

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❖ Annexure

Annex 1: Consumer Price Index and Inflation

(Base year 1995-96)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
General	135.97	143.90	153.23	164.21	176.06	193.54	206.43	221.53	241.02	266.61
(% change)	(4.38)	(5.83)	(6.48)	(7.17)	(7.22)	(9.93)	(6.66)	(7.31)	(8.80)	(10.62)
Food	137.01	146.50	158.08	170.34	184.18	206.79	221.64	240.55	267.83	295.86
(% change)	(3.46)	(6.93)	(7.91)	(7.76)	(8.12)	(12.28)	(7.18)	(8.53)	(11.34)	(10.47)
Non-food	135.13	141.03	147.14	156.56	165.79	176.26	186.67	196.84	205.01	227.87
(% change)	(5.66)	(4.37)	(4.33)	(6.40)	(5.90)	(6.32)	(5.91)	(5.45)	(4.15)	(11.15)

Source: Bangladesh Bureau of Statistics

Annex 2: Rate of Increase in Wages

(Base year 1969-70=100)

Fiscal Year	Nominal Wage Rate Index					CPI for industrial labour (national)	Real Wage Rate Index (General)
	General	Agriculture	Fisheries	Manufacturing	Construction		
2001-02	2637 (5.95)	2262 (5.65)	2411 (5.19)	3035 (7.17)	2444 (3.74)	2024 (1.25)	130 (4.00)
2002-03	2926 (10.96)	2443 (8.00)	2563 (6.30)	3501 (15.35)	2624 (7.36)	2068 (2.17)	141 (8.46)
2003-04	3111 (6.31)	2582 (5.69)	2775 (8.28)	3765 (7.55)	2669 (1.69)	2129 (2.95)	146 (3.55)
2004-05	3293 (5.85)	2719 (5.31)	2957 (6.55)	4015 (6.64)	2758 (3.33)	2216 (4.08)	149 (2.05)
2005-06	3507 (6.50)	2926 (7.61)	3133 (5.95)	4293 (6.92)	2889 (4.75)	2351 (6.09)	149 (0.00)
2006-07	3779 (7.76)	3156 (7.69)	3332 (6.35)	4636 (7.99)	3135 (8.52)	2524 (7.36)	150 (0.67)
2007-08	4227 (11.85)	3524 (11.66)	3669 (10.11)	5197 (12.10)	3549 (13.20)	2740 (8.56)	154 (2.67)
2008-09	5026 (18.90)	4274 (21.28)	4236 (15.45)	6128 (17.91)	4311 (21.47)	2885 (5.30)	174 (12.92)
2009-10	5562 (10.67)	4985 (16.65)	4821 (14)	6620 (13.95)	4756 (10.31)	----	----
2010-11	5782 (6.27)	5326 (10.87)	5043 (6.69)	6778 (3.96)	4983 (7.55)	----	----
2011-12	6469 (11.88)	6134 (15.17)	5187 (2.86)	7221 (6.54)	6583 (32.10)	----	----

Source: BBS

Note: BBS has not published the consumer price index of industrial labour after FY 2005-06. Figures for FY 2006-07 to FY 2008-09 have been calculated by using the trend analysis of the ratio of CPI and Industrial CPI of FY 2005-06 and before.

Annex 3: Balance of Payments

(In Million US\$)								
Particulars	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12*
Trade balance	-3297	-2889	-3458	-5330	-4710	-5155	-7744	-7995
Exports f.o.b. (including EPZ)	8573	10412	12053	14151	15581	16233	22592	23992
Import, f.o.b. (including EPZ)	-11870	-13301	-15511	-19481	-20291	-21388	-30336	-31987
Services	-870	-1023	-1255	-1525	-1616	-1233	-2369	-2566
Receipts	1177	1340	1484	1891	1832	2478	2573	2684
Payments	-2047	-2363	-2739	-3416	-3448	-3711	-4942	-5250
Income	-680	-702	-905	-994	-1484	-1484	-1454	-1508
Receipts	116	136	244	217	95	52	124	195
Payments	-796	-838	-1149	-1211	-1579	-1536	-1578	-1703
of which official interest payment	-203	-204	-212	-234	-238	-215	-345	-373
Current transfers	4290	5438	6554	8529	10226	11596	12452	13699
Official	37	125	97	127	72	127	103	105
Private	4253	5313	6457	8402	10154	11469	12349	13594
of which workers' remittances	3848	4802	5979	7915	9689	10987	11650	12843
Current account balance	-557	824	936	680	2416	3724	885	1630

Particulars	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12*
Capital account	163	375	490	576	451	512	642	469
Capital transfers	163	375	490	576	451	512	642	469
Financial account	760	-141	762	-457	-825	-746	-1920	-955
(i) Foreign Direct Investment (net)	776	743	793	748	961	818	775	995
(ii) Portfolio investment	0	32	106	47	-159	-117	-28	198
(iii) Other investment	-16	-916	-137	-1252	-1627	-1447	-2667	-2148
Medium and Long term loans (MLT)	940	1023	1037	1338	1204	1589	1032	1460
MLT amortization payments	-449	-488	-525	-580	-641	-687	-739	-789
Other long-term loans (net)	-46	-37	-24	-6	-70	-151	-101	-57
Other short-term loans (net)	241	-256	493	-160	-169	62	531	242
Other assets	-182	-495	-535	-603	-650	-902	-661	-1606
Trade credit (net)	-320	-898	-481	-1108	-1277	-1043	-2569	-1450
Commercial Bank Assets	-200	235	-102	-133	-24	-315	-160	52
Liabilities	-91	31	-86	-146	-129	-410	452	443
	-109	204	-16	13	105	95	292	495
Errors and omission	-323	-720	-695	-468	16	-625	-263	-650
Overall balance	67	338	1493	331	2058	2865	-656	494
Reserve assets	-67	-338	-1493	-331	-2058	-2865	656	-494
Bangladesh Bank Assets	-67	-338	-1493	-331	-2058	-2865	656	-494
Liabilities	-225	-554	-1593	-799	-1883	-3616	-481	293
	158	216	100	468	-175	751	175	-201

Source: Bangladesh Bank. *= Provisional.

Annex 4: Recent Trend Health Indicator

Indicator	Level	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Crude birth rate (per 1000)	National	20.1	20.9	20.6	20.7	20.6	20.6	20.5	19.4	19.2	19.2
	Urban	16.6	17.9	17.5	17.8	17.5	17.4	17.2	16.8	17.1	20.1
	Rural	21	21.7	20.7	21.7	20.7	22.1	22.4	20.4	20.1	17.1
Crude death rate (per 1000)	National	5.1	5.9	5.8	5.7	5.6	6.2	6.0	5.8	5.6	5.6
	Urban	3.8	4.7	4.4	4.9	4.4	5.2	5.1	4.7	4.9	5.9
	Rural	5.4	6.2	6	6.1	6	6.6	6.5	6.1	5.9	4.9
Average age at marriage	Male	25.6	25.2	23.4	23.2	23.4	23.4	23.6	23.8	23	23.9
	Female	20.6	20.4	18.1	18	18.1	18.4	19.1	18.5	18.7	18.7
Population per doctor		3590	3532	3137	3261	3110	2991	2860	2832	2785*	2860
Average life expectancy (year)	National	64.9	64.9	65.4	65.2	65.4	66.6	66.8	67.2	67.7	66.8
	Urban	67.2	67.6	68	67.9	68	68.1	68.3	68.7	68.9	68.3
	Rural	64.4	64.3	64.6	64.5	64.6	66	66.2	66.9	67.4	66.2
Child mortality rate (neonatal, <1) per 1000	National	53	53	65	50	45.52	52	43	39	36	43
	Urban	37	40	72	44	38	50	40	37	35	42
	Rural	57	57	72	51	47	59	42	40	37	43
Child mortality rate (1-4 years) per 1000	National	4.6	4.6	88	4.4	3.9	65	3.1	2.7	2.6	53

Indicator	Level	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Maternal mortality rate per 1000	National	3.9	3.8	92	3.5	3.4	63	3.5	2.59	2.16	-
	Urban	2.7	2.7	98	2.75	1.96	77	2.4	1.79	1.78	-
	Rural	4.2	4.0	-	3.58	3.75	-	3.9	2.85	2.30	1.94
Contraceptive users rate (%)		53.4	55.1	58.1	57	58.3	55.8	52.6	56.1	56.7	61.2
Fertility rate per women		2.6	2.6	3	2.5	2.41	2.7	2.3	2.15	2.12	2.3

Source: Bangladesh Bureau of Statistics; Health Bulletin, MIS; Health Economics Unit, Ministry of Health and Family Welfare .BDHS Survey:

2004,2007,2011 MOHFA; Sample Vital Registration System (SVRS), 2009; BMMS-2011

Annex 5 : Human Development Index (HDI) of Bangladesh

Human Development Index	
Ranking	146
Health	
Life expectancy at birth (years)	69.2
Education	
Mean years of schooling (of adults) (years)	4.8
Income	
GNI per capita in PPP terms (Constant 2005 international \$)	1,785
Inequality	
Inequality-adjusted HDI value	0.374
Poverty	
MPI: Multidimensional poverty index (%)	0.292
Gender	
GII: Gender Inequality Index, value	0.518
Sustainability	
Carbon dioxide emissions per capita (tonnes)	0.3
Demography	
Population, total both sexes (thousands)	152,408.80
Composite indices	
Non-income HDI value	0.567
Innovation and technology	
Fixed and mobile telephone subscribers per 100 people (per100 people)	46.8
Trade, economy and income	
Income index	0.425